COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF NEW CINGULAR WIRELESS PCS, LLC	)
FOR ISSUANCE OF A CERTIFICATE OF PUBLIC	)
CONVENIENCE AND NECESSITY TO CONSTRUCT	)
A WIRELESS COMMUNICATIONS FACILITY AT	)CASE: **2010-00079**
399 DALTON ROAD, ALBANY	)
CLINTON COUNTY, KENTUCKY, 42602	)

SITE NAME: ALBANY (052G0505)

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

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

1. The complete name and address of the Applicant is: New Cingular Wireless PCS, LLC, a Delaware limited liability company having a local address of 601 West Chestnut Street, Louisville, Kentucky 40203.

2. Applicant is a Delaware limited liability company and a copy of its Delaware Certificate of Formation and Certificate of Amendment are attached as **Exhibit A**. A copy of the Certificate of Authorization to transact business in the Commonwealth of Kentucky is also included as **Exhibit A**.

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

4. The public convenience and necessity require the construction of the proposed WCF. The construction of the WCF will bring or improve the Applicant's services to an area currently not served or not adequately served by the Applicant by enhancing coverage and/or capacity and thereby increasing the public's access to wireless telecommunication services. The WCF is an integral link in the Applicant's network design that must be in place to provide adequate coverage to the service area.

5. To address the above-described service needs, Applicant proposes to construct a WCF at 399 Dalton Road, Albany, Kentucky 42602 (36° 41' 51.68" North Latitude, 85° 07' 19.11" West Longitude (NAD 83)), in an area entirely within Clinton County. The property in which the WCF will be located is currently owned by Jerome and Elizabeth Grider, pursuant to that Deed of record in Deed Book 135, Page 645 in the Office of the Clinton County Clerk. The proposed WCF will consist of a 250 foot self-support tower with an approximately 6-foot tall lightning arrestor attached to the top of the tower for a total height of 256 feet. The WCF will also include concrete foundations to accommodate the placement of a prefabricated equipment shelter. The WCF compound will be fenced and all access gates(s) will be secured. A detailed site development plan and survey, signed and sealed by a professional land surveyor registered in Kentucky is attached as **Exhibit B**.

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

7. A geotechnical engineering report was performed at the WCF site by Patriot Engineering and Environmental, Inc., of Louisville, Kentucky dated February 18, 2010 and is attached as **Exhibit E**. The name and address of the geotechnical engineering firm and the professional engineer registered in the Commonwealth of Kentucky who prepared the report is included as part of the exhibit.

8. A list of public utilities, corporations, and or persons with whom the proposed WCF is likely to compete with is attached as **Exhibit F**. Three maps of suitable scale showing the location of the proposed WCF as well as the location of any like facilities owned by others located anywhere within the map area are also included in **Exhibit F**.

9. The Federal Aviation Administration Determination of No Hazard to Air Navigation is attached as **Exhibit G**. The Kentucky Airport Zoning Commission Approval of Application is also attached as **Exhibit G**.

10. The Applicant operates on frequencies licensed by the Federal Communications Commission pursuant to applicable federal requirements. Copies of the license(s) are attached as **Exhibit H**. Appropriate FCC required signage will be posted on the site.

11. Based on the review of Federal Emergency Management Agency Flood Insurance Rate Maps, the licensed, professional land surveyor has noted in **Exhibit B** that the Flood Insurance Rate Map (FIRM) No. 2103270100B dated August 19, 1986 and Map No. 210059B dated June 17, 1986 indicate that the proposed WCF is not located within any flood hazard area.

12. Personnel directly responsible for the design and construction of the proposed WCF are well qualified and experienced. Project Manager for the site is Chad Goughnour, of Nsoro, Inc.

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

14. Applicant has notified every person of the proposed construction who, according to the records of the Clinton County Property Valuation Administrator, owns property which is within 500 feet of the proposed tower or is contiguous to the site property, by certified mail, return receipt requested. Applicant included in said notices the docket number under which the Application will be processed and informed each person of his or her right to request intervention. A list of the property owners who received notices is attached as **Exhibit J**. Copies of the certified letters sent to the referenced property owners are attached as **Exhibit J**.

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

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

17. The site of the proposed WCF is located in an undeveloped area near Albany, Kentucky.

18. Applicant has considered the likely effects of the proposed construction on nearby land uses and values and has concluded that there is no more suitable location reasonably available from which adequate service to the area can be provided. Applicant currently has equipment installed on a nearby municipal water tank, however the water tank is scheduled for demolition. Applicant carefully evaluated locations within the search area for other co-location opportunities and found no suitable towers or other existing structures that met the requirements necessary in providing adequate service to the area. Applicant has attempted to co-locate on towers deigned to host multiple wireless service providers' facilities or existing structures, such as a telecommunications tower or another suitable structure capable of supporting the utility's facilities.

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

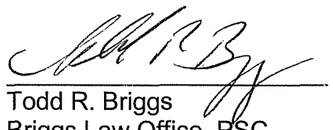
20. No reasonably available telecommunications tower, or other suitable structure capable of supporting the Applicant's facilities which would provide adequate service to the area exists.

21. Correspondence and communication with regard to this Application should be directed to:

Todd R. Briggs
Briggs Law Office, PSC
1301 Clear Springs Trace
Suite 205
Louisville, KY 40223
(502) 412-9222
todd@briggslawoffice.net

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

Respectfully submitted,



Todd R. Briggs
Briggs Law Office, PSC
1301 Clear Springs Trace
Suite 205
Louisville, KY 40223
Telephone 502-412-9222
Counsel for New Cingular Wireless PCS, LLC

Mary K. Keyer
General Counsel
AT&T Kentucky
601 W. Chestnut Street
Room 407
Louisville, KY 40203

LIST OF EXHIBITS

Exhibit A	Certificate of Authorization
Exhibit B	Site Development Plan and Survey
Exhibit C	Vertical Tower Profile
Exhibit D	Structural Design Report Foundation Design Report
Exhibit E	Geotechnical Engineering Report
Exhibit F	Competing Utilities List and Map of Like Facilities, General Area
Exhibit G	FAA Approval KAZC Approval
Exhibit H	FCC Documentation
Exhibit I	Directions to Site and Copy of Lease Agreement
Exhibit J	Notification Listing and Copy of Property Owner Notifications
Exhibit K	Copy of County Judge Executive Notice
Exhibit L	Copy of Posted Notices
Exhibit M	Map of Search Area
Exhibit N	Miscellaneous

Exhibit A

Commonwealth of Kentucky
Trey Grayson, Secretary of State

8/6/2009

Division of Corporations
Business Filings

P. O. Box 718
Frankfort, KY 40602
(502) 564-2848
http://www.sos.ky.gov

Certificate of Authorization

Authentication Number: 84012
Jurisdiction: Briggs Law Office, PSC
Visit http://apps.sos.ky.gov/business/obdb/certvalidate.aspx to authenticate this certificate.

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,

NEW CINGULAR WIRELESS PCS, LLC

, a limited liability company 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 October 14, 1999.

I further certify that all fees and penalties owed to the Secretary of State have been paid; that an application for certificate of withdrawal has not been filed; and that the most recent annual report required by KRS 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 6th day of August, 2009.

Trey Grayson
Secretary of State
Commonwealth of Kentucky
84012/0481848

Delaware

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 AMENDMENT OF "AT&T WIRELESS PCS, LLC", CHANGING ITS NAME FROM "AT&T WIRELESS PCS, LLC" TO "NEW CINGULAR WIRELESS PCS, LLC", FILED IN THIS OFFICE ON THE TWENTY-SIXTH DAY OF OCTOBER, A.D. 2004, AT 11:07 O'CLOCK A.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE EFFECTIVE DATE OF THE AFORESAID CERTIFICATE OF AMENDMENT IS THE TWENTY-SIXTH DAY OF OCTOBER, A.D. 2004, AT 7:30 O'CLOCK P.M.

Harriet Smith Windsor

Harriet Smith Windsor, Secretary of State

2445544 8100

040770586

AUTHENTICATION: 3434823

DATE: 10-25-04

State of Delaware
Secretary of State
Division of Corporations
Delivered 11:20 AM 10/26/2004
FILED 11:07 AM 10/26/2004
SRV 040770586 - 2445544 FILE

CERTIFICATE OF AMENDMENT TO THE CERTIFICATE OF FORMATION OF AT&T WIRELESS PCS, LLC

1. The name of the limited liability company is AT&T Wireless PCS, LLC (the "Company").

2. The Certificate of Formation of the Company is amended by deleting the first paragraph in its entirety and replacing it with a new first paragraph to read as follows:

   "**FIRST:** The name of the limited liability company is New Cingular Wireless PCS, LLC."

3. The Certificate of Amendment shall be effective at 7:30 p.m. EDT on October 26, 2004.

[Signature on following page]

IN WITNESS WHEREOF, AT&T Wireless PCS, LLC has caused this Certificate of Amendment to be executed by its duly authorized Manager this 26th day of October, 2004.

AT&T WIRELESS PCS, LLC

By: Cingular Wireless LLC, its Manager

By: [signature]
Name: Joanne Todaro
Title: Assistant Secretary

STATE OF DELAWARE

CERTIFICATE OF FORMATION OF

AT&T WIRELESS PCS, LLC

The undersigned authorized person hereby executes the following Certificate of Formation for the purpose of forming a limited liability company under the Delaware Limited Liability Company Act.

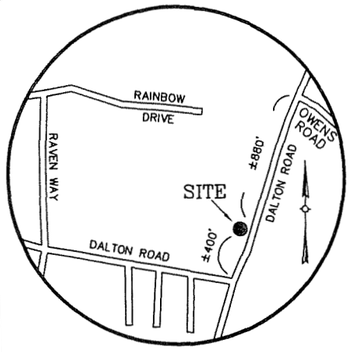
FIRST: The name of the limited liability company is AT&T Wireless PCS, LLC.

SECOND: The address of its registered office in the State of Delaware is Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware 19801. The name of its registered agent at such address is The Corporation Trust Company.

DATED this 7 day of September, 1999.

AT&T WIRELESS SERVICES, INC.,
As Authorized Person

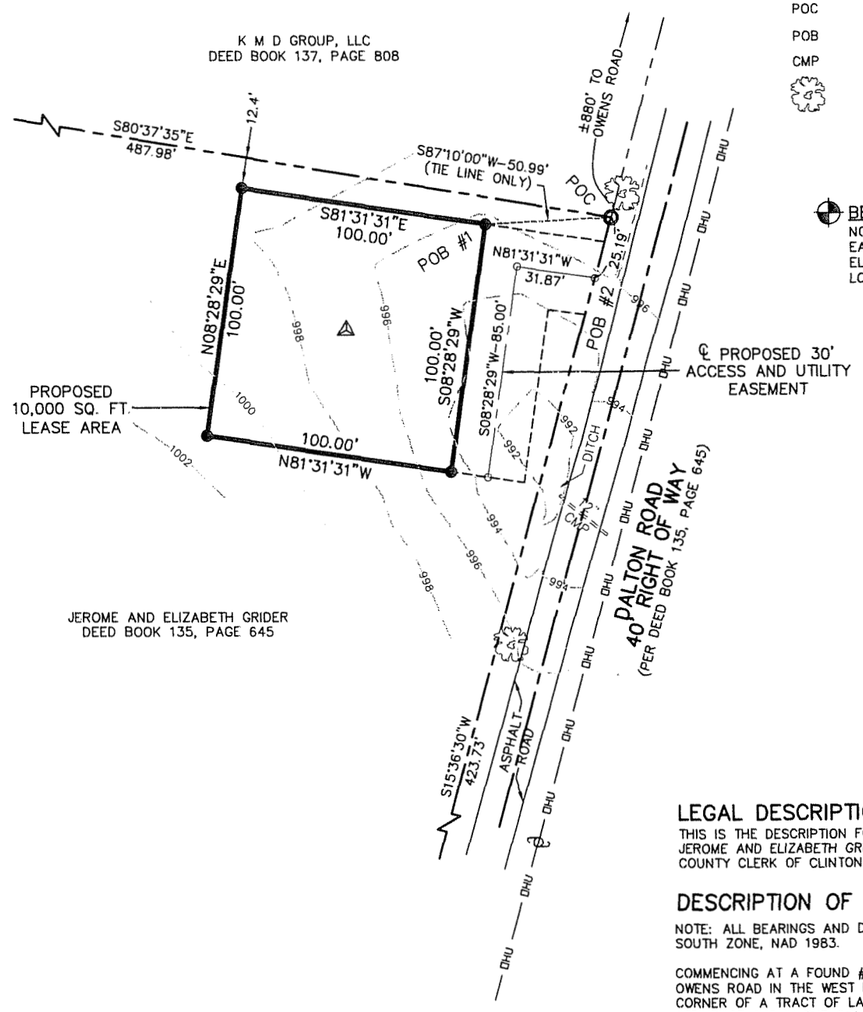
Mark U. Thomas, Vice President



LOCATION MAP
ALBANY, CLINTON CO., KY
NOT TO SCALE

FLOOD PLAIN CERTIFICATION

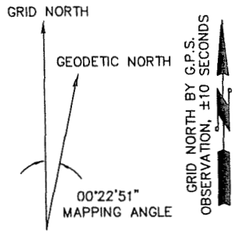
I HAVE REVIEWED THE FLOOD INSURANCE RATE MAPS (FIRM) MAP NO. 2103270100B DATED 8-19-86 AND MAP NO. 210059B DATED 6-17-86 AND THE LEASE AREA DOES NOT APPEAR TO BE IN A FLOOD HAZARD AREA.



JEROME AND ELIZABETH GRIDER
DEED BOOK 135, PAGE 645

LEGEND

- DHU — EXISTING OVERHEAD UTILITIES
- LEASE LINE
- APPROXIMATE PROPERTY LINE
- UTILITY POLE
- FOUND #5 REBAR WITH CAP STAMPED "TALBOTT #3149" UNLESS OTHERWISE NOTED
- SET #5 REBAR WITH CAP STAMPED "JOHN THOMAS #3259" UNLESS OTHERWISE NOTED
- POC — POINT OF COMMENCEMENT
- POB — POINT OF BEGINNING
- CMP — CORRUGATED METAL PIPE
- TREE



NORTH IS BASED ON GRID NORTH KENTUCKY STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, NAD 1983 AND WAS DETERMINED BY COMPUTATION FROM G.P.S OBSERVATION ON SEPTEMBER 29, 2009.

BENCHMARK
NORTH: 1773707.15
EAST: 1824336.03
ELEVATION: 1001.43 (NAVD 88)
LOCATION: #5 REBAR WITH CAP "BTM TRAVERSE"

COORDINATE POINT LOCATION
PROPOSED TOWER CENTERLINE
NAD 1983
LATITUDE: 36°41'51.677"N
LONGITUDE 85°07'19.114"W
ELEVATION: 996.89 (NAVD 88)
STATE PLANE COORDINATE
NORTHING: 1773685.44
EASTING: 1824543.46

NOTE

1. THIS SURVEY IS SUBJECT TO ALL EXISTING EASEMENTS, RESTRICTIONS, EXCEPTIONS, SERVITUDE'S, RIGHT OF WAYS AND PRIOR LEASES WHETHER SHOWN HEREON OR NOT. A TITLE REPORT MAY REVEAL EASEMENTS OR OTHER DEFECTS WHETHER SHOWN HEREON OR NOT.

LAND SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAT AND SURVEY WERE MADE UNDER MY SUPERVISION, AND THAT THE ANGULAR AND LINEAR MEASUREMENTS AS WITNESSED BY MONUMENTS SHOWN HEREON ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS SURVEY WAS MADE BY METHOD OF RANDOM TRAVERSE WITH SIDESHOTS. THE UNADJUSTED CLOSURE RATIO OF THE TRAVERSE WAS GREATER THAN 1:5,000. THIS SURVEY MEETS OR EXCEEDS THE MINIMUM STANDARDS FOR A CLASS "B" SURVEY AS ESTABLISHED BY THE STATE OF KENTUCKY PER 201 KAR 18:150.

JOHN M. THOMAS, PLS 3259 — DATE 10/13/09

OWNER APPROVAL: _____ DATE _____

OWNER APPROVAL: _____ DATE _____

AT&T APPROVAL: _____ DATE _____

GRAPHIC SCALE
60 0 30 60
1 INCH = 60 FT.

LEGAL DESCRIPTIONS

THIS IS THE DESCRIPTION FOR AT&T, FOR AN AREA TO BE LEASED FROM A TRACT OF LAND CONVEYED TO JEROME AND ELIZABETH GRIDER BY DEED OF RECORD IN DEED BOOK 135, PAGE 645 IN THE OFFICE OF THE COUNTY CLERK OF CLINTON COUNTY, KENTUCKY AND FURTHER DESCRIBED AS FOLLOWS:

DESCRIPTION OF PROPOSED LEASE AREA AND EASEMENTS

NOTE: ALL BEARINGS AND DISTANCES ARE BASED ON GRID NORTH KENTUCKY STATE PLANE COORDINATE SYSTEM SOUTH ZONE, NAD 1983.

COMMENCING AT A FOUND #5 REBAR WITH CAP STAMPED "TALBOTT #3149" APPROXIMATELY 880 FEET SOUTH OF OWENS ROAD IN THE WEST RIGHT OF WAY LINE OF DALTON ROAD AND ALSO BEING THE NORTHEAST PROPERTY CORNER OF A TRACT OF LAND CONVEYED TO JEROME AND ELIZABETH GRIDER BY DEED OF RECORD IN DEED BOOK 135, PAGE 645 IN THE OFFICE OF THE COUNTY CLERK OF CLINTON COUNTY, KENTUCKY; THENCE S87°10'00"W, 50.99 FEET TO A SET REBAR #5 REBAR WITH CAP STAMPED "JOHN THOMAS #3259" HEREAFTER REFEREED TO AS A SET REBAR AT THE POINT OF BEGINNING 1; THENCE WITH THE PROPOSED LEASE AREA THE NEXT FOUR CALLS, S08°28'29"W, 100.00 FEET TO A SET REBAR; THENCE N81°31'31"W, 100.00 FEET TO A SET REBAR; THENCE N08°28'29"E, 100.00 FEET TO A SET REBAR; THENCE S81°31'31"E, 100.00 FEET TO THE POINT OF BEGINNING 1 AND CONTAINING 10,000 SQUARE FEET.

ALSO, THE RIGHT TO USE FOR ACCESS AND UTILITIES TO THE ABOVE DESCRIBED LEASE AREA, A 30 FOOT WIDE EASEMENT THE CENTERLINE DESCRIBED AS FOLLOWS: COMMENCING AT A FOUND #5 REBAR WITH CAP STAMPED "TALBOTT #3149" APPROXIMATELY 880 FEET SOUTH OF OWENS ROAD IN THE WEST RIGHT OF WAY LINE OF DALTON ROAD AND ALSO BEING THE NORTHEAST PROPERTY CORNER OF A TRACT OF LAND CONVEYED TO JEROME AND ELIZABETH GRIDER BY DEED OF RECORD IN DEED BOOK 135, PAGE 645 IN THE OFFICE OF THE COUNTY CLERK OF CLINTON COUNTY, KENTUCKY; THENCE ALONG SAID RIGHT OF WAY OF DALTON ROAD S15°36'30"W, 25.19 FEET TO THE POINT OF BEGINNING 2; THENCE WITH SAID EASEMENT CENTERLINE THE FOLLOWING TWO CALLS, N81°31'31"W, 31.87 FEET; THENCE S08°28'29"W, 85.00 FEET TO THE TERMINATION OF SAID EASEMENT CENTERLINE.

BTM ENGINEERING, INC.
3001 TAYLOR SPRINGS DRIVE
LOUISVILLE, KENTUCKY 40220
(502) 459-8402 PHONE
(502) 459-8427 FAX

STATE OF KENTUCKY
JOHN M. THOMAS
3259
LICENSED PROFESSIONAL LAND SURVEYOR

SITE NAME: ALBANY
SITE I.D.: 052G0505
SITE ADDRESS: DALTON ROAD, ALBANY, CLINTON CO., KY 42602
LEASE AREA: 10,000 SQ. FT.
PROPERTY OWNER: JEROME AND ELIZABETH GRIDER, 399 DALTON STREET, ALBANY, KY 42602
TAX MAP NUMBER: 103-17
PARCEL NUMBER: 7.02
SOURCE OF TITLE: DEED BOOK 135, PAGE 645
LATITUDE: 36° 41' 51.677"N
LONGITUDE: 85° 07' 19.114"W

NO.	REVISION/ISSUE	DATE
1	ISSUE	10/13/09

TITLE: COMMUNICATIONS SITE SURVEY

SHEET: C-2

J:\Nsoro\Albany\Survey\Albany C2.dwg, 10/13/2009 1:54:39 PM, lthomas

SITE PLAN NOTES

1. THE PROPOSED DEVELOPMENT IS FOR A 250 FOOT SELF-SUPPORT TOWER AND MULTIPLE EQUIPMENT LOCATIONS. THE LOCATION IS DALTON RDH, ALBANY, KY 42602.

2. THE TOWER WILL BE ACCESSED BY A PROPOSED STABILIZED DRIVE FROM AN EXISTING ASPHALT ROADWAY (DALTON RD) WHICH IS A PUBLIC RIGHT OF WAY. WATER, SANITARY SEWER, \AND WASTE COLLECTIONS SERVICES ARE NOT REQUIRED FOR THE PROPOSED DEVELOPMENT.

3. CENTERLINE OF PROPOSED TOWER GEOGRAPHIC LOCATIONS:
   LATITUDE: 36° 41' 51.677"N 1773685.44 N
   LONGITUDE: 85° 07' 19.114"W 1824543.46 E

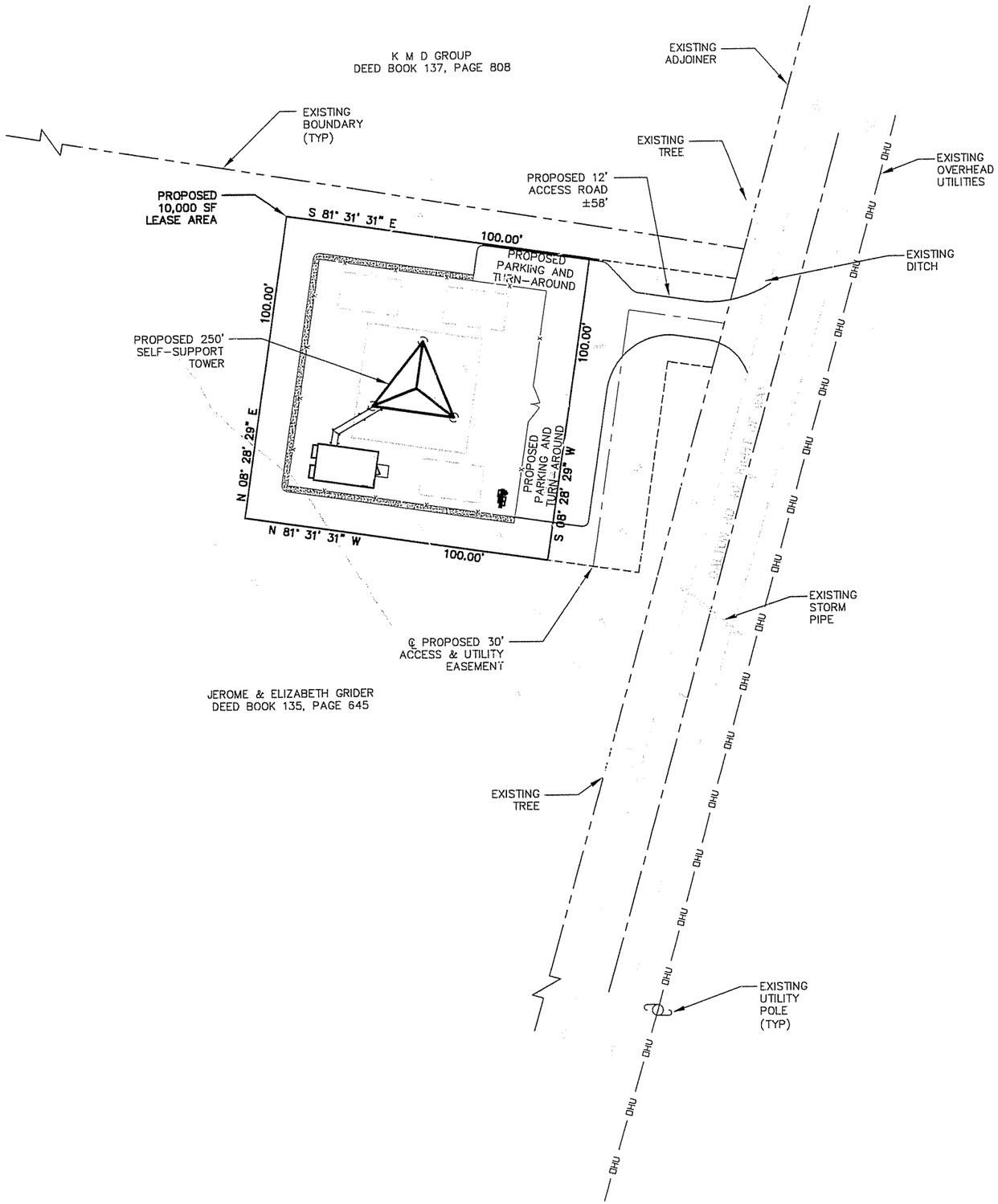
4. REMOVE ALL VEGETATION, CLEAN AND GRUBB LEASE AREA (WHERE REQUIRED).

5. FINISH GRADING TO PROVIDE EFFECTIVE DRAINAGE WITH A SLOPE OF NO LESS THAN ONE EIGHTH INCH (1/8") PER FOOT FLOWING AWAY FROM EQUIPMENT FOR A MINIMUM DISTANCE OF SIX FEET (6') IN ALL DIRECTIONS.

6. LOCATE ALL U.G. UTILITIES PRIOR TO ANY CONSTRUCTION.

7. COMPOUND FINISHED SURFACE TO BE FENCED

UNDERGROUND UTILITIES
CALL 2 WORKING DAYS
BEFORE YOU DIG
INDIANA 1-800-382-5544
KENTUCKY 1-800-752-6007
OR DIAL 811
UTILITIES PROTECTION SERVICE
NON-MEMBERS MUST CALL DIRECTLY



LEGEND

- EXISTING OVERHEAD ELECTRIC
- EXISTING OVERHEAD TELEPHONE
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND TELEPHONE
- UE — PROPOSED UNDERGROUND ELECTRIC
- UT — PROPOSED UNDERGROUND TELEPHONE
- FENCE LINE
- POWER POLE
- TELE. PED — TELEPHONE PEDESTAL
- WATER VALVES
- FIRE HYDRANTS
- BOLLARDS

GRAPHIC SCALE

40 0 20 40

1 INCH = 40 FT.

at&t

nsoro
It's just good business.

BTM Engineering, Inc.
3001 TAYLOR SPRINGS DRIVE
LOUISVILLE, KENTUCKY 40220
(502) 459-8402 PHONE
(502) 459-8427 FAX

STATE OF KENTUCKY
WOODROW W MARCUM JR
13602
LICENSED PROFESSIONAL ENGINEERS

SITE NAME: ALBANY

SITE ID NUMBER: 052GO505

SITE ADDRESS: DALTON RD
ALBANY, KY 42602

LATITUDE: 36° 41' 51.677"N
LONGITUDE: 85° 07' 19.114"W

TAX MAP NUMBER: 103-17

PARCEL NUMBER: 7.02

SOURCE OF TITLE: DEED BOOK 135, PAGE 645

PROPERTY OWNER:
JEROME & ELIZABETH GRIDER
399 DALTON ST
ALBANY, KY 42602

NO	REVISION/ISSUE	DATE
1	ISSUE FOR COMMENT	02/22/09
2	ISSUE FOR ZONING	02/24/10

TITLE: OVERALL SITE LAYOUT

SHEET: Z-2

SITE PLAN NOTES

1. THE PROPOSED DEVELOPMENT IS FOR A 250 FOOT SELF-SUPPORT TOWER AND MULTIPLE EQUIPMENT LOCATIONS. THE LOCATION IS DALTON RDH, ALBANY, KY 42602.

2. THE TOWER WILL BE ACCESSED BY A PROPOSED STABILIZED DRIVE FROM AN EXISTING ASPHALT ROADWAY (DALTON RD) WHICH IS A PUBLIC RIGHT OF WAY. WATER, SANITARY SEWER, \AND WASTE COLLECTIONS SERVICES ARE NOT REQUIRED FOR THE PROPOSED DEVELOPMENT.

3. CENTERLINE OF PROPOSED TOWER GEOGRAPHIC LOCATIONS:
   LATITUDE: 36° 41' 51.677"N 1773685.44 N
   LONGITUDE: 85° 07' 19.114"W 1824543.46 E

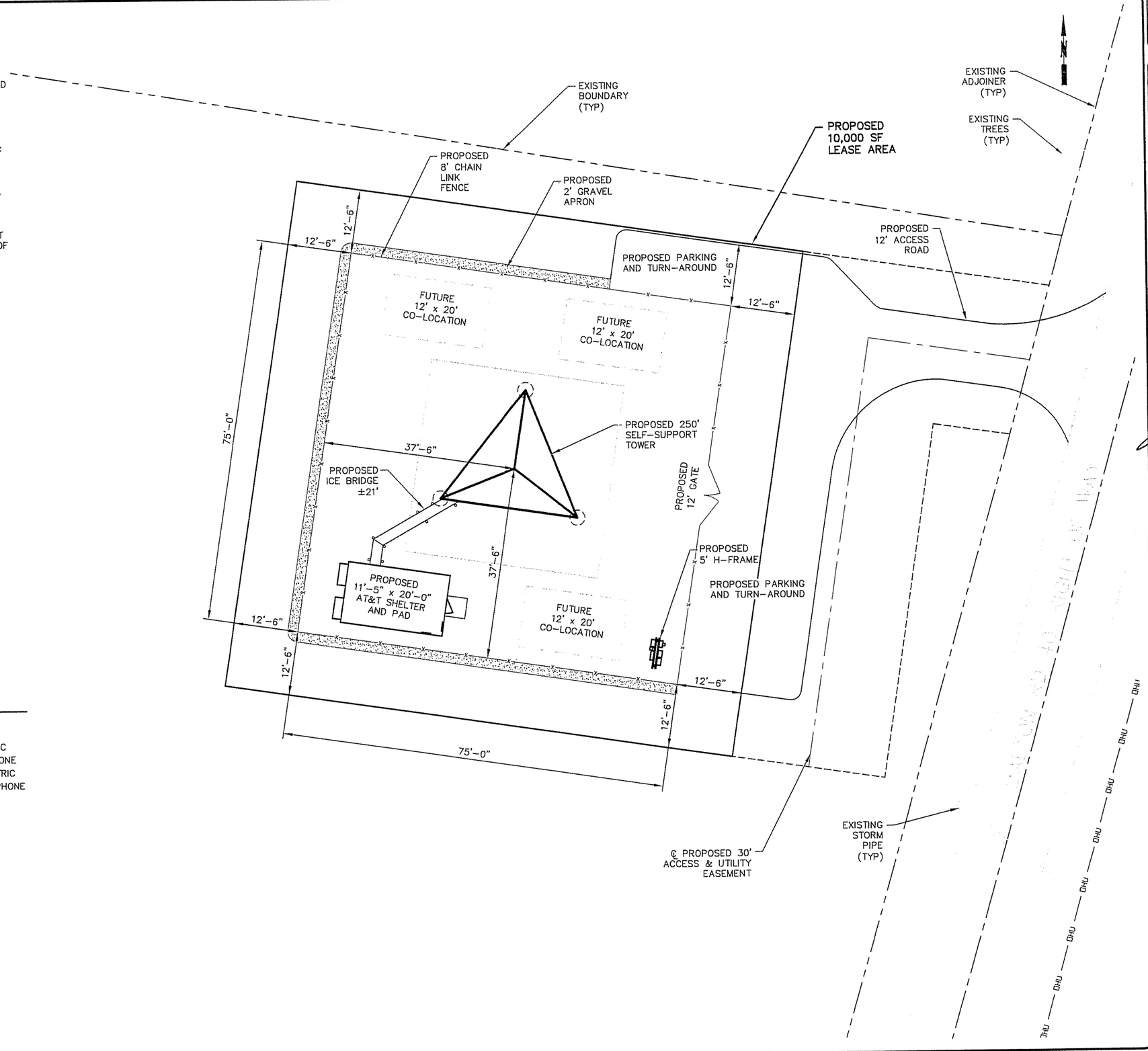
4. REMOVE ALL VEGETATION, CLEAN AND GRUBB LEASE AREA (WHERE REQUIRED).

5. FINISH GRADING TO PROVIDE EFFECTIVE DRAINAGE WITH A SLOPE OF NO LESS THAN ONE EIGHTH INCH (1/8") PER FOOT FLOWING AWAY FROM EQUIPMENT FOR A MINIMUM DISTANCE OF SIX FEET (6') IN ALL DIRECTIONS.

6. LOCATE ALL U.G. UTILITIES PRIOR TO ANY CONSTRUCTION.

7. COMPOUND FINISHED SURFACE TO BE FENCED

UNDERGROUND UTILITIES
CALL 2 WORKING DAYS
BEFORE YOU DIG
INDIANA 1-800-382-5544
KENTUCKY 1-800-752-6007
OR DIAL 811
UTILITIES PROTECTION SERVICE
NON-MEMBERS MUST CALL DIRECTLY



LEGEND

———E———	EXISTING OVERHEAD ELECTRIC
———T———	EXISTING OVERHEAD TELEPHONE
—UE— —UE—	EXISTING UNDERGROUND ELECTRIC
—UT— —UT—	EXISTING UNDERGROUND TELEPHONE
——— UE ———	PROPOSED UNDERGROUND ELECTRIC
——— UT ———	PROPOSED UNDERGROUND TELEPHONE
———x———x———	FENCE LINE
	POWER POLE
TELE. PED	TELEPHONE PEDESTAL
	WATER VALVES
	FIRE HYDRANTS
	BOLLARDS

GRAPHIC SCALE
10 5 0 5 10 20 40
(IN FEET)
1 inch = 20 ft.

at&t

nsoro
It's just good business.

BTM Engineering, Inc.
3001 TAYLOR SPRINGS DRIVE
LOUISVILLE, KENTUCKY 40220
(502) 459-8402 PHONE
(502) 459-8427 FAX

STATE OF KENTUCKY
WOODROW W MARCUM JR
13602
LICENSED PROFESSIONAL ENGINEER

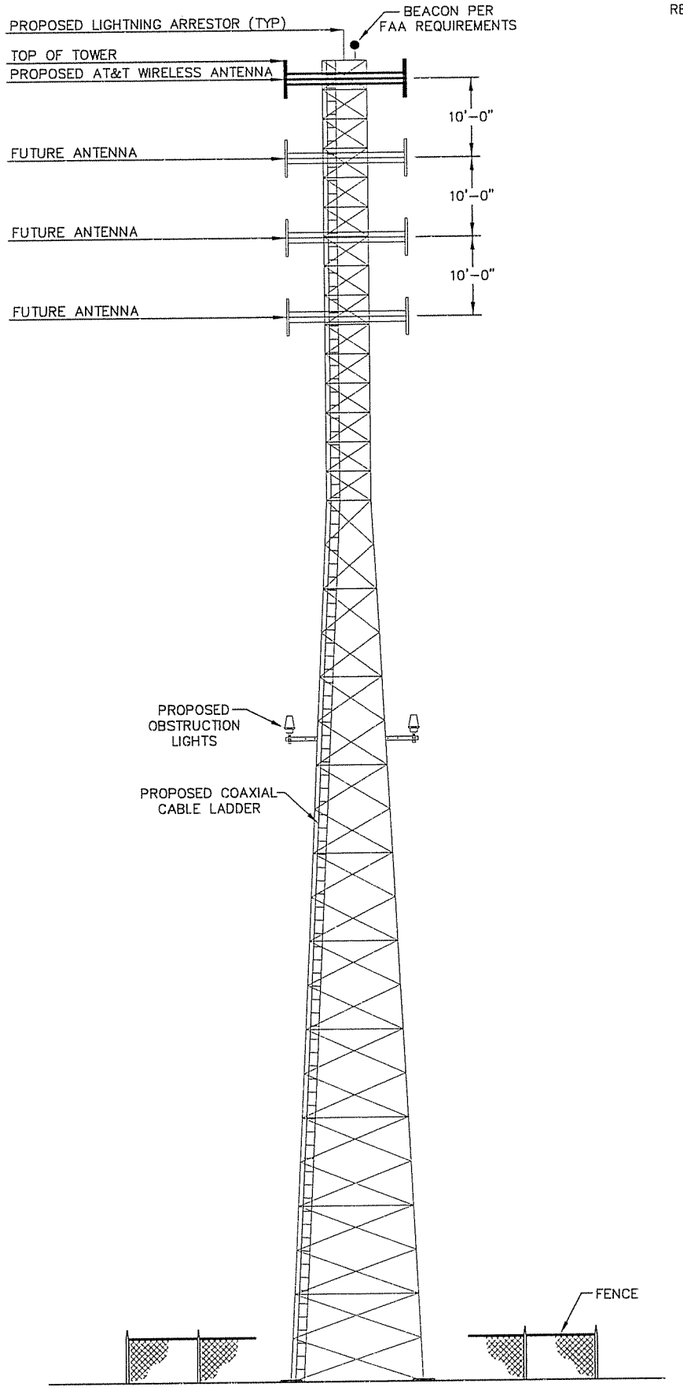
SITE NAME: ALBANY
SITE ID NUMBER: 052G0505
SITE ADDRESS: DALTON RD ALBANY, KY 42602
LATITUDE: 36° 41' 51.677"N
LONGITUDE: 85° 07' 19.114"W
TAX MAP NUMBER: 103-17
PARCEL NUMBER: 7.02
SOURCE OF TITLE: DEED BOOK 135, PAGE 645
PROPERTY OWNER: JEROME & ELIZABETH GRIDER 399 DALTON ST ALBANY, KY 42602

NO	REVISION/ISSUE	DATE
1	ISSUE FOR COMMENT	02/22/09
2	ISSUE FOR ZONING	02/24/10

TITLE: SITE LAYOUT

SHEET: Z-3

Exhibit C

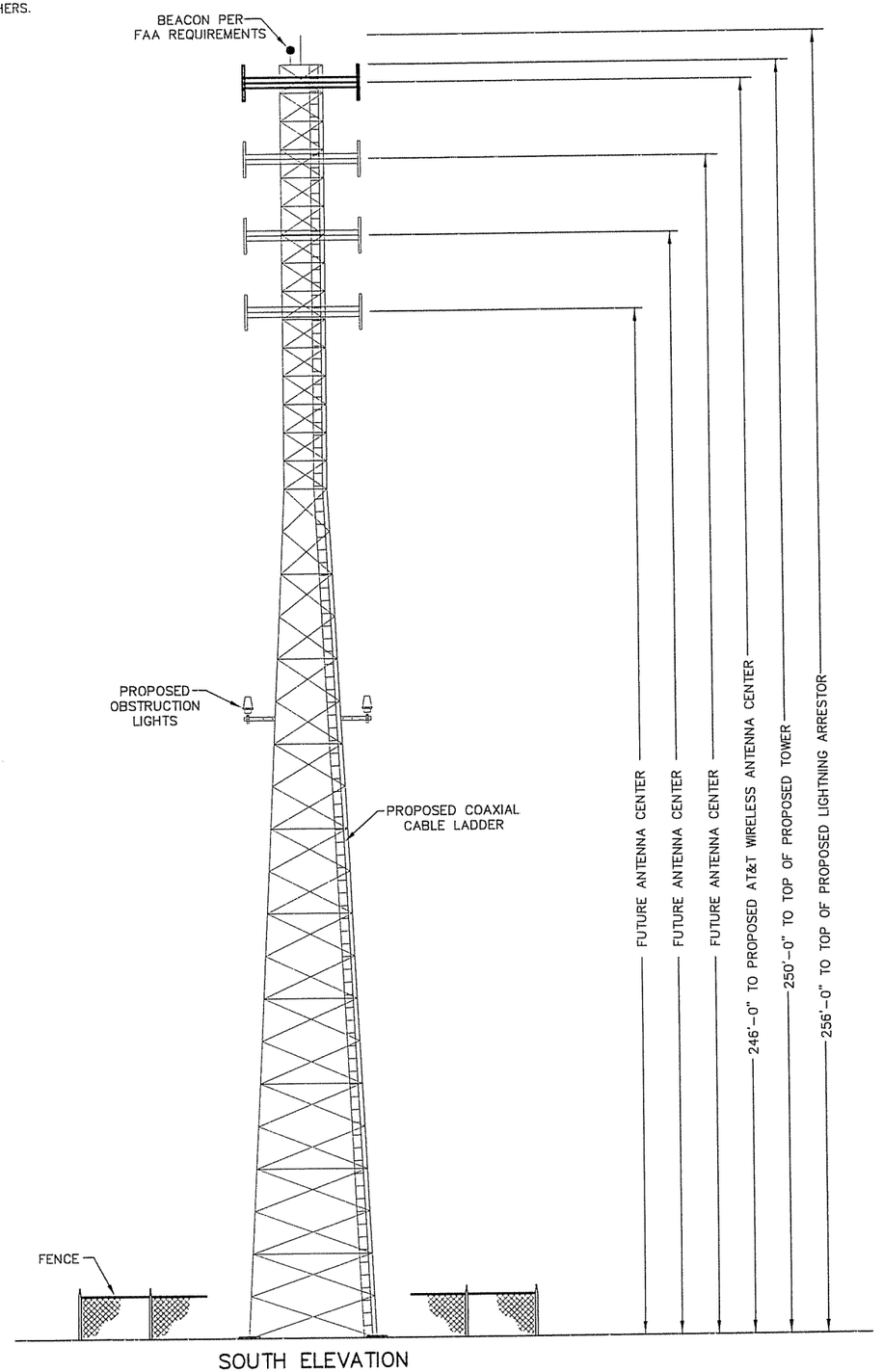


NORTH ELEVATION

NOT TO SCALE

NOTE:

THE ELEVATIONS SHOWN ON THIS SHEET ARE FOR PICTORIAL PURPOSES ONLY. THIS DESIGN WAS PROVIDED BY OTHERS. REFER TO TOWER PLANS FOR TOWER DESIGN.



SOUTH ELEVATION

NOT TO SCALE

at&t

nsoro
It's just good business.

BTM Engineering, Inc.
3001 TAYLOR SPRINGS DRIVE
LOUISVILLE, KENTUCKY 40220
(502) 459-8402 PHONE
(502) 459-8427 FAX

STATE OF KENTUCKY
WOODROW W MARCUM JR
13602
LICENSED PROFESSIONAL ENGINEER

SITE NAME: ALBANY

SITE ID NUMBER: 052G0505

SITE ADDRESS: DALTON RD
ALBANY, KY 42602

LATITUDE: 36° 41' 51.677"N
LONGITUDE: 85° 07' 19.114"W

TAX MAP NUMBER: 103-17

PARCEL NUMBER: 7.02

SOURCE OF TITLE: DEED BOOK 135, PAGE 645

PROPERTY OWNER:
JEROME & ELIZABETH GRIDER
399 DALTON ST
ALBANY, KY 42602

NO	REVISION/ISSUE	DATE
1	ISSUE FOR COMMENT	02/22/09
2	ISSUE FOR ZONING	02/24/10

TITLE: NORTH & SOUTH ELEVATIONS

SHEET: Z-5

Exhibit D

Sabre™ Towers & Poles

Structural Design Report

250' S3TL Series HD1 Self-Supporting Tower

located at: Albany Relo, KY

Site Number: 273787

prepared for: AMERICAN TOWER INC

by: Sabre Towers & Poles ™

Job Number: 10-01020

January 8, 2010

Tower Profile 1

Maximum Leg Loads 2

Maximum Diagonal Loads 3

Maximum Foundation Loads 4

Calculations A1-A7

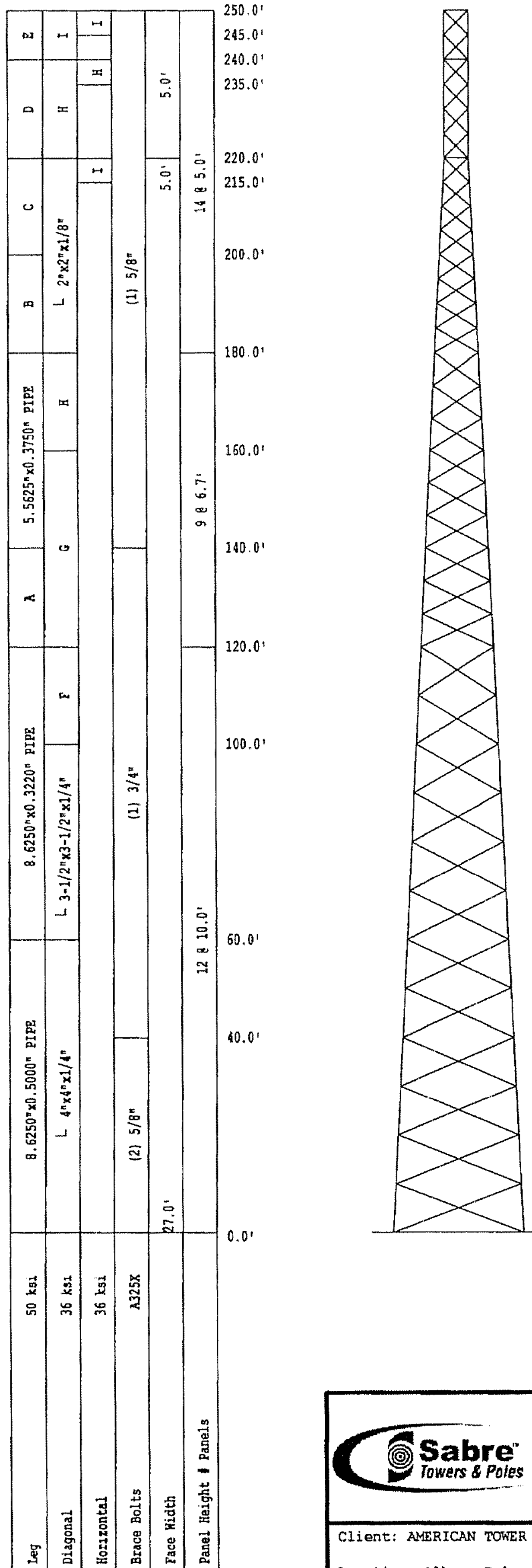
STATE OF KENTUCKY
KEITH J. TINDALL
20897
LICENSED PROFESSIONAL ENGINEER

2/23/10

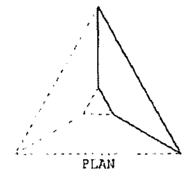
Tower by JRJ

Checked by JEB

Approved by KJT



DRAWMAST Version 3.2 + A (c) Guymast Inc. 2007 Phone:(416) 736-7453



NOTES:
1. The tower model is S3TL Series HD1.
2. Transmission lines are to be attached to standard 12 hole single rail with 3 in line spacing waveguide ladders with stackable hangers.
3. Azimuths are relative (not based on true north).
4. Foundation loads shown are maximums.
5. (6) 1 1/2" dia. F1554 grade IC5 anchor bolts per leg. Minimum 58" embedment from top of concrete to top of nut.
6. All unequal angles are oriented with the short leg vertical.

ANTENNA LIST

NO	ELEV	ANTENNA	TX-LINE
1	250'	115 sq ft (no ice) 135 sq ft (ice)	(12) 1 5/8
2	240'	115 sq ft (no ice) 135 sq ft (ice)	(12) 1 5/8
3	230'	115 sq ft (no ice) 135 sq ft (ice)	(12) 1 5/8
4	220'	115 sq ft (no ice) 135 sq ft (ice)	(12) 1 5/8

MATERIAL LIST

NO	TYPE
A	5.5625"x0.5000" PIPE
B	4.5000"x0.3370" PIPE
C	4.0000"x0.3180" PIPE
D	2.8750"x0.2760" PIPE
E	2.3750"x0.1540" PIPE
F	L 3"x3"x3/16"
G	L 2-1/2"x2-1/2"x3/16"
H	L 2"x2"x3/16"
I	L 2"x2"x1/8"

STATE OF KENTUCKY
KEITH J. TINDALL
20697
LICENSED
PROFESSIONAL ENGINEER

2/23/10

TOTAL FOUNDATION LOADS

H=50.68k
V=86.04k
M=7460.78k-ft
T=-0.00k-ft

INDIVIDUAL FOOTING LOADS

H=31.05k
V=336.77k
U=-287.57k

Sabre Towers And Poles

2101 Murray Street (P.O. Box 658), Sioux City, IA 51111

Phone: (712) 258-6690 Fax: (712) 258-8250

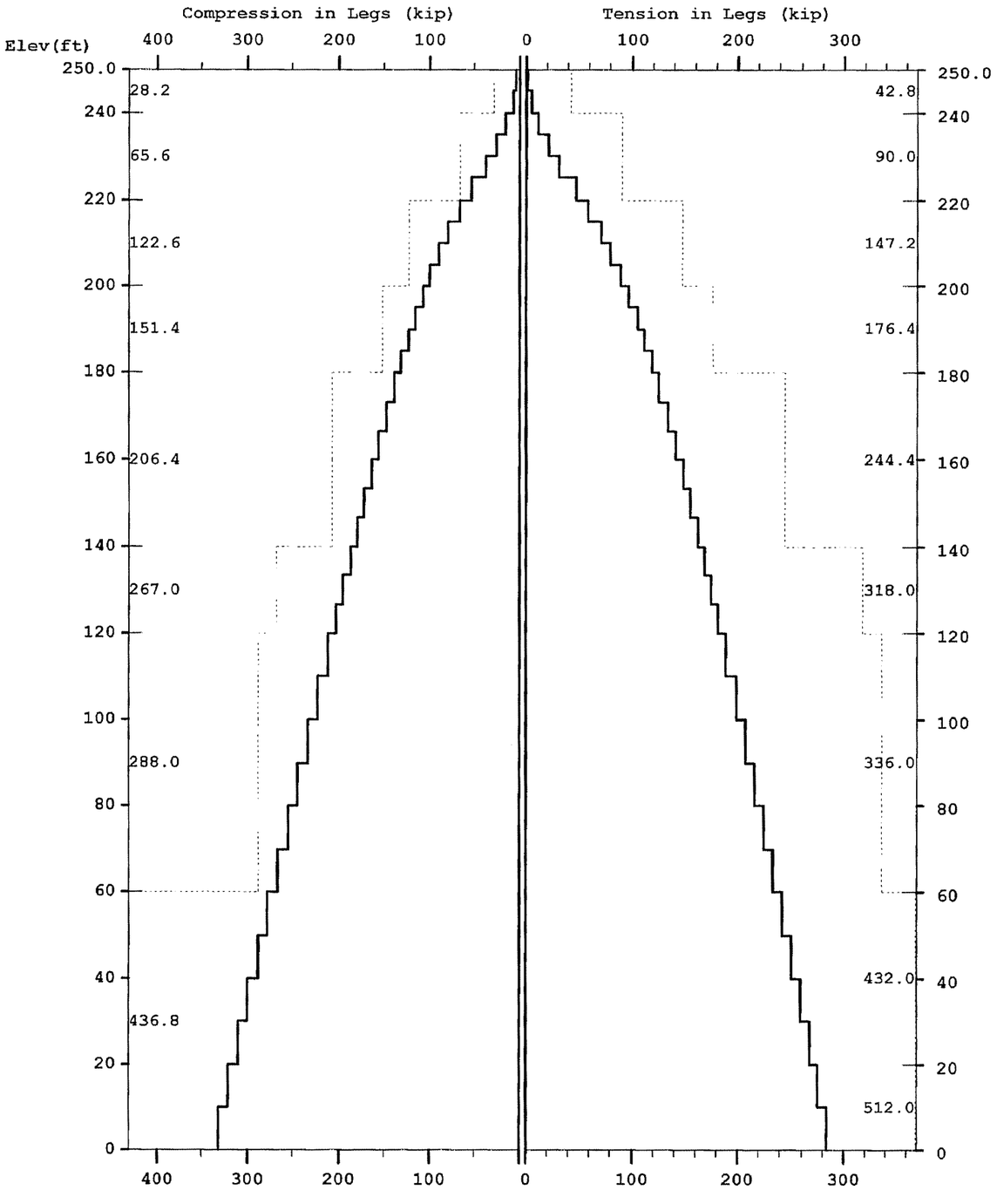
Client: AMERICAN TOWER INC Job No: 10-01020 Date: 8 jan 2010

Location: Albany Relo, KY Total Height: 250.00' Tower Height: 250.00'

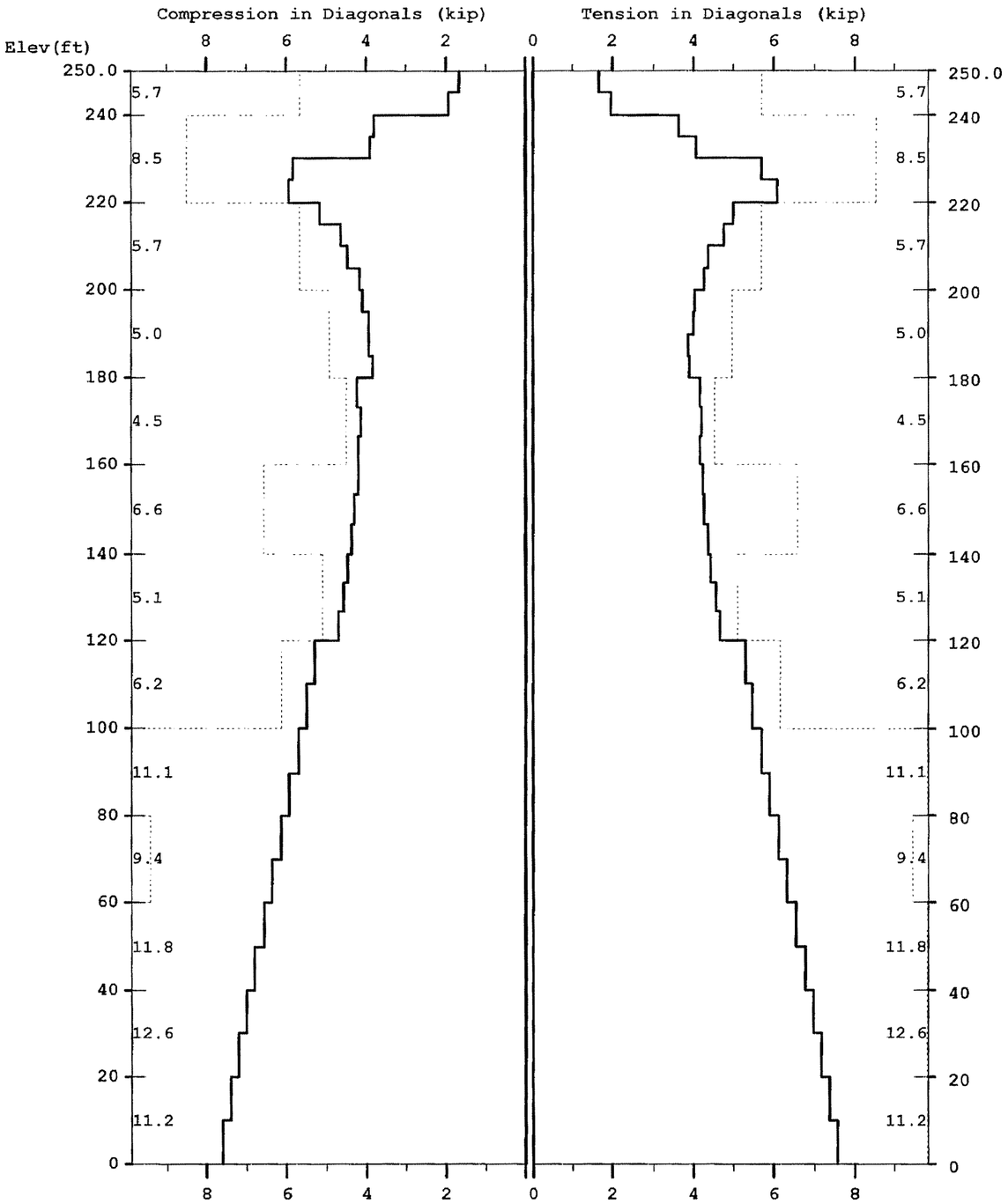
Standard: EIA/TIA 222-F-1996 Design Wind & Ice: 75 mph + 0.5" ice

Project: C:\Program Files\Guymast\Tower v33\S3TLHD1-10-01020.LOD

250' S3TL AMERICAN TOWER INC Albany Relo KY (10-01020) HACASSENS
Maximum

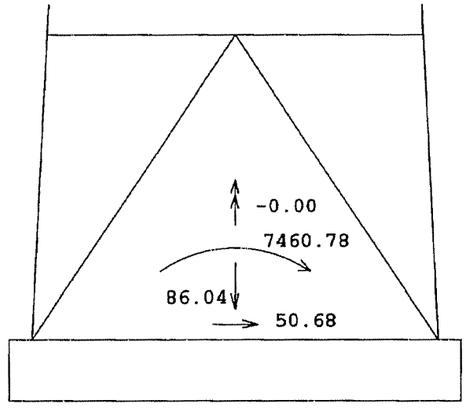


250' S3TL AMERICAN TOWER INC Albany Relo KY (10-01020) HACASSENS
Maximum

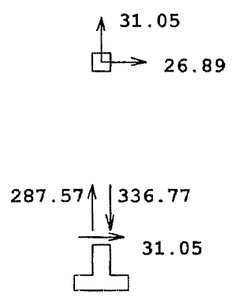


250' S3TL AMERICAN TOWER INC Albany Relo KY (10-01020) HACASSENS
Maximum

TOTAL FOUNDATION LOADS (kip, ft-kip)



INDIVIDUAL FOOTING LOADS (kip)



MAST - Latticed Tower Analysis (Unguyed) (c)1997 Guymast Inc. 416-736-7453
Processed under license at:

Sabre Towers And Poles on: 8 jan 2010 at: 11:30:08

250' S3TL AMERICAN TOWER INC Albany Relo KY (10-01020) HACASSENS

MAST GEOMETRY (ft)

PANEL TYPE	NO.OF LEGS	ELEV.AT BOTTOM	ELEV.AT TOP	F.W..AT BOTTOM	F.W..AT TOP	TYPICAL PANEL HEIGHT
X	3	245.00	250.00	5.00	5.00	5.00
X	3	240.00	245.00	5.00	5.00	5.00
X	3	235.00	240.00	5.00	5.00	5.00
X	3	220.00	235.00	5.00	5.00	5.00
X	3	215.00	220.00	5.50	5.00	5.00
X	3	200.00	215.00	7.00	5.50	5.00
X	3	180.00	200.00	9.00	7.00	5.00
X	3	160.00	180.00	11.00	9.00	6.67
X	3	140.00	160.00	13.00	11.00	6.67
X	3	120.00	140.00	15.00	13.00	6.67
X	3	100.00	120.00	17.00	15.00	10.00
X	3	80.00	100.00	19.00	17.00	10.00
X	3	60.00	80.00	21.00	19.00	10.00
X	3	40.00	60.00	23.00	21.00	10.00
X	3	20.00	40.00	25.00	23.00	10.00
X	3	0.00	20.00	27.00	25.00	10.00

MEMBER PROPERTIES

MEMBER TYPE	BOTTOM ELEV ft	TOP ELEV ft	X-SECTN AREA in.sq	RADIUS OF GYRAT in	ELASTIC MODULUS ksi	THERMAL EXPANSN /deg
LE	240.00	250.00	1.075	0.000	29000.	0.0000000
LE	220.00	240.00	2.254	0.000	29000.	0.0000000
LE	200.00	220.00	3.678	0.000	29000.	0.0000000
LE	180.00	200.00	4.407	0.000	29000.	0.0000000
LE	140.00	180.00	6.111	0.000	29000.	0.0000000
LE	120.00	140.00	7.952	0.000	29000.	0.0000000
LE	60.00	120.00	8.399	0.000	29000.	0.0000000
LE	0.00	60.00	12.763	0.000	29000.	0.0000000
DI	240.00	250.00	0.484	0.000	29000.	0.0000000
DI	220.00	240.00	0.715	0.000	29000.	0.0000000
DI	180.00	220.00	0.484	0.000	29000.	0.0000000
DI	160.00	180.00	0.715	0.000	29000.	0.0000000
DI	120.00	160.00	0.902	0.000	29000.	0.0000000
DI	100.00	120.00	1.090	0.000	29000.	0.0000000
DI	60.00	100.00	1.687	0.000	29000.	0.0000000
DI	0.00	60.00	1.937	0.000	29000.	0.0000000
HO	245.00	250.00	0.484	0.000	29000.	0.0000000
HO	235.00	240.00	0.715	0.000	29000.	0.0000000
HO	215.00	220.00	0.484	0.000	29000.	0.0000000

* 12 wind directions were analyzed, with & without ice. Only two conditions are shown in full.

LOADING CONDITION A

75 MPH + NO ICE WIND AZ 0 DEGREES

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

LOAD TYPE	ELEV ft	APPLY..LOAD..AT RADIUS ft	AZI	LOAD AZI	.....FORCES..... HORIZ kip	DOWN kip	.....MOMENTS..... VERTICAL ft-kip	TORSNAL ft-kip
C	250.0	0.00	0.0	0.0	3.25	2.00	0.00	0.00
C	240.0	0.00	0.0	0.0	3.21	2.00	0.00	0.00
C	230.0	0.00	0.0	0.0	3.17	2.00	0.00	0.00
C	220.0	0.00	0.0	0.0	3.13	2.00	0.00	0.00
D	250.0	0.00	0.0	0.0	0.12	0.05	0.00	0.00
D	245.0	0.00	0.0	0.0	0.12	0.05	0.00	0.00
D	245.0	0.00	0.0	0.0	0.11	0.04	0.00	0.00
D	240.0	0.00	0.0	0.0	0.11	0.04	0.00	0.00
D	240.0	0.00	0.0	0.0	0.12	0.08	0.00	0.00
D	235.0	0.00	0.0	0.0	0.12	0.08	0.00	0.00
D	235.0	0.00	0.0	0.0	0.11	0.07	0.00	0.00
D	230.0	0.00	0.0	0.0	0.11	0.07	0.00	0.00
D	230.0	0.00	0.0	0.0	0.11	0.08	0.00	0.00
D	220.0	0.00	0.0	0.0	0.11	0.08	0.00	0.00
D	220.0	0.00	0.0	0.0	0.12	0.11	0.00	0.00
D	215.0	0.00	0.0	0.0	0.12	0.11	0.00	0.00
D	215.0	0.00	0.0	0.0	0.12	0.11	0.00	0.00
D	200.0	0.00	0.0	0.0	0.12	0.11	0.00	0.00
D	200.0	0.00	0.0	0.0	0.12	0.11	0.00	0.00
D	180.0	0.00	0.0	0.0	0.13	0.12	0.00	0.00
D	180.0	0.00	0.0	0.0	0.13	0.14	0.00	0.00
D	160.0	0.00	0.0	0.0	0.13	0.14	0.00	0.00
D	160.0	0.00	0.0	0.0	0.14	0.15	0.00	0.00
D	140.0	0.00	0.0	0.0	0.14	0.15	0.00	0.00
D	140.0	0.00	0.0	0.0	0.14	0.17	0.00	0.00
D	120.0	0.00	0.0	0.0	0.15	0.18	0.00	0.00
D	120.0	0.00	0.0	0.0	0.16	0.18	0.00	0.00
D	100.0	0.00	0.0	0.0	0.16	0.18	0.00	0.00
D	100.0	0.00	0.0	0.0	0.16	0.21	0.00	0.00
D	80.0	0.00	0.0	0.0	0.16	0.21	0.00	0.00
D	80.0	0.00	0.0	0.0	0.16	0.21	0.00	0.00
D	60.0	0.00	0.0	0.0	0.15	0.22	0.00	0.00
D	60.0	0.00	0.0	0.0	0.15	0.28	0.00	0.00
D	40.0	0.00	0.0	0.0	0.15	0.28	0.00	0.00
D	40.0	0.00	0.0	0.0	0.14	0.28	0.00	0.00
D	20.0	0.00	0.0	0.0	0.14	0.29	0.00	0.00
D	20.0	0.00	0.0	0.0	0.14	0.29	0.00	0.00
D	0.0	0.00	0.0	0.0	0.15	0.29	0.00	0.00

LOADING CONDITION M ==========

64.96 MPH + 0.5 ICE WIND AZ 0 DEGREES

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

LOAD TYPE	ELEV ft	APPLY..LOAD..AT RADIUS ft	AZI	LOAD AZI	.....FORCES..... HORIZ kip	DOWN kip	.....MOMENTS..... VERTICAL ft-kip	TORSNAL ft-kip
C	250.0	0.00	0.0	0.0	2.86	3.00	0.00	0.00
C	240.0	0.00	0.0	0.0	2.83	3.00	0.00	0.00
C	230.0	0.00	0.0	0.0	2.79	3.00	0.00	0.00
C	220.0	0.00	0.0	0.0	2.76	3.00	0.00	0.00
D	250.0	0.00	0.0	0.0	0.14	0.09	0.00	0.00
D	245.0	0.00	0.0	0.0	0.14	0.09	0.00	0.00
D	245.0	0.00	0.0	0.0	0.13	0.08	0.00	0.00
D	240.0	0.00	0.0	0.0	0.13	0.08	0.00	0.00
D	240.0	0.00	0.0	0.0	0.14	0.14	0.00	0.00
D	235.0	0.00	0.0	0.0	0.14	0.14	0.00	0.00
D	235.0	0.00	0.0	0.0	0.14	0.13	0.00	0.00
D	230.0	0.00	0.0	0.0	0.14	0.13	0.00	0.00

D	230.0	0.00	0.0	0.0	0.13	0.16	0.00	0.00
D	220.0	0.00	0.0	0.0	0.13	0.16	0.00	0.00
D	220.0	0.00	0.0	0.0	0.14	0.21	0.00	0.00
D	215.0	0.00	0.0	0.0	0.14	0.21	0.00	0.00
D	215.0	0.00	0.0	0.0	0.13	0.20	0.00	0.00
D	200.0	0.00	0.0	0.0	0.13	0.21	0.00	0.00
D	200.0	0.00	0.0	0.0	0.13	0.22	0.00	0.00
D	180.0	0.00	0.0	0.0	0.13	0.22	0.00	0.00
D	180.0	0.00	0.0	0.0	0.13	0.24	0.00	0.00
D	160.0	0.00	0.0	0.0	0.13	0.25	0.00	0.00
D	160.0	0.00	0.0	0.0	0.14	0.26	0.00	0.00
D	140.0	0.00	0.0	0.0	0.14	0.27	0.00	0.00
D	140.0	0.00	0.0	0.0	0.14	0.29	0.00	0.00
D	100.0	0.00	0.0	0.0	0.15	0.30	0.00	0.00
D	100.0	0.00	0.0	0.0	0.15	0.34	0.00	0.00
D	80.0	0.00	0.0	0.0	0.15	0.34	0.00	0.00
D	80.0	0.00	0.0	0.0	0.14	0.34	0.00	0.00
D	60.0	0.00	0.0	0.0	0.14	0.35	0.00	0.00
D	60.0	0.00	0.0	0.0	0.14	0.42	0.00	0.00
D	40.0	0.00	0.0	0.0	0.14	0.42	0.00	0.00
D	40.0	0.00	0.0	0.0	0.13	0.43	0.00	0.00
D	20.0	0.00	0.0	0.0	0.13	0.43	0.00	0.00
D	20.0	0.00	0.0	0.0	0.13	0.44	0.00	0.00
D	0.0	0.00	0.0	0.0	0.13	0.44	0.00	0.00

MAXIMUM MAST DISPLACEMENTS:
==========

ELEV	------DEFLECTIONS (ft)-----			--TILTS (DEG)---		TWIST
ft	NORTH	EAST	DOWN	NORTH	EAST	DEG
250.0	2.822 G	2.760 J	0.035 W	1.561 G	1.533 J	0.000 B
245.0	2.685 G	2.625 J	0.033 W	1.554 G	1.527 J	0.000 B
240.0	2.549 G	2.491 J	0.032 W	1.534 G	1.507 J	0.000 B
235.0	2.414 G	2.359 J	0.030 W	1.514 G	1.487 J	0.000 B
230.0	2.284 G	2.231 J	0.028 W	1.478 G	1.452 J	0.000 R
225.0	2.152 G	2.101 J	0.026 W	1.426 G	1.400 J	0.000 R
220.0	2.030 G	1.981 J	0.025 W	1.350 G	1.325 J	0.000 R
215.0	1.910 G	1.864 J	0.023 W	1.297 G	1.273 J	0.000 R
210.0	1.797 G	1.754 J	0.022 W	1.241 G	1.217 J	0.000 R
205.0	1.688 G	1.646 J	0.021 W	1.180 G	1.157 J	0.000 R
200.0	1.586 G	1.546 J	0.020 W	1.118 G	1.096 J	0.000 R
195.0	1.488 G	1.450 J	0.019 W	1.065 G	1.044 J	0.000 R
190.0	1.395 G	1.359 J	0.018 W	1.013 G	0.992 J	0.000 R
185.0	1.306 G	1.272 J	0.017 W	0.959 G	0.939 J	0.000 C
180.0	1.223 G	1.191 J	0.016 W	0.906 G	0.886 J	0.000 C
173.3	1.118 G	1.088 J	0.015 W	0.855 G	0.836 J	0.000 C
166.7	1.020 G	0.992 J	0.014 W	0.804 G	0.786 J	0.000 C
160.0	0.927 G	0.901 J	0.013 W	0.753 G	0.736 J	0.000 C
153.3	0.840 G	0.817 J	0.012 W	0.703 G	0.686 J	0.000 C
146.7	0.759 G	0.738 J	0.011 W	0.652 G	0.637 J	0.000 C
140.0	0.684 G	0.665 J	0.011 W	0.603 G	0.588 J	0.000 C
133.3	0.614 G	0.596 J	0.010 W	0.566 G	0.551 J	0.000 C
126.7	0.549 G	0.533 J	0.009 W	0.529 G	0.516 J	0.000 C
120.0	0.487 G	0.472 J	0.009 W	0.492 G	0.480 J	0.000 C
110.0	0.403 G	0.391 J	0.008 W	0.441 G	0.429 J	0.000 R
100.0	0.327 G	0.317 J	0.007 W	0.390 G	0.379 J	0.000 R
90.0	0.262 G	0.254 J	0.006 W	0.339 G	0.330 J	0.000 R
80.0	0.206 G	0.199 J	0.006 S	0.288 G	0.280 J	0.000 R
70.0	0.157 G	0.152 J	0.005 W	0.238 G	0.231 J	0.000 R
60.0	0.118 G	0.113 J	0.004 W	0.189 G	0.183 J	0.000 R
50.0	0.085 G	0.082 J	0.003 W	0.157 G	0.152 J	0.000 R
40.0	0.058 G	0.056 J	0.003 W	0.125 G	0.121 J	0.000 R
30.0	0.036 G	-0.034 D	0.002 W	0.094 G	0.091 J	0.000 R
20.0	0.019 G	-0.018 D	0.001 S	0.062 G	0.060 J	0.000 R
10.0	0.006 G	-0.006 D	0.001 W	0.031 G	0.030 J	0.000 R
0.0	0.000 A	0.000 A	0.000 A	0.000 A	0.000 A	0.000 A

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

ELEV	LEGS	DIAG	HORIZ	BRACE

ft					
250.0				0.72 K	0.00 A
	1.38 I	1.67 B			
245.0				0.02 Q	0.00 A
	5.52 I	1.94 D			
240.0				0.33 G	0.00 A
	11.66 I	3.63 J			
235.0				0.11 I	0.00 A
	21.10 I	4.08 D			
230.0				0.06 K	0.00 A
	31.59 I	5.68 F			
225.0				0.12 I	0.00 A
	46.89 E	6.08 D			
220.0				1.36 G	0.00 A
	58.57 E	5.00 D			
215.0				0.07 Q	0.00 A
	70.66 I	4.77 J			
210.0				0.00 M	0.00 A
	79.92 I	4.37 J			
205.0				0.06 Q	0.00 A
	89.41 E	4.27 H			
200.0				0.01 U	0.00 A
	97.12 E	4.04 L			
195.0				0.04 Q	0.00 A
	105.02 I	4.02 J			
190.0				0.01 U	0.00 A
	111.73 I	3.89 J			
185.0				0.03 Q	0.00 A
	118.63 I	3.91 F			
180.0				0.02 M	0.00 A
	125.58 I	4.16 L			
173.3				0.05 Q	0.00 A
	133.71 I	4.19 F			
166.7				0.02 M	0.00 A
	140.96 I	4.16 D			
160.0				0.05 Q	0.00 A
	148.31 I	4.24 F			
153.3				0.02 U	0.00 A
	155.07 I	4.27 F			
146.7				0.04 Q	0.00 A
	161.93 I	4.38 J			
140.0				0.02 U	0.00 A
	168.36 I	4.45 F			
133.3				0.05 Q	0.00 A
	174.85 I	4.58 B			
126.7				0.02 M	0.00 A
	181.07 I	4.67 F			
120.0				0.06 Q	0.00 A
	188.81 I	5.30 B			
110.0				0.05 U	0.00 A
	197.92 I	5.47 F			
100.0				0.07 M	0.00 A
	207.02 A	5.69 J			
90.0				0.07 U	0.00 A
	215.92 A	5.90 J			
80.0				0.04 M	0.00 A
	224.84 A	6.13 J			
70.0				0.06 M	0.00 A
	233.61 A	6.34 J			
60.0				0.04 U	0.00 A
	242.31 A	6.56 J			
50.0				0.04 M	0.00 A
	250.77 A	6.77 D			
40.0				0.04 Q	0.00 A
	259.22 A	6.98 J			
30.0				0.04 M	0.00 A
	267.52 A	7.16 D			
20.0				0.00 M	0.00 A
	275.79 A	7.38 B			
10.0				0.03 U	0.00 A
	283.92 A	7.57 D			
0.0				0.00 A	0.00 A

MAXIMUM COMPRESSION IN MAST MEMBERS (kip)

ELEV ft	LEGS	DIAG	HORIZ	BRACE
250.0			-0.72 E	0.00 A
	-2.95 S	-1.68 D		
245.0			-0.01 K	0.00 A
	-7.13 C	-1.94 J		
240.0			-0.20 E	0.00 A
	-14.63 C	-3.82 D		
235.0			-0.09 C	0.00 A
	-24.96 C	-3.92 D		
230.0			-0.07 E	0.00 A
	-36.79 C	-5.83 J		
225.0			-0.10 K	0.00 A
	-52.98 C	-5.96 F		
220.0			-1.54 E	0.00 A
	-66.13 C	-5.17 J		
215.0			-0.06 K	0.00 A
	-79.18 K	-4.65 D		
210.0			0.00 S	0.00 A
	-88.67 K	-4.49 J		
205.0			-0.05 G	0.00 A
	-98.99 K	-4.19 F		
200.0			-0.01 K	0.00 A
	-107.05 K	-4.13 J		
195.0			-0.03 G	0.00 A
	-115.73 K	-3.96 J		
190.0			-0.01 K	0.00 A
	-122.90 K	-3.96 J		
185.0			-0.03 K	0.00 A
	-130.53 K	-3.86 L		
180.0			-0.02 G	0.00 A
	-138.12 K	-4.23 P		
173.3			-0.04 K	0.00 A
	-147.31 K	-4.16 L		
166.7			-0.02 G	0.00 A
	-155.40 K	-4.22 J		
160.0			-0.04 K	0.00 A
	-163.81 K	-4.22 F		
153.3			-0.02 C	0.00 A
	-171.51 K	-4.32 B		
146.7			-0.03 G	0.00 A
	-179.46 K	-4.37 J		
140.0			-0.02 C	0.00 A
	-186.93 K	-4.49 F		
133.3			-0.04 K	0.00 A
	-194.61 K	-4.57 H		
126.7			-0.01 G	0.00 A
	-201.97 K	-4.70 B		
120.0			-0.05 K	0.00 A
	-211.21 K	-5.31 B		
110.0			-0.04 G	0.00 A
	-222.10 K	-5.51 B		
100.0			-0.06 C	0.00 A
	-233.12 K	-5.71 H		
90.0			-0.05 G	0.00 A
	-244.04 K	-5.94 J		
80.0			-0.04 K	0.00 A
	-255.04 K	-6.15 J		
70.0			-0.05 G	0.00 A
	-265.90 G	-6.38 J		
60.0			-0.04 C	0.00 A
	-276.95 G	-6.59 D		
50.0			-0.03 G	0.00 A

AMERICAN TOWER®

CORPORATION

8505 FREEPORT PARKWAY
SUITE 135
IRVING, TX 75063
PHONE: (972) 999-8900 / FAX: (972) 999-8940

273787 - ALBANY KY, KY

PROJECT DESCRIPTION:

FOUNDATION DESIGN FOR A 250' "SABRE" SELF-SUPPORTING TOWER.

AS-BUILT SIGN-OFF		
DESCRIPTION	SIGNATURE	DATE
CONTRACTOR NAME		
CONTRACTOR REPRESENTATIVE (PRINT NAME)		
CONTRACTOR REPRESENTATIVE (SIGNATURE)		
REDEVELOPMENT P.M. (PRINT NAME)		
REDEVELOPMENT P.M. (SIGNATURE)		

PROJECT SUMMARY

CUSTOMER: OPERATIONS STRUCTURAL

SITE NUMBER: 273787

SITE NAME: ALBANY KY, KY

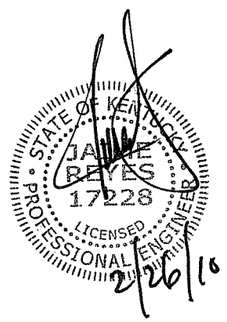
SITE ADDRESS: DALTON RD
ALBANY, KY 42602

PROPERTY OWNER: AMERICAN TOWER CORPORATION

ATC JOB NUMBER: 44654072

DATE: 2/26/10

REVISION: 0



I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the state of Kentucky.

DRAWING INDEX		
DRAWING NUMBER	DRAWING TITLE	REVISION
BOM	BILL OF MATERIALS (1 PAGE)	0
IGN	IBC GENERAL NOTES	0
A-1	PIER AND MAT FOUNDATION DETAILS	0
A-2	BAR LIST FOR REINFORCING STEEL AND GENERAL NOTES	0

BILL OF MATERIALS

QUANTITY REQUIRED	QUANTITY SHIPPED	PART NUMBER	DESCRIPTION	LENGTH	DRAWING NUMBER	WEIGHT (lbs)	COMMENTS
			REBARS				
36		--	#4 REBARS, GRADE 40	11'-9 1/2"	A-1, A-2	284	
60		--	#8 REBARS, GRADE 60	7'-0 1/2"	A-1, A-2	1122	
164		--	#9 REBARS, GRADE 60	37'-6"	A-1, A-2	20910	

TOTAL WEIGHT: 22316

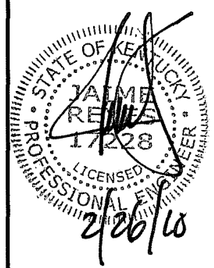
PAGE 1 OF 1

AMERICAN TOWER®
STRUCTURAL ENGINEERING
8505 FREEPORT PARKWAY
SUITE 135
IRVING, TX 75063
(972) 999-8900 Tel.
(972) 999-8940 Fax
NYSE AMT

REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	JL	2/26/10

SITE NUMBER:
273787
SITE NAME:
ALBANY KY, KY

SITE ADDRESS:
DALTON RD
ALBANY, KY 42602



DRAWN BY:	JL
CHECKED BY:	HMA
APPROVED BY:	RAM
DATE DRAWN:	2/26/10
ATC JOB NO:	44654072

SHEET TITLE:
BILL OF MATERIALS

SHEET NUMBER:	REV #:
BOM	0

GENERAL

1. ALL METHODS, MATERIALS AND WORKMANSHIP SHALL FOLLOW THE DICTATES OF GOOD CONSTRUCTION PRACTICE.

2. ALL WORK INDICATED ON THESE DRAWINGS SHALL BE PERFORMED BY QUALIFIED CONTRACTORS EXPERIENCED IN TOWER AND FOUNDATION CONSTRUCTION.

3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD IMMEDIATELY OF ANY INSTALLATION INTERFERENCES. ALL NEW WORK SHALL ACCOMMODATE EXISTING CONDITIONS. DETAILS NOT SPECIFICALLY SHOWN ON THE DRAWINGS SHALL FOLLOW SIMILAR DETAILS FOR THIS JOB.

4. ANY SUBSTITUTIONS MUST CONFORM TO THE REQUIREMENTS OF THESE NOTES AND SPECIFICATIONS, AND SHOULD BE SIMILAR TO THOSE SHOWN. ALL SUBSTITUTIONS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.

5. ANY MANUFACTURED DESIGN ELEMENTS MUST CONFORM TO THE REQUIREMENTS OF THESE NOTES AND SPECIFICATIONS AND SHOULD BE SIMILAR TO THOSE SHOWN. THESE DESIGN ELEMENTS MUST BE STAMPED BY AN ENGINEER PROFESSIONALLY REGISTERED IN THE STATE OF THE PROJECT, AND SUBMITTED TO THE ENGINEER OF RECORD FOR APPROVAL PRIOR TO FABRICATION.

6. ALL WORK SHALL BE DONE IN ACCORDANCE WITH LOCAL CODES AND OSHA SAFETY REGULATIONS.

7. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND EXECUTION OF ALL MISCELLANEOUS SHORING, BRACING, TEMPORARY SUPPORTS, ETC. NECESSARY TO PROVIDE A COMPLETE AND STABLE STRUCTURE AS SHOWN ON THESE DRAWINGS.

8. CONTRACTOR'S PROPOSED INSTALLATION SHALL NOT INTERFERE, NOR DENY ACCESS TO, ANY EXISTING OPERATIONAL AND SAFETY EQUIPMENT.

9.) FIELD CUT EDGES, EXCEPT DRILLED HOLES, SHALL BE GROUND SMOOTH.

10.) ALL FIELD CUT SURFACES SHALL BE REPAIRED WITH ZRC GALVALITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.

APPLICABLE CODES AND STANDARDS

1. ANSI/TIA/EIA: STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES, 222-F EDITION.

2. KENTUCKY BUILDING CODE 2007 AND 2006 INTERNATIONAL BUILDING CODE.

3. ACI 318: AMERICAN CONCRETE INSTITUTE, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, 318-05.

4. CRSI: CONCRETE REINFORCING STEEL INSTITUTE, MANUAL OF STANDARD PRACTICE, LATEST EDITION.

5. AISC: AMERICAN INSTITUTE OF STEEL CONSTRUCTION, MANUAL OF STEEL CONSTRUCTION, LATEST EDITION.

6. STRUCTURAL CONNECTIONS TO BE ASSEMBLED AND INSPECTED IN ACCORDANCE WITH RCSC-2004 (SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A325 OR ASTM A490 BOLTS).

7. AWS: AMERICAN WELDING SOCIETY D1.1, STRUCTURAL WELDING CODE, LATEST EDITION.

STRUCTURAL STEEL

1. ALL DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AISC SPECIFICATIONS, LATEST EDITION.

2. ALL EXPOSED STRUCTURAL STEEL MEMBERS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION PER ASTM A123. EXPOSED STEEL HARDWARE AND ANCHOR BOLTS SHALL BE GALVANIZED PER ASTM A153 OR B695.

3. ALL U-BOLTS SHALL BE ASTM A307 OR EQUIVALENT, WITH LOCKING DEVICE, UNLESS NOTED OTHERWISE.

WELDING

1. ALL WELDING TO BE PERFORMED BY AWS CERTIFIED WELDERS AND CONDUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AWS WELDING CODE D1.1.

2. ALL ELECTRODES TO BE LOW HYDROGEN, MATCHING FILLER METAL, PER AWS D1.1, U.N.O.

3. MINIMUM WELD SIZE TO BE 0.1875 INCH FILLET WELDS, UNLESS NOTED OTHERWISE.

4. PRIOR TO FIELD WELDING GALVANIZED MATERIAL, CONTRACTOR SHALL GRIND OFF GALVANIZING 1/2" BEYOND ALL FIELD WELD SURFACES. AFTER WELD AND WELD INSPECTION IS COMPLETE, REPAIR ALL GROUND AND WELDED SURFACES WITH ZRC GALVALITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.

PAINT

1. AS REQUIRED, CLEAN AND PAINT PROPOSED STEEL ACCORDING TO FAA ADVISORY CIRCULAR AC 70/7460-1K.

BOLT TIGHTENING PROCEDURE

1. TIGHTEN FLANGE BOLTS BY AISC - "TURN OF THE NUT" METHOD, USING THE CHART BELOW:

BOLT LENGTHS UP TO AND INCLUDING FOUR DIA.		
3/4"	BOLTS UP TO AND INCLUDING 4.0 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
7/8"	BOLTS UP TO AND INCLUDING 3.5 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1"	BOLTS UP TO AND INCLUDING 4.0 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1-1/8"	BOLTS UP TO AND INCLUDING 4.5 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1-1/4"	BOLTS UP TO AND INCLUDING 5.0 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1-1/2"	BOLTS UP TO AND INCLUDING 6.0 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
BOLT LENGTHS OVER FOUR DIA. BUT NOT EXCEEDING 8 DIA.		
3/4"	BOLTS 4.25 TO 6.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
7/8"	BOLTS 3.75 TO 7.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1"	BOLTS 4.25 TO 8.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1-1/8"	BOLTS 4.75 TO 9.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1-1/4"	BOLTS 5.25 TO 10.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1-1/2"	BOLTS 6.25 TO 12.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT

2. SPLICE BOLTS SUBJECT TO DIRECT TENSION SHALL BE INSTALLED AND TIGHTENED AS PER SECTION 8(d)(1) OF THE AISC SPECIFICATION FOR STRUCTURAL JOINTS USING A325 OR A490 BOLTS, LOCATED IN THE AISC MANUAL OF STEEL CONSTRUCTION. THE INSTALLATION PROCEDURE IS PARAPHRASED AS FOLLOWS:

   "FASTENERS SHALL BE INSTALLED IN PROPERLY ALIGNED HOLES AND TIGHTENED BY ONE OF THE METHODS DESCRIBED IN SUBSECTION 8(d)(1) THROUGH 8(d)(4).

   8(d)(1) TURN-OF-THE-NUT TIGHTENING.
   BOLTS SHALL BE INSTALLED IN ALL HOLES OF THE CONNECTION AND BROUGHT TO A SNUG TIGHT CONDITION AS DEFINED IN SECTION 8 (c), UNTIL ALL THE BOLTS ARE SIMULTANEOUSLY SNUG TIGHT AND THE CONNECTION IS FULLY COMPACTED. FOLLOWING THIS INITIAL OPERATION ALL BOLTS IN THE CONNECTION SHALL BE TIGHTENED FURTHER BY THE APPLICABLE AMOUNT OF ROTATION SPECIFIED ABOVE. DURING THE TIGHTENING OPERATION THERE SHALL BE NO ROTATION OF THE PART NOT TURNED BY THE WRENCH. TIGHTENING SHALL PROGRESS SYSTEMATICALLY.

3. ALL OTHER BOLTED CONNECTIONS SHALL BE BROUGHT TO A SNUG TIGHT CONDITION AS DEFINED IN SECTION 8 (c) OF THE SPECIFICATION.

SPECIAL INSPECTION

1. A QUALIFIED INDEPENDENT TESTING LABORATORY, EMPLOYED BY THE OWNER, SHALL PERFORM INSPECTION AND TESTING IN ACCORDANCE WITH KENTUCKY BUILDING CODE 2007 AND IBC 2006, SECTION 1704 AS REQUIRED BY PROJECT SPECIFICATIONS FOR THE FOLLOWING CONSTRUCTION WORK:
   a) STRUCTURAL WELDING
   b) HIGH STRENGTH BOLTS

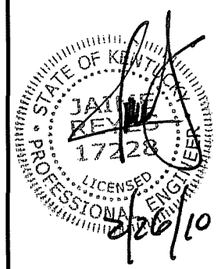
2. THE INSPECTION AGENCY SHALL SUBMIT INSPECTION AND TEST REPORTS TO THE BUILDING DEPARTMENT, THE ENGINEER OF RECORD, AND THE OWNER IN ACCORDANCE WITH KENTUCKY BUILDING CODE 2007 AND IBC 2006, SECTION 1704. UNLESS THE FABRICATOR IS APPROVED BY THE BUILDING OFFICIAL TO PERFORM SUCH WORK WITHOUT THE SPECIAL INSPECTIONS.

AMERICAN TOWER®
STRUCTURAL ENGINEERING
8505 FREEPORT PARKWAY
SUITE 135
IRVING, TX 75063
(972) 999-8900 Tel.
(972) 999-8940 Fax
NYSE: AMT

REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	JL	2/26/10

SITE NUMBER:
273787
SITE NAME:
ALBANY KY, KY

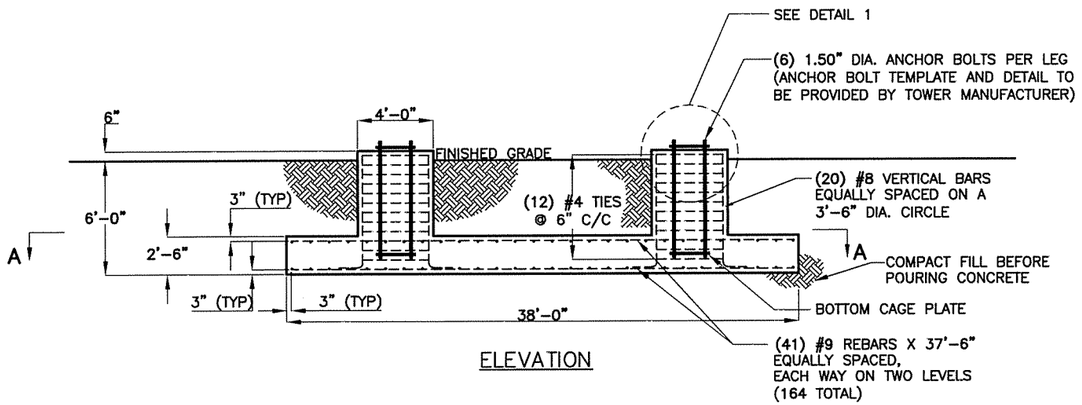
SITE ADDRESS:
DALTON RD
ALBANY, KY 42602



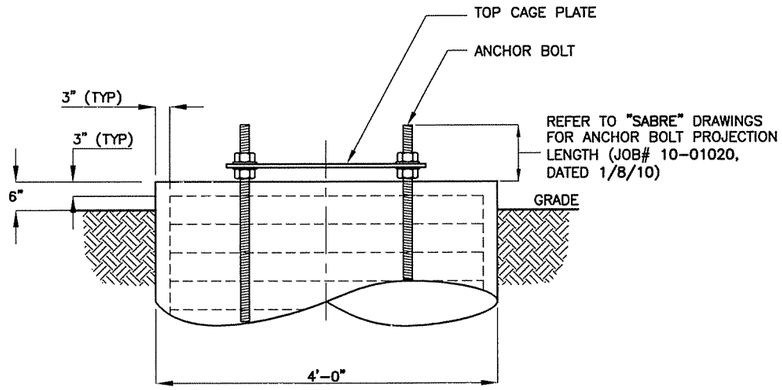
DRAWN BY:	JL
CHECKED BY:	HMA
APPROVED BY:	RAM
DATE DRAWN:	2/26/10
ATC JOB NO:	44654072

SHEET TITLE:
IBC GENERAL NOTES

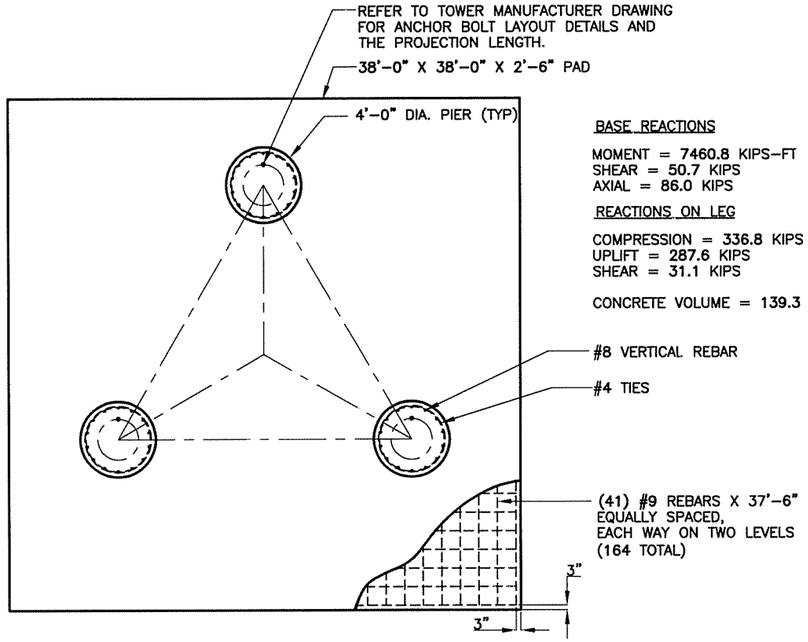
SHEET NUMBER:	REV #:
IGN	0



ELEVATION



DETAIL 1



A--A

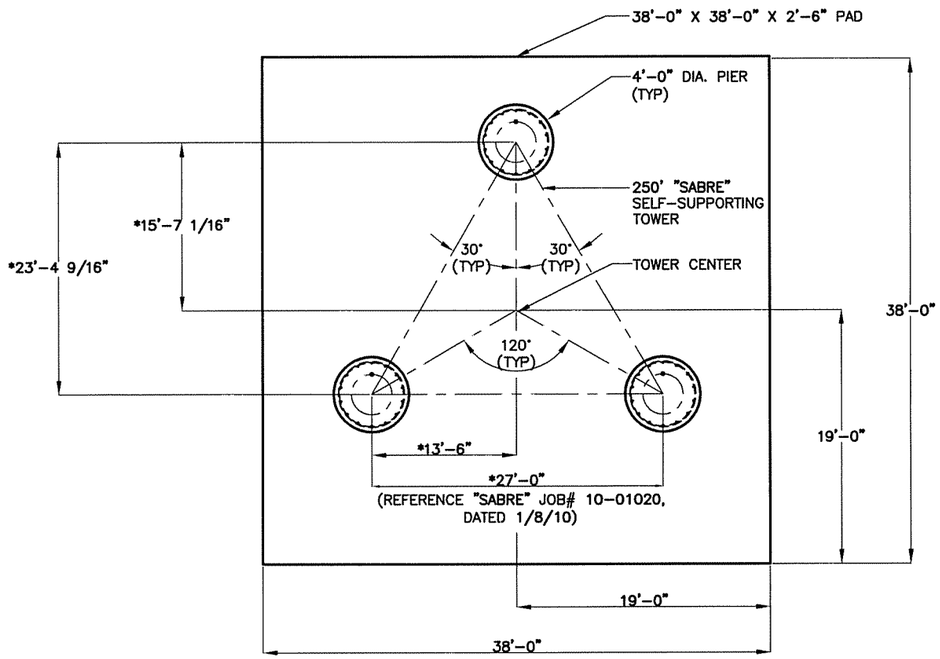
BASE REACTIONS

MOMENT = 7460.8 KIPS-FT
SHEAR = 50.7 KIPS
AXIAL = 86.0 KIPS

REACTIONS ON LEG

COMPRESSION = 336.8 KIPS
UPLIFT = 287.6 KIPS
SHEAR = 31.1 KIPS

CONCRETE VOLUME = 139.3 CUBIC YARDS



PLAN VIEW

*VERIFY THE FACE WIDTH (C/C OF TOWER LEGS) WITH THE TOWER MANUFACTURER. IF THE FACE WIDTH IS DIFFERENT, ALL DIMENSIONS SHOWN IN THIS PLAN VIEW ARE NOT VALID.

NOTES

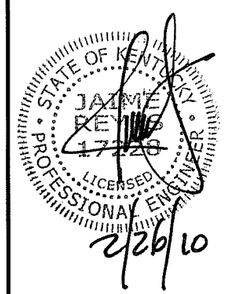
1. FOUNDATION DESIGNED FOR A "SABRE" 250' SELF-SUPPORTING TOWER (JOB# 10-01020, DATED 1/8/10). REFERENCE TOWER MANUFACTURER DRAWINGS FOR ANCHOR BOLT INSTALLATION REQUIREMENTS.
2. FOUNDATION DESIGN REACTIONS WERE OBTAINED FROM TOWER MANUFACTURER DESIGN DRAWINGS (JOB# 10-01020, DATED 1/8/10).
3. FOUNDATION DESIGN WAS BASED ON SOIL REPORT PROVIDED BY "PATRIOT ENGINEERING AND ENVIRONMENTAL, INC." WITH PROJECT# 5-09-0996, DATED 2/18/10. REFERENCE THE SOIL REPORT FOR ADDITIONAL CONSIDERATIONS AND REQUIREMENTS.
4. DUE TO THE PRESENCE OF VERY STIFF OR DENSE SOILS AT APPROX. 3.5' BELOW THE GRADE SURFACE, THE USE OF HEAVY TOOLS OR EQUIPMENT WILL BE REQUIRED IN EXCAVATIONS.
5. CONCRETE SLUMP: 2"~4"
6. FOUNDATION BASE SHOULD REST ON FIRM AND LEVELED SURFACE.
7. ELEVATION AT THE TOPS OF ALL THREE PIERS TO BE WITHIN ± 1/4" OF EACH OTHER.

AMERICAN TOWER®
STRUCTURAL
ENGINEERING
8505 FREEPORT PARKWAY
SUITE 135
IRVING, TX 75063
(972) 999-8900 Tel.
(972) 999-8940 Fax
NYSE AMT

REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	JL	2/26/10

SITE NUMBER:
273787
SITE NAME:
ALBANY KY, KY

SITE ADDRESS:
DALTON RD
ALBANY, KY 42602

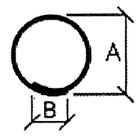


DRAWN BY:	JL
CHECKED BY:	HMA
APPROVED BY:	RAM
DATE DRAWN:	2/26/10
ATC JOB NO:	44654072

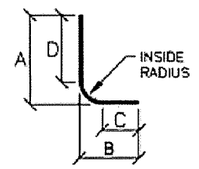
SHEET TITLE:
PIER AND MAT FOUNDATION DETAILS

SHEET NUMBER:	REV #:
A-1	0

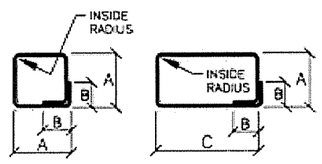
QTY REQ'D	REBAR SIZE	LENGTH	TOTAL WEIGHT (LBS)	TYPE	BENDING DIAGRAM
-	-	-	-	ROUND TIE	A: 3'-6" B: 11"
36	#4	11 '-9 1/2"	284		



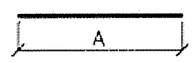
QTY REQ'D	REBAR SIZE	LENGTH	TOTAL WEIGHT (LBS)	TYPE	A	B	C	D	INSIDE RAD.
-	-	-	-	90° BEND VERTICAL	5'-9"	1'-6"	1'-2"	5 '-5"	3"
60	#8	7 '-0 1/2"	1122						



QTY REQ'D	REBAR SIZE	LENGTH	TOTAL WEIGHT (LBS)	TYPE	A	B	C	INSIDE RAD.
-	-	-	-	SQUARE OR RECTANGULAR TIE				



QTY REQ'D	REBAR SIZE	LENGTH	TOTAL WEIGHT (LBS)	TYPE	A
-	-	-	-	STRAIGHT	
164	#9	37 '-6"	20910		37 '-6"



GENERAL FOUNDATION CONSTRUCTION NOTES

1. ALL REBAR (HORIZONTAL & VERTICAL) SHALL BE SECURELY WIRE TIED TO PREVENT DISPLACEMENT DURING POURING OF CONCRETE.
2. CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS.
3. REINFORCED CONCRETE CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH ACI STANDARDS 318.
4. MINIMUM CONCRETE COVER OVER REBAR IS 3".
5. BACKFILL SHALL BE SELECTED MATERIAL, WELL COMPACTED IN LAYERS NOT EXCEEDING 12".
6. BACKFILL SHALL BE PLACED SO AS TO PREVENT ACCUMULATION OF WATER AROUND THE FOUNDATION.
7. REINFORCING MATERIAL SHALL BE IN ACCORDANCE WITH ASTM SPECIFICATION A615-85.
8. ALL REBAR TO BE GRADE 60 (UNLESS NOTED).

FOUNDATION AND ANCHOR TOLERANCES

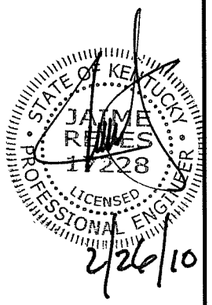
1. VERTICAL EMBEDMENTS OUT OF PLUMB: 1.0 DEGREE.
2. DRILLED FOUNDATION OUT OF PLUMB: 1.0 DEGREE.
3. DEPTH OF FOUNDATION: PLUS 3" (76mm) OR MINUS 0".
4. PROJECTIONS OF EMBEDMENTS: PLUS OR MINUS 1/4" (6mm).
5. CONCRETE DIMENSIONS: PLUS OR MINUS 1" (25mm).
6. REINFORCING STEEL PLACEMENT: PLUS OR MINUS 1/2" INCLUDING CONCRETE COVER.
7. TOP LEVELS OF ALL THREE PIERS FROM EACH OTHER: PLUS OR MINUS 1/4"

AMERICAN TOWER®
STRUCTURAL ENGINEERING
8505 FREEPORT PARKWAY
SUITE 135
IRVING, TX 75063
(972) 999-8900 Tel.
(972) 999-8940 Fax
NYSE: AMT

REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	JL	2/26/10

SITE NUMBER:
273787
SITE NAME:
ALBANY KY, KY

SITE ADDRESS:
DALTON RD
ALBANY, KY 42602



DRAWN BY:	JL
CHECKED BY:	HMA
APPROVED BY:	RAM
DATE DRAWN:	2/26/10
ATC JOB NO:	44654072

SHEET TITLE:
BAR LIST FOR REINFORCING STEEL AND GENERAL NOTES

SHEET NUMBER:	REV #:
A-2	0

Exhibit E

PATRIOT ENGINEERING and Environmental, Inc.
Engineering Value for Project Success
Consulting Environmental, Geotechnical and Materials Engineers

February 18, 2010

AT&T Mobility
c/o Nsoro
10830 Penion Drive
Louisville, Kentucky 40299

Attention: Stephani Leadingham

RE: Report of Geotechnical Engineering Investigation
Albany Cell Tower
Albany, Clinton County, Kentucky
Patriot Project Number 5-09-0996

Dear Stephani:

Submitted herewith is the report of our subsurface investigation for the above-referenced project. This investigation was completed in general accordance with our Master Subcontract Agreement – Professional Services dated March 12, 2009.

This report includes detailed and graphic logs of the four (4) soil test borings drilled at the proposed site. Also included in the report are the results of laboratory tests performed on samples obtained from the site, and geotechnical recommendations pertinent to the foundation design and construction.

We appreciate the opportunity to have performed this geotechnical engineering investigation and are looking forward to working with you during the construction phase of the project. If you have any questions regarding this report or if we may be of any additional assistance regarding any geotechnical aspect of the project, please do not hesitate to contact our office.

Respectfully submitted,
Patriot Engineering and Environmental, Inc.

STATE OF KENTUCKY
WESLEY J. HEMP
25731
LICENSED
PROFESSIONAL ENGINEER

Wesley J. Hemp, P.E., LEED AP
Director – Louisville Geotechnical Services

Richard L. Johnson, P.E.
Senior Project Engineer

Attachment: Report of Geotechnical Engineering Investigation

TABLE OF CONTENTS

1.0 INTRODUCTION....1
1.1 General....1
1.2 Purpose and Scope....1

2.0 PROJECT INFORMATION....1

3.0 SITE AND SUBSURFACE CONDITIONS....2
3.1 Site Conditions....2
3.2 Site Geology....2
3.3 Subsurface Conditions....2
3.4 Groundwater Conditions....5

4.0 DESIGN RECOMMENDATIONS....6
4.1 Basis....6
4.2 Tower Foundation....6
4.3 Maintenance Building Foundations....8
4.4 Floor Slabs....9
4.5 Modulus of Subgrade Reaction....10
4.6 Access Road and Parking Area....10
4.7 Seismic Considerations....11

5.0 CONSTRUCTION CONSIDERATIONS....12
5.1 Site Preparation....12
5.2 Foundation Excavations....12
5.3 Structural Fill and Fill Placement Control....13
5.4 Groundwater....14
5.5 Sinkhole Considerations....14

6.0 INVESTIGATIONAL PROCEDURES....16
6.1 Field Work....16
6.2 Laboratory Testing....17

7.0 ILLUSTRATIONS....17

APPENDICES

Appendix A:
Site Vicinity Map
Boring Location Map
Sinkhole Identification Map
Boring Log
Boring Log Key
Unified Soils Classification

Appendix B:
General Qualifications
Standard Clause for Unanticipated Subsurface Conditions

REPORT OF GEOTECHNICAL ENGINEERING INVESTIGATION

Albany Cell Tower
Albany, Clinton County, Kentucky
Patriot Project No. 5-09-0996

1.0 INTRODUCTION

1.1 General

AT&T in conjunction with Nsoro is planning the construction of a new cell tower to be located in Albany, Clinton County, Kentucky. The results of our geotechnical engineering investigation for the project are presented in this report. This investigation was carried out in general accordance with our Master Subcontract Agreement – Professional Services dated March 12, 2009.

1.2 Purpose and Scope

The purpose of this investigation was to determine the general near surface and subsurface conditions within the project area and to develop the geotechnical engineering recommendations necessary for the design and construction of the structure. This was achieved by drilling soil test borings at four (4) locations, and by conducting laboratory tests on samples taken from the borings. This report contains the results of our findings, an engineering interpretation of these results with respect to the available project information, and recommendations to aid in the design and construction of the proposed cell tower facility.

2.0 PROJECT INFORMATION

The proposed project includes a 250 ft. self support cell tower to be constructed on a grass covered parcel in Albany, Clinton County, KY. Structural loading information for this project was not available at the time of this report. However, we estimate that the ultimate loads will not exceed the following loading conditions for each tower leg:

Vertical (Downward) Load:	400 kips
Uplift:	350 kips
Horizontal Shear:	60 kips

It is understood that the project will also include the development of a fenced-in compound area which will include a small equipment building. We anticipate that wall loads for the proposed building will not exceed 1.5 kips per lineal foot and floor slab loads will not exceed 150 psf.

3.0 SITE AND SUBSURFACE CONDITIONS

3.1 Site Conditions

The site for the proposed cell tower is a relatively flat grass covered field that slopes down to the east. The ground was dry during our initial site visit and covered with snow and ice during performance of the additional test borings.

3.2 Site Geology

Information pertaining to soil characteristics in the project area was obtained through the Kentucky Geological Society Website and Interactive GIS Map.

The site is located in the Mississippian Plateaus physiographic region in Western Kentucky midway between the Dripping Springs Escarpment and the Pottsville Escarpment. The bedrock at or near the surface consists of sedimentary rock and is of Mississippian age. Specifically, the underlying bedrock is referred to as the St. Louis Limestone Formation. This formation consists of dark to medium gray, sublithographic to medium-grained limestone and calcareous siltstone. The St. Louis Limestone is a karstic formation, meaning that sinkholes are prevalent throughout the formation. The KGS website indicates that the project site is located within an area of very high karst potential. Several sinkholes were observed to be in close vicinity of the project site when reviewing the published geology maps. However, no obvious sinkhole depressions or swallow holes were noted during our site visit.

3.3 Subsurface Conditions

Our interpretation of the subsurface conditions is based upon widely spaced soil borings drilled at the approximate locations shown on the Boring Location Map in Appendix A. The following discussion is general; for more specific information, please refer to the boring log presented in Appendix A. It should be noted that the dashed stratification lines shown on the soil boring logs indicate approximate transitions between soil types. In situ stratification changes could occur gradually or at different

depths. All depths discussed below refer to depths below the existing ground surface.

The parcel is generally covered with topsoil, a surficial layer of material that is a blend of silts, sands, and clays, with varying amounts of organic matter. The topsoil layer was about 4 to 7 inches thick in the test borings with an average thickness of about 5.5 inches.

Below the topsoil surface cover, boring B-1 encountered silty clay described as dark brown, very moist, and stiff to soft to a depth of 3.5 feet. Below this layer, the boring encountered sitly clay described as medium to reddish brown in color, moist, and very stiff to a depth of 6.0 feet. **Below this layer, the boring encountered highly plastic (CH) fat clay described as red mottled yellowish brown, moist, and very stiff to hard to a depth of about 18.5 feet. Highly plastic, gravelly clay described as yellowish brown, moist, and very stiff with small chert fragments was encountered to a depth of about 22.0 feet, the auger refusal depth.** Upon encountering auger refusal, 10 feet of rock coring was performed. The first 5-ft of coring had a recovery of 40% (i.e. 2 feet) and an RQD (Rock Quality Designation) of 23%, while no recovery was noted for the second 5-ft core run. The rock recovered consisted of chert described as light gray, very-fine grained, and hard. The field boring logs indicated that the rock core sample recovered was retrieved from between the depths of about 22 to 24 feet. It was initially thought that the lack of sample recovery was indicative of a large void from 24 to 32 feet, but based upon information obtained from the additional borings, it is likely that the core barrel penetrated through a chert bed from 22 to 24 feet that is underlain by clay. The clay most likely was washed away by the core barrel and the introduction of water into the hole during the coring process.

Boring B-2 encountered silty clay described as dark brown, moist to very moist, and medium stiff to soft to a depth of about 3.5 feet below the ground surface. **Below this layer, the boring encountered highly plastic (CH) clay described as light brown mottled red, moist, and very stiff to hard to a depth of about 13.5 feet. Below this layer, the boring encountered highly plastic, gravelly clay described as light brown mottled red, moist to very moist, and hard to a depth of about 22.5 feet, at which point auger refusal was encountered.** It appeared that the SPT blow counts were elevated in the gravelly clay layer due to the presence of chert

fragments. Upon reaching auger refusal, 5-ft of rock coring was performed, although only 8 inches of rock was cored, with the remaining core run most likely being performed through clay and weathered chert fragments. The 8 inch sample recovered from 22.5 to 23.2 feet consisted of chert described as light gray, very fine-grained, and hard. Below the 8 inch layer of chert, clay with rock fragments was encountered for the remainder of the core run to a depth of about 27.5 feet. The core sample retrieved had a recovery of 13 percent and an RQD of 13 percent. Due to the hollow-stem augers not being able to penetrate through the chert bed (which prevents additional splitspoon sampling), a single Standard Penetration Test was performed from 27.5 to 29.0 feet to obtain a sample of the underlying clay layer. The sample retrieved consisted of silty clay described as brown, very moist, and very stiff with chert fragments to a depth of about 29.0 feet, the termination depth. It appeared that the blow counts for this sample were elevated due to the presence of chert fragments.

Boring B-3 encountered light brown, moist, stiff, silty clay to a depth of about 3.5 feet and was underlain by medium brown mottled orange brown, moist, stiff to very stiff clayey silt to a depth of about 6.0 feet. **Below these layers, a thin stratum of highly plastic (CH) fat clay described as red mottled yellowish brown, moist, and very stiff was encountered to a depth of 8.5 feet.** Silt described as reddish brown and brown, moist to dry, and stiff to very stiff was encountered to a depth of about 13.5 feet and was underlain by silty clay described as reddish brown, very moist, and stiff to very stiff to a depth of 18.5 feet. Below this layer, the boring encountered gravelly clay described as reddish brown to orange, very moist to wet, and stiff to very stiff with chert fragments to a depth of about 43.5 feet. The blow counts for samples retrieved from 18.5 to 20.0 feet, from 33.5 to 35.0 feet, and from 38.5 to 40.0 feet appeared to be elevated due to the presence of the chert fragments. **Clay described as brown, wet, and soft to very soft was encountered between depth of 43.5 feet and 50.0 feet, the termination depth.**

Boring B-4 encountered silty clay described as dark brown to brown, very moist to moist, and medium stiff to soft to a depth of about 8.5 feet. Below this layer, the boring encountered highly plastic (CH) fat clay described as red mottled yellowish brown, moist, and very stiff to hard to a depth of about 18.5 feet. The sample from 13.5 to 15.0 feet also contained some black oxide nodules. Between depths of 18.5 and 33.5 feet the boring encountered yellowish brown, moist,

medium stiff to very stiff clay with weathered chert fragments. Below this layer the boring encountered weathered limestone described as light gray, fine-grained, and medium dense to hard to a depth of about 39.0 feet, the auger refusal depth. Upon encountering auger refusal on limestone, 13.5 feet of rock coring was performed. The core samples retrieved revealed limestone described as light gray to light gray weathered brown, very fine to medium grained, and hard. The core sample retrieved from 39.0 to 42.5 feet had a recovery of 31% and an RQD of 26%, while the core sample retrieved from 42.5 to 47.5 feet had a recovery of 31% and an RQD of 35%. **No recovery was noted for the 5 ft core run performed between depths of 47.5 and 52.5 feet. Loss of the coring water return was noted at a depth of about 39.9 feet, which is indicative of a void or solution channel in the underlying rock mass.**

Standard Penetration Test blow counts (N-values) ranged from 6 to 14 blows per foot (bpf) in the upper 3.5 feet, from 5 to 17 bpf between 3.5 and 6 feet, from 5 to 25 bpf between 6 and 8.5 feet, from 21 to 26 bpf between 8.5 and 13.5 feet, from 16 to 45 bpf between 13.5 and 18.5 feet, from 20 to 45 bpf between 18.5 and 23.5 feet, from 10 to 17 bpf between 23.5 and 28.5 feet, and from 2 to greater than 50 blows per foot below 28.5 feet. Natural moisture contents in these soils ranged from 9 to 48 percent, Compressive strengths as determined with a calibrated hand penetrometer ranged from less than 0.25 to greater than 4.5 tons per square foot (tsf) in these soils.

3.4 Groundwater Conditions

Groundwater was encountered during drilling in test boring B-3 at a depth of 13 feet. The remaining borings did not encounter groundwater during or upon completion of drilling operations.

The term groundwater, for the purpose of this report, pertains to any water that percolates through the naturally occurring soil materials found on site. This includes any overland flow that permeates through a given depth of soil, perched water, and water that occurs below the "water table", a zone that remains saturated and water bearing year round.

It should be recognized that fluctuations in the groundwater level should be expected to occur due to variations in rainfall and other environmental or physical factors at the time

measurements are made. The true static groundwater level can only be determined through observations made in cased holes over a long period of time, the construction of which was beyond the scope of this investigation.

4.0 DESIGN RECOMMENDATIONS

4.1 Basis

Our recommendations are based on data presented in this report, which include soil borings, laboratory testing and our experience with similar projects. Subsurface variations that may not be indicated by a dispersive exploratory boring program can exist on any site. If such variations or unexpected conditions are encountered during construction, or if the project information is incorrect or changed, we should be informed immediately since the validity of our recommendations may be affected. Refer to Appendix B for additional qualifications and contractual considerations.

4.2 Tower Foundation

Foundation Selection

Based upon the significant variance in the subsurface conditions shown on the boring logs, we do not recommend that the proposed tower be supported utilizing a deep foundation system such as drilled piers. The presence of a chert bed and/or floaters, inconsistent SPT blow counts compared to penetrometer unconfined compressive strengths, and poor and/or uncertain conditions at deeper depths are not conducive to utilization of deep foundations. It is likely that any recommendations for drilled pier design would need to be conservative and, therefore, costly to account for these varying conditions. Furthermore, it is also likely that significant installation difficulties could be encountered due the presence of chert and/or limestone beds or floaters. Instead, we recommend that the tower be supported on a mat foundation bearing on native stiff clay. Design parameters for mat foundation design may be observed in the section below.

Mat Foundation

The cell tower may be supported by use of a mat foundation between a depth of no less than 4 feet and no greater than 20 feet below existing subgrade. The mat foundation may be proportioned utilizing an allowable bearing pressure of *2000* psf.

Based upon our previous experience, we understand that the mat foundation for a 250-ft tall tower will most likely be in excess of 25-ft x 25-ft in plan dimension, regardless of the allowable design bearing pressure. It is also understood that the allowable design bearing pressure will likely only be experienced at the edge of the foundation due to overturning moment caused by transient forces (wind loads, etc.). Therefore, the actual contact pressure over a majority of the foundation area will be significantly less than the allowable pressure provided above.

It should be understood that if the mat foundation is designed to bear at a depth of 6 feet or shallower, some additional over-excavation and replacement (probably 2.5 feet or less) may be required, particularly in the vicinity of boring B-4. Additionally, if the foundation excavation extends to a depth of 13 feet below existing grade it is possible that groundwater may be encountered, particularly in the vicinity of boring B-3.

The thickness of the mat should be sufficient to support the tower as a rigid mat without flexure. For mat foundation design, we recommend that the modulus of subgrade reaction, "K_{30}", not exceed ***75*** pounds per cubic inch for a mat bearing native stiff clay or structural fill overlying the same. ***As noted in Section 3.3 of this report, highly plastic (CH) fat clays that are subject to volume change due to fluctuations in moisture content were encountered in several of the test borings between depths of 3.5 to 22.0 feet below the existing subgrade elevation. Should the mat foundation bear in or on these materials the mat should be of sufficient thickness to withstand potential damage caused by the volume changes in these materials.***

A detailed settlement analysis was beyond the scope of this report; however, we estimate that the total settlement of the mat foundation should not exceed

approximately 1 inch. Careful field control during construction is necessary to minimize the actual settlement that will occur.

4.3 Maintenance Building Foundations

It should be noted that a test boring was not performed for the Maintenance Building foundation since the location of the building has yet to be determined. Therefore, the recommendations provided below are based upon information obtained from the four (4) test borings performed within the tower lease area.

The proposed structure can be supported on spread footings bearing on native stiff silty clay or structural fill overlying the same at normal shallow depths. ***If foundations bear at a depth of greater than 24 inches below existing site grade, it is possible that highly plastic (CH) fat clay may be encountered in foundation excavations, particularly in the vicinity of boring B-2. Where encountered, any highly-plastic fat clay should be over-excavated to a minimum depth of 24 inches below the foundation bearing elevation and replacing with an equal amount of approved compacted structural fill. The reason for this over-excavation and replacement is to reduce the potential for volume changes in the underlying highly plastic fat clay (CH) that could damage structure foundation due to changes in moisture content. It is also that some soft soils that will require over-excavation and removal will be encountered in the vicinity of boring B-4 to a depth of approximately 8.5 feet.*** These footings may be proportioned using a net allowable soil bearing pressure not exceeding ***1,400*** pounds per square foot (psf) for wall footings, provided the foundations are constructed in compliance with the recommendations discussed in Section 5.0 of this report.

In using the above net allowable soil bearing pressure, the weight of the foundation and backfill over the foundation need not be considered. Hence, only loads applied at or above the minimum finished grade adjacent to the footing need to be used for dimensioning the foundations. Each new foundation should be positioned so it does not induce significant pressure on adjacent foundations; otherwise the stress overlap must be considered in the design.

All exterior foundations and foundations in unheated areas should be located at a depth of at least 24 inches below final exterior grade for frost protection. We recommend that strip footings be at least 18 inches wide and column footings be at least 24 inches wide.

We estimate that the total foundation settlement should not exceed approximately 1 inch and that differential settlement should not exceed about ¾ inch for footings bearing at shallow depths on stiff silty clay or structural fill. Careful field control during construction is necessary to minimize the actual settlement that will occur.

Positive drainage of surface water, including downspout discharge, should be maintained away from structure foundations to avoid wetting and weakening of the foundation soils both during construction and after construction is complete.

4.4 Floor Slabs

It should be noted that a test boring was not performed for the proposed maintenance building. Therefore, the following discussion should be considered general in regards to floor slabs.

The shallow soft soils encountered in the test boring are not suitable for floor slab support without some remediation. Some over-excavation and replacement or scarification and recompaction of the upper 24 inches will most likely be required. If the final design grade for the tower compound calls for the removal of the upper few feet of subgrade soils, it is likely that highly-plastic (CH) fat clays will be exposed, particularly in the vicinity of boring B-2. Where encountered, any highly-plastic fat clay should be over-excavated to a minimum depth of 24 inches below the slab bearing elevation and replaced with an equal amount of approved compacted structural fill.

Depending upon the time of year in which floor slabs are constructed the native subgrade may be soft or frozen. If floor slab construction takes place during the rainy season or the winter months, some undercutting should be expected prior to placement of the granular base course.

We recommend that all floor slabs be designed as "floating", that is, fully ground supported and not structurally connected to walls or foundations. This is to minimize the possibility of cracking and displacement of the floor slab because of differential movements between the slab and the foundation. Although the movements are estimated to be within the tolerable limits for the structural safety, such movements could be detrimental to the slabs if they were rigidly connected to the foundations.

The building floor slab should be supported on a minimum 6-inch thick, granular base course, bearing on a suitably prepared subgrade (refer to Section 5.0 Construction Considerations). The granular base course is expected to help distribute loads and equalize moisture conditions beneath the slab. All slabs should be liberally jointed and designed with the appropriate reinforcement for the anticipated loading conditions.

4.5 Modulus of Subgrade Reaction

A modulus of subgrade reaction, "K_{30} ", value of **75** pounds per cubic inch (pci) is recommended for the design of ground supported floor slabs. It should be noted that the "K_{30}" modulus is based on a 30-inch diameter plate load test and a CBR value of **1.5**.

4.6 Access Road and Parking Area

No test borings were performed for the tower access drive. It is possible that conditions different than those encountered at the tower location may exist along the access drive. Therefore, the following discussion should be considered general in nature in regards to access road and parking areas.

The near surface lean clay (CL) soil encountered in test borings is generally suitable for support of the access road and parking area after some remediation. The near surface soil encountered in test borings B-1, B-2, and B-4 was soft and may require some over-excavation and replacement (probably 24 inches or less) or moisture conditioning and recompaction prior to placement of the granular base course.

It is assumed that the access drive/parking lot design for this project will consist of crushed stone overlying the existing soil subgrade. A pavement section without asphalt or concrete surface cover will require regular maintenance due to degradation of soils caused by inclement weather, vegetation growth, and vehicular traffic. Therefore, the pavement section will require routine maintenance to keep the access drive and parking areas functional.

Depending upon the time of year in which access road and parking areas are constructed the exposed subgrade may be soft. If soft areas are encountered during construction, the areas should be undercut and replaced with approved compacted

structural fill as outlined in section 5.0 of this report. If construction is performed during a wet or cold period, the contractor will need to exercise care during the grading and fill placement activities in order to achieve the necessary subgrade soil support for the access road (See Section 5.0 for Construction Considerations).

The base soil for the access road and parking will need to be firm and dry. The subgrade should be sloped properly in order to provide good base drainage. To minimize the effects of groundwater or surface water conditions, the base section for the driveway should be sufficiently high above adjacent ditches and properly graded to provide adequate drainage.

Our recommendations are based on the assumption that the access drive and parking areas will be constructed on proofrolled natural soils, or on structural fill overlying the same. Serviceable pavements can be achieved by different combinations of materials and thickness, varied to provide roughly equivalent strengths. In addition, local practice for existing pavement construction should be reviewed for other blends, combinations of materials that have been found satisfactory, and for applicable minimum standards.

4.7 Seismic Considerations

We have reviewed Section 1615 of the 2007 Kentucky Building Code (Modified 2006 International Building Code) with respect to the subsurface conditions disclosed by our geotechnical investigation and the following recommendations and comments are presented for your use in developing the seismic design criteria for the structural design. For structural design purposes, we recommend using a **Site Class of D** as defined by the 2007 Kentucky Building Code. Other earthquake resistant design parameters should be applied consistent with the minimum requirements of the Kentucky Building Code. The Site Class of D was based on clay with an average undrained shear strength of 750 psf to a depth of 50 feet, and moderately hard bedrock with an average shear wave velocity of 2,500 feet per second from 50 to 100 feet.

5.0 CONSTRUCTION CONSIDERATIONS

5.1 Site Preparation

All areas that will support foundations, floors, pavements or newly placed structural fill must be properly prepared. All loose surficial soil, topsoil, fill and other unsuitable materials must be removed. Unsuitable materials include: frozen soil, relatively soft material, relatively wet soils, deleterious material, soils that exhibit a high organic content.

Prior to construction of floor slabs or pavements or the placement of new structural fill, the exposed subgrade must be evaluated by the Patriot representative. The evaluation should include proofrolling of the subgrade.

Care must be exercised during grading and fill placement operations. The combination of heavy construction equipment traffic and excess surface moisture can cause pumping and deterioration of the near surface soils. The severity of this potential problem depends to a great extent on the weather conditions prevailing during construction.

5.2 Foundation Excavations

The exposed clay in the base of the foundation (except for foundations bearing on structural backfill) should be observed by a Patriot site representative to confirm that bearing material of adequate strength has been reached and that no highly plastic (CH) clay materials are present beneath the foundations. Over-excavation of CH soils beneath the mat foundation may not be necessary if the foundation is of sufficient thickness to withstand any potential damage caused by possible volume changes in these soils. Any localized soft soil zones encountered at the bearing elevation should be further excavated until adequate support materials encountered. The cavity should be backfilled with approved structural fill as outlined in Section 5.3 of this report.

When it is necessary to support the foundation on structural fill, then the fill pad must extend laterally a minimum distance beyond the edge of the mat foundation. The minimum structural pad width would correspond with a point at which an imaginary line extending downward from the outside edge of the footing at a 1H:2V slope intersects the surface of the natural soils. For example, if the depth to the bottom of excavation is

2 feet below the bottom of the foundation, the excavation would need to extend laterally beyond the edge of the footing at least 1 foot, as shown in Illustration A found at the conclusion of this report.

Excavation slopes should be maintained within OSHA requirements. In addition, we recommend that any surcharge fill or heavy equipment be kept at least 5 feet away from the edge of the excavation. In addition, excavations that occur near existing in-use foundations should be carefully performed, making a conscious effort not to undermine the support of the in-use foundations. If it is necessary to excavate soils adjacent to and below the bearing elevation of any in-use foundations *Patriot* should be contacted to make further recommendations regarding these excavations. Please refer to Illustration B in Appendix A for further details.

Construction traffic on the exposed surface of the bearing soils will potentially cause some disturbance of the subgrade and consequently loss of bearing capacity. However, the degree of disturbance can be minimized by proper protection of the exposed surface.

5.3 Structural Fill and Fill Placement Control

Structural fill, defined as any fill that will support structural loads, should be clean and free of organic material, debris, deleterious materials and frozen soils. Samples of the proposed fill materials should be tested prior to initiating the earthwork and backfilling operations to determine the classification, natural and optimum moisture contents, maximum dry density and overall suitability as a structural fill.

Structural fill should be limited to compacted No. 57 Stone, DGA, or lean clay placed and compacted in accordance with this report, or lean concrete. Any clay borrow should have a liquid limit of less than 40 percent and a plasticity index of less than 20 percent. The on-site highly plastic soils should not be used as fill (unless used as overburden backfill for the mat foundation, assuming the clay may be compacted to a sufficient unit weight).

All structural fill placed beneath floor slabs and above the foundation bearing elevation should be compacted to at least 95 percent of its maximum Standard Proctor dry density (ASTM D-698). This minimum compaction requirement should be

increased to 100 percent of the maximum Standard Proctor dry density for fill supporting footings, provided foundations are designed as outlined in Recommendations, Section 4.2.

It may be necessary to scarify and recompact the near surface soil prior to placement of the pavement sections. Any fill placed or recompacted within 1 ft of the base of the pavement section should also be compacted to at least 100 percent of the Standard Proctor maximum dry density. This can be reduced to 95 percent for engineered fill placed more than 1 ft below the base of the pavement section.

To achieve the recommended compaction of the structural fill, we suggest that the fill be placed and compacted in layers not exceeding eight inches in loose thickness. A Patriot soils engineer or his representative should monitor all fill placements.

5.4 Groundwater

Groundwater was encountered during drilling in test boring B-3 at a depth of 13 feet. The remaining borings did not encounter groundwater during or upon completion of drilling operations.

Groundwater inflow into shallow excavations above the groundwater table is expected to be adequately controlled by conventional methods such as gravity drainage and/or pumping from sumps. More significant inflow can be expected in deeper excavations below the groundwater table requiring more aggressive dewatering techniques, such as well or wellpoint systems. For groundwater to have minimal effects on the construction, foundation excavations should be constructed and poured in the same day, if possible.

5.5 Sinkhole Considerations

Review of available geologic information and our prior experience in the area suggests the site is located in a karst region. Therefore, the underlying limestone bedrock may be susceptible to solution weathering. There are risks associated with construction activity in karst regions, including some risk of future dropout occurrence. It is possible that site grading activity may uncover insipient sinkholes that were not previously discovered by our investigation. A quantitative evaluation of this risk is beyond the scope of this geotechnical engineering investigation. However, qualitative assessments may be made based on past experience in the area and other site specific indicators. In our opinion, the risks at this

site should be no greater than that of numerous other sites which have been successfully developed in the general area of the site. Therefore, the following general discussion should be considered in regard to sinkholes and their treatment.

Our prior experience with similar sites indicates that the risks associated with future sinkhole development can be reduced by properly treating existing sinkholes and prudent site design and development procedures.

Solution activity typically results from water movement through the limestone bedrock. Therefore, an important factor in site design and construction is to reduce the quantity of surface water which is allowed to infiltrate into the subgrade near planned structural areas. We recommend that project design and construction include the following considerations:

- Building and pavement areas should be sited as far as practical, horizontally from identified solution features.
- All surface drainage should be directed away from structural areas.
- Water should not be allowed to pond in structural areas.
- Water collected from the roof systems should be collected in pipes and suitably disposed of in non-structural areas. The collected waters should not be routed and discharged to sinkholes near structural areas.
- All water pipelines and planters should be designed and installed such that leakage and water infiltration is minimized.

The actual method used for treating of sinkholes is typically dependent on the depth to limestone bedrock (as shown in illustration C). For shallow bedrock conditions, an acceptable method of treatment is to excavate the sinkhole throat to a defined opening in the limestone bedrock at the soil/rock interface (Illustration C – top). The exposed area should be properly cleaned and then plugged with lean concrete. Once the area is plugged, the excavation may be backfilled to desired grade with properly placed and compacted fill.

Construction of a graded inverted filter inside the cone of depression is another treatment method available (Illustration C – bottom). This methodology is more suitable for deeper (i.e., greater than 10 to 15 feet) bedrock conditions. The filter should be constructed by initially excavating the area down to limestone, exposing the solution drainage channel if possible. At this level, a suitable geotextile fabric (such as used for pavement edge drains)

should be placed over the excavated area. The fabric should extend up on each side of the trench, with enough material to overlap the top of the excavation after backfilling. The area can then be backfilled using crushed limestone. A minimum thickness of 24 inches of coarse crushed limestone (such as No. 1 stone) should be placed initially and covered with finer clean crushed limestone (such as DGA stone). Upon completing the stone backfilling, the geotextile should overlap the top of the stone to encapsulate the plug. We recommend that a layer of compacted soil fill cap of at least one-foot thick be placed over the encupsulated stone plug to limit surface water migration into the inverted filter. We recommend that collected surface waters not be routed to or discharged into the treated sinkholes. Our experience indicates that changes in the quantity of water discharged into solution features may result in enlargement of the feature, even after treatment. If solution features are identified during construction activities, the geotechnical engineer should be contacted for guidance.

6.0 INVESTIGATIONAL PROCEDURES

6.1 Field Work

A total of 1 boring (B-1) was performed at the project site on October 16, 2009 at the approximate location shown on the Boring Location Plan in Appendix A. The remaining three borings (B-3 thru B-4) were drilled between the dates of February 8, 2010 and February 10, 2010 at the approximate locations shown on the Boring Location Plan. Borings B-1, B-2, and B-4 were drilled to auger refusal depths of 22, 22.4, and 39 feet, respectively. Boring B-3 was drilled to a termination depth of 50 feet without encountering auger refusal. Upon reaching auger refusal, 10 feet of rock coring was performed in B-1, 5 feet of coring was performed in B-2, and 13.5 feet of coring was performed in B-4. Although 5 feet of coring was performed in B-2, it appeared that the core barrel had penetrated a chert bed approximatley 8 inches in thickness. After the core run was completed in this hole, an additional splitspoon sample was retrieved before terminating the hole at a depth of about 29 feet. All depths are given as feet below the existing ground surface.

The borings were advanced using 3¼" I.D. (inside diameter) hollow-stem augers. Samples were recovered in the undisturbed material below the bottom of the augers using the standard drive sample technique in accordance with ASTM D 1586-74. A 2" O.D. by $1^{3}/_{8}$" I.D. split-spoon sampler was driven a total of 18 inches with the number of

blows of a 140-pound hammer falling 30 inches of penetration is the Standard Penetration Test result commonly referred to as the N-value (or blow-count). Split-spoon samples were recovered at 2.5-foot intervals, beginning at a depth of 1 foot below the existing surface grade, extending to the auger refusal or termination depth depth. The rock core samples were obtained using an NX-size double-tube core barrel with a diamond cutting bit. Water levels were monitored at the borehole locations during drilling and upon completion of the borings. The boreholes were backfilled with auger cuttings prior to demobilization for safety considerations.

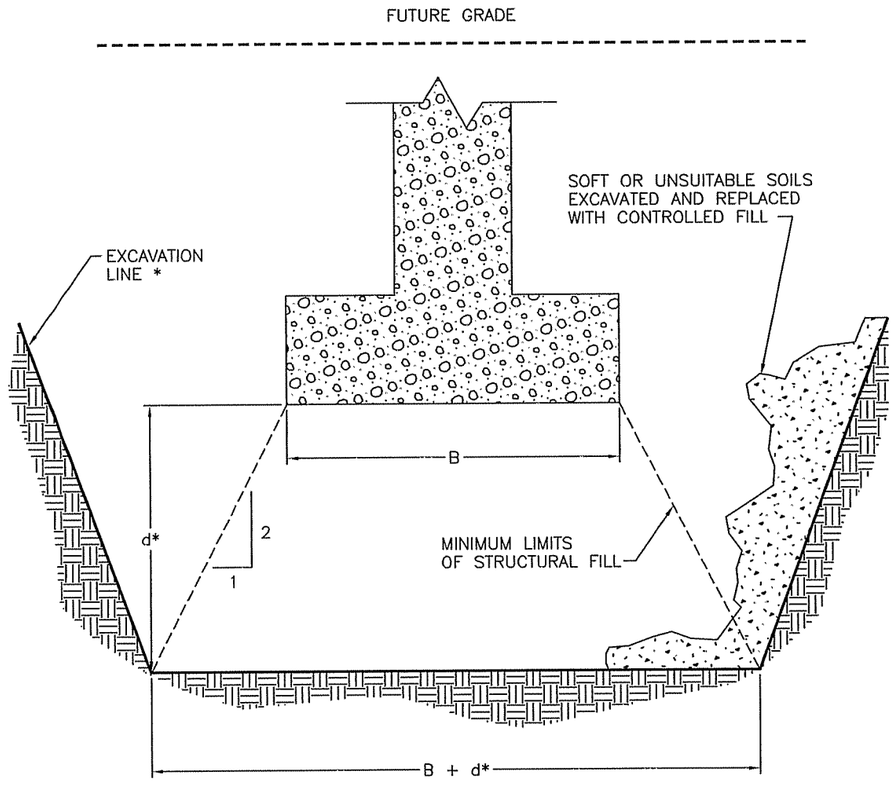
Upon completion of the boring program, all of the samples retrieved during drilling in this sampling program were returned to *Patriot*'s soils testing laboratory where they were visually examined and classified. Laboratory generated logs of the borings were prepared based upon the driller's field logs, laboratory test results, and our visual classification. The test boring logs and a description of the classification system are included in Appendix A in this report. Indicated on the logs are the primary strata encountered, the approximate depth of each stratum change, depth of sample, the Standard Penetration Test results, groundwater conditions, and select laboratory test data. The laboratory logs were prepared for each boring giving the appropriate sample data and the textural description and classification.

6.2 Laboratory Testing

Representative samples recovered in the borings were selected for testing in the laboratory to evaluate their physical properties and engineering characteristics. Laboratory analyses included natural moisture content determinations (ASTM D 2216), and an estimate of unconfined compressive strength testing by use of a calibrated hand penetrometer. The results of all laboratory tests are shown on the boring logs.

7.0 ILLUSTRATIONS

See Illustrations A, B, and C on the following pages. These illustrations are presented to further visually clarify the Construction Considerations presented in Section 5.2.



*d IS DEPTH TO SUITABLE SOILS

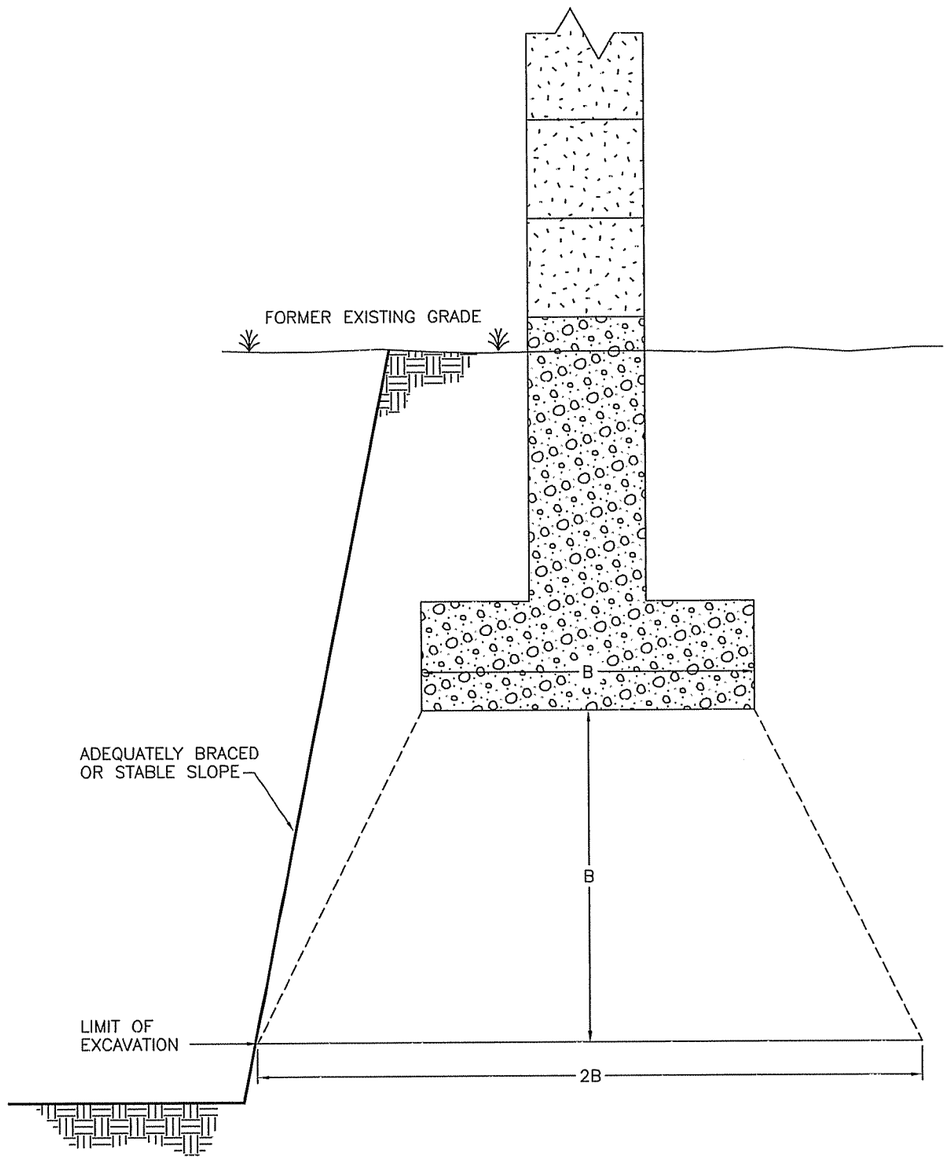
* IN COMPLIANCE WITH OSHA STANDARDS

PATRIOT ENGINEERING
and Environmental, Inc.
4735 Poplar Level Road, Suite 1
(502)961-5652 FAX (502)961-9256

Excavation for Footings
In an Area of Fill
ILLUSTRATION A

job. no.: PAT–UC

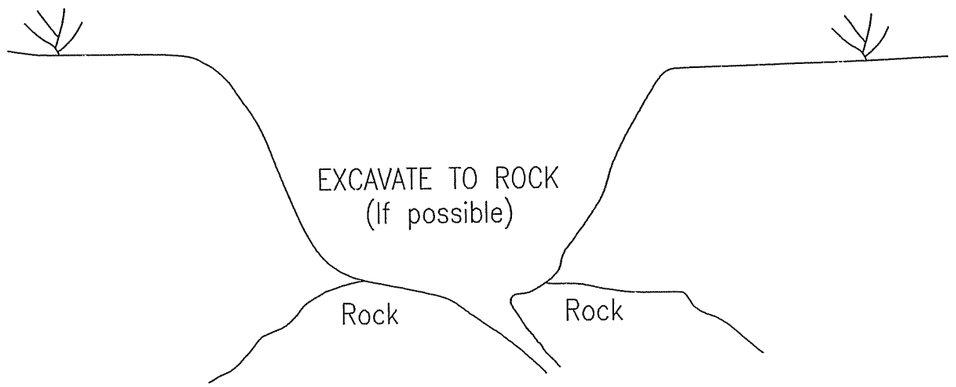
figure: 1

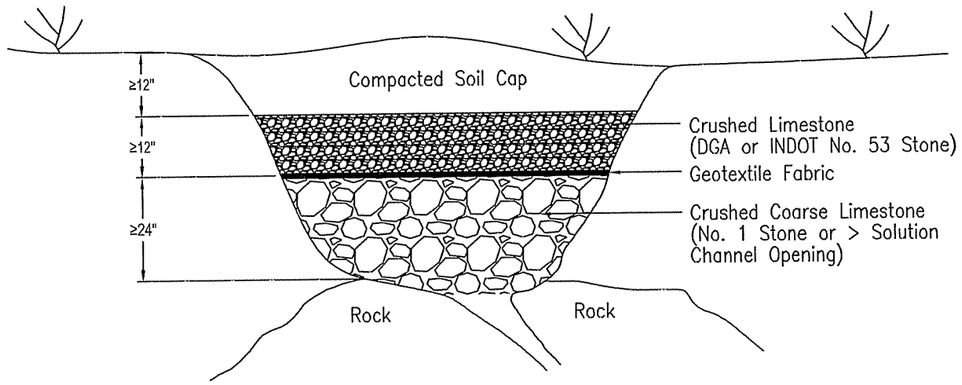


PATRIOT ENGINEERING
and Environmental, Inc.
4735 Poplar Level Road, Suite 1
(502)961-5652 FAX (502)961-9256

Excavation Near Existing
In Use Foundations
ILLUSTRATION B

job. no.:	PAT–UC1	figure:	1





PATRIOT ENGINEERING
and ENVIRONMENTAL, INC.
400 Production Court, Louisville, KY 40299
(502)961-5652 FAX (502)961-9256

Treatment Method For
Deep Sink Holes
ILLUSTRATION C

PROJECT NO.

FIGURE 1

pat-sinkhole

APPENDIX A

Site Vicinity Map

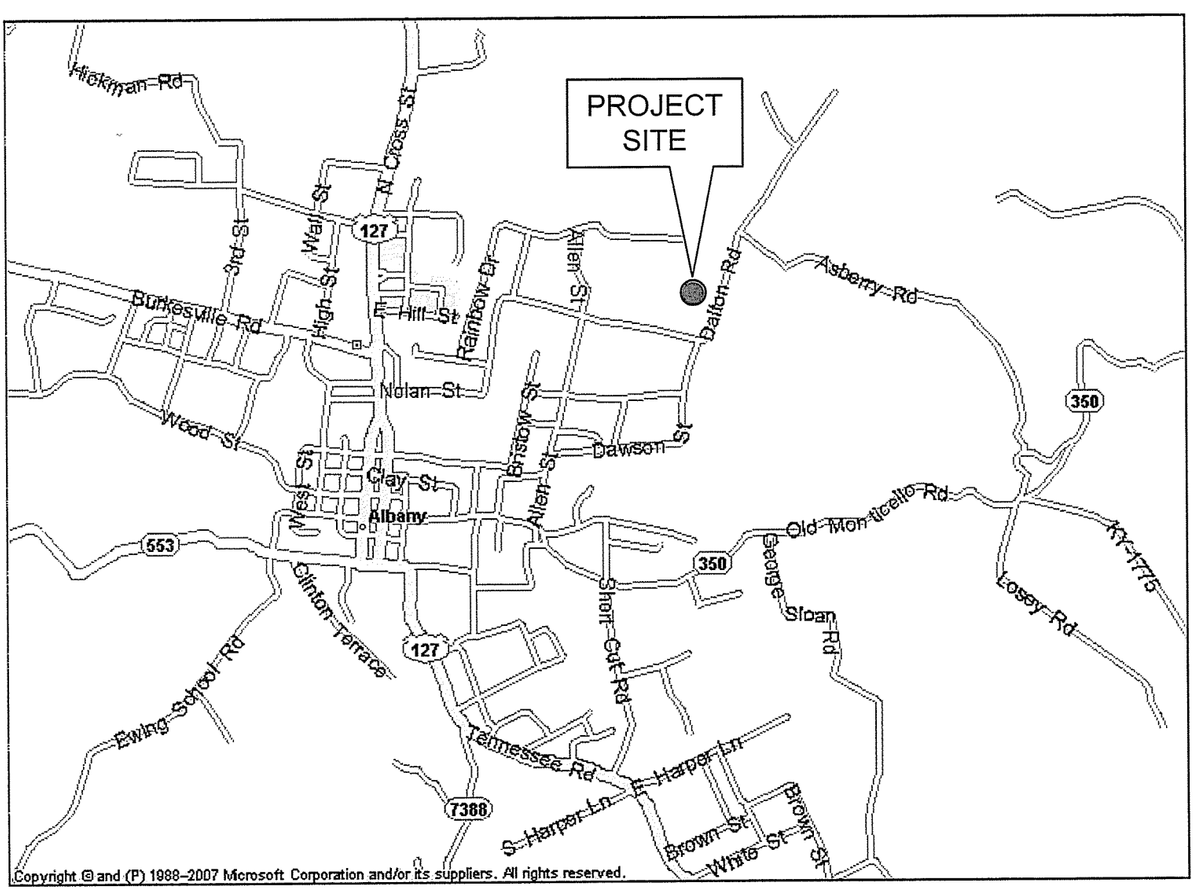
Boring Location Map

Sinkhole Identification Map

Boring Logs

Boring Log Key

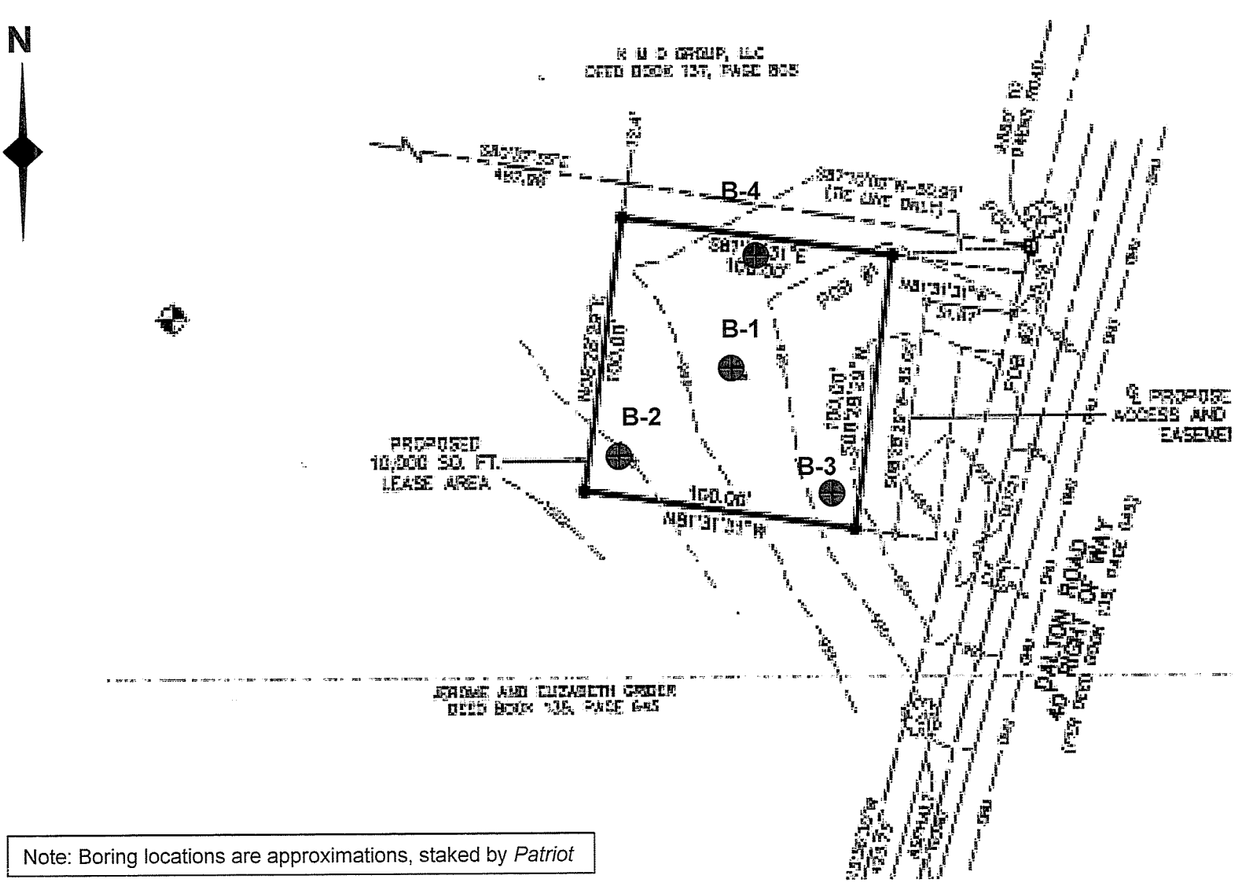
Unified Soils Classification (USCS)



PATRIOT ENGINEERING
and Environmental, Inc.
Louisville, Kentucky 40299

Site Location Map
Albany Cell Tower
Albany, Clinton County, KY

Job No. 5-09-0996 | **Figure** 1

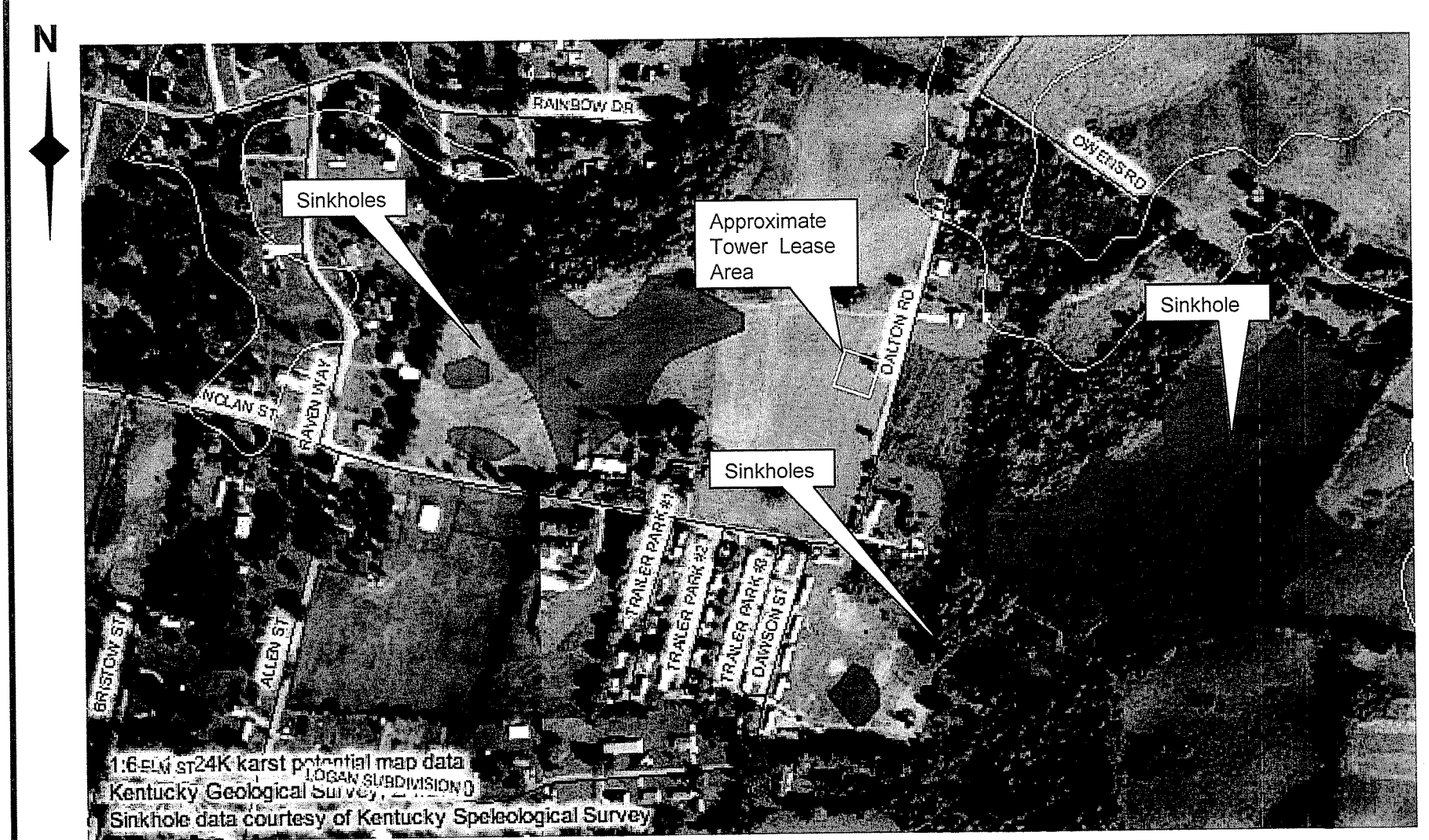


Note: Boring locations are approximations, staked by *Patriot*

PATRIOT ENGINEERING
and Environmental, Inc.
Louisville, Kentucky 40299

Boring Location Map
Salem Cell Tower
Baker Road
Salem, Livingston County, KY

Job No. 5-09-0996 | **Figure** 2



PATRIOT ENGINEERING
and Environmental, Inc.
Louisville, Kentucky 40299

Sinkhole Identification Map
Albany Cell Tower
Albany, Clinton County, KY

Job No. 5-09-0996	**Figure** 3

PATRIOT ENGINEERING and Environmental Inc.
Indianapolis, Terre Haute, Evansville, Fort Wayne, South Bend, Lafayette, Louisville KY, Dayton OH, Charleston IL

LOG OF BORING B-1

(Page 1 of 1)

Albany Cell Tower
Albany, Clinton County, KY

Client Name	: Nsoro	Driller	: G. Taylor
Project Number	: 5-09-0996	Sampling	: Splitspoon
Logged By	: W Hemp	Approximate Elevation	:
Start Date	: 10/16/2009	Drill Rig	: CME-750 ATV
Drilling Method	: HSA		

Water Levels
▼ During Drilling
▽ After Completion
◆ After 24 hours

Depth in Feet	Water Level	USCS	GRAPHIC	DESCRIPTION	Samples	Rec %	SPT Results	qp tsf	w %	RQD %	REMARKS
0				Topsoil (7")							
		CL		SILTY CLAY, dark brown, very moist, stiff to soft	☒	89	4/4/5	0.25	22		
5		CL		SILTY CLAY, medium to reddish brown, moist, very stiff	☒	89	5/8/8	"	20		
				CLAY, red mottled yellowish brown, moist, very stiff to hard	☒	67	7/9/10	3.5	38		
10					☒	89	7/9/13	>4.5	24		
		CH									Auger refusal encountered at 22.0'. Rock core run No. 1 - 22.0' to 27.0'.
15					☒	89	8/7/9	3.0	46		
20		CH		GRAVELLY CLAY, yellowish brown, moist, very stiff, w/ small chert fragments	☒	78	16/10/10	-	38		
				CHERT, light gray to medium gray, very fine grained, hard	▒	40				23	
25		CL		No recovery - probable clay layer							Rock core run No. 2 - 27.0' to 32.0'
		CL		No recovery - probable clay layer	▒	0				0	
30											
				Boring terminated at 32.0'							
35											
40											
45											
50											
55											

02-17-2010 P:\Borings\KY2009\5-09-0996\B-1.bor

PATRIOT ENGINEERING and Environmental Inc.
Indianapolis, Terre Haute, Evansville, Fort Wayne, South Bend, Lafayette, Louisville KY, Dayton OH, Charleston IL

LOG OF BORING B-2

(Page 1 of 1)

Albany Cell Tower
Albany, Clinton County, KY

Client Name	: Nsoro	Driller	: M. Wells
Project Number	: 5-09-0996	Sampling	: Splitspoon
Logged By	: W. Hemp	Approximate Elevation	:
Start Date	: 2/10/2010	Drill Rig	: CME-550 ATV
Drilling Method	: HSA		

Water Levels
▼ During Drilling
▽ After Completion
◆ After 24 hours

Depth in Feet	Water Level	USCS	GRAPHIC	DESCRIPTION	Samples	Rec %	SPT Results	qp tsf	w %	RQD %	REMARKS
0				Topsoil (5")							
		CL		SILTY CLAY, dark brown, moist to very moist, medium stiff to soft	☒	56	3/3/4	0.25	22		
5		CH		SILTY CLAY, light brown mottled red, moist, very stiff to hard	☒	100	2/5/11	2.25	31		
					☒	100	6/10/15	4.25	31		
10					☒	100	8/11/15	3.5	29		
15		CH		GRAVELLY CLAY, light brown mottled red, moist to very moist, hard	☒	100	8/17/28	-	25		
20					☒	100	17/22/23	-	10		Auger refusal at 22 5'. Rock core run No. 1 - 22.5' to 27 5'.
				CHERT, light gray, very fine-grained, hard							Cored thru approximate 8" chert layer. Cannot advance soil augers any further due to chert layer. Obtained SPT sample from 27.5'-29.0' before terminating boring.
25		CL		SILTY CLAY, brown, very moist, very stiff, w/ chert fragments	▚	13				13	
					☒	100	4/11/14	<0.25	14		Blow counts from 27.5' to 29.0' elevated due to presence of chert fragments.
30				Boring terminated at 29.0'							
35											
40											
45											
50											
55											

02-17-2010 P:\Borings\KY2009\5-09-0996\B-2.bor

PATRIOT ENGINEERING and Environmental Inc.
Indianapolis, Terre Haute, Evansville, Fort Wayne, South Bend, Lafayette, Louisville KY, Dayton OH, Charleston IL

LOG OF BORING B-3

(Page 1 of 1)

Albany Cell Tower
Albany, Clinton County, KY

Client Name	: Nsoro	Driller	: M. Wells
Project Number	: 5-09-0996	Sampling	: Splitspoon
Logged By	: W. Hemp	Approximate Elevation	:
Start Date	: 2/10/2010	Drill Rig	: CME-550 ATV
Drilling Method	: HSA		

Water Levels
▼ During Drilling
▽ After Completion
◆ After 24 hours

Depth in Feet	Water Level	USCS	GRAPHIC	DESCRIPTION	Samples	Rec %	SPT Results	qp tsf	w %	RQD %	REMARKS
0				Topsoil (6")							
		CL		SILTY CLAY, light brown, moist, stiff	☒	100	4/6/8	1.0	18		
5		ML		CLAYEY SILT, medium brown mottled orange brown, moist, very stiff to stiff	☒	100	5/7/10	1.25	21		
		CH		CLAY, red mottled yellowish brown, moist, very stiff	☒	100	7/9/9	3.25	22		
10	▼	ML		SILT, reddish brown and brown, moist to dry, stiff to very stiff	☒	67	6/11/13	1.75	14		
15		CL		SILTY CLAY, reddish brown, very moist, stiff to very stiff	☒	67	6/7/10	1.0	27		
20		CL		GRAVELLY CLAY, reddish brown, very moist, very stiff	☒	72	8/10/12	0.25	30		Blow counts from 18.5' to 20.0' elevated due to presence of chert fragments.
25		CL		GRAVELLY CLAY, orange, very moist to wet, stiff, w/ chert fragments	☒	83	3/5/5	1.25	25		
30					☒	0	7/9/8	-	-		Boring caved to 27.0' upon auger removal.
35					☒	100	5/3/8	<0.25	48		Blow counts from 33.5' to 35.0' elevated due to presence of chert fragments.
40					☒	89	9/12/20	<0.25	20		Blow counts from 38.5' to 40.0' elevated due to presence of chert fragments.
45		CL		CLAY, brown, wet, soft to very soft	☒	28	1/1/1	<0.25	35		
50					☒	28	1/2/1	<0.25	36		
				Boring terminated at 50.0'							
55											

02-17-2010 P:\Borings\KY2009\5-09-0996\B-3.bor

PATRIOT ENGINEERING and Environmental Inc.
Indianapolis, Terre Haute, Evansville, Fort Wayne, South Bend, Lafayette, Louisville KY, Dayton OH, Charleston IL

LOG OF BORING B-4

Albany Cell Tower
Albany, Clinton County, KY

Client Name	: Nsoro	Driller	: M. Wells
Project Number	: 5-09-0996	Sampling	: Splitspoon
Logged By	: W. Hemp	Approximate Elevation	:
Start Date	: 2/8/2010	Drill Rig	: CME-550 ATV
Drilling Method	: HSA		

Water Levels
▼ During Drilling
▽ After Completion
◆ After 24 hours

Depth in Feet	Water Level	USCS	GRAPHIC	DESCRIPTION	Samples	Rec %	SPT Results	qp tsf	w %	RQD %	REMARKS
0				Topsoil (4")							
		CL		SILTY CLAY, dark brown, very moist, medium stiff to soft	☒	67	2/3/3	0.25			
					☒	100	2/3/2	0.25			
5		CL		SILTY CLAY, brown, moist, soft to medium stiff	☒	56	2/2/3	0.75			
				SILTY CLAY, red mottled yellowish brown, moist, very stiff to hard	☒	100	4/8/13	>4.5			
10		CH									
				* w/ black oxide nodules	☒	67	7/10/21	2.75			
15											
				CLAY, yellowish brown, moist, very stiff to stiff, w/ weathered chert fragments	☒	67	7/11/15	2.5			
20											
					☒	67	9/7/7	0.5			Blow counts from 23.5' to 25.0' and from 28.5' to 30.0' elevated due to presence of chert fragments.
25		CL									
					☒	73	10/7/7	0.25			
30											
35		LS		WEATHERED LIMESTONE, light gray, fine-grained, medium dense to hard	☒	89	25/7/12	-			
					▩	0	(50/0")	-			Auger refusal at 39.0'.
40		LS		LIMESTONE, light gray and brown, slightly weathered, very fine-grained, hard	▩	31				26	Rock core run No. 1 - 39.0' to 42.5' Lost coring water return at 39.9'
											Rock core run No. 2 - 42.5' to 47.5'
45		LS		LIMESTONE, light gray, fine to medium grained, fresh, very hard	▩	35				35	
											Rock core run No. 3 - 47.5' to 52.5'
50					▩	0				0	
				Boring terminated at 52.5'							
55											

02-17-2010 P:\Borings\KY2009\5-09-0996\B-4.bor

BORING LOG KEY

UNIFIED SOIL CLASSIFICATION SYSTEM
FIELD CLASSIFICATION SYSTEM
FOR SOIL EXPLORATION

NON COHESIVE SOILS
(Silt, Sand, Gravel and Combinations)

Density

Very Loose	-5 blows/ft. or less
Loose	-6 to 10 blows/ft.
Medium Dense	-11 to 30 blows/ft.
Dense	-31 to 50 blows/ft.
Very Dense	-51 blows/ft. or more

Grain Size Terminology

Soil Fraction	Particle Size	US Standard Sieve Size
Boulders	Larger than 12"	Larger than 12"
Cobbles	3" to12"	3" to 12"
Gravel: Coarse	¾" to 3"	¾" to 3"
Small	4.76mm to ¾"	#4 to ¾"
Sand: Coarse	2.00mm to 4.76mm	#10 to #4
Medium	0.42mm to 2.00mm	#40 to #10
Fine	0.074mm to 0.42mm	#200 to #40
Silt	0.005mm to 0.074 mm	Smaller than #200
Clay	Smaller than 0.005mm	Smaller than #200

RELATIVE PROPORTIONS FOR SOILS

Descriptive Term	Percent
Trace	1 - 10
Little	11 - 20
Some	21 - 35
And	36 - 50

COHESIVE SOILS
(Clay, Silt and Combinations)

Consistency	Field Identification	Unconfined Compressive Strength (tons/sq. ft.)
Very Soft	Thumb will penetrate soil more than 1 inch	Less than 0.25
Soft	Thumb will penetrate soil about 1 inch	0.25 – < 0.5
Medium Stiff	Thumb will penetrate soil about ½ inch	0.5 - < 1.0
Stiff	Thumb will indent soil about ¼ inch	1.0 - < 2.0
Very Stiff	Readily indented by thumbnail	2.0 - < 4.0
Hard	Indented with difficulty by thumbnail	Over 4.0

Classification on logs are made by visual inspection.

Standard Penetration Test - Driving a 2.0" O.D., $1^{3/8}$" I.D., sampler a distance of 1.0 foot into undisturbed soil with a 140 pound hammer free falling a distance of 30.0 inches. It is customary for **Patriot** to drive the spoon 6.0 inches to seat into undisturbed soil, then perform the test. The number of hammer blows for seating the spoon and making the tests are recorded for each 6.0 inches of penetration on the drill log (Example - 6/8/9). The standard penetration test results can be obtained by adding the last two figures (i.e. 8 + 9 = 17 blows/ft.).

Strata Changes - In the column "Soil Descriptions" on the drill log the horizontal lines represent strata changes. A solid line (———) represents an actually observed change, a dashed line (- - - - -) represents an estimated change.

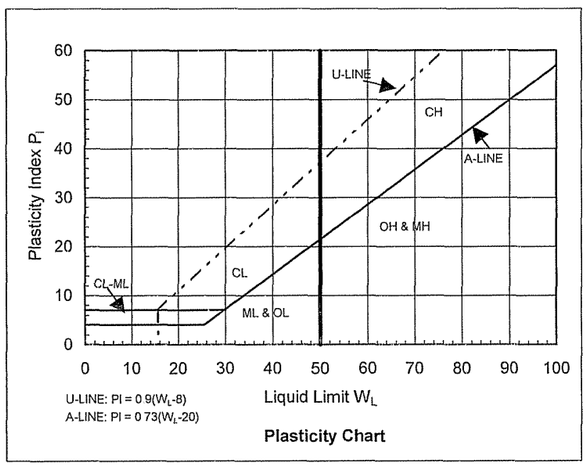
Groundwater observations were made at the times indicated. Porosity of soil strata, weather conditions, site topography, etc., may cause changes in the water levels indicated on the logs.

Groundwater symbols: ▼-observed groundwater elevation, encountered during drilling; ∇-observed groundwater elevation upon completion of boring.

PATRIOT ENGINEERING
and Environmental, Inc.

Unified Soil Classification

Major Divisions			Group Symbol		Typical Names	Classification Criteria for Coarse-Grained Soils		
Coarse-grained soils (more than half of material is larger than No. 200)	Gravels (more than half of coarse fraction is larger than No. 4 sieve size)	Clean gravels (little or no fines)	GW		Well-graded gravels, gravel-sand mixtures, little or no fines	$C_U \geq 4$ $1 \leq C_C \leq 3$	$C_U = \frac{D_{60}}{D_{10}}$	$C_C = \frac{D^2_{30}}{D_{10} D_{60}}$
			GP		Poorly graded gravels, gravel-sand mixtures, little or no fines	Not meeting all gradation requirements for GW ($C_U < 4$ or $1 > C_C > 3$)		
		Gravels with fines (appreciable amount of fines)	GM	d/u	Silty gravels, gravel-sand-silt mixtures	Atterberg limits below A line or $P_I < 4$	Above A line with $4 < P_I < 7$ are borderline cases requiring use of dual symbols	
			GC		Clayey gravels, gravel-sand-clay mixtures	Atterberg limits above A line or $P_I > 7$		
	Sands (more than half of coarse fraction is smaller than No. 4 sieve size)	Clean sands (little or no fines)	SW		Well-graded sands, gravelly sands, little or no fines	$C_U \geq 6$ $1 \leq C_C \leq 3$	$C_U = \frac{D_{60}}{D_{10}}$	$C_C = \frac{(D_{30})^2}{D_{10} D_{60}}$
			SP		Poorly graded sands, gravelly sands, little or no fines	Not meeting all gradation requirements for SW ($C_U < 6$ or $1 > C_c > 3$)		
		Sands with fines (appreciable amount of fines)	SM	d/u	Silty sands, sand-silt mixtures	Atterberg limits below A line or $P_I < 4$	Limits plotting in hatched zone with $4 \leq P_I \leq 7$ are borderline cases requiring use of dual symbols	
			SC		Clayey sands, sand-clay mixtures	Atterberg limits above A line with $P_I > 7$		
Fine-grained soils (more than half of material is smaller than No. 200)	Silt and clays (liquid limit <50)		ML		Inorganic silts and very fine sands, rock flour, silty or clayey fine sands, or clayey silts with slight plasticity	1. Determine percentages of sand and gravel from grain size curve. 2. Depending on percentages of fines (fraction smaller than 200 sieve size), coarse-grained soils are classified as follows: Less than 5% - GW, GP, SW, SP More than 12% - GM, GC, SM, SC 5-12% - Borderline cases requiring dual symbols		
			CL		Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays			
			OL		Organic silts and organic silty clays of low plasticity			
	Silts and clays (liquid limit >50)		MH		Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts			
			CH		Inorganic clays or high plasticity, fat clays			
			OH		Organic clays of medium to high plasticity, organic silts			
	Highly organic soils		PT		Peat and other highly organic soils			



Plasticity Chart

APPENDIX B

General Qualifications

and

Standard Clause for Unanticipated Subsurface Conditions

GENERAL QUALIFICATIONS

of Patriot Engineering's Geotechnical Engineering Investigation

This report has been prepared at the request of our client for his use on this project. Our professional services have been performed, findings obtained, and recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices. This warranty is in lieu of all other warranties either expressed or implied.

The scope of our services did not include any environmental assessment or investigation for the presence or absence of wetlands, hazardous or toxic materials in the soil, groundwater, or surface water within or beyond the site studied. Any statements in this report or on the test borings logs regarding vegetation types, odors or staining of soils, or other unusual conditions observed are strictly for the information of our client and the owner.

This report may not contain sufficient information for purposes of other parties or other uses. This company is not responsible for the independent conclusions, opinions or recommendations made by others based on the field and laboratory data presented in this report. Should there be any significant differences in structural arrangement, loading or location of the structure, our analysis should be reviewed.

The recommendations provided herein were developed from the information obtained in the test borings, which depict subsurface conditions only at specific locations. The analysis, conclusions, and recommendations contained in our report are based on site conditions as they existed at the time of our exploration. Subsurface conditions at other locations may differ from those occurring at the specific drill sites. The nature and extent of variations between borings may not become evident until the time of construction. If, after performing on-site observations during construction and noting the characteristics of any variation, substantially different subsurface conditions from those encountered during our explorations are observed or appear to be present beneath excavations we must be advised promptly so that we can review these conditions and reconsider our recommendations where necessary.

If there is a substantial lapse of time between the submission of our report and the start of work at the site, or if conditions have changed due to natural causes or construction operations at or adjacent to the site, we urge that our report be reviewed to determine the applicability of the conclusions and recommendations considering the changed conditions and time lapse.

We urge that Patriot be retained to review those portions of the plans and specifications that pertain to earthwork and foundations to determine whether they are consistent with our recommendations. In addition, we are available to observe construction, particularly the compaction of structural backfill and preparation of the foundations, and such other field observations as may be necessary.

In order to fairly consider changed or unexpected conditions that might arise during construction, we recommend the following verbiage (Standard Clause for Unanticipated Subsurface Conditions) be included in the project contract.

STANDARD CLAUSE FOR UNANTICIPATED SUBSURFACE CONDITIONS

"The owner has had a subsurface exploration performed by a soils consultant, the results of which are contained in the consultant's report. The consultant's report presents his conclusions on the subsurface conditions based on his interpretation of the data obtained in the exploration. The contractor acknowledges that he has reviewed the consultant's report and any addenda thereto, and that his bid for earthwork operations is based on the subsurface conditions as described in that report. It is recognized that a subsurface exploration may not disclose all conditions as they actually exist and further, conditions may change, particularly groundwater conditions, between the time of a subsurface exploration and the time of earthwork operations. In recognition of these facts, this clause is entered in the contract to provide a means of equitable additional compensation for the contractor if adverse unanticipated conditions are encountered and to provide a means of rebate to the owner if the conditions are more favorable than anticipated.

At any time during construction operations that the contractor encounters conditions that are different than those anticipated by the soils consultant's report, he shall immediately (within 24 hours) bring this fact to the owner's attention. If the owner's representative on the construction site observes subsurface conditions which are different than those anticipated by the consultant's report, he shall immediately (within 24 hours) bring this fact to the contractor's attention. Once a fact of unanticipated conditions has been brought to the attention of either the owner or the contractor, and the consultant has concurred, immediate negotiations will be undertaken between the owner and the contractor to arrive at a change in contract price for additional work or reduction in work because of the unanticipated conditions. The contract agrees that the following unit prices would apply for additional or reduced work under the contract. For changed conditions for which unit prices are not provided, the additional work shall be paid for on a time and materials basis."

Another example of a changed conditions clause can be found in paper No. 4035 by Robert F. Borg, published in ASCE Construction Division Journal, No. CO2, September 1964, page 37.

Exhibit F

Competing Utilities, Corporations or Persons

American Towers

Crown Communication

SBA Towers

Verizon

Sprint / Nextel

T-Mobile

Bluegrass Cellular

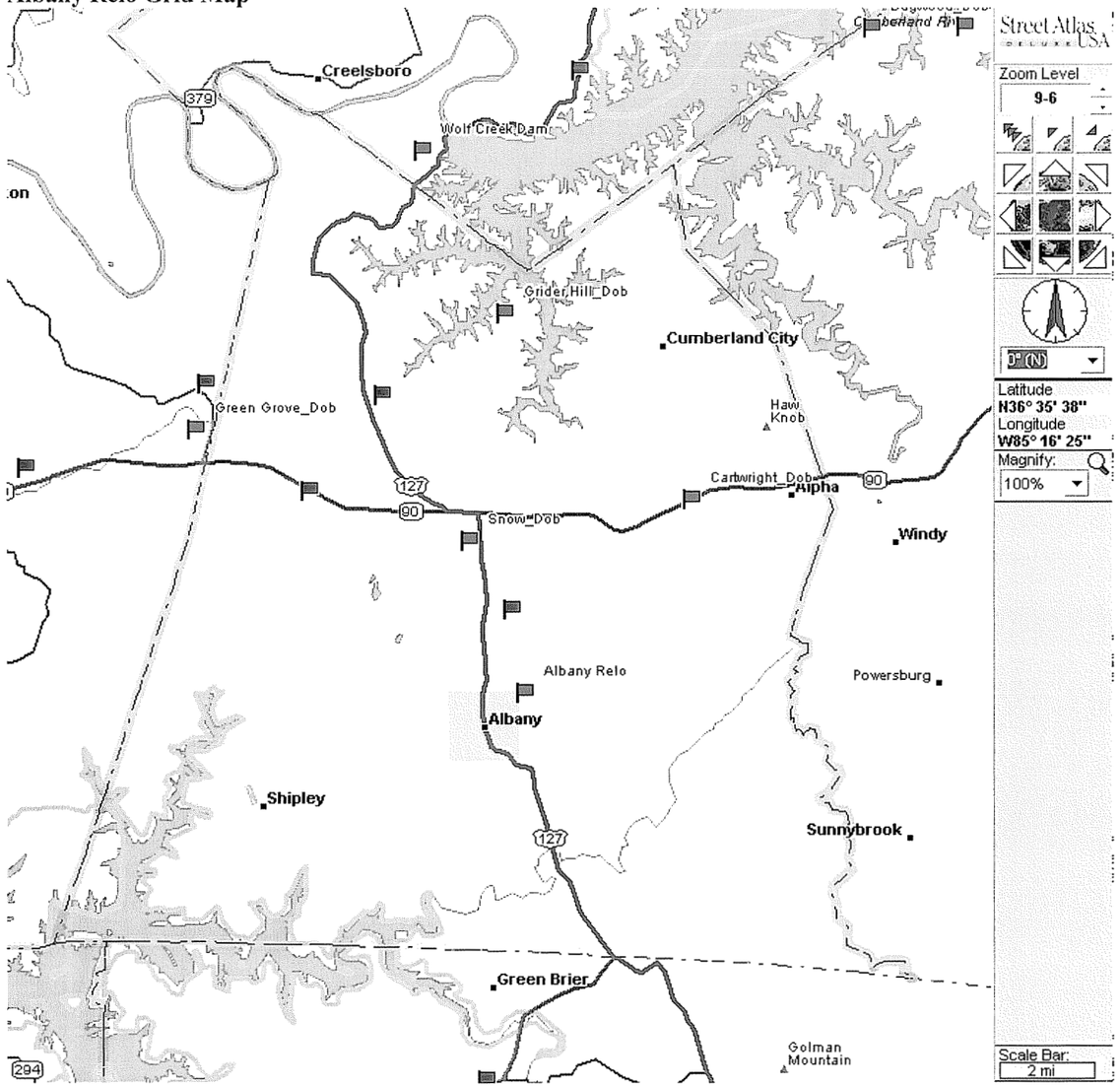
Shared Sites

Cricket

Pegasus Towers

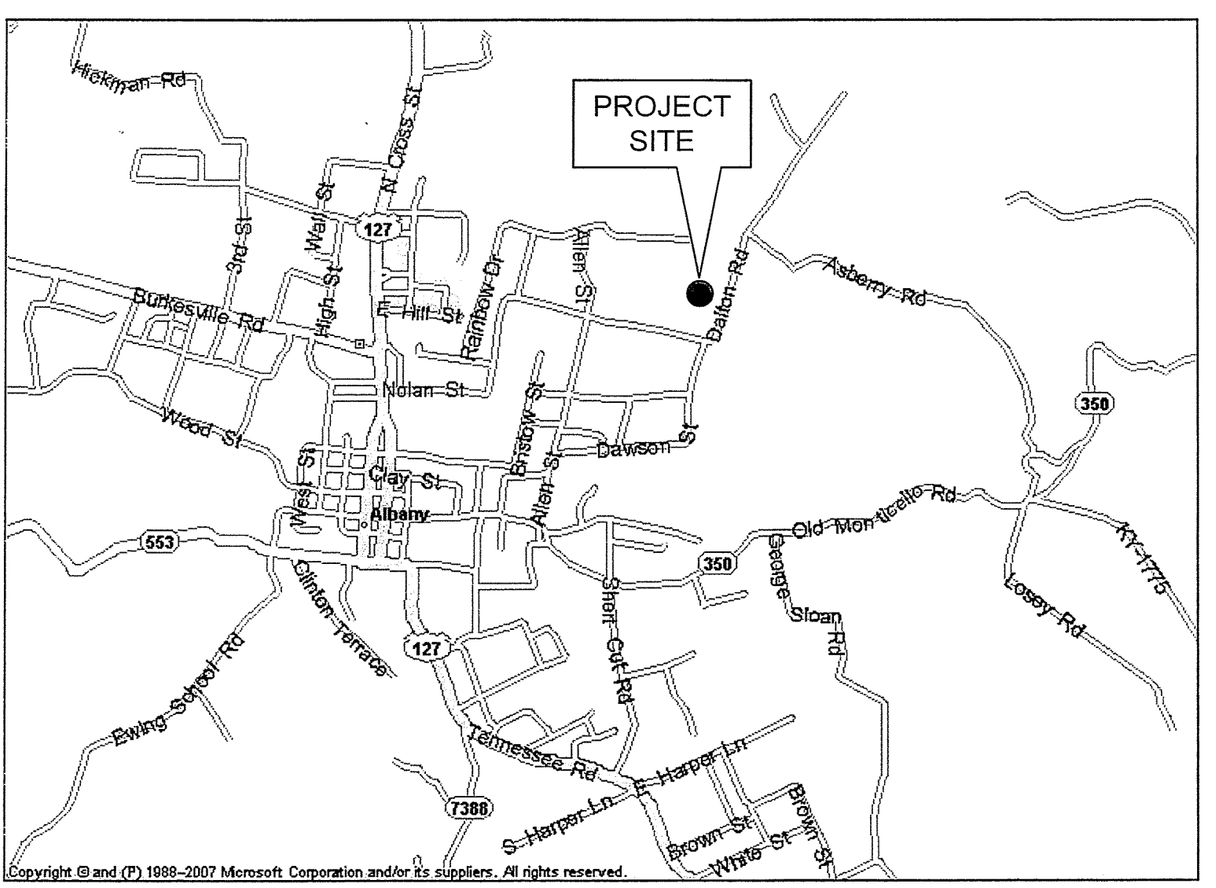
Appalachian Wireless

Albany Relo Grid Map



Red Flags indicate AT&T existing and proposed locations.
Blue Flags indicate non-AT&T existing towers.

N



PATRIOT ENGINEERING
and Environmental, Inc.
Louisville, Kentucky 40299

Site Location Map
Albany Cell Tower
Albany, Clinton County, KY

Job No. 5-09-0996 | **Figure** 1

Exhibit G

Federal Aviation Administration
Air Traffic Airspace Branch, ASW-520
2601 Meacham Blvd.
Fort Worth, TX 76137-0520

Aeronautical Study No.
2009-ASO-6202-OE

Issued Date: 12/11/2009

AT&T Mobility LLC
Rick Suarez
5601 Legacy Drive #A-3
Plano, TX 75024

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Antenna Tower Albany Relo
Location:	Albany, KY
Latitude:	36-41-51.68N NAD 83
Longitude:	85-07-19.11W
Heights:	265 feet above ground level (AGL) 1262 feet above mean sea level (AMSL)

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

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

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be completed and returned to this office any time the project is abandoned or:

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

This determination expires on 06/11/2011 unless:

(a) extended, revised or terminated by the issuing office.
(b) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE POSTMARKED OR DELIVERED TO THIS OFFICE AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

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

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

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

If we can be of further assistance, please contact our office at (847) 294 7575. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2009-ASO-6202-OE.

Signature Control No: 661892-120818694 (DNE)
Vivian Vilaro
Specialist

Attachment(s)
Frequency Data

cc: FCC

Frequency Data for ASN 2009-ASO-6202-OE

LOW FREQUENCY	HIGH FREQUENCY	FREQUENCY UNIT	ERP	ERP UNIT
806	824	MHz	500	W
824	849	MHz	500	W
851	866	MHz	500	W
869	894	MHz	500	W
896	901	MHz	500	W
901	902	MHz	7	W
930	931	MHz	3500	W
931	932	MHz	3500	W
932	932.5	MHz	17	dBW
935	940	MHz	1000	W
940	941	MHz	3500	W
1850	1910	MHz	1640	W
1930	1990	MHz	1640	W
2305	2310	MHz	2000	W
2345	2360	MHz	2000	W

KENTUCKY AIRPORT ZONING COMMISSION
STEVEN BESHEAR
Governor
90 Airport Road, Bldg 400
FRANKFORT, KY
www.transportation.ky.gov/aviation
502 564-4480

December 11, 2009

APPROVAL OF APPLICATION

APPLICANT:
A T & T MOBILITY LLC
MS LISA GLASS
5310 MARYLAND WAY
BRENTWOOD, TN 37027

SUBJECT: AS–027-EKQ–2009-182

STRUCTURE: Antenna Tower
LOCATION: Albany, KY
COORDINATES: 36° 41' 51.68" N / 85° 7' 19.11" W
HEIGHT: 265' AGL/1262'AMSL

The Kentucky Airport Zoning Commission has approved your application for a permit to construct 265'AGL/ 1262'AMSL Antenna Tower near Albany, KY 36° 41' 51.68" N / 85° 7' 19.11" W.

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

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

M-Dual Obstruction Lighting is required.

John Houlihan
Administrator

Exhibit H

ULS License

Cellular License - KNKN666 - New Cingular Wireless PCS, LLC

PA **This license has pending applications:** 0004078789

Call Sign	KNKN666	Radio Service	CL - Cellular
Status	Active	Auth Type	Regular

Market

Market	CMA447 - Kentucky 5 - Barren	Channel Block	A
Submarket	0	Phase	2

Dates

Grant	10/30/2001	Expiration	10/01/2011
Effective	04/28/2009	Cancellation	

Five Year Buildout Date

10/16/1996

Control Points

1 124 South Keeneland Drive (Suite 103), MADISON, RICHMOND, KY
P: (859)544-4804

Licensee

FRN	0003291192	Type	Limited Liability Company

Licensee

New Cingular Wireless PCS, LLC
5601 Legacy Drive, MS: A-3
Plano, TX 75024
ATTN FCC Group

P: (469)229-7422
F:(469)229-7297
E:kellye.e.abernathy@att.com

Contact

AT&T Mobility LLC
Michael P Goggin
1120 20th Street, NW Suite 1000
Washington, DC 20036

P: (202)457-2055
F:(202)457-3073
E:MG7268@att.com

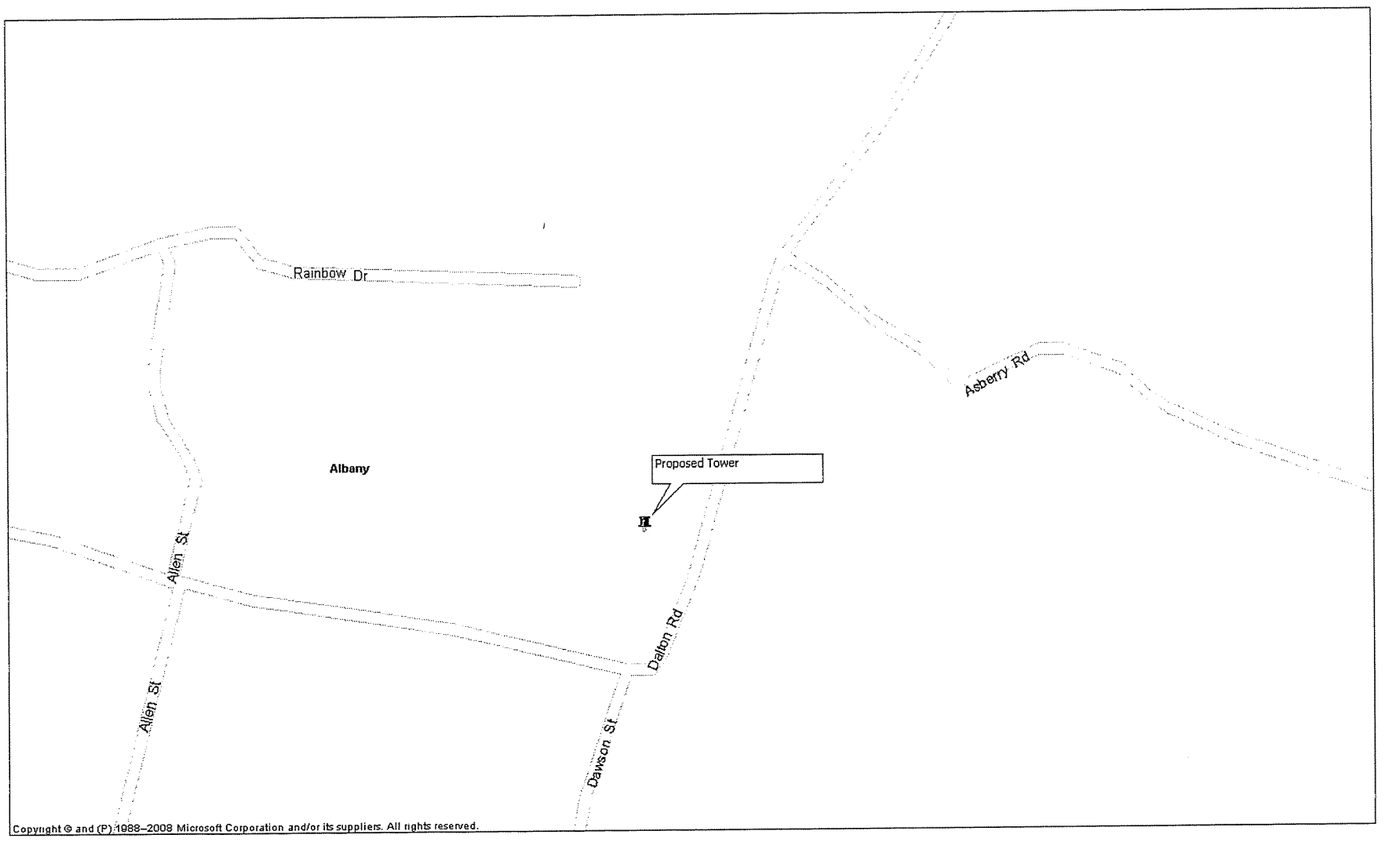
Ownership and Qualifications

Radio Service Type	Mobile		
Regulatory Status	Common Carrier	Interconnected	Yes

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

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

Exhibit I



Directions to Site: From Albany at the intersection of U.S. 127 (Cross Street) and State Route 1590 (Burkesville Road), proceed South on U.S. 127 approximately 0.7 miles to the junction of Noan Street. Turn left on Noan Street and proceed for approximately .25 miles to Lynnview Drive. Turn left on Lynnview Drive and proceed for approximately .25 miles to where Lynnview Drive becomes Dalton Street. Proceed for another .50 miles to proposed site on left.

Prepared by: Briggs Law Office, PSC (502) 412-9222

Market: BTA052
Cell Site Number: 052G0505
Cell Site Name: Albany, KY
Fixed Asset Number: 10143788

OPTION AND LEASE AGREEMENT

THIS OPTION AND LEASE AGREEMENT ("**Agreement**"), dated as of the latter of the signature dates below (the "**Effective Date**"), is entered into by Jerome Grider and Elizabeth Grider, a husband and wife, having a mailing address of 399 Dalton Street, Albany, Kentucky 42602 (hereinafter referred to as "**Landlord**") and New Cingular Wireless PCS, LLC, a Delaware limited liability company, having a mailing address of 12555 Cingular Way, Alpharetta, GA 30004 (hereinafter referred to as "**Tenant**").

BACKGROUND

Landlord owns or controls that certain plot, parcel or tract of land, together with all rights and privileges arising in connection therewith, located at 399 Dalton Street, Albany, Kentucky 42602, in the County of Clinton, State of Kentucky (collectively, the "**Property**"). Tenant desires to use a portion of the Property in connection with its federally licensed communications business. Landlord desires to grant to Tenant the right to use a portion of the Property in accordance with this Agreement.

The parties agree as follows:

1. **OPTION TO LEASE.**

(a) Landlord grants to Tenant an option (the "**Option**") to lease a certain portion of the Property containing approximately 10,000 square feet including the air space above such room/cabinet/ground space as described on attached **Exhibit 1**, together with unrestricted access for Tenant's uses from the nearest public right-of-way along the Property to the Premises as described on the attached **Exhibit 1** (collectively, the "**Premises**").

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

(c) In consideration of Landlord granting Tenant the Option, Tenant agrees to pay Landlord the sum of within thirty (30) business days of the Effective Date. The Option will be for an initial term of one (1) year commencing on the Effective Date (the "**Initial Option Term**") and may be renewed by Tenant for an additional one (1) year upon written notification to Landlord and the payment of an additional no later than ten (10) days prior to the expiration date of the Initial Option Term.

(d) The Option may be sold, assigned or transferred at any time by Tenant to Tenant's parent company or member if Tenant is a limited liability company or any affiliate or subsidiary of, or partner in, Tenant or its parent company or member, or to any third party agreeing to be subject to the terms hereof. Otherwise, the Option may not be sold, assigned or transferred without the written consent of Landlord, such consent not to be unreasonably withheld, conditioned or delayed. From and after the date the Option has been sold, assigned or transferred by Tenant to a third party agreeing to be subject to the terms hereof, Tenant shall immediately be released from any and all liability under this Agreement, including the payment of any rental or other sums due, without any further action.

(e) During the Initial Option Term and any extension thereof, Tenant may exercise the Option by notifying Landlord in writing. If Tenant exercises the Option then Landlord leases the Premises to the Tenant subject to the terms and conditions of this Agreement. If Tenant does not exercise the Option during the Initial Option Term or any extension thereof, this Agreement will terminate and the parties will have no further liability to each other.

(f) If during the Initial Option Term or any extension thereof, or during the term of this Agreement if the Option is exercised, Landlord decides to subdivide, sell, or change the status of the zoning of the Premises, Property or any of Landlord's contiguous, adjoining or surrounding property (the **"Surrounding Property,"** which includes (without limitation) the remainder of the structure) or in the event of foreclosure, Landlord shall immediately notify Tenant in writing. Any sale of the Property shall be subject to Tenant's rights under this Agreement. Landlord agrees that during the Initial Option Term or any extension thereof, or during the Term of this Agreement if the Option is exercised, Landlord shall not initiate or consent to any change in the zoning of the Premises, Property or Surrounding Property or impose or consent to any other restriction that would prevent or limit Tenant from using the Premises for the uses intended by Tenant as hereinafter set forth in this Agreement.

2. **PERMITTED USE.** Tenant may use the Premises for the transmission and reception of communications signals and the installation, construction, maintenance, operation, repair, replacement and upgrade of its communications fixtures and related equipment, cables, accessories and improvements, which may include a suitable support structure, associated antennas, equipment shelters or cabinets and fencing and any other items necessary to the successful and secure use of the Premises (collectively, the **"Communication Facility"**), as well as the right to test, survey and review title on the Property; Tenant further has the right but not the obligation to add, modify and/or replace equipment in order to be in compliance with any current or future federal, state or local mandated application, including, but not limited to, emergency 911 communication services, at no additional cost to Tenant or Landlord (collectively, the **"Permitted Use"**). Landlord and Tenant agree that any portion of the Communication Facility that may be conceptually described on **Exhibit 1** will not be deemed to limit Tenant's Permitted Use. If **Exhibit 1** includes drawings of the initial installation of the Communication Facility, Landlord's execution of this Agreement will signify Landlord's approval of **Exhibit 1**. For a period of ninety (90) days following the start of construction, Landlord grants Tenant, its subtenants, licensees and sublicensees, the right to use such portions of Landlord's contiguous, adjoining or Surrounding Property as described on **Exhibit 1** as may reasonably be required during construction and installation of the Communications Facility. Tenant has the right to install and operate transmission cables from the equipment shelter or cabinet to the antennas, electric lines from the main feed to the equipment shelter or cabinet and communication lines from the main entry point to the equipment shelter or cabinet, and to make Property improvements, alterations, upgrades or additions appropriate for Tenant's use (**"Tenant Changes"**). Tenant Changes include the right to construct a fence around the Premises and undertake any other appropriate means to secure the Premises at Tenant's expense. Tenant agrees to comply with all applicable governmental laws, rules, statutes and regulations, relating to its use of the Communication Facility on the Property. Tenant has the right to modify, supplement, replace, upgrade, expand the equipment, increase the number of antennas or relocate the Communication Facility within the Premises at any time during the term of this Agreement. Tenant will be allowed to make such alterations to the Property in order to accomplish Tenant's Changes or to insure that Tenant's Communication Facility complies with all applicable federal, state or local laws, rules or regulations. In the event Tenant desires to modify or upgrade the Communication Facility, and Tenant requires

an additional portion of the Property (the "**Additional Premises**") for such modification or upgrade, Landlord agrees to lease to Tenant the Additional Premises, upon the same terms and conditions set forth herein, except that the Rent shall increase, in conjunction with the lease of the Additional Premises by a reasonable amount consistent with rental rates then charged for comparable portions of real property being in the same area. Landlord agrees to take such actions and enter into and deliver to Tenant such documents as Tenant reasonably requests in order to effect and memorialize the lease of the Additional Premises to Tenant.

3. **TERM.**

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

(b) This Agreement will automatically renew for four (4) additional five (5) year term(s) (each five (5) year term shall be defined as the "**Extension Term**"), upon the same terms and conditions unless the Tenant notifies the Landlord in writing of Tenant's intention not to renew this Agreement at least sixty (60) days prior to the expiration of the existing Term.

(c) If, at least sixty (60) days prior to the end of the fourth (4th) extended term, either Landlord or Tenant has not given the other written notice of its desire that the term of this Agreement end at the expiration of the fourth (4th) extended term, then upon the expiration of the fourth (4th) extended term this Agreement shall continue in force upon the same covenants, terms and conditions for a further term of one (1) year, and for annual terms thereafter until terminated by either party by giving to the other written notice of its intention to so terminate at least six (6) months prior to the end of any such annual term. Monthly rental during such annual terms shall be equal to the rent paid for the last month of the fourth (4th) extended term. If Tenant remains in possession of the Premises after the termination of this Agreement then Tenant will be deemed to be occupying the Premises on a month to month basis (the "**Holdover Term**"), subject to the terms and conditions of this Agreement.

(d) The Initial Term, the Extension Term and the Holdover Term are collectively referred to as the Term ("**Term**").

4. **RENT.**

(a) Commencing on the first day of the month following the date that Tenant commences construction (the "**Rent Commencement Date**"), Tenant will pay the Landlord a monthly rental payment of ("**Rent**"), at the address set forth above, on or before the fifth (5th) day of each calendar month in advance. In partial months occurring after the Rent Commencement Date, Rent will be prorated. The initial Rent payment will be forwarded by Tenant to Landlord within thirty (30) days after the Rent Commencement Date.

(b) In year one (1) of each Extension Term, the monthly Rent will increase by over the Rent paid during the previous Term.

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

5. **APPROVALS.**

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

(b) Tenant has the right to obtain a title report or commitment for a leasehold title policy from a title insurance company of its choice and to have the Property surveyed by a surveyor of Tenant's choice. In the event Tenant determines, in its sole discretion, due to the title report results or survey results, that the condition

of the Premises is unsatisfactory, Tenant will have the right to terminate this Agreement upon notice to Landlord.

(c) Tenant may also perform and obtain, at Tenant's sole cost and expense, soil borings, percolation tests, engineering procedures, environmental investigation or other tests or reports on, over, and under the Property, necessary to determine if the Tenant's use of the Premises will be compatible with Tenant's engineering specifications, system, design, operations or Government Approvals.

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

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

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

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

(d) by Tenant upon sixty (60) days prior written notice to Landlord for any reason, so long as Tenant pays Landlord a termination fee equal to three (3) months Rent, at the then current rate, provided, however, that no such termination fee will be payable on account of the termination of this Agreement by Tenant under any one or more of Paragraphs 5(b), 6(a), 6(b), 6(c), 8, 11(d), 18, 19 or 23(j) of this Agreement.

7. **INSURANCE.**

Tenant will carry during the Term, at its own cost and expense, the following insurance: (i) "All Risk" property insurance for its property's replacement cost; (ii) commercial general liability insurance with a minimum limit of liability of Two Million Five Hundred Thousand Dollars $2,500,000 combined single limit for bodily injury or death/property damage arising out of any one occurrence; and (iii) Workers' Compensation Insurance as required by law. The coverage afforded by Tenant's commercial general liability insurance shall apply to Landlord as an additional insured, but only with respect to Landlord's liability arising out of its interest in the Property.

8. **INTERFERENCE.**

(a) Where there are existing radio frequency user(s) on the Property, the Landlord will provide Tenant with a list of all existing radio frequency user(s) on the Property to allow Tenant to evaluate the potential for interference. Tenant warrants that its use of the Premises will not interfere with existing radio frequency user(s) on the Property so disclosed by Landlord, as long as the existing radio frequency user(s) operate and continue to operate within their respective frequencies and in accordance with all applicable laws and regulations.

(b) Landlord will not grant, after the date of this Agreement, a lease, license or any other right to any third party for the use of the Property, if such use may in any way adversely affect or interfere with the Communication Facility, the operations of Tenant or the rights of Tenant under this Agreement. Landlord will notify Tenant in writing prior to granting any third party the right to install and operate communications equipment on the Property.

(c) Landlord will not use, nor will Landlord permit its employees, tenants, licensees, invitees or agents to use, any portion of the Property in any way which interferes with the Communication Facility, the operations of Tenant or the rights of Tenant under this Agreement. Landlord will cause such interference to cease within twenty-four (24) hours after receipt of notice of interference from Tenant. In the event any such interference does not cease within the aforementioned cure period then the parties acknowledge that Tenant will suffer irreparable injury, and therefore, Tenant will have the right, in addition to any other rights that it may have at law or in equity, for Landlord's breach of this Agreement, to elect to enjoin such interference or to terminate this Agreement upon notice to Landlord.

9. INDEMNIFICATION.

(a) Tenant agrees to indemnify, defend and hold Landlord harmless from and against any and all injury, loss, damage or liability (or any claims in respect of the foregoing), costs or expenses (including reasonable attorneys' fees and court costs) arising directly from the installation, use, maintenance, repair or removal of the Communication Facility or Tenant's breach of any provision of this Agreement, except to the extent attributable to the negligent or intentional act or omission of Landlord, its employees, agents or independent contractors.

(b) Landlord agrees to indemnify, defend and hold Tenant harmless from and against any and all injury, loss, damage or liability (or any claims in respect of the foregoing), costs or expenses (including reasonable attorneys' fees and court costs) arising directly from the actions or failure to act of Landlord or its employees or agents, or Landlord's breach of any provision of this Agreement, except to the extent attributable to the negligent or intentional act or omission of Tenant, its employees, agents or independent contractors.

(c) Notwithstanding anything to the contrary in this Agreement, Tenant and Landlord each waives any claims that each may have against the other with respect to consequential, incidental or special damages.

10. WARRANTIES.

(a) Tenant and Landlord each acknowledge and represent that it is duly organized, validly existing and in good standing and has the right, power and authority to enter into this Agreement and bind itself hereto through the party set forth as signatory for the party below.

(b) Landlord represents and warrants that: (i) Landlord solely owns the Property as a legal lot in fee simple, or controls the Property by lease or license; (ii) the Property is not encumbered by any liens, restrictions, mortgages, covenants, conditions, easements, leases, or any other agreements of record or not of record, which would adversely affect Tenant's Permitted Use and enjoyment of the Premises under this Agreement; (iii) as long as Tenant is not in default then Landlord grants to Tenant sole, actual, quiet and peaceful use, enjoyment and possession of the Premises; (iv) Landlord's execution and performance of this Agreement will not violate any laws, ordinances, covenants or the provisions of any mortgage, lease or other agreement binding on the Landlord; and (v) if the Property is or becomes encumbered by a deed to secure a debt, mortgage or other security interest, Landlord will provide promptly to Tenant a mutually agreeable Subordination, Non-Disturbance and Attornment Agreement.

11. ENVIRONMENTAL.

(a) Landlord represents and warrants that the Property is free of hazardous substances as of the date of this Agreement, and, to the best of Landlord's knowledge, the Property has never been subject to any contamination or hazardous conditions resulting in any environmental investigation, inquiry or remediation. Landlord and Tenant agree that each will be responsible for compliance with any and all environmental and industrial hygiene laws, including any regulations, guidelines, standards, or policies of any governmental authorities regulating or imposing standards of liability or standards of conduct with regard to any environmental or industrial hygiene condition or other matters as may now or at any time hereafter be in effect, that are now or were related to that party's activity conducted in or on the Property.

(b) Landlord and Tenant agree to hold harmless and indemnify the other from, and to assume all duties, responsibilities and liabilities at the sole cost and expense of the indemnifying party for, payment of penalties, sanctions, forfeitures, losses, costs or damages, and for responding to any action, notice, claim, order, summons, citation, directive, litigation, investigation or proceeding which is related to (i) the indemnifying party's failure to comply with any environmental or industrial hygiene law, including without limitation any regulations, guidelines, standards or policies of any governmental authorities regulating or imposing standards of liability or standards of conduct with regard to any environmental or industrial hygiene conditions or matters as may now or hereafter be in effect, or (ii) any environmental or industrial hygiene conditions that arise out of or are in any way related to the condition of the Property and activities conducted by the party thereon, unless the environmental conditions are caused by the other party.

(c) The indemnifications of this Paragraph 11 specifically include reasonable costs, expenses and fees incurred in connection with any investigation of Property conditions or any clean-up, remediation, removal

or restoration work required by any governmental authority. The provisions of this Paragraph 11 will survive the expiration or termination of this Agreement.

(d) In the event Tenant becomes aware of any hazardous materials on the Property, or any environmental or industrial hygiene condition or matter relating to the Property that, in Tenant's sole determination, renders the condition of the Premises or Property unsuitable for Tenant's use, or if Tenant believes that the leasing or continued leasing of the Premises would expose Tenant to undue risks of government action, intervention or third-party liability, Tenant will have the right, in addition to any other rights it may have at law or in equity, to terminate the Agreement upon notice to Landlord.

12. **ACCESS.** At all times throughout the Term of this Agreement, and at no additional charge to Tenant, Tenant and its employees, agents, and subcontractors, will have twenty-four (24) hour per day, seven (7) day per week pedestrian and vehicular access to and over the Property, from an open and improved public road to the Premises, for the installation, maintenance and operation of the Communication Facility and any utilities serving the Premises. Landlord grants to Tenant an easement for such access and Landlord agrees to provide to Tenant such codes, keys and other instruments necessary for such access at no additional cost to Tenant. Landlord acknowledges that in the event Tenant cannot access the Premises, Tenant shall incur significant damage. If Landlord fails to provide the access granted by this Paragraph 12, such failure shall be a default under this Lease. In connection with such default, in addition to any other rights or remedies available to Tenant under this Lease or at law or equity, Landlord shall pay Tenant, as liquidated damages and not as a penalty, $500.00 per day in consideration of Tenant's damages, including, but not limited to, its lost profits, until Landlord cures such default. Landlord and Tenant agree that Tenant's damages in the event of a denial of access are difficult, if not impossible, to ascertain, and the liquidated damages set forth herein are a reasonable approximation of such damages. Upon Tenant's request, Landlord will execute a separate recordable easement evidencing this right. In the event any public utility is unable to use the access or easement provided to Tenant then the Landlord agrees to grant additional access or an easement either to Tenant or to the public utility, for the benefit of Tenant, at no cost to Tenant.

13. **REMOVAL/RESTORATION.** All portions of the Communication Facility brought onto the Property by Tenant will be and remain Tenant's personal property and, at Tenant's option, may be removed by Tenant at any time during the Term. Landlord covenants and agrees that no part of the Communication Facility constructed, erected or placed on the Premises by Tenant will become, or be considered as being affixed to or a part of, the Property, it being the specific intention of the Landlord that all improvements of every kind and nature constructed, erected or placed by Tenant on the Premises will be and remain the property of the Tenant and may be removed by Tenant at any time during the Term. Within one hundred twenty (120) days of the termination of this Agreement, Tenant will remove all of Tenant's above-ground improvements and Tenant will, to the extent reasonable, restore the Premises to its condition at the commencement of the Agreement, reasonable wear and tear and loss by casualty or other causes beyond Tenant's control excepted. Notwithstanding the foregoing, Tenant will not be responsible for the replacement of any trees, shrubs or other vegetation, nor will Tenant be required to remove from the Premises or the Property any structual steel or any foundations or underground utilities.

14. **MAINTENANCE/UTILITIES.**

(a) Tenant will keep and maintain the Premises in good condition, reasonable wear and tear and damage from the elements excepted. Landlord will maintain and repair the Property and access thereto, in good and tenantable condition, subject to reasonable wear and tear and damage from the elements.

(b) Tenant will be responsible for paying on a monthly or quarterly basis all utilities charges for electricity, telephone service or any other utility used or consumed by Tenant on the Premises. In the event Tenant cannot secure its own metered electrical supply, Tenant will have the right, at its own cost and expense, to submeter from the Landlord. When submetering is required under this Agreement, Landlord will read the meter and provide Tenant with an invoice and usage data on a monthly basis. Landlord agrees that it will not include a markup on the utility charges. Landlord further agrees to provide the usage data and invoice on forms provided by Tenant and to send such forms to such address and/or agent designated by Tenant. Tenant will

remit payment within thirty days of receipt of the usage data and required forms. Failure by Landlord to perform this function will limit utility fee recovery by Landlord to a 12-month period. If Tenant submeters electricity from Landlord, Landlord agrees to give Tenant at least 24 hours advanced notice of any planned interruptions of said electricity. Landlord acknowledges that Tenant provides a communication service which requires electrical power to operate and must operate twenty-four (24) hour per day, seven (7) day per week . If the interruption is for an extended period of time, in Tenant's reasonable determination, the Landlord agrees to allow Tenant the right to bring in a temporary source of power for the duration of the interruption. Landlord will fully cooperate with any utility company requesting an easement over, under and across the Property in order for the utility company to provide service to the Tenant. Landlord will not be responsible for interference with, interruption of or failure, beyond the reasonable control of Landlord, of such services to be furnished or supplied by Landlord.

15. **DEFAULT AND RIGHT TO CURE.**

(a) The following will be deemed a default by Tenant and a breach of this Agreement: (i) non-payment of Rent if such Rent remains unpaid for more than thirty (30) days after receipt of written notice from Landlord of such failure to pay; or (ii) Tenant's failure to perform any other term or condition under this Agreement within forty-five (45) days after receipt of written notice from Landlord specifying the failure. No such failure, however, will be deemed to exist if Tenant has commenced to cure such default within such period and provided that such efforts are prosecuted to completion with reasonable diligence. Delay in curing a default will be excused if due to causes beyond the reasonable control of Tenant. If Tenant remains in default beyond any applicable cure period, Landlord will have the right to exercise any and all rights and remedies available to it under law and equity.

(b) The following will be deemed a default by Landlord and a breach of this Agreement: (i) failure to provide access to the Premises or to cure an interference problem within twenty-four (24) hours after receipt of written notice of such default; or (ii) Landlord's failure to perform any term, condition or breach of any warranty or covenant under this Agreement within forty-five (45) days after receipt of written notice from Tenant specifying the failure. No such failure, however, will be deemed to exist if Landlord has commenced to cure the default within such period and provided such efforts are prosecuted to completion with reasonable diligence. Delay in curing a default will be excused if due to causes beyond the reasonable control of Landlord. If Landlord remains in default beyond any applicable cure period, Tenant will have the right to exercise any and all rights available to it under law and equity, including the right to cure Landlord's default and to deduct the costs of such cure from any monies due to Landlord from Tenant.

16. **ASSIGNMENT/SUBLEASE.** Tenant will have the right to assign this Agreement or sublease the Premises and its rights herein, in whole or in part, without Landlord's consent. Upon notification to Landlord of such assignment, Tenant will be relieved of all future performance, liabilities and obligations under this Agreement.

17. **NOTICES.** All notices, requests, demands and communications hereunder will be given by first class certified or registered mail, return receipt requested, or by a nationally recognized overnight courier, postage prepaid, to be effective when properly sent and received, refused or returned undelivered. Notices will be addressed to the parties as follows:

If to Tenant:

New Cingular Wireless PCS, LLC
Attn: Network Real Estate Administration

Re: Cell Site #: 052G0505; Cell Site Name: Albany, KY
Fixed Asset No: 10143788
12555 Cingular Way, Suite 1300
Alpharetta, GA 30004

With a required copy of the notice sent to the address above to AT&T Legal at:

New Cingular Wireless PCS, LLC
Attn: AT&T Legal Department
Re: Cell Site #: 052G0505; Cell Site Name: Albany, KY
Fixed Asset No.: 10143788
1025 Lenox Park Blvd.
5th Floor
Atlanta, GA 30319

If to Landlord: Jerome and Elizabeth Grider
399 Dalton Street
Albany, KY 42602

Either party hereto may change the place for the giving of notice to it by thirty (30) days prior written notice to the other as provided herein.

(b) In the event of a change in ownership, transfer or sale of the Property, within ten (10) days of such transfer, Landlord will send the below documents (in section 17(b)(i) to Tenant. In the event Tenant does not receive such appropriate documents, Tenant shall not be responsible for any failure to pay the current landlord

(i)
a. Old deed to Property
b. New deed to Property
c. Bill of Sale or Transfer
d. Copy of current Tax Bill
e. New W-9
f. New Payment Direction Form
g. Full contact information for new Landlord including all phone numbers

18. **CONDEMNATION.** In the event Landlord receives notification of any condemnation proceedings affecting the Property, Landlord will provide notice of the proceeding to Tenant within forty-eight (48) hours. If a condemning authority takes all of the Property, or a portion sufficient, in Tenant's sole determination, to render the Premises unsuitable for Tenant, this Agreement will terminate as of the date the title vests in the condemning authority. The parties will each be entitled to pursue their own separate awards in the condemnation proceeds, which for Tenant will include, where applicable, the value of its Communication Facility, moving expenses, prepaid Rent, and business dislocation expenses, provided that any award to Tenant will not diminish Landlord's recovery. Tenant will be entitled to reimbursement for any prepaid Rent on a prorata basis.

19. **CASUALTY.** Landlord will provide notice to Tenant of any casualty affecting the Property within forty-eight (48) hours of the casualty. If any part of the Communication Facility or Property is damaged by fire or other casualty so as to render the Premises unsuitable, in Tenant's sole determination, then Tenant may

terminate this Agreement by providing written notice to the Landlord, which termination will be effective as of the date of such damage or destruction. Upon such termination, Tenant will be entitled to collect all insurance proceeds payable to Tenant on account thereof and to be reimbursed for any prepaid Rent on a prorata basis. If notice of termination is given, or if Landlord or Tenant undertake to rebuild the Communications Facility, Landlord aggress to use its reasonable efforts to permit Tenant to place temporary transmission and reception facilities on the Property at no additional Rent until such time as Tenant is able to activate a replacement transmission facility at another location or the reconstruction of the Communication Facility is completed.

20. **WAIVER OF LANDLORD'S LIENS.** Landlord waives any and all lien rights it may have, statutory or otherwise, concerning the Communication Facility or any portion thereof. The Communication Facility shall be deemed personal property for purposes of this Agreement, regardless of whether any portion is deemed real or personal property under applicable law, and Landlord consents to Tenant's right to remove all or any portion of the Communication Facility from time to time in Tenant's sole discretion and without Landlord's consent.

21. **TAXES**. Landlord shall be responsible for payment of all ad valorem taxes levied upon the lands, improvements and other property of Landlord. Tenant shall be responsible for all taxes levied upon Tenant's leasehold improvements (including Tenant's equipment building and tower) on the Premises. Landlord shall provide Tenant with copies of all assessment notices on or including the Premises immediately upon receipt, but in no event later than thirty (30) days after receipt by Landlord. If Landlord fails to provide such notice within such time frame, Landlord shall be responsible for all increases in taxes for the year covered by the assessment. Tenant shall have the right to contest, in good faith, the validity or the amount of any tax or assessment levied against the Premises by such appellate or other proceedings as may be appropriate in the jurisdiction, and may defer payment of such obligations, pay same under protest, or take such other steps as Tenant may deem appropriate. This right shall include the ability to institute any legal, regulatory or informal action in the name of Landlord, Tenant, or both, with respect to the valuation of the Premises. Landlord shall cooperate in the institution and prosecution of any such proceedings and will execute any documents required therefore. The expense of any such proceedings shall be borne by Tenant and any refunds or rebates secured as a result of Tenant's action shall belong to Tenant.

22. **SALE OF PROPERTY/RIGHT OF FIRST REFUSAL.**

(a) If Landlord, at any time during the Term of this Agreement, decides to sell, subdivide or rezone any of the Premises, all or any part of the Property or Surrounding Property, to a purchaser other than Tenant, Landlord shall promptly notify Tenant in writing, and such sale, subdivision or rezoning shall be subject to this Agreement and Tenant's rights hereunder. Landlord agrees not to sell, lease or use any areas of the Property or Surrounding Property for the installation, operation or maintenance of other wireless communications facilities if such installation, operation or maintenance would interfere with Tenant's Permitted Use or communications equipment as determined by radio propagation tests performed by Tenant in its sole discretion, any such testing to be at the expense of Landlord or Landlord's prospective purchaser, and not Tenant. If the radio frequency propagation tests demonstrate levels of interference unacceptable to Tenant, Landlord shall be prohibited from selling, leasing or using any areas of the Property or the Surrounding Property for purposes of any installation, operation or maintenance of any other wireless communications facility or equipment. Landlord shall not be prohibited from the selling, leasing or use of any of the Property or the Surrounding Property for non-wireless communication use. In the event the Property is transferred, the new landlord shall have a duty at the time of such transfer to provide Tenant with a completed IRS Form W-9, or its equivalent, and other related paper work to effect a transfer in Rent to the new landlord. The provisions of this Paragraph 22 shall in no way limit or impair the obligations of Landlord under Paragraph 8 above.

(b) If at any time after the Effective Date, Landlord receives a bona fide written offer from a third party seeking an assignment of the rental stream associated with this Agreement ("**Purchase Offer**"), Landlord shall immediately furnish Tenant with a copy of the Purchase Offer, together with a representation that the Purchase Offer is valid, genuine and true in all respects. Tenant shall have the right within thirty (30) days after it receives such copy and representation to match the Purchase Offer and agree in writing to match the terms of

the Purchase Offer. Such writing shall be in the form of a contract substantially similar to the Purchase Offer. If Tenant chooses not to exercise this right of first refusal or fails to provide written notice to Landlord within the thirty (30) day period, Landlord may assign the rental stream pursuant to the Purchase Offer, subject to the terms of this Agreement (including without limitation the terms of this Subparagraph 22(B), to the person or entity that made the Purchase Offer provided that (i) the assignment is on the same terms contained in the Purchase Offer and (ii) the assignment occurs within ninety (90) days of Tenant's receipt of a copy of the Purchase Offer. If such third party modifies the Purchase Offer or the assignment does not occur within such ninety (90) day period, Landlord shall re-offer to Tenant, pursuant to the procedure set forth in this subparagraph 22(b), the assignment on the terms set forth in the Purchase Offer, as amended. The right of first refusal hereunder shall (i) survive any transfer of all or any part of the Property or assignment of all or any part of the Agreement; (ii) bind and inure to the benefit of, Landlord and Tenant and their respective heirs, successors and assigns; (iii) run with the land; and (iv) terminate upon the expiration or earlier termination of this Agreement.

23. MISCELLANEOUS.

(a) **Amendment/Waiver.** This Agreement cannot be amended, modified or revised unless done in writing and signed by an authorized agent of the Landlord and an authorized agent of the Tenant. No provision may be waived except in a writing signed by both parties.

(b) **Memorandum/Short Form Lease.** Either party will, at any time upon fifteen (15) business days prior written notice from the other, execute, acknowledge and deliver to the other a recordable Memorandum or Short Form of Lease. Either party may record this Memorandum or Short Form of Lease at any time, in its absolute discretion.

(c) **Bind and Benefit.** The terms and conditions contained in this Agreement will run with the Property and bind and inure to the benefit of the parties, their respective heirs, executors, administrators, successors and assigns.

(d) **Entire Agreement.** This Agreement and the exhibits attached hereto, all being a part hereof, constitute the entire agreement of the parties hereto and will supersede all prior offers, negotiations and agreements with respect to the subject matter of this Agreement.

(e) **Governing Law.** This Agreement will be governed by the laws of the state in which the Premises are located, without regard to conflicts of law.

(f) **Interpretation.** Unless otherwise specified, the following rules of construction and interpretation apply: (i) captions are for convenience and reference only and in no way define or limit the construction of the terms and conditions hereof; (ii) use of the term "including" will be interpreted to mean "including but not limited to"; (iii) whenever a party's consent is required under this Agreement, except as otherwise stated in the Agreement or as same may be duplicative, such consent will not be unreasonably withheld, conditioned or delayed; (iv) exhibits are an integral part of the Agreement and are incorporated by reference into this Agreement; (v) use of the terms "termination" or "expiration" are interchangeable; (vi) reference to a default will take into consideration any applicable notice, grace and cure periods; and (vii) to the extent there is any issue with respect to any alleged, perceived or actual ambiguity in this Agreement, the ambiguity shall not be resolved on the basis of who drafted the Agreement.

(g) **Estoppel.** Either party will, at any time upon twenty (20) business days prior written notice from the other, execute, acknowledge and deliver to the other a statement in writing (i) certifying that this Agreement is unmodified and in full force and effect (or, if modified, stating the nature of such modification and certifying this Agreement, as so modified, is in full force and effect) and the date to which the Rent and other charges are paid in advance, if any, and (ii) acknowledging that there are not, to such party's knowledge, any uncured defaults on the part of the other party hereunder, or specifying such defaults if any are claimed. Any such statement may be conclusively relied upon by any prospective purchaser or encumbrance of the Premises. The requested party's failure to deliver such a statement within such time will be conclusively relied upon by the requesting party that (i) this Agreement is in full force and effect, without modification except as may be properly represented by the requesting party, (ii) there are no uncured defaults in either party's performance, and (iii) no more than one month's Rent has been paid in advance.

(h) **W-9.** Landlord agrees to provide Tenant with a completed IRS Form W-9, or its equivalent, upon execution of this Agreement and at such other times as may be reasonably requested by Tenant.

(i) **No Electronic Signature/No Option.** The submission of this Agreement to any party for examination or consideration does not constitute an offer, reservation of or option for the Premises based on the terms set forth herein. This Agreement will become effective as a binding Agreement only upon the handwritten legal execution, acknowledgment and delivery hereof by Landlord and Tenant.

(j) **Severability.** If any term or condition of this Agreement is found unenforceable, the remaining terms and conditions will remain binding upon the parties as though said unenforceable provision were not contained herein. However, if the invalid, illegal or unenforceable provision materially affects this Agreement then the Agreement may be terminated by either party on ten (10) business days prior written notice to the other party hereto.

(k) **Counterparts.** This Agreement may be executed in two (2) or more counterparts, all of which shall be considered on 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.

[SIGNATURES APPEAR ON THE NEXT PAGE]

IN WITNESS WHEREOF, the parties have caused this Agreement to be effective as of the last date written below.

"LANDLORD"

By: Jerome Grider
Print Name: Jerome Grider
Its: Co-owner
Date: 9-15-09

Erica L. Clanton
Print Name: ERICA L. CLANTON

Amy Tate
Print Name: Amy Tate

"LANDLORD"

By: Elizabeth Grider
Print Name: Elizabeth Grider
Its: Co-owner
Date: 9-15-09

"TENANT"

New Cingular Wireless PCS, LLC,
a Delaware limited liability company
By: AT&T Mobility Corporation
Its: Manager

By:
Print Name: Dan Toth
Its: Manager of Real Estate and Construction
Date: 12/15/09

[ACKNOWLEDGEMENTS APPEAR ON THE NEXT PAGE]

FOR INDIVIDUAL:

STATE OF KENTUCKY
COUNTY OF CLINTON

On this 15 day of September, 2009, before me personally appeared Jerome and Elizabeth Grider, to me known (or proved to me on the basis of satisfactory evidence) to be the person described in and who executed the foregoing instrument, and acknowledged that such person executed the same as such person's free act and deed.

Susan W. Conner
Name: Susan W. Conner
Notary Public Kentucky State at Large

My Commission Expires: September 9, 2013

[NOTARIAL SEAL]

STATE OF TENNESSEE
COUNTY OF WILLIAMSON

Before me, a Notary Public in and for the State and County aforementioned, personally appeared Dan Toth, with whom I am personally acquainted (or proved to me on the basis of satisfactory evidence), and who, upon oath, acknowledged such person to be Manager of Real Estate and Construction, of New Cingular Wireless PCS, LLC, the within named bargainor, a Delaware limited liability company, and that such person as such Manager, executed the foregoing instrument for the purpose therein contained, by personally signing the name of the limited liability company as New Cingular Wireless PCS, LLC, a Delaware limited liability company.

Witness my hand and seal, at office in BRENTWOOD, TN this the 15th day of DECEMBER, 2009.

Erica L. Clark
Name: ERICA L. CLANTON
Notary Public

My Commission Expires: MAY 8, 2012

[NOTARIAL SEAL]

ERICA L. CLANTON
STATE OF TENNESSEE
NOTARY PUBLIC
DAVIDSON COUNTY, TENN.
My Commission Expires MAY 8, 2012

EXHIBIT 1

DESCRIPTION OF PREMISES

to the Agreement dated DECEMBER 15 2009, by and between Jerome and Elizabeth Grider, a husband and wife, as Landlord, and New Cingular Wireless PCS, LLC, a Delaware limited liability corporation, as Tenant.

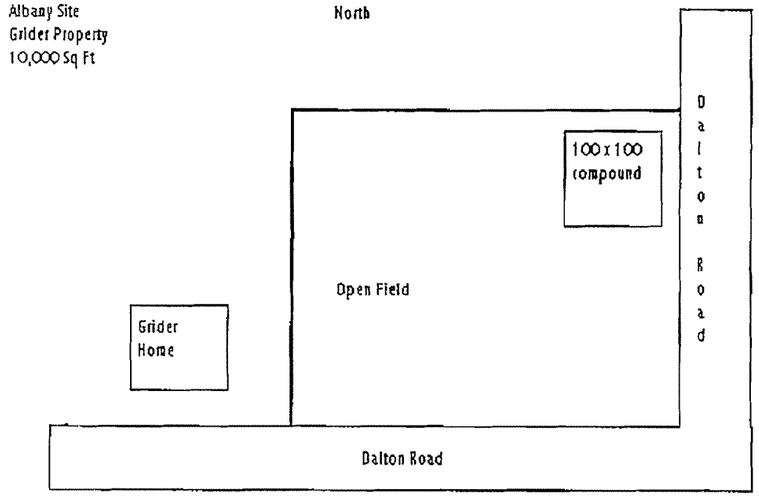
The Premises are described and/or depicted as follows in the books of the Clinton County Clerk office in Deed Book 135, Page 645.

Being a tract of land located in or near the city limits of Albany, Kentucky, approximately 3500' northeast of the town square of Albany, Kentucky, and more particularly described as follows:

AUG 0
CLINTON
JIM EL
County

Beginning on an existing rod and cap set in the north right-of-way line of the Dalton Road (observing a 40' right-of-way, approximately 20' left and right of roadway centerline), a corner to Jerome Grider (D.B. 52, Pg. 503), said rod and cap being S 77, 18' 26" E – 877.00' from the southwest corner of the parent tract; thence, leaving said north right-of-way line, and with the line of Grider (250.10') and severing the land of the grantor (222.23') N 10 52' 40" E – 472.34' to a rod and cap set this survey; thence, continuing to sever the land of the grantor S 78 22' 06" E – 487.98' to a rod and cap set this survey in the east right-of-way line of aforesaid Dalton Road; thence, with said right-of-way line S 17 51' 59" W – 423.73' to a rod and cap set this survey, thence, continuing with same with a curve to the right having an arc length of 96.23', and a radius of 65.00', thence, continuing with same N 77 18' 26" W – 369.99' to the point of beginning containing 5.000 acres. This survey performed by Gregory H. Talbott, P.L.S. and was completed in the field on the 30th day of May, 2007.

Exhibit 1
page 2 of 2



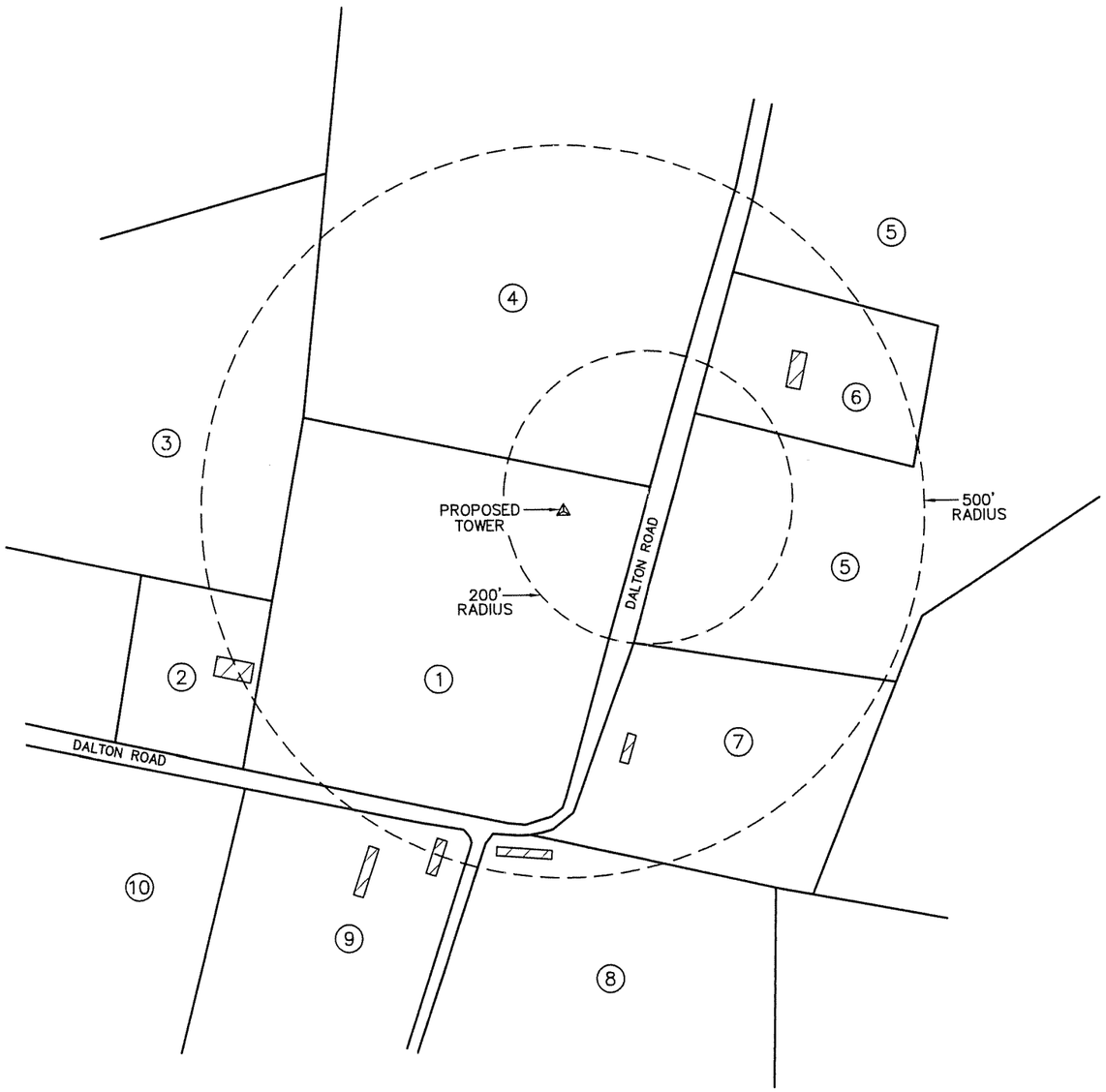
Not to Scale
8-27-09

Notes:

1. This Exhibit may be replaced by a land survey and/or construction drawings of the Premises once received by Tenant.
2. Any setback of the Premises from the Property's boundaries shall be the distance required by the applicable governmental authorities.
3. Width of access road shall be the width required by the applicable governmental authorities, including police and fire departments.
4. The type, number and mounting positions and locations of antennas and transmission lines are illustrative only. Actual types, numbers and mounting positions may vary from what is shown above.

Exhibit J

NORTH BASED ON PVA MAP



APPROXIMATE GRAPHIC SCALE

200 0 100 200

1 INCH = 200 FT.

GENERAL NOTE:

ALL INFORMATION SHOWN HEREON WAS OBTAINED FROM THE RECORDS OF CLINTON COUNTY, KENTUCKY PROPERTY VALUATION ADMINISTRATION OFFICE ON 9/29/09. THE PROPERTY VALUATION ADMINISTRATION RECORDS MAY NOT REFLECT THE CURRENT OWNERS AND ADDRESS DUE TO THE INACCURACIES AND TIME LAPSE IN UPDATING FILES. THE COUNTY PROPERTY VALUATION ADMINISTRATION EXPRESSLY DISCLAIMS ANY WARRANTY FOR THE CONTENT AND ANY ERRORS CONTAINED IN THEIR FILES.

THIS MAP IS FOR GENERAL INFORMATIONAL PURPOSES ONLY AND IS NOT A BOUNDARY SURVEY.

at&t

nsoro
It's just good business.

BTM ENGINEERING, INC.
3001 TAYLOR SPRINGS DRIVE
LOUISVILLE, KENTUCKY 40220
(502) 459-8402 PHONE
(502) 459-8427 FAX

10-13-09
STATE OF KENTUCKY
JOHN M. THOMAS
3259
LICENSED PROFESSIONAL LAND SURVEYOR

SITE NAME: ALBANY

SITE I.D.: 052G0505

SITE ADDRESS: DALTON ROAD
ALBANY, CLINTON CO., KY 42602

LEASE AREA: 10,000 SQ. FT.

PROPERTY OWNER:
JEROME AND ELIZABETH GRIDER
399 DALTON STREET
ALBANY, KY 42602

TAX MAP NUMBER: 103-17

PARCEL NUMBER: 7.02

SOURCE OF TITLE:
DEED BOOK 135, PAGE 645

LATITUDE: 36° 41' 51.677"N
LONGITUDE: 85° 07' 19.114"W

NO.	REVISION/ISSUE	DATE
1	ISSUE	10/13/09

TITLE:
500' RADIUS VICINITY MAP

SHEET:
C-1

J:\Nsoro\Albany\Survey\Albany C1.dwg, 10/13/2009 1:55:50 PM, jthomas

(1) TAX MAP 103–17, PARCEL 7.02
JEROME AND ELIZABETH GRIDER
399 DALTON STREET
ALBANY, KY 42602

(2) TAX MAP 103–17, PARCEL 8
JEROME AND ELIZABETH GRIDER
399 DALTON STREET
ALBANY, KY 42602

(3) TAX MAP 103–17, PARCEL 7
K M D GROUP, LLC
PO BOX 23
ALBANY, KY 42602

(4) TAX MAP 36, PARCEL 14
K M D GROUP, LLC
PO BOX 23
ALBANY, KY 42602

(5) TAX MAP 36, PARCEL 22
GENE FERRILL
303 TENN ROAD
ALBANY, KY 42602

(6) TAX MAP 36, PARCEL 22.01
ISAAC R. DALTON
838 DALTON STREET
ALBANY, KY 42602

(7) TAX MAP 36, PARCEL 22.02
ISAAC R. DALTON
838 DALTON STREET
ALBANY, KY 42602

(8) TAX MAP 36, PARCEL 23
JAMES P. AND BETTY G. UPCHURCH
120 BURKESVILLE ROAD
ALBANY, KY 42602

(9) TAX MAP 103–21, PARCEL 15
JAMES P. AND BETTY G. UPCHURCH
120 BURKESVILLE ROAD
ALBANY, KY 42602

(10) TAX MAP 103–21, PARCEL 16
JAMES P. AND BETTY G. UPCHURCH
120 BURKESVILLE ROAD
ALBANY, KY 42602

GENERAL NOTE:

ALL INFORMATION SHOWN HEREON WAS OBTAINED FROM THE RECORDS OF CLINTON COUNTY, KENTUCKY PROPERTY VALUATION ADMINISTRATION OFFICE ON 9/29/09. THE PROPERTY VALUATION ADMINISTRATION RECORDS MAY NOT REFLECT THE CURRENT OWNERS AND ADDRESS DUE TO THE INACCURACIES AND TIME LAPSE IN UPDATING FILES. THE COUNTY PROPERTY VALUATION ADMINISTRATION EXPRESSLY DISCLAIMS ANY WARRANTY FOR THE CONTENT AND ANY ERRORS CONTAINED IN THEIR FILES.

J:\Nsoro\Albany\Survey\Albany C1.dwg, 10/13/2009 1:55:38 PM, ithomas

at&t

nsoro
It's just good business.

BTM ENGINEERING, INC.
3001 TAYLOR SPRINGS DRIVE
LOUISVILLE, KENTUCKY 40220
(502) 459–8402 PHONE
(502) 459–8427 FAX

10-13-09
STATE OF KENTUCKY
JOHN M. THOMAS
3259
LICENSED PROFESSIONAL LAND SURVEYOR

SITE NAME: ALBANY

SITE I.D.: 052G0505

SITE ADDRESS: DALTON ROAD
ALBANY, CLINTON CO., KY 42602

LEASE AREA: 10,000 SQ. FT.

PROPERTY OWNER:
JEROME AND ELIZABETH GRIDER
399 DALTON STREET
ALBANY, KY 42602

TAX MAP NUMBER: 103–17

PARCEL NUMBER: 7.02

SOURCE OF TITLE:
DEED BOOK 135, PAGE 645

LATITUDE: 36° 41' 51.677"N
LONGITUDE: 85° 07' 19.114"W

NO.	REVISION/ISSUE	DATE
1	ISSUE	10/13/09

TITLE:
500' RADIUS
OWNER LIST

SHEET:
C–1A

BRIGGS LAW OFFICE, PSC

1301 Clear Springs Trace | Suite 205 | Louisville, Kentucky 40223
Telephone [502] 412-9222 | Facsimile [866] 333-4563
todd@briggslawoffice.net

TODD R. BRIGGS
also admitted in Colorado

Notice of Proposed Construction
Wireless Telecommunications Facility

Isaac R. Dalton
838 Dalton Street
Albany, KY 42602

Via Certified Mail Return Receipt Requested

Dear Landowner:

New Cingular Wireless PCS, LLC is applying to the Kentucky Public Service Commission (the "Commission") for a Certificate of Public Convenience and Necessity to construct and operate a new wireless telecommunications facility located at 399 Dalton Road, Albany, Kentucky 42602. A map showing the location is attached. The proposed facility will include a 250 foot self-support tower, plus related ground facilities.

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

The Commission invites your comments regarding the proposed construction and wants you to be aware of your right to intervene in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: Kentucky Public Service Commission, Executive Director, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to case number 2010-00079 in any correspondence.

Sincerely,

Todd R. Briggs
Counsel for New Cingular Wireless PCS, LLC

Enclosure

BRIGGS LAW OFFICE, PSC

1301 Clear Springs Trace | Suite 205 | Louisville, Kentucky 40223
Telephone [502] 412-9222 | Facsimile [866] 333-4563
todd@briggslawoffice.net

TODD R. BRIGGS
also admitted in Colorado

Notice of Proposed Construction
Wireless Telecommunications Facility

Gene Ferrill
305 Tenn Road
Albany, KY 42602

Via Certified Mail Return Receipt Requested

Dear Landowner:

New Cingular Wireless PCS, LLC is applying to the Kentucky Public Service Commission (the "Commission") for a Certificate of Public Convenience and Necessity to construct and operate a new wireless telecommunications facility located at 399 Dalton Road, Albany, Kentucky 42602. A map showing the location is attached. The proposed facility will include a 250 foot self-support tower, plus related ground facilities.

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

The Commission invites your comments regarding the proposed construction and wants you to be aware of your right to intervene in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: Kentucky Public Service Commission, Executive Director, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to case number 2010-00079 in any correspondence.

Sincerely,

Todd R. Briggs
Counsel for New Cingular Wireless PCS, LLC

Enclosure

BRIGGS LAW OFFICE, PSC

1301 Clear Springs Trace | Suite 205 | Louisville, Kentucky 40223
Telephone [502] 412-9222 | Facsimile [866] 333-4563
todd@briggslawoffice.net

TODD R. BRIGGS
also admitted in Colorado

Notice of Proposed Construction
Wireless Telecommunications Facility

KMD Group, LLC
P.O. Box 23
Albany, KY 42602

Via Certified Mail Return Receipt Requested

Dear Landowner:

New Cingular Wireless PCS, LLC is applying to the Kentucky Public Service Commission (the "Commission") for a Certificate of Public Convenience and Necessity to construct and operate a new wireless telecommunications facility located at 399 Dalton Road, Albany, Kentucky 42602. A map showing the location is attached. The proposed facility will include a 250 foot self-support tower, plus related ground facilities.

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

The Commission invites your comments regarding the proposed construction and wants you to be aware of your right to intervene in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: Kentucky Public Service Commission, Executive Director, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to case number 2010-00079 in any correspondence.

Sincerely,

Todd R. Briggs
Counsel for New Cingular Wireless PCS, LLC

Enclosure

BRIGGS LAW OFFICE, PSC

1301 Clear Springs Trace | Suite 205 | Louisville, Kentucky 40223
Telephone [502] 412-9222 | Facsimile [866] 333-4563
todd@briggslawoffice.net

TODD R. BRIGGS
also admitted in Colorado

Notice of Proposed Construction
Wireless Telecommunications Facility

James P. and Betty G. Upchurch
120 Burkesville Road
Albany, KY 42602

Via Certified Mail Return Receipt Requested

Dear Landowner:

New Cingular Wireless PCS, LLC is applying to the Kentucky Public Service Commission (the "Commission") for a Certificate of Public Convenience and Necessity to construct and operate a new wireless telecommunications facility located at 399 Dalton Road, Albany, Kentucky 42602. A map showing the location is attached. The proposed facility will include a 250 foot self-support tower, plus related ground facilities.

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

The Commission invites your comments regarding the proposed construction and wants you to be aware of your right to intervene in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: Kentucky Public Service Commission, Executive Director, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to case number 2010-00079 in any correspondence.

Sincerely

Todd R. Briggs
Counsel for New Cingular Wireless PCS, LLC

Enclosure

Exhibit K

BRIGGS LAW OFFICE, PSC

1301 Clear Springs Trace | Suite 205 | Louisville, Kentucky 40223
Telephone [502] 412-9222 | Facsimile [866] 333-4563
todd@briggslawoffice.net

TODD R. BRIGGS
also admitted in Colorado

Via Certified Mail Return Receipt Requested

Honorable Lyle K. Huff
Clinton County Judge Executive
100 S. Cross Street
Albany, KY 42602

RE: Notice of Proposal to Construct Wireless Telecommunications Facility
Kentucky Public Service Commission--Case No. 2010-00079

Dear Judge Huff:

New Cingular Wireless PCS, LLC is applying to the Kentucky Public Service Commission (the "Commission") for a Certificate of Public Convenience and Necessity to construct and operate a new wireless telecommunications facility located at 399 Dalton Road, Albany, Kentucky 42602. A map showing the location is attached. The proposed facility will include a 250 foot self-support tower, plus related ground facilities.

You have a right to submit comments regarding the proposed construction to the Commission or to request intervention in the Commission's proceedings on this application.

Your comments and request for intervention should be addressed to: Kentucky Public Service Commission, Executive Director, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to case number 2010-00079 in any correspondence.

Sincerely,

Todd R. Briggs
Counsel for New Cingular Wireless PCS, LLC

Enclosure

Exhibit L


PUBLIC NOTICE
New Cingular Wireless PCS, LLC proposes to construct a telecommunications
TOWER
on this site. If you have any questions please contact:
Briggs Law Office, PSC
1301 Clear Springs Trace
Suite 205
Louisville, KY 40223
(502) 412-9222
or
Executive Director
Public Service Commission
211 Sower Boulevard
P.O. Box 615
Frankfort, KY 40602
Please refer to Commission's
Case #2010-00079
in your correspondence.
PUBLIC NOTICE
New Cingular Wireless PCS, LLC proposes to construct a telecommunications
TOWER
near this site. If you have any questions please contact:
Briggs Law Office, PSC
1301 Clear Springs Trace
Suite 205
Louisville, KY 40223
(502) 412-9222
or
Executive Director
Public Service Commission
211 Sower Boulevard
P.O. Box 615
Frankfort, KY 40602
Please refer to Commission's
Case #2010-00079
in your correspondence.

Exhibit M

Albany Relo Search Area

Exhibit N

AT&T Mobility
3231 N. Green River Rd.
Evansville, IN 47715

Sherri A Lewis
RF Design Engineer - Kentucky
3231 North Green River Road
Evansville, IN 47715
Phone: 812-457-3327

February 23, 2010

To Whom It May Concern:

Dear Sir or Madam:

This letter is to state the need of the proposed AT&T site called Albany Relo, to be located in Clinton County, KY. The Albany Relo site is necessary to replace our existing Albany site which has to be removed from the water tank it is currently on. The Albany Relo site will also improve coverage and reduce interference on US Hwy 127, in Albany, KY, and the surrounding area. With the addition of this site, the customers in this area of Clinton County will experience improved reliability, better in-building coverage, and improved access to emergency 911 services.

Sherri A Lewis
RF Design Engineer

AT&T Mobility
3231 N. Green River Rd.
Evansville, IN 47715

Sherri A Lewis
RF Design Engineer - Kentucky
3231 North Green River Road
Evansville, IN 47715
Phone: 812-457-3327

February 23, 2010

To Whom It May Concern:

Dear Sir or Madam:

This letter is to state that there is no more suitable location reasonably available from which adequate service can be provided in the area of the proposed Albany Relo site. There are no collocation opportunities available as there are no tall structures located within this site's search area.

Sherri A Lewis
RF Design Engineer

AT&T Mobility
3231 N. Green River Rd.
Evansville, IN 47715

Sherri A Lewis
RF Design Engineer - Kentucky
3231 North Green River Road
Evansville, IN 47715
Phone: 812-457-3327

February 23, 2010

To Whom It May Concern:

Dear Sir or Madam:

This letter is to serve as documentation that the proposed AT&T site called Albany Relo, to be located in Clinton County, KY at Latitude 36-41-51.68 North, Longitude 085-07-19.11 West, has been designed, and will be built and operated in accordance with all applicable FCC and FAA regulations.

Sherri A Lewis
RF Design Engineer