

Tuesday, August 01, 2006

Beth O'Donnell Executive Director Public service Commission 211 Sower Boulevard Frankfort, KY 40602-0615

Dear Ms. O'donnell,

Enclosed, please find one original and five copies of Shared Sites, LLC's application to construct a new Wireless Communications Facility at Rt. 1, Box 517A, Ewing, KY 41039. PSC Case #2006-00310.

Please contact me if anything is not in order.

Regards,

David B. Jantzi

### COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION



IN THE MATTER OF:

APPLICATION OF SHARED SITES, LLC.
AND AMERICAN CELLULAR CORPORATION
FOR ISSUANCE OF A CERTIFICATE OF PUBLIC
CONVIENENCE AND NECESSITY TO CONSTRUCT
A WIRELESS COMMUNICATIONS FACILITY AT
ROUTE 1, OLD US 68, BOX 517A
EWING, KENTUCKY 41039
IN THE WIRELESS COMMUNICATIONS LICENSE AREA
IN THE COMMONWEALTH OF KENTUCKY
IN THE COUNTY OF ROBERTSON

SITE NAME:

**BLUE LICKS** 

SITE NUMBER:

\* \* \* \* \* \* \*

#### UNIFORM APPLICATION: CONFIDENTIAL AND PROPRIETARY

Shared Sites, LLC. ("Shared Sites"), as ultimate owner, and American Cellular Corporation ("Provider") as a licensed public utility in the Commonwealth of Kentucky, hereinafter jointly referred to as "Applicants", respectfully submit their Application for a Certificate of Public Convenience and Necessity from the Public Service Commission to construct, maintain, and operate a Wireless Communications Facility ("WCF") to serve the customers of the Provider with wireless and telecommunications services, and other wireless service provider collocations in the area described herein.

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

The complete names and addresses of the Applicants are:
 Shared Sites, LLC., a Kentucky Limited Liability Company, having a mailing address of 1390 Chain Bridge Road #40, McLean, Virginia 22101

(703) 893-0806.

American Cellular Corporation, a Delaware Corporation, 3910 South Ave. Youngstown, OH 44512, 73134 having a local address of 124 South Keeneland Drive, Suite 1, Richmond, KY 40475, (606) 544-2355.

- 2. Shared Sites constructs, owns, manages, maintains, and operates independent communications networks. Shared Sites owns and manages safe, clean and well maintained facilities. Shared Sites facilities do not generate smoke, odors, noise, noxious gases, vibrations, or traffic increase. Shared Sites facilities will not pollute air, soil, or water, nor will they adversely affect radio or television reception or transmission. A certified copy of the Certificate of a Limited Liability Company issued by the Secretary of State of the State of West Virginia and a copy of the application for a Certificate of Authorization which was sent to the Secretary of State of the Commonwealth of Kentucky for Shared Sites, LLC. are attached or described as part of Exhibit A. A copy of the Certificate of Authorization issued by the Secretary of State of the Commonwealth of Kentucky and a copy of the Certificate of Merger issued by the Secretary of State of the State of Delaware for the Provider are attached or described as part of Exhibit B.
- 3. After completion of the proposed WCF, Shared Sites will lease or license space on said tower and the surrounding site so the Provider may locate and operate its facility including all required antennas and appurtenances. The proposed WCF will serve an area completely within the Provider's Federal Communications Commission ("FCC")

licensed service area in the Commonwealth of Kentucky. The Provider is authorized to provide wireless service by the FCC and the PSC. A copy of the Provider's FCC license to provide wireless service is attached to this Application or described as part of **Exhibit C**. Shared Sites has located the proposed site in a manner such that other wireless communications service providers will desire to collocate on said tower, and will endeavor to provide all necessary facilities to make collocation attractive to them.

- 4. The public convenience and necessity require the construction of the proposed WCF. The construction of the WCF will bring the Provider's services to an area currently not served or not adequately served by the Provider and will thereby enhance the public's access to innovative and competitive wireless telecommunications services. The WCF will provide a necessary link in the Provider's telecommunications network that is designed to meet the increasing demands for wireless services in Kentucky's wireless communications licensed area. The WCF is an integral link in the Provider's network design that must be in place to cover the proposed service area.
- 5. Shared Sites' construction of the described WCF is desirable because it allows for the collocation of additional wireless service providers within this portion of the Kentucky wireless communications licensed area. These services may include telecommunications, wireless data transfer and internet services, wireless cable, paging systems, 911 service, and other new products currently being developed in the wireless industry. In addition, the WCF will be available for use by governmental agencies and providers of emergency services. The WCF will provide a necessary link in Shared Sites' and the Provider's wireless infrastructure networks, and Shared Sites, as part of it's business structure, will diligently pursue and encourage other wireless providers to collocate on the WCF. These services will provide increased competition in the in the local

Kentucky telecommunications market, which will, in turn, promote competitive pricing, quality, and coverage options to users of telecommunications services in this area. Shared Sites' vested interest in the collocation of wireless service providers promotes the same goals for the local consumers.

- 6. The Applicants propose to construct a WCF at Route 1, Old US 68, Box 517A, Ewing, Kentucky 41039 (38° 26' 14.71" North latitude, 83° 59' 4.64" West longitude). In an area 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 Ray Hunter. The proposed WCF will consist of a 280 foot guyed tower with an approximately 6-foot lightning arrester attached to the top, for a total height of 286 feet. The WCF will also include concrete foundations to accommodate the placement of the Provider's proprietary radio electronics equipment. The equipment will be housed in a prefabricated cabinet or shelter that will contain: (i) the transmitting and receiving equipment required to connect the WCF with the Provider's users in Kentucky, (ii) telephone lines that will link the WCF with the Provider's other facilities, (iii) battery back-up that will allow the Provider to operate even after a loss of outside power, and (iv) all other necessary appurtenances. The Provider's equipment cabinet or shelter will be approved for use in the commonwealth of Kentucky by the relevant building inspector. The WCF compound will be fenced and all access gate(s) will be secured. A description of the manner in which the proposed WCF will be constructed is attached as Exhibit D and Exhibit E. Periodic inspections will be performed on the WCF in accordance with the applicable regulations or requirements of the PSC. The list of competing utilities, corporations, or persons is attached as Exhibit F.
- 7. Reduced copies of the site development plan have been included as **Exhibit**D and **Exhibit** E of this application. A vertical profile sketch of the WCF signed and sealed

by a professional engineer registered in Kentucky depicting the tower height, as well as a proposed configuration for the antennas of the provider and future antenna mounts, has also been included as part of **Exhibit E**. Foundation design plans and a description of the standards according to which the tower was designed signed and sealed by a professional engineer registered in Kentucky is included as part of **Exhibit D**.

- 8. The Applicants have considered the likely effects of the installation of the proposed WCF on nearby land uses and values and have concluded there is no more suitable location reasonably available from which adequate services can be provided, and that there are no reasonably available opportunities to collocate. The Applicants have attempted to collocate on suitable existing structures such as telecommunications towers or other suitable structures capable of supporting the Provider's facilities. No other suitable and available collocation site was found to be located in the vicinity of the site. Information regarding the Applicants' efforts to achieve collocation in the vicinity are presented as **Exhibit G**.
- 9. The Applicants have conducted a preliminary aeronautical evaluation for the proposed WCF. The evaluation determined that the proposed structure height at this site meets Federal Aviation Administration ("FAA") Regulation requirements. Furthermore, FAA notice is required for the proposed construction, and lighting or marking requirements may be applicable to this facility. A copy of the FAA Application is attached as **Exhibit H**. Upon receiving a "Determination" from the FAA, the Applicants will forward a copy as a supplement to this Application Proceeding
- 10. A copy of the Kentucky Airport Zoning Commission ("KAZC") Application for the proposed WCF is attached as **Exhibit I**. Upon receiving authorization from the KAZC,

the Applicants will forward a copy of the determination as a supplement to this Application Proceeding

- 11. The WCF will be registered with the FCC pursuant to applicable federal requirements. Appropriate required signage will be posted on this site upon receipt of the tower registration number.
- 12. A geotechnical-engineering firm has performed soil boring(s) and subsequent geotechnical-engineering studies at the WCF site under the supervision of a professional engineer registered in the Commonwealth of Kentucky who specializes in geotechnical engineering, including subsurface exploration. The geotechnical-engineering firm has performed many such studies for the communications industry. A copy of the geotechnical-engineering report and evaluation signed and sealed by a professional engineer registered in the Commonwealth of Kentucky who specializes in geotechnical engineering, including subsurface exploration, is attached as **Exhibit J**. 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 in **Exhibit J**.
- 13. Clear directions to the proposed WCF site from the County seat are attached as **Exhibit K**. The name and address of the preparer of **Exhibit K** is included in **Exhibit K**.
- 14. Shared Sites, pursuant to a written agreement, has acquired the right to use the WCF site and associated property rights. A copy of the agreement or an abbreviated agreement recorded with the County Clerk is attached as **Exhibit L**. Also included as part of **Exhibit L** is the portion of the full agreement demonstrating that in the case of abandonment a method is provided to dismantle and remove the cellular antenna tower.

- Personnel directly responsible for the design and construction of the 15. proposed WCF are well-qualified and experienced. Nello Corporation (the Tower Manufacturer) performed the tower and foundation design. The Tower Manufacturer is a nationally recognized manufacturer and designer of communication towers. The Tower Manufacturer has designed and installed communications towers throughout North America. The Tower Manufacturer has assigned Dennis Daniel Abel, a professional engineer registered in the commonwealth of Kentucky to design the Tower for the WCF. This engineer specializes in the design and engineering of guyed, self support and monopole structures, and has extensive experience in the design and construction of projects similar to the Applicants'. These projects include the design of towers and the requires foundations of many other wireless facilities. All of the designs have been signed and sealed by Dennis Daniel Abel. The construction of the proposed WCF will be performed by Shared Sites or their agents who are insured and experienced tower erection specialists. The Project Manager, David Jantzi, will manage the construction of the WCF and the tower erection. David has been erecting towers for the telecommunications industry for over 15 years. All tower designs will meet or exceed applicable laws and regulations.
- 16. Based on a review of Federal Emergency Management Agency Flood Insurance Rate Maps, the registered land surveyor has certified in **Exhibit M** that the proposed WCF is not located within any flood hazard area.
- 17. The possibility of high winds has been considered in the design of this tower. The tower has been designed and engineered by professional engineers using computer assistance and the same accepted codes and standards as are typically used for high-rise building construction. The tower has been designed to withstand a wind loading of 70

m.p.h. with ½ inch of radial ice. This tower has been designed in accordance with the Electronic Industries Association ("EIA") 222-F 1996 Standards, which have been accepted and approved by ANSI and is a nationally recognized tower design standard. Similarly, the proposed WCF design has been developed with consideration of potential ground shaking based on a negligible seismic zone of 1. Seismic loading is regarded as secondary to the wind loading.

- 18. The site development plan signed and sealed by a professional engineer registered in Kentucky was prepared by David B. Sharp, and was designed from a survey performed by Mike Ruggles. This site development plan is drawn to a scale of no less than one (1) inch equals 200 feet, and identifies every owner of real estate within 500 feet of the proposed tower (according to the Property Valuation Administrator) and is incorporated in the survey as part of **Exhibit E**. 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 incorporated in the survey as part of **Exhibit E**.
- 19. Shared Sites, on behalf of itself and the Provider, has notified every person who owns property within 500 feet of the proposed tower by certified mail, return receipt requested, of the proposed construction. Each property owner has been informed of their right to request intervention. A list of the nearby property owners who received the notices, together with copies of the certified letters, are attached as **Exhibit N** and **Exhibit O**, respectively.
- 20. Shared Sites, on behalf of itself and the Provider, has notified the Robertson County Judge Executive by certified mail, return receipt requested, of the proposed construction. This notice informed the Robertson County Judge Executive of his/her right to request intervention. A copy of this notice is attached as **Exhibit P**.

- 21. Two appropriate notice signs measuring at least two (2) feet in height and four (4) feet in width with all required language in letters of required height have been posted in a visible location on the proposed site and on the nearest public road and shall remain posted for at least two (2) weeks after filing of the Application. Copies of the postings are attached as **Exhibit Q**. The location of the proposed facility has been published in a newspaper of general circulation in the county where the WCF is located.
  - 22. The property where WCF is proposed to be constructed is not zoned.
- 23. The process that was used in selecting the site for the proposed WCF by the Applicants' radio frequency engineers was consistent with the process used for selecting generally all other existing and proposed WCF facilities within the proposed network design area. Before beginning the acquisition process, the Applicants carefully evaluated the location of the required WCF for possible collocation opportunities on existing structures. Radio Frequency Engineers used computer programs to evaluate the most effective coverage design for facilitating collocation potential on the proposed tower. Shared Sites and the Provider's radio frequency engineers have combined their efforts in order to develop a highly efficient network that is designed to serve the Federal Communications Commission licensed territory without extending beyond the Provider's approved boundary. The engineers selected the optimum vicinity in terms of elevation and location to provide the best quality service to customers in the service area. A proposed coverage area was considered by the Applicants when searching for sites that would provide both (i) the coverage deemed necessary by the Provider, and (ii) the coverage deemed necessary by Shared Sites to permit the integration of the proposed WCF into Shared Sites' overall network design. No suitable towers or existing structures were found in the immediate area

which would meet the technical requirements for this element of the telecommunications network. 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, pursuant to radio frequency requirements, be located is attached as **Exhibit R**.

- 24. A grid map showing the location of all existing cellular antenna towers that includes the general position of proposed construction sites for new cellular antenna towers within the Commission's jurisdiction and one-half mile outside the boundary of the planning unit's jurisdiction if that area contains either existing or proposed construction sites for cellular antenna towers is attached as **Exhibit S**.
- 25. All Exhibits to this application are hereby incorporated by reference as if fully set out as part of the Application.

26. All responses and requests associated with this Application may be directed

to:

David Jantzi Boulevard Properties, LLC 7383 Utica Blvd. Lowville, NY 13367 Telephone: (315) 523-6258

And

Kamal Doshi Shared Sites, LLC 1390 Chain Bridge Road #40 McLean, VA 22101 Wherefore, the applicants respectfully request that the PSC accept the foregoing Application for filing and having met the requirements of KRS 278.020 and all applicable rules and regulations of the PSC, grant a Certificate of Public Convienence and Necessity to construct and operate the WCF at the location set forth herein for the respective networks in the commonwealth of Kentucky.

Respectfully submitted,

Kamal Doshi Shared Sites, LLC

1390 Chain Bridge Road #40 McLean, Virginia 22101

Telephone: (703) 893-0806

And

Timothy J. Duffy

Chief Technical Officer / Senior Vice President

Network Operations & Engineering American Cellular Corporation

14201 Wireless Way

Oklahoma City, OK 73134

(405) 529-8660

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#### LIST OF EXHIBITS

- A. Certificate of LLC from the State of West Virginia and copy of application for Certificate of Authority to the State of Kentucky for Shared Sites, LLC.
- B. Certificate of Authorization from the State of Kentucky and Certificate of Merger for American Cellular Corporation
- C. Copy of FCC license for American Cellular Corporation
- D. Tower and Foundation Plan
- E. Site Development Plan:

Vicinity Map
Property Owner Listing
500' Vicinity Map
Legal Descriptions
Site Plan
Vertical Tower Profile

- F. Competing Utilities, Corporations, or Persons List
- G. Collocation Report
- H. Application to FAA
- I. Application to Kentucky Airport Zoning Commission
- J. Geotechnical report
- K. Directions to WCF Site
- L. Copy of Real Estate Agreement
- M. Flood Plain Certification
- N. Certification of Notification
- O. Copy of Property Owner Notification
- P. Copy of County Judge Executive Notice
- Q. Copy of Posting Notices
- R. Copy of Radio Frequency Design Search Area
- S. Tower Map for Subject County

#### **EXHIBIT A**

CERTIFICATE OF LLC FROM THE STATE OF WEST VIRGINIA

AND

CERTIFICATE OF AUTHORITY FROM THE COMMONWEALTH OF KENTUCKY

FOR SHARED SITES, LLC



## I, Betty Ireland, Secretary of State of the State of West Virginia, hereby certify that

#### SHARED SITES, LLC

Control Number: 82134

has filed its "Articles of Organization" in my office according to the provisions of West Virginia Code §§31B-2-203 and 206. I hereby declare the organization to be registered as a limited liability company from its effective date of January 13, 2006 until the expiration of the term or termination of the company.

Therefore, I hereby issue this

#### CERTIFICATE OF A LIMITED LIABILITY COMPANY



Given under my hand and the Great Seal of the State of West Virginia on this day of January 13, 2006

Secretary of State

# Commonwealth of Kentucky Trey Grayson Secretary of State

#### **Certificate of Authorization**

I, Trey Grayson, Secretary of State of the Commonwealth of Kentucky, do hereby certify that according to the records in the Office of the Secretary of State,

#### SHARED SITES, LLC

, a limited liability company organized under the laws of the state of West Virginia, is authorized to transact business in the Commonwealth of Kentucky and received the authority to transact business in Kentucky on February 24, 2006.

I further certify that all fees and penalties owed to the Secretary of State have been paid; that an application for certificate of withdrawal has not been filed; and that the most recent annual report required by KRS 275.190 has been delivered to the Secretary of State.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Official Seal at Frankfort, Kentucky, this 19th day of March, 2006.

Certificate Number: 28229

Jurisdiction: Shared Sites, LLC (Boulevard Properties)

Visit http://apps.sos.ky.gov/business/obdb/certvalidate.aspx\_to validate the authenticity of this

certificate.



Trey Grayson
Secretary of State
Commonwealth of Kentucky
28229/0633042

,		

#### **EXHIBIT B**

### CERTIFICATE OF AUTHORIZATION FROM THE COMMONWEALTH OF KENTUCKY

AND

CERTIFICATE OF MERGER FROM THE STATE OF DELAWARE

FOR AMERICAN CELLULAR CORPORATION

# Commonwealth of Kentucky Trey Grayson Secretary of State

#### **Certificate of Authorization**

I, Trey Grayson, Secretary of State of the Commonwealth of Kentucky, do hereby certify that according to the records in the Office of the Secretary of State,

#### AMERICAN CELLULAR CORPORATION

, a corporation organized under the laws of the state of Delaware, is authorized to transact business in the Commonwealth of Kentucky, and received the authority to transact business in Kentucky on January 20, 2004.

I further certify that all fees and penalties owed to the Secretary of State have been paid; that an application for certificate of withdrawal has not been filed; and that the most recent annual report required by KRS 271B.16-220 has been delivered to the Secretary of State.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Official Seal at Frankfort, Kentucky, this 13th day of February, 2006.

Certificate Number: 26879 Jurisdiction: Shared Sites, LLC

Visit http://apps.sos.ky.gov/business/obdb/certvalidate.aspx\_to\_validate the authenticity of this

certificate.



Trey Grayson Secretary of State

Commonwealth of Kentucky 26879/0576718

+4055298765

#### The First State

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF MERGER, WHICH MERGES:

"ACC OF KENTUCKY LLC", A DELAWARE LIMITED LIABILITY COMPANY, WITH AND INTO "AMERICAN CELLULAR CORPORATION" UNDER THE NAME OF "AMERICAN CELLULAR CORPORATION", A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE THIRTY-FIRST DAY OF DECEMBER, A.D. 2003, AT 10:30 O'CLOCK A.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE EFFECTIVE DATE OF THE AFORESAID CERTIFICATE OF MERGER IS THE THIRTY-FIRST DAY OF DECEMBER, A.D. 2003, AT 11:30 O'CLOCK A.M.

A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS.



Darriet Smith Hindson

AUTHENTICATION: 2856461

DATE: 01-07-04

2222565 8100M

030845574

# EXHIBIT C COPY OF FCC LICENSE FOR AMERICAN CELLULAR

#### Federal Communications Commission Wireless Telecommunications Bureau

Page 1 of 6

#### Radio Station Authorization

LICENSEE NAME: American Cellular Corporation

RONALD L. RIPLEY AMERICAN CELLULAR CORPORATION 14201 WIRELESS WAY OKLAHOMA CITY DK 73134

FCC Registration Number (FRN) 0003767324 Call Sign File Number KNKNESS 0001571120 Radio Service CL - Cellular Market Number Channel Block CMA447 Sub-Market Designator

#### Market Name

<u> Kentucky 5 - Barren</u>

Grant Date	Effective Date	Expiration Date	Five Yr Build-Out Date	Print Date
10-30-2001	01-07-2004	10-01-2011		01-14-2004

#### SITE INFORMATION

		Ground Elev (meters) 285.1 W State KY		Structure (meters) 78.9 truction	_	Re 10	tenna Sti gistrati 42214		
Antenna: 1 Azimuth Antenna Height AAT(met Transmitting ERP(watts	ers)	129.600	113.300	90 180.500 91.200			225 156.200 31.600	270 136.700 24.300	315 159.500 31.600
5 036-44-13.0 N	Longitude (	Ground Elev (meters) 309.7 1 EDMONTON	vation ROAD	Structure	∍ Hgt to	Tip Ar Re 10			
Antenna: 1 Azimuth	(from true north	) 0	45	90	135	180	225	270	315

#### Conditions:

Pursuant to Section 309(h) of the Communications Act of 1934, as amended, 47 U.S.C. Section 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. Section 310(d). This license is subject in terms to the right of use or control conferred by Section 706 of the Communications Act of 1934, as amended. See 47 U.S.C. Section 606.

## EXHIBIT D TOWER AND FOUNDATION DESIGN



1301 Stahly Drive P. O. Box 376 Nappanee, IN 46550

Phone: 574-773-4827 Fax: 574-773-5840 www.nelloinc.com

July 20, 2006

Mr. Matthew Wallack Boulevard Properties 7383 Utica Blvd. Lowville, NY 13367 mwallack@blvdllc.com

Re: Nello Tower and Foundation Designs for Kentucky

Dear Mr. Wallack:

This is in response to your inquiry about the design of your towers and foundations being located in Kentucky.

- The tower and foundation designs are reviewed and sealed by a Professional Engineer actively licensed in the State of Kentucky. More specifically, they will be sealed by me (KY PE #22516) or by Dan Ianello (KY PE #21958).
- We use a soil report to design the foundation. The soil report is then referenced in the foundation notes on the tower and foundation drawing.
- The full tower loading and reactions are used for the foundation design. The foundation design reactions are listed on the tower and foundation drawing.

This design criteria will be applied to all of the following sites:

- Monticello North 195 ft guyed tower Monticello, Kentucky
- Gradyville 280 ft guyed tower Columbia, Kentucky
- Blue Licks 280 ft guyed tower Ewing, Kentucky

If you have any other questions or concerns regarding these projects, please contact my by phone at 574-773-4827 ext. 222 or by e-mail at dabel@nelloinc.com.

Sincerely,

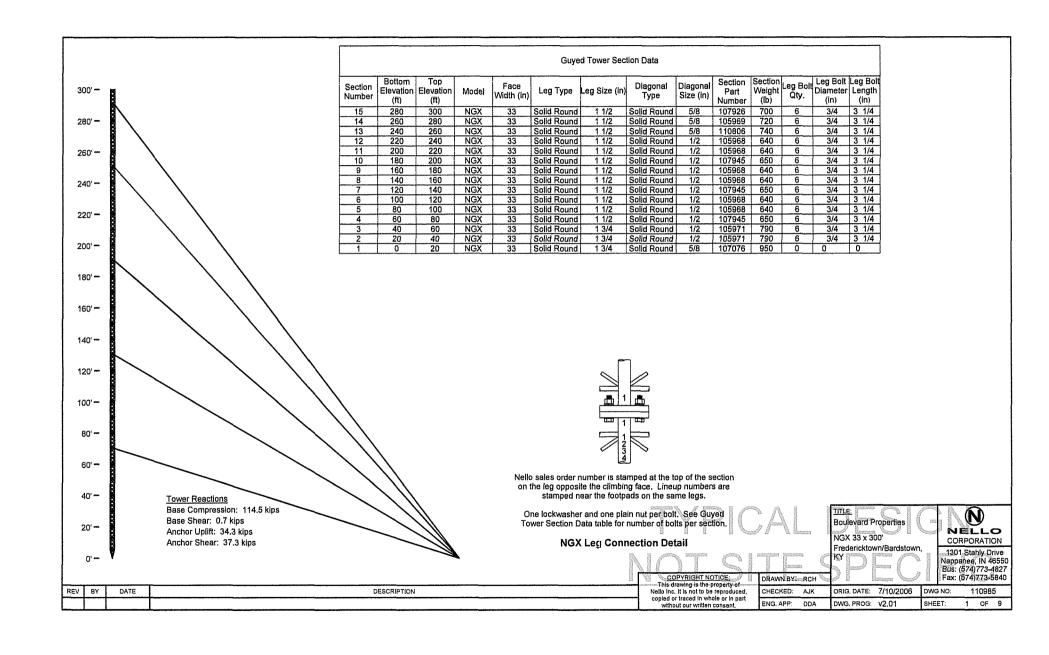
Dennis D. Abel, P.E. Chief Engineer

ABEL No. 22516

DANIEL

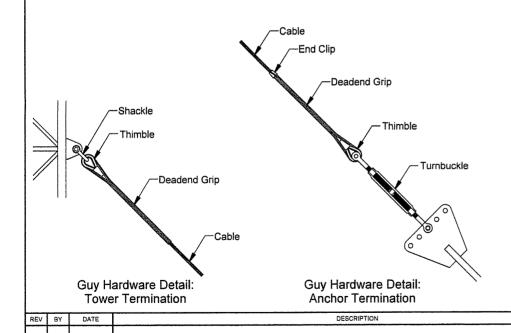
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			1 10 474 77 / 27 - 1		Guy Cab	ole and Har	dware Data						
Elevation (ft)	Cable Size (in)	Cable Type	Lug PN	Lug Hole Diameter (in)	Turnbuckle Size (in)	Shackle Size (in)	Thimble Size (in)	Deadend Grip (in)			Cut Length, Anchor B (ft)	Cut Length, Anchor C (ft)	Cut Length, Total (ft)
290	5/8	EHS	104865	1 1/16	1	3/4	3/4	5/8	5/8	397	401	397	1195
250	1/2	EHS	104865	1 1/16	7/8	5/8	5/8	1/2	1/2	364	367	364	1095
190	3/8	EHS	104865	1 1/16	7/8	5/8	7/16	3/8	3/8	319	322	319	960
130	3/8	EHS	104865	1 1/16	7/8	5/8	7/16	3/8	3/8	281	283	281	845
70	5/16	EHS	104865	1 1/16	7/8	5/8	7/16	5/16	5/16	255	256	255	766

There are 3 guy cables per level. The cut length is the theoretical chord length plus 8%.



TITLE: Boulevard Properties NGX 33 x 300' Fredericktown/Bardstown NELLO CORPORATION

1301 Stahly Drive Nappanee, IN 46550 Bus: (574)773-4827 Fax: (574)773-5840 110985

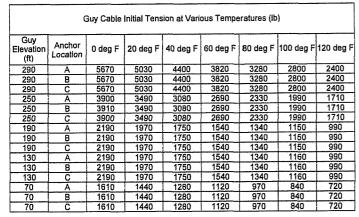
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DRAWN BY:	RCH
CHECKED:	AJK
CNO ADD	224

ORIG. DATE: 7/10/2006 DWG. PROG: V2.01

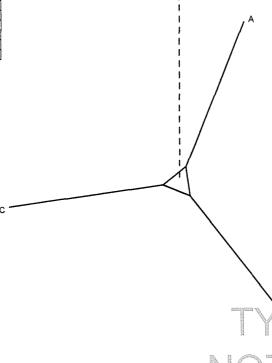
DWG NO:

2 OF 9



1	Maximum (	3uy Anchor	Reactions	S
Guy Radius (ft)	Anchor Location	Elevation Change (ft)	Uplift (kips)	Shear (kips)
225	Α	-1	33.7	37.3
225	В	-5	34.3	37.3
225	С	-1	33.7	37.3

North



TITLE: Boulevard Properties NGX 33 x 300'

N NELLO CORPORATION

Fredericktown/Bardstown,

130	1 Stahly Drive
	anee, IN 46550
	(574)773-4827
Fax:	(574)773-5840
	440005

REV	BY	DATE	DESCRIPTION
_			

COPYRIGHT NOTICE: This drawing is the property of Nello Inc. It is not to be reproduced, copied or traced in whole or in part without our written consent.

DRAWN BY: RCH CHECKED: ENG. APP: DDA

ORIG. DATE: 7/10/2006 DWG. PROG: v2.01

DWG NO: 110985 3 OF 9

		Antenna Loading
Height Qty. Description		Description
300'	1	4' Lightning Rod
300'	1	Beacon (12" x 36")
300'	12	8' x 1' x 3" Panel Antenna on 96" Pipe
300'	3	12' KD Sector Frames, No Pipes
290'	12	4' x 1' x 3" Panel Antenna on 48" Pipe
290'	3	12' KD Sector Frames, No Pipes
280'	12	8' x 1' x 3" Panel Antenna on 96" Pipe
280'	3	12' KD Sector Frames, No Pipes
270'	12	4' x 1' x 3" Panel Antenna on 48" Pipe
270'	3	12' KD Sector Frames, No Pipes

		Feedline Loading	
Height Qty. Description			
270' - 300'		LDF7-50A (1-5/8 FOAM)	
0' - 290'		LDF7-50A (1-5/8 FOAM)	
0' - 280'	12	LDF7-50A (1-5/8 FOAM)	
0' - 270'	24	LDF7-50A (1-5/8 FOAM)	
0' - 300'	1	1" Conduit	

Dish Loading				
Height	Qty.	Description		
150'	1	3' Solid Dish		

Boulevard Properties
NGX 33 x 300' Fredericktown/Bardstown,

NELLO CORPORATION 1301 Stahly Drive Nappanee, IN 46550 Bus: (574)773-4827 Fax: (574)773-5840

DRAWN BY: RCH CHECKED: AJK

ORIG, DATE: 7/10/2006

DWG NO: 110985 4 OF 9 SHEET:

DESCRIPTION REV BY DATE

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ENG. APP: DDA DWG. PROG: v2.01

ΚY

#### **Tower Notes:**

- 1. Tower is designed per TIA/EIA-222-F, "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures," for the following loading conditions:
  - 70 mph fastest-mile basic wind speed with no ice
- 70 mph fastest-mile basic wind speed with 1/2 inch radial ice with a 25% reduction in wind loading
- 2. Tower design loading is assumed to be based on site-specific data and must be verified by others prior to installation.
- 3. Tower design includes the antennas, dishes, and/or lines listed in the appurtenance loading tables on sheet 4.
- 4. Antenna mounting pipes may need to be field cut to match the lengths listed in the appurtenance loading tables on sheet 4.
- 5. Tower member design does not include stresses due to erection since erection equipment and procedures are unknown. Tower installation shall be performed by competent and qualified erectors in accordance with TIA/EIA-222-F and OSHA standards and all applicable building codes.
- 6. Field connections shall be bolted. No field welds shall be allowed unless otherwise noted.
- 7. Structural bolts shall conform to ASTM A325, except for 1/2 inch diameter and smaller bolts, which shall conform to ASTM A449 or SAE J429 Grade 5.
- 8. Structural steel and connection bolts shall be galvanized after fabrication in accordance with TIA/EIA-222-F.
- 9. All high strength bolts shall be tightened to a "snug tight" condition as defined in the November 13, 1985, AISC "Specification for Structural Joints Using ASTM A325 or A490 Bolts."
- 10. Tower shall be marked and lighted in conformance with local building codes, FAA regulations, and TIA/EIA-222-F.
- 11. Tower shall be grounded in conformance with local building codes and TIA/EIA-222-F.
- 12. Allowable tolerance on as-built tower steel height is plus 1% or minus 1/2%.
- 13. Maintenance and inspection shall be performed over the life of the structure in accordance with TIA/EIA-222-F.
- 14. Material specifications:

NGX Solid Rod Legs - ASTM A572 Grade 50

NGX Solid Rod Bracing - ASTM A36

NGX Footpads - ASTM A572 Grade 50

- 15. Guy cable segments should be cut 8% longer than theoretical chord lengths.
- 16. Guy anchor location and elevations are based on the site plan provided by McKinney Land Survey, dated 02/01/2006.
- 17. Fill any gap between base plate and top of concrete with non-shrink grout before erecting tower.
- 18. Transmission lines to each carrier must be stacked and installed on different faces so that no more than 6 lines are exposed to the wind on any face until the fourth carrier.

TITLE: Boulevard Properties NGX 33 x 300'

N NELLO CORPORATION 1301 Stahly Drive Nappanee, IN 46550 Bus: (574)773-4827 Fax: (574)773-5840

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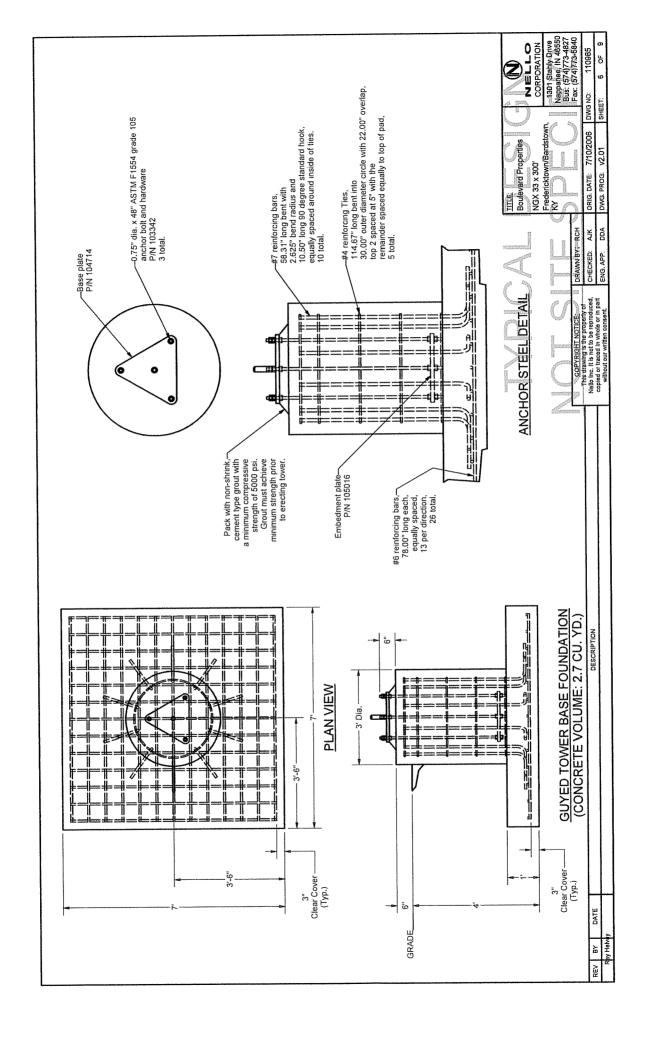
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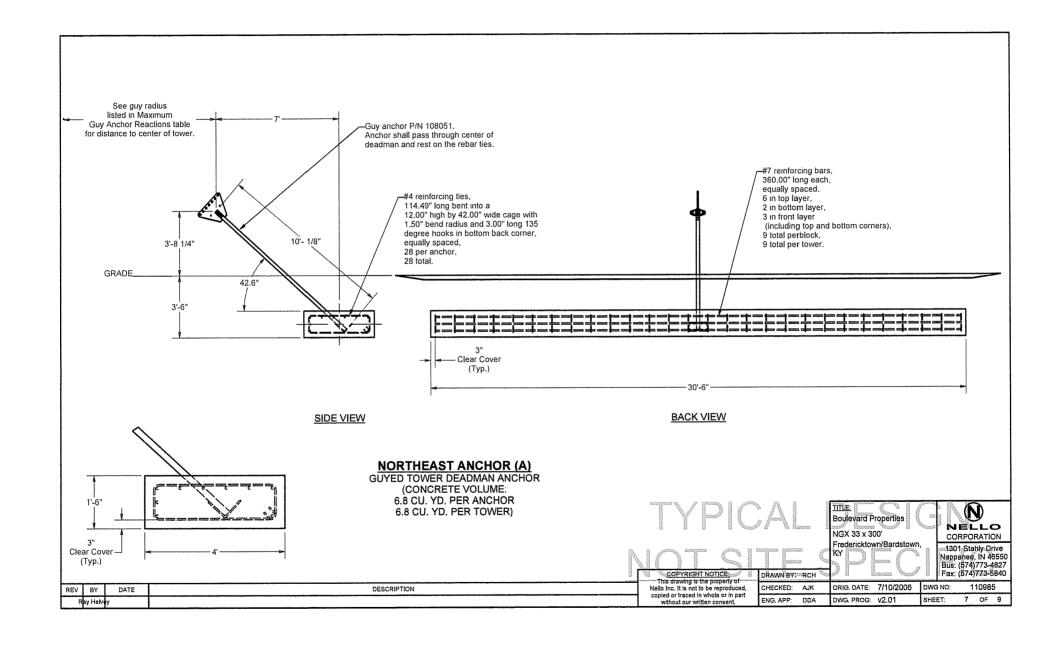
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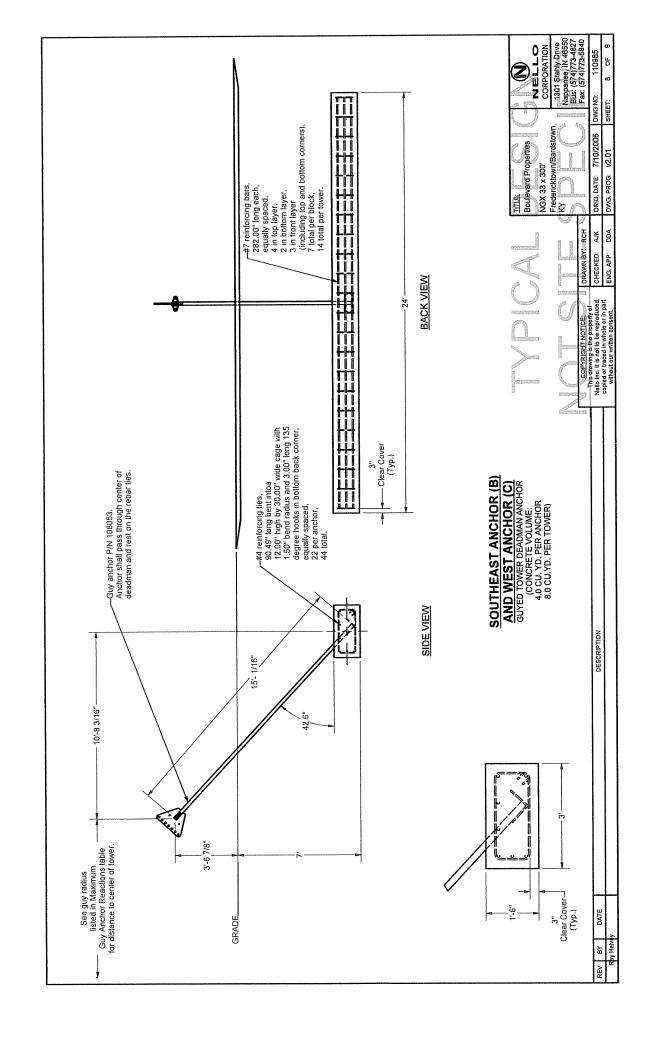
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REV	BY	DATE

DESCRIPTION







#### Foundation Notes

1. This foundation has been designed for the following tower reactions.

Base Down Load: 114.5 kips Base Shear Load: 0.8 kips Anchor Uplift: 36.0 kips Anchor Shear: 39.1 kips

- 2. Foundation design based on soil report dated February 2006, by Smith Management Group of Louisville, Kentucky, project number 2006-3974.
- 3. A field inspection shall be performed in order to verify that the actual site soil parameters meet or exceed the assumed soil parameters and that the depth of standard foundations are adequate based on the frost penetration and groundwater depth. Local frost depth must be no deeper than the bottom of the base foundation.
- 4. Reinforcement shall be deformed and conform to the requirements of ASTM A615 Grade 60 unless otherwise noted. Splices in reinforcement shall not be allowed unless otherwise indicated.
- 5. Welding is prohibited on reinforcing steel and anchorage.
- 6. Structual backfill must be compacted in 12" loose lifts to a 95% of maximum dry density within 3 % of optimum moisture content in accordance with ASTM D698. Backfill must be clean and free of organic and frozen soils and foreign materials.
- 7. Foundation designs assume level ground at tower site.
- 8. Loose material shall be removed from bottom of excavation prior to concrete placement.
- 9. Concrete cover from exposed surface of concrete to surface of reinforcement shall not be less than 3".
- 10. Concrete and reinforcement installation must conform to ACI 318, "Building Code Requirements for Structual Concrete,"
- 11. Concrete shall develop a minimum compressive strength of 3000 psi in 28 days.
- 12. Concrete shall be placed as soon as practical after excavating to avoid disturbance of bearing and side wall surfaces.
- 13. Difficult excavating may be encountered due to shallow bedrock, Heavy excavating equipment may be required.
- 14. Contractor must confirm that the anchor locations are consistent with both the boring location plan in the soil report and the site plan dated 02/01/2006 by McKinney Land Surveying of Columbia, Kentucky.

**Boulevard Properties** NGX 33 x 300'

Fredericktown/Bardstown,

N NELLO CORPORATION

	1301 Stahly Drive
į	Nappanee, IN 46550
	Bus: (574)773-4827
	Fax: (574)773-5840

9 OF 9

REV	BY	DATE	DESCRIPTION
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DRAWN BY: RCH CHECKED: AJK ENG. APP:

ORIG. DATE: 7/10/2006 DWG. PROG: v2.01

DWG NO: 110985

SHEET:

## **EXHIBIT E**

## SITE DEVELOPMENT PLAN

VICINITY MAP
PROPERTY OWNER LISTING
500' VICINITY MAP
LEGAL DESCRIPTIONS
SITE PLAN
VERTICAL TOWER PROFILE

ı				

# EXHIBIT F COMPETING UTILITIES, CORPORATIONS, OR PERSONS LIST

## **COMPETING UTILITIES, CORPORATIONS, OR PERSONS LIST:**

- American Towers
- Crown Communications
- SBA
- Verizon
- Cingular/AT&T
- Nextel
- T-Mobil
- Sprint
- Bluegrass Cellular
- Ramcell Cellular

# EXHIBIT G COLLOCATION REPORT



124 S. Keeneland Drive Richmond, KY 40475

859-544-4802 859-544-5858 FAX

## GRADYVILLE

#### Discussion of site need and configuration

Currently, Cellular One has a gap in coverage along the Cumberland Parkway and nearby roads between Columbia and Edmonton. The closest sites are just east of Edmonton and in Columbia. The distance, coupled with local terrain, blocks any meaningful signal from reaching the area.

The proposed site fills in a large part of the problem area noted above providing service along the Cumberland Parkway and the Gradyville area. The height is needed to overcome the rugged terrain through the area.

Sincerely,

W. Eric Broviak

Regional Rf Engineering Manager

# EXHIBIT H APPLICATION TO FAA

## Notice of Proposed Construction or Alteration (7460-1)

SHARE-000041563-06 Sponsor: Shared Sites, L.L.C. **Project Name:** 

Details for Case: Gradyville

Show Project Summary

**Case Status** 

2006-ASO-3273-OE ASN:

Date Accepted:

05/31/2006

Status:

Accepted

Date Determined:

Letters:

None

Construction / Alteration Information

Notice Of:

Construction

Structure Summary Structure Name:

Gradyville

Duration:

Permanent

Structure Type:

Antenna Tower

if Temporary : Months:

Days:

Other:

Work Schedule - Start: 07/15/2006 Work Schedule - End: 12/31/2006

Prior ASN:

FCC Number:

State Filing:

Structure Details Latitude:

37° 4' 3.1" N

85° 23' 14.32" W Longitude:

**Horizontal Datum:** NAD83

Site Elevation (SE): 840 (nearest foot)

Structure Height (AGL): 286 (nearest foot)

Marking/Lighting: White-medium intensity

Other:

**Nearest City:** 

Columbia

**Nearest State:** 

Kentucky

Traverseway:

No Traverseway

Description of Location:

Description of Proposal:

550 Willie Neil Rd Columbia, KY 42728 280' Communications tower w/ 6' lightning rod for wireless

communications. located in fenced compound.

**Common Frequency Bands** Low Freq High Freq Freq Unit ERP ERP Unit

806 824 MHz 500 W 824 849 500 W MHz 851 866 MHz 500 W 869 894 MHz 500 W 896 901 MHz 500 W 901 902 MHz W 930 931 MHz 3500 W 931 932 MHz 3500 W 932 932.5 MHz 17 dBW 935 940 MHz 1000 940 MHz 3500 941 W 1850 MHz 1640 1910 W MHz 1640 1930 1990 W 2305 2310 MHz 2000 W

MHz 2000

W

**Specific Frequencies** 

2360

2345

# EXHIBIT I APPLICATION TO KENTUCKY AIRPORT ZONING COMMISSION

Kentu Ĉiĝ

TC 56-50E (Rev. 02/05)

Kentucky Transportation Cabinet, Kentucky Airport Zoning Commission, 200 Mero S  APPLICATION FOR PERMIT TO CONSTRUCT OR ALTER INSTRUCTIONS INCLUDED	
1. APPLICANT – Name, Address, Telephone, Fax, etc.  Shared Sites, LLC- Kamal Doshi 1390 Chain Bridge Rd #40 Mclean, VA 22101 703-893-0806 (phone) 703-852-7289 (fax)  2. Representative of Applicant – Name, Address, Telephone, Fax Boulevard Properties, LLC- Matt Wallack 7383 Utica Blvd Lowville, NY 13367	9 Latitude: 37 ° 4 ' 3 1 "  10. Longitude: 85 ° 23 ' 14 32 "  11. Datum: F NAD83 F NAD27 Fl Other  12. Nearest Kentucky City: Columbia County Adair  13. Nearest Kentucky public use or Military airport:  196: Columbia-Adair County Airport  14. Distance from #13 to Structure: 2.55 miles
315-376-3333 (phone) 315-376-8139 (fax)	15. Direction from #13 to Structure; WSW  16. Site Elevation (AMSL): 840 00 Feet
3. Application for: 同 New Construction 『 Alteration 『 Existing	17. Total Structure Height (AGL): 286.00 Feet
4. Duration: Permanent Temporary (Months Days)  5. Work Schedule: Start 15 Jul 2006 End 31 Dec 2006	18. Overall Height (#16 + #17) (AMSL): 1,126.00 Feet
6. Type: Antenna Tower Crane Building Power Line Landfill Water Tank Other  7. Marking/Painting and/or Lighting Preferred: Red Lights and Paint Dual - Red & Medium Intensity White White - Medium Intensity Dual - Red & High Intensity White White - High Intensity Cother  8. FAA Aeronautical Study Number  21. Description of Proposal: 280' Wireless communications tower w/ 6' lightning rod located within fe	20. Description of Location: (Attach USGS 7.5 minute Quadrangle Map or an Airport layout Drawing with the precise site marked and any certified survey)  550 Willie Neil Rd Columbia, KY 42728
22. Has a "NOTICE OF CONSTRUCTION OR ALTERATION" (FAA Form 7460-1)	
Matthew J. Wallack Printed Name and Title  PENALTIES: Persons failing to comply with Kentucky Revised Statutes (KRS 183 050:Series) are liable for fines and/or imprisonment as set forth in KRS 183.990(3). in further penalties.	31 May 2006 Date  8.861 through 183.990) and Kentucky Administrative Regulations (602 KAR
	man, KAZC Fl Administrator, KAZC
☐ Approved	Date

	è		

# EXHIBIT J GEOTECHNICAL REPORT

## SUBSURFACE INVESTIGATION & FOUNDATION RECOMMENDATIONS

## PROPOSED GRADYVILLE 2 CELL TOWER COLUMBIA, KENTUCKY

Prepared for:

BOULEVARD PROPERTIES LOWVILLE, NY

Prepared by:

ALT & WITZIG ENGINEERING, INC. WEST CHESTER, OHIO

**JULY 6, 2006** 

PROJECT NO. 06CN0219

July 6, 2006

Boulevard Properties 7383 Utica Blvd Lowville, NY 13367

ATTN: Mr. Matthew J. Wallack

RE: Subsurface Investigation &

Foundation Recommendations Proposed Gradyville 2 Tower

Columbia, Kentucky

Alt & Witzig File: 06CN0219

#### Gentlemen:

In compliance with your request, we have completed a foundation investigation and evaluation for the above referenced project. It is our pleasure to transmit herewith three (3) copies of our report.

### **SITE LOCATION:**

The site is located in Columbia, Kentucky. Specifically, this site is located at 550 Willie Neil Road. The general vicinity of the site is shown on the enclosed site location map in the appendix of this report.

The purpose of this subsurface investigation was to determine the various soils profile components, determine the engineering characteristics of the materials encountered, and provide information to be used in preparing foundation designs for the proposed communication tower.

### **Field Services**

The field investigation included reconnaissance of the project site, drilling four (4) soil borings for the tower. Additionally, our investigation included performing standard penetration tests, and obtaining soil samples retained in the standard split-spoon sampler. The apparent groundwater level at the boring location was also determined.

The soil borings were performed with a conventional drilling rig equipped with a rotary head. Conventional hollow-stem augers were used to advance the holes. Representative samples were obtained employing split-spoon sampling procedures in accordance with ASTM Procedure D-1586.

Shared Site, L.L.C. Gradyville 2 Tower Alt & Witzig File No.: 06CN0219 July 6, 2006 Page 2

During the sampling procedure, standard penetration tests were performed at regular intervals to obtain the standard penetration value of the soil. The standard penetration value is defined as the number of blows of a 140-pound hammer, falling thirty (30) inches, required to advance the split-spoon sampler one (1) foot into the soil. The results of the standard penetration tests indicate the relative density and comparative consistency of the soils, and thereby provide a basis for estimating the relative strength and compressibility of the soil profile components.

#### **Laboratory Testing**

The types of soils encountered in the borings were visually classified according to the Unified Soil Classification System and are described in detail on the boring logs. Representative samples of the soils encountered in the field were placed in sample jars and are now stored in our laboratory. Unless notified to the contrary, all samples will be disposed of after three (3) months.

#### Recommendations for Tower

Information provided by Boulevard Properties indicates that guyed cellular tower will be constructed at this site. It is anticipated that the structural loads of the tower will be supported by a conventional spread footings or drilled pier foundation.

Our borings encountered medium stiff to stiff clay and silty clay to a depth of four (4) to sixteen (16) feet in the area of the tower. At this depth the borings encountered hard limestone with thin clay layers. A rock core was performed at the center of the tower. Auger refusal occurred at this boring at four and one-half (4½) feet below grade. The boring was offset several times, however, the rock could not be penetrated by our auger. Therefore, a rock core was attempted from 4½ to 9½ feet below grade. The rock encountered a 2 to 3 inch limestone layer and "plugged off" with clay. Therefore, a spilt-spoon sample was taken at 9½ feet and indicated red clay of medium stiff consistency. Another rock core was then attempted from twelve (12) to fifteen (15) feet below grade. The rock core indicated hard limestone with thin clay seams. Recovery for the core was 65% with a Rock Quality Designation (RQD) of 39% for the core. This qualifies as fair to good quality bedrock.

Shared Site, L.L.C. Gradyville 2 Tower

Alt & Witzig File No.: 06CN0219

July 6, 2006 Page 3

The following soil parameters can be used to design a shallow foundation. Due to the seasonal variations in moisture content and freeze thaw cycles, no skin friction or resistance to passive pressure should be considered above four (4) feet.

Borings B-1, B-3, and B-4										
Soil Description	Depth Below Existing Grade	Bearing Pressure (psf) SF=3	Dry Density (pcf)	ф	Кp	Coefficient of Friction Against Sliding				
Clay	4'-12'*	3,500	115	15°	1.7	0.50				
Limestone 12' + 20,000 130 38° 4.2 0.70										

<sup>\*</sup> Some difficulty will be encountered in penetrating the hard limestone layer at 4½ feet at B-1 and at 6 feet at B-3.

Borings B-2										
Soil Below Bearing Dry Pressure (psf) Density Grade SF=3 (pcf)					Kp	Coefficient of Friction Against Sliding				
Silty Clay	4' - 7'	2,000	110	10°	1.0	0.35				
Clay	7' – 16'	3,500	115	15°	1.7	0.50				
Limestone 16' + 20,000 130 38° 4.2 0.70										

The weight of the backfill above the footings will be used to resist uplift forces; therefore, it is recommended that proper compaction techniques be maintained. It is recommended that a density of 100% maximum dry density in accordance with ASTM D-698 be achieved above the footings to finished grade for all fill. If on-site soils are used, the excavation should be ramped so that a drive or walk-behind sheepfoot can be used to compact the clayey soils.

Shared Site, L.L.C. Gradyville 2 Tower Alt & Witzig File No.: 06CN0219 July 6, 2006 Page 4

The groundwater should be anticipated at the soil/rock interface. All borings indicated dry conditions during and upon completion of operations However, depending upon the weather conditions while excavations are open, seepage from surface runoff may occur into shallow excavations. Since these foundation materials tend to soften when exposed to free water, every effort should be made to keep the excavations dry should water be encountered.

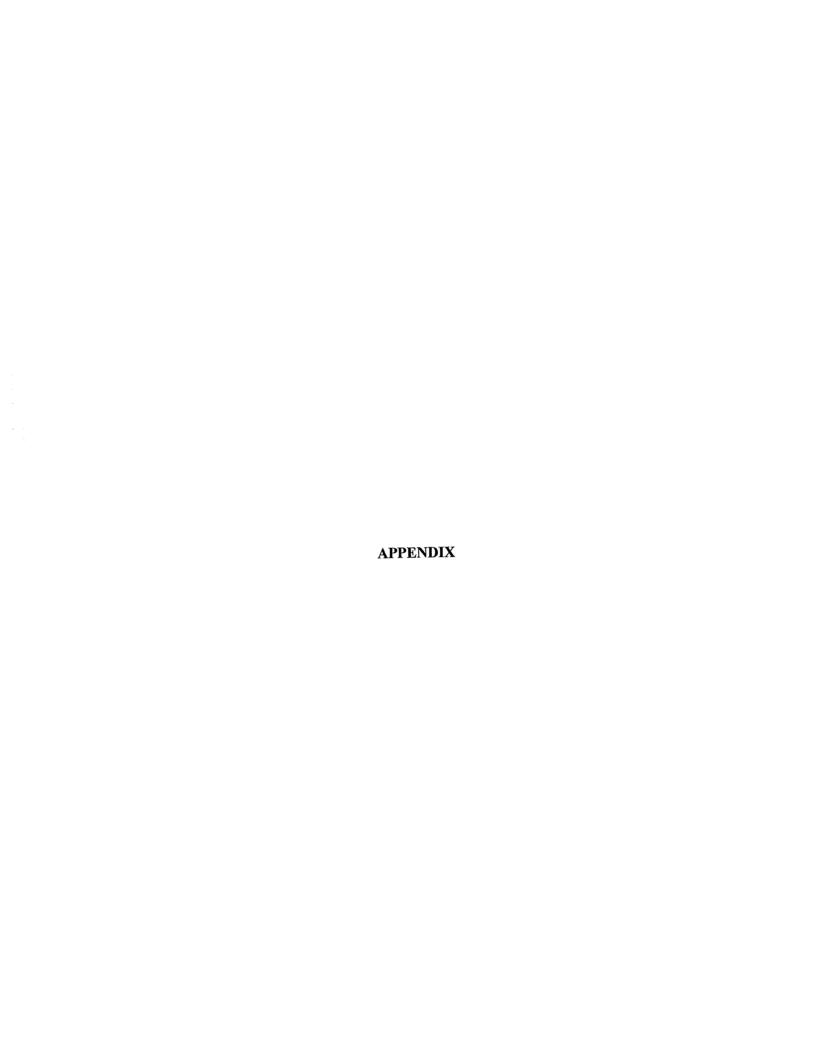
Often, because of design and construction details that occur on a project, questions rise concerning the soil conditions. If we can give further service in these matters, please contact us at your convenience.

Respectfully Submitted,

ALT & WITZIG ENGINEERING, INC.

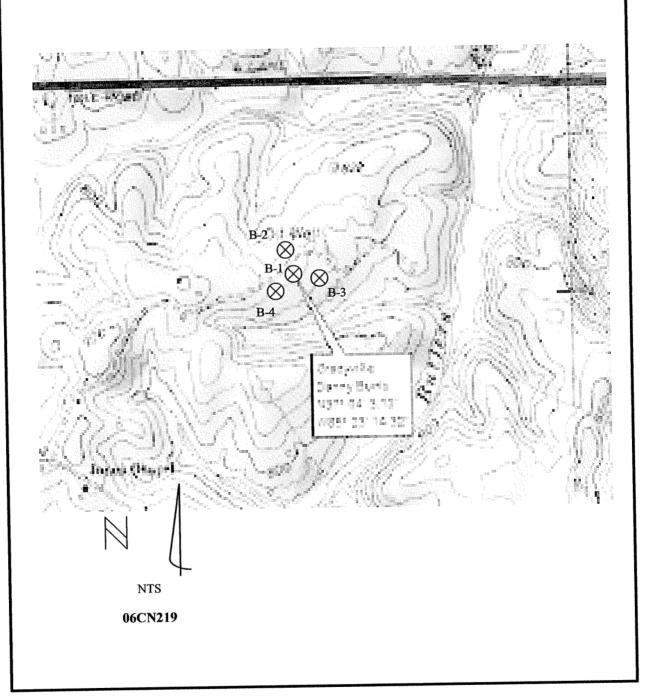
Robert Smith, P.E. Project Engineer

Patrick A. Knoll, P.E.



## Boring Location Plan

Proposed Gradyville 2 Tower Columbia, Ohio



## A

## **RECORD OF SUBSURFACE EXPLORATION**

CLIENT Shared Sites, LLC PROJECT NAME Gradyville 2 Tower LOCATION Columbia, Kentucky				-							Boring Alt & V		ile No.	B-1 06CN0219
	6/29							hics		Standard Penetration Test, N - Blows/foot	Qu - tsf Unconfined Compressive Strength	Pp - tsf Pocket Penetrometer	tent %	
STRATA ELEV.		SURFACE ELEVATION	-	Depth Scale	Strata Depth	Sample No.	Sample Type	Sampler Graph	Ground Water	Standard Pen Blows/foot	Qu - tsf Unco Strength	Pp - tsf Pocke	Moisture Content %	Remarks
		0.0-0.6 Topsoil 0.6-4.0 Brown and Reddish Brown Clay	1	5	4.5	1	ss	X		12		4.5	33.1	
		4.5-9.5 Rock Core 1  Red Clay and 2" to 3" Limestone  REC = 30%  RQD = 0%  9.5-12.0 Red Clay and Limestone		10	9.5	2	ss	V		17		2.8	32.9	
		12.0-15.0 Rock Core 2 Limestone with Thin Clay Seams REC = 65% RQD = 39%	-		12.0		55	Δ		17		2.0	32.9	
		Boring Terminated at 15.0 feet												
			-											
Boring Mi HSA - Hollow St CFA - Continuou DC - Driving Cas MD - Mud Drilling	em Au us Fligh sing			At C Afte	DUND Completer er ter on Boring	etion hou Rods	rs <u>Dr</u> y		ft. ft	ft.	L		ST C/ R	Sample Type S - Driven Split Spoon T - Pressed Shelby Tube A - Continuous Flight Auger C - Rock Core J - Cuttings

## $A_{//}$

## **RECORD OF SUBSURFACE EXPLORATION**

P	LIENT ROJECT NA OCATION	ME	Shared Sites, LLC Gradyville 2 Tower Columbia, Kentucky											Boring Alt & V		ile No.	B-2 06CN0219	
		,	ILLING and SAMPLING INFORMA	TION	, , , , , , , , , , , , , , , , , , ,										т-			
D	ate Started ate Completed oring Method			p <u>30</u>	lbs. in. in.								st, N -	pressive	eter			
	STRATA		SOIL CLASSIFICAT	ION			Ð	÷.		ed.	raphics	iter	Standard Penetration Test, N Blows/foot	Qu - tsf Unconfined Compressive Strength	Pp - tsf Pocket Penetrometer	ontent %		
	ELEV.		SURFACE ELEVATION				Depth Scale	Strata Depth	Sample No.	Sample Type	Sampler Graph	Ground Water	Standard P Blows/foot	Qu - tsf Un Strength	Pp - tsf Po	Moisture Content %	Remarks	
			0.0-0.2 Topso	1	/	1												
			0.2-7.0 Red Silty	Clay		-			1	ss	X		8		3.5	18.1		
	**************************************					F	5	7.0	2	ss	X		10		3.0	21.0		
			7.0-14.0 Red Cl	ay	THE RESERVE THE PROPERTY OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COL	t		7.0	3	SS	X		17		4.5+	29.7		
							10		4	SS	X		28	6.3	4.5+	29.9		
						F	4.5	14.0										
_			14.0-16.0 Red Clay Trace Brown	and Black	Mottleing	-	15	16.0	5	SS	M		35		3.5	31.1		
			Boring Terminated at	16.0 feet		F												
						L												
_						H												
_						F												
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-	Boring Me	thed					<u>L_</u>				Ц						Sample Type	
D	SA - Hollow Ste FA - Continuou C - Driving Cas D - Mud Drilling	m Au s Fligl ing				Z.	At C		etion hou	<u>Dry</u> rs		ft.	ft.			ST CA RC	S - Driven Split Spoon - Pressed Shelby Tube A - Continuous Flight Auger C - Rock Core	
					(	$\supset$		er on Borine				ft n				Cl	J - Cuttings	

## 4

## **RECORD OF SUBSURFACE EXPLORATION**

CLIENT PROJECT NA LOCATION	AME	Shared Sites, LLC Gradyville 2 Tower Columbia, Kentucky									Boring Alt & V		ïle No.	B-3 06CN0219
Date Started Date Completed Boring Method	6/29	Spoon Sampler OD 2 in.						SO	- A	ration lest, N -	Qu - tsf Unconfined Compressive Strength	Penetrometer	ıt %	
STRATA ELEV.		SOIL CLASSIFICATION  SURFACE ELEVATION		Depth Scale	Strata Depth	Sample No.	Sample Type	Sampler Graphic Ground Water	Glodina water	Standard Penetration Test, N Blows/foot	Qu - tsf Unconfli Strength	Pp - tsf Pocket Penetrometer	Moisture Content %	Remarks
	1	0.0-0.4 Topsoil	7						T					
		0.4-6.0 Reddish Brown Clay Trace Gravel	-			1	ss	X		10	3.7	4.5	21.9	
			-	5	6.0	2	ss	X		50/3		3.0	33.2	
		Auger Refusal at 6.0 feet												
Boring M HSA - Hollow St CFA - Continuo DC - Driving Ca: MD - Mud Drillin	em Au us Flig sing	ht Auger	∇ ▼ 0	At C Afte Wat		etion hou Rods	<u>Dry</u> rs <u>Dry</u>	!	ft ft. ft.				ST CA RO	Sample Type 5 - Driven Split Spoon - Pressed Shelby Tube A - Continuous Flight Auger C - Rock Core J - Cuttings

## RECORD OF SUBSURFACE EXPLORATION



P		ME ]	Shared Sites, LLC Gradyville 2 Tower Columbia, Kentucky										Boring Alt & V		ile No.	B-4 06CN0219
F.	OCATION	-	Columbia, Remucky													
		6/29	LLING and SAMPLING INFORMATION           /2006         Hammer Wt. 140         Ibs           /2006         Hammer Drop 30         in.										0			
	oring Method	HSA										n Test, N -	Qu - tsf Unconfined Compressive Strength	strometer		
	STRATA ELEV		SOIL CLASSIFICATION			ale	apth	ďo.	Гуре	Graphics	Nater	Standard Penetration Test, N Blows/foot	Jnconfined	Pp - tsf Pocket Penetrometer	Moisture Content %	S
		SURFACE ELEVATION				Depth Scale	Strata Depth	Sample No.	Sample Type	Sampler Graph	Ground Water	Standard Blows/fo	Qu - tsf l Strength	Pp - tsf P	Moisture (	Remarks
			0.0-0.5 Topsoil		L											
			0.5-9.5 Reddish Brown Clay Trace Grave and Some Weathered Siltstone	4	-			1	SS	M		17	5.4	4.5+	23.2	
					_	5		2	SS	A		17		4.5+	28.5	
					-			3	SS	M		18		4.5+	26.6	
					Ľ		9.5	-		А				1.0	20.0	
			9.5-11.5 Brown and Red Clay with Grave	Ā	-	10	11.5	4	SS	X		10		2.5	31.7	
			Auger Refusal at 11.5 feet		F											
					L											
					-											
					H	1										
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F					F											
	Boring Me	thod	L		Τ_			L	.E.C		L	<u></u>	L	L	L	Sample Type
	SA - Hollow Ste FA - Continuou	m Au		7	Z.		OUNE Compl					ft.				S - Driven Split Spoon T - Pressed Shelby Tube
D	C - Driving Cas 1D - Mud Drilling	ing	· · · · · <del>· · · ·</del>		_			hou			ft.				C	A - Continuous Flight Auger
IV	io - maa Diniinį	,		C	)		ter on Borin					t.				U - Cuttings

#### **GENERAL NOTES**

#### SAMPLE IDENTIFICATION

The Unified Soil Classification System is used to identify the soil unless otherwise noted.

### SOIL PROPERTY SYMBOLS

N: Standard "N" penetration: Blows per foot of a 140 pound hammer falling 30 inches on a 2 inch O.D. split-spoon.

Qu: Unconfined compressive strength, TSF

Qp: Penetrometer value, unconfined compressive strength, TSF

Mc: Water content, %

LL: Liquid limit, %

PL: Plastic limit, %

Dd: Natural dry density, PCF

▼: Apparent groundwater level at time noted after completion

## DRILLING AND SAMPLING SYMBOLS

SS: Split-spoon - 1 3/8" I.D., 2" O.D., except where noted

ST: Shelby tube - 3" O.D., except where noted

AU: Auger sample
DB: Diamond bit
CB: Carbide bit
WS: Washed sample

Stiff

Hard

Very Stiff

## RELATIVE DENSITY AND CONSISTENCY CLASSIFICATION

TERM (NON-COHESIVE SOILS)	BLOWS PER FOOT
Very loose	0 - 4
Loose	5 - 10
Firm	11 - 30
Dense	31 - 50
Very Dense	Over 50
TERM (COHESIVE SOILS)	Qu (TSF)
Very soft	0 - 0.25
Soft	0.25 - 0.50
Medium	0.50 - 1.00

### **PARTICLE SIZE**

<b>Boulders</b>	8 in.(+)	Coarse Sand	5 mm-0.6 mm	Silt	0.075 mm - 0.005 mm
Cobbles	8 in 3 in.	<b>Medium Sand</b>	0.6mm-0.2 mm	Clay	0.005mm(-)
Gravel	3 in 5 mm	Fine Sand	0.2mm-0.075 mm		

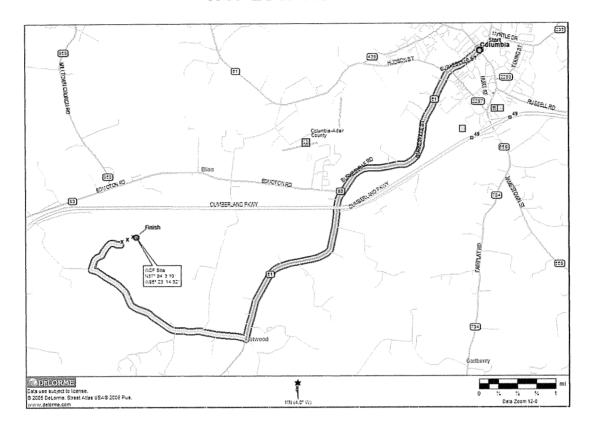
1.00 - 2.00

2.00 - 4.00

4.00 +

# EXHIBIT K DIRECTIONS TO WCF SITE

## WCF LOCATION MAP



## **DIRECTIONS TO WCF FROM COUNTY SEAT**

From the Adair County Court House proceed south west out of Columbia for approximately 5 miles. Turn right on Jones Chapel Road and proceed approximately 2.3 miles. Turn right on Willie Nell Road and proceed approximately .6 miles (continue past property owner's buildings). WCF site is on the right.

These directions were prepared by:

David B. Jantzi Boulevard Properties 7383 Utica Boulevard Lowville, NY 13367 (315) 523-6258

# EXHIBIT L COPY OF REAL ESTATE AGREEMENT

#### SITE LEASE AGREEMENT

County: Adair City: Columbia

Site Name: Gradyville Site I. D.: Latitude: N37° 04' 3,10" Longitude: W85° 23' 14.32"

Site Address: 550 Willie Nell Road, Columbia, Kentucky 42728

1. Premises and Use. In consideration of the expenditures and efforts of Tenant to develop and use the premises described below, the undersigned (jointly and severally, the "Owner") hereby leases to Shared Sites, LLC, a West Virginia limited liability company ("Tenant"), or its permitted assignee, the site described below:

The exclusive right to use and occupy real property, approximately 10,000 square feet of land, as approximately described and shown on Exhibit A, together with non-exclusive easements (a) to a public right of way, for reasonable access, (b) to the appropriate sources of electric and telephone facilities as determined by Tenant, (c) for placement of any supporting guy wires as reasonably determined by Tenant per good engineering practices and (d) to meet fall-zone or set back requirements (collectively, the "Site"). The Site will be used for installing, maintaining and/or operating, a wireless communications and broadcast facility, including, without limitation, antenna towers or poles, guy wires, foundations, utility lines, equipment shelters, ice bridges, radio equipment, antennas, security alarms, cameras, lights, and supporting equipment thereto (collectively, the "Facility"), or for any other use permitted by applicable law. Title to the Facility shall be held by Tenant and the Facility shall remain Tenant's personal property and in no event shall be construed as fixtures.

- 2. Term. The term of this Agreement (the "Initial Term") is five (5) years, starting on the date Tenant signs this Agreement. This Agreement will be automatically renewed for ten (10) additional terms (each a "Renewal Term") of five years each with a % increase in rent at each renewal, unless Tenant provides Owner notice of intention not to renew 90 days prior to the expiration of any term.
- Rent. Beginning with the date upon which the construction of the Facility is completed, rent will be paid quarterly, on the first day of each calendar quarter, at the rate of per quarter, partial months to be prorated.
- 4. Title, Quiet Possession, and Access. Owner represents and agrees (a) that it is the owner of the Site pursuant to the instrument set forth on Exhibit A; (b) that the Site is free from all encumbrances except as set forth on Exhibit A, (c) that it has the right to enter into this Agreement; (d) that the person signing this Agreement has the authority to sign; (e) that Tenant, its employees, agents, subcontractors, clients, and invitees are entitled to access to the Site at all times and to the quiet possession of the so long as Tenant is not in default beyond the expiration of any cure period; and (f) that Owner will not have unsupervised access to the Site or to the related Facility. Owner further represents, agrees and covenants that during the Initial Term and Renewal Terms of this Agreement Owner will not use, or permit others to use, any part of any real property currently owned, or hereafter acquired, by Owner within two (2) miles of the Site for any type of communication or broadcast tower or otherwise provide advice, services for

development of competing properties or release any information about Tenant's business. Owner shall obtain non-disturbance, subordination and attornment agreement from prior lien holders as required by Tenant's title insurance company.

- 5. Assignment/Subletting. Either party may assign or transfer this Agreement with notice to the other party. Upon delivery of such notice the transferor will have no further liability under the Agreement. Tenant shall be allowed to sublet, or otherwise grant use rights to all or any portion of the Site and/or the Facility without the prior written consent of Owner, it being the express intention of Tenant to lease or license antenna, towers, shelters, and related space of the Facility to separate wireless communication carriers and other clients.
- 6. Improvements. Tenant may make such future improvements on or to the Site and Facility as it deems necessary. Owner agrees to cooperate with Tenant with respect to obtaining any required building/zoning approvals for the Site and improvements. Upon termination or expiration of this Agreement, Tenant shall remove the Facility and its other property located upon the Site, excepting the foundation, and will restore the Site to substantially the condition existing at inception of this lease within 365 days of said termination, except for ordinary wear and tear and casualty loss. Tenant shall reimburse Owner any property tax increases directly attributable to Tenant's improvements. Owner shall fully cooperate Tenant in any available administrative or court appeals of such tax increases.
- 7. Compliance with Laws. Owner represents that Owner's property (including the Site), and all improvements located thereon, are in substantial compliance with building, life/safety, disability and other laws, codes and regulations of applicable governmental authorities. Tenant will substantially comply with all applicable laws relating to its possession and use.
- Utilities. Tenant will pay for all utility connections to the Site.
   Owner will cooperate with Tenant in Tenant's efforts to obtain utilities from the most economical source.
- 9. Termination. Tenant may terminate this Agreement at any time by notice to Owner without further liability, if Tenant does not obtain all permits or other approvals (collectively, "approval") required from any municipal and/or governmental authority or any easements required from any third party to construct/operate the Facility for its intended use, or if any such approval is canceled, expires or is withdrawn or terminated, or if Owner fails to have proper ownership of the Site or authority to enter into this Agreement, or if Tenant, for any other reason, in its sole discretion, determines that it will be unable to use the Site for its intended purpose.
- Default. If either party is in default under this Agreement for a period thirty (30) days following receipt of notice from the non-

defaulting party shall have the right to pursue all legal remedies including termination of this Agreement. If a non-monetary default may not reasonably be cured within a thirty (30) day period, this Agreement may not be terminated if the defaulting party commences action to cure the default within such 30 day period and said default is substantially cured within ninety (90) days of the initial notice of default.

- 11. Indemnity. Owner and Tenant each indemnify the other against and hold the other harmless from any and all costs (including reasonable attorneys' fees) and claims of liability or loss which arise out of the use and/or occupancy of the Site or Facility by the direct actions or culpable omissions of the indemnifying party, its employees, agents or independent contractors. This indemnity does not apply to any claims arising from the sole negligence or intentional misconduct or omission of the party seeking indemnification.
- 12. Hazardous Substances. Owner represents that it has no knowledge of any substance, ground contamination, chemical or waste (collectively, "substance") on the Site that is identified as hazardous, toxic or dangerous in any applicable federal, state or local law or regulation. Tenant will not introduce or use any such substance on the Site in violation of any applicable law. Owner shall indemnify Tenant against and hold it harmless from any and all costs (including reasonable attorneys' fees) and claims of liability or loss which arise out of any occurrence or condition causing the presence of any such substance on the Site that occurred prior to the date of this Agreement or is directly attributable to the Owner's use of adjoining premises during the term of this agreement.
- 13. Waiver of Owner's Lien. (a) Owner waives any lien rights it may have concerning the Facility, which is deemed Tenant's personal property and not fixtures, and Tenant has the right to remove the same at any time without Owner's consent. Owner (i) disclaims any interest, now or in the future, in and to the Facility, as fixtures or otherwise; (ii) agrees that the Facility and the leasehold or other use interest of Tenant or its authorized subTenants or users, shall be exempt from execution, foreclosure, sale, levy, attachment, or distress for

- any rent due or to become due. and (iii) agrees to provide any lender of the Tenant with an estoppel statement regarding the above facts, such as the lack of a default hereunder, and any other information or document reasonably requested, such as a non-disturbance, subordination and attornment agreement, within five (5) days of request, and shall upon notice by such lender recognize lender as Tenant or execute a new lease on substantially similar terms with such lender.
- 14. Insurance. Tenant, at its sole cost and expense, shall upon commencement of construction (upon use of mechanical equipment to disturb the land, but not for taking of soil samples or surveys and measurements) procure and maintain bodily injury and property insurance on the Facility with a combined single limit of at least One Million Dollars (\$1,000,000). A certificate of such insurance shall be furnished to Owner within 30 days of written request.
- 15. Miscellaneous. (a) This Agreement applies to and binds the heirs, successors, executors, administrators and assigns of the parties to this Agreement; (b) This Agreement is governed by the laws of the State in which the Site is located; (c) This Agreement (including the Exhibits) constitutes the entire agreement between the parties and supersedes all prior agreements; any amendments to this Agreement must be executed by both parties; (e) If any provision of this Agreement is invalid or unenforceable with respect to any party, the remainder of this Agreement, will not be affected and shall remain valid and enforceable to the extent permitted by law; (f) The prevailing party in any action or proceeding in court is entitled to receive its reasonable attorneys' fees and other reasonable enforcement (or, as applicable, defense) costs and expenses; (g) Owner agrees promptly to execute and deliver to Tenant, simultaneously herewith or forthwith hereafter, a recordable Memorandum of this Agreement in the form of Exhibit B; and (h) All notices are effective, on the third business day after their deposit via certified and postage prepaid mail. or, on the next business day after deposit via overnight delivery, to the address below.

"Owner" "Owner" Shared Sites, LLC ("Tenant") By: Danny W. Burris Name: Debbie Burris Name:David B. Jantzi Title: Site Developer (Subject to Approval) Owner Owner Date: 5/25/2006 5/25/2006 Date:5/25/2006 550 Willie Nell Road Address: 550 Willie Nell Road Columbia, KY 42728 Columbia, KY 42728 Tax ID: 406 86 9307 406 86 9139 Kamal Doshi, Manager (Final Approval) 270-384-5766 Phone: 270-384-5766 Date: 1390 Chain Bridge Road #40 Mclean, VA 22101 Phone: (703)-893-0806

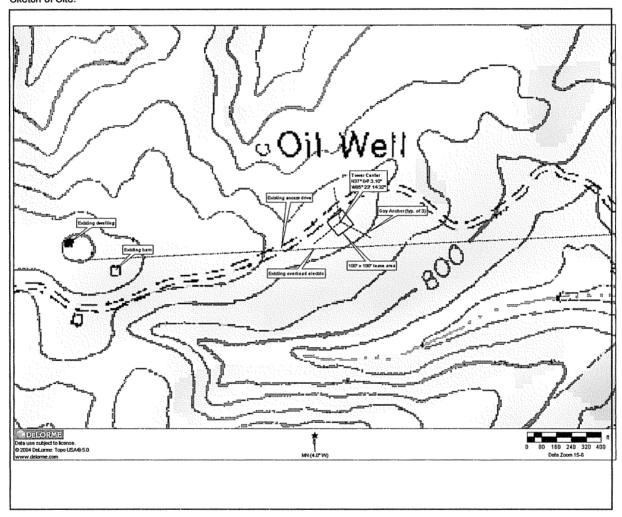
## EXHIBIT A Site Agreement - Site Description - Permitted Exceptions

Site Name: Gradyville	Site I.D.			
Site situated in the City/Town	n of Columbia, County of Adai	r, State of Kentucky	commonly describ	ed as follows

Legal Description: A portion of the premises located at address: 550 Willie Nell Rd., Columbia, KY 42728

more particularly described in Deed to:  $\underline{Danny\ W}$ .  $\underline{Burris\ and\ Debbie\ Burris}$  dated  $\underline{04/03/2006}$  and recorded in  $\underline{Adair}$  County Registry of Deeds at Book  $\underline{213}$ , Page  $\underline{487}$ . Tax Map  $\underline{31}$ , Plot  $\underline{35}$ 

Sketch of Site:



Permitted Exceptions: None.		
Owner Initials	Owner Initials	Tenant Initials

**Note:** Owner and Tenant may, at Tenant's option, replace this Exhibit with an exhibit setting forth the legal description of the property on which the Site is located and/or a more detailed survey or drawing depicting the Site.

This instrument prepared by:		
David B. Jantzi		
After recording please return to: Shared Sites, LLC, 1390 Chain Brid	lge Road #40, McLean VA 22101	
Tax Map No. 31, Plot No. 35 Notice to Clerk: Both Owner Indices.		d in the Grantors and Grantees
M	lemorandum of Site Lease Ag	reement
	(Exhibit B of the Lease Agree	ment)
Site Name: Gradyville	Site I.D.:	
	that a lease was made and entere	ed into by written Site Lease
		Burris ("Owner") and Shared Sites
-		te terms and conditions of which are
incorporated herein by referen	nce.	
Such Agreement provides in	part that Owner leases to Tenant	a portion of a certain site ("Site")
located at 550 Willie Nell Ro	oad, City of Columbia, County of	f Adair, State of Kentucky owned
by Owner, as described in Ex	hibit A attached hereto, with gra	nt of easement for unrestricted
rights of access thereto and to	electric, telephone and guy wire	e facilities for an initial term of five
(5) years, which term is subje	ect to ten (10) additional five (5)	year extension periods by Tenant.
IN WITNESS WHEREOF, th	ne parties have executed the Men	norandum as of the day and year
first above written.	•	
"Owner"	"Owner"	"Tenant" Shared Sites, LLC
Ву:		10-10-11-11-11-11-11-11-11-11-11-11-11-1
Name: Danny W. Burris	Debbie Burris	David B. Jantzí
Title: Owner  Date:	Owner	Consultant

550 Willie Nell Road Columbia, KY 42728 1390 Chain Bridge Road #40 McLean, VA 22101

Address: 550 Willie Nell Road Columbia, KY 42728

STATE OF	(Tenant Notary Block)
CITY/COUNTY OF,s	S
Sites, LLC, a West Virginia limited liability of	before me this day of (Name), (Title) of Shared company (Tenant) on behalf of the limited liability
company.	
(AFFIX NOTARIAL SEAL)  My commission expires:	NOTARY PUBLIC
STATE OF, ss	(Owner Notary Block for Individuals)
The foregoing instrument was acknowledged, 2006, byapplicable), each an Owner.	before me this day of (Name(s) as
(AFFIX NOTARIAL SEAL)  My commission expires:	NOTARY PUBLIC
STATE OF,ss	(Owner Notary Block for Companies)
The foregoing instrument was acknowledged, 2006, by	
(AFFIX NOTARIAL SEAL)  My commission expires:	NOTARY PUBLIC

•			

# EXHIBIT M FLOOD PLAIN CERTIFICATION