RECEIVED

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

APR 27 2009
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: 2009-00159
6522 U.S. HIGHWAY 41 A SOUTH)
PROVIDENCE, WEBSTER COUNTY, 42450)

SITE NAME: LISMAN (135G0237)

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 Webster County, Kentucky, 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 6522 U.S. Highway 41A South, Providence, Kentucky 42450 (37° 26' 20.00" North Latitude, 87° 42' 38.22" West Longitude (NAD 83)), in an area entirely within Webster County. The property in which the WCF will be located is currently owned by Richard and Phyllis Marvel, pursuant to those Deeds of record in Deed Book 185, Page 192 and Deed Book 188, Page 676 in the Office of the Webster County Clerk. The proposed WCF will consist of a 195 foot monopole with an approximately 4-foot tall lightning arrestor attached to the top of the tower for a total height of 199 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 Tri-State Geosciences, LLC, of Chattanooga, Tennessee, dated October 13, 2008 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 Application for Permit to Construct or Alter a Structure was filed by the Applicant on March 4, 2009 and is also attached as **Exhibit G**. Approval from the KAZC will be forwarded once received.
- 10. The Applicant operates on frequencies licensed by the Federal Communications Commission pursuant to applicable federal requirements. Copies of the licenses are attached as **Exhibit H**. Appropriate FCC required signage will be posted on the site.

- 11. The licensed, professional land surveyor has noted in **Exhibit B** that Webster County does not participate in the Flood Insurance Rate Map (FIRM) program. The site does not appear to be 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 Kathy Kelly-Jacobs, of Nsoro.
- 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 Webster 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 Webster 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 Webster 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 (The Journal-Enterprise).
- 17. The site of the proposed WCF is located in a rural area near Providence, 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 carefully evaluated locations within the search area for co-location opportunities and found no suitable towers or other existing structures that met the requirements necessary in providing adequate service to the area. 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.

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

> Todd R. Briggs Briggs Law Office, PSC 17300 Polo Fields Lane Louisville, KY 40245 (502) 254-9756 briggslo@bellsouth.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 17300 Polo Fields Lane Louisville, KY 40245

Telephone 502-254-9756

Counsel for New Cingular Wireless PCS, LLC

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

Exhibit E Geotechnical Engineering Report

Exhibit F Competing Utilities List and Map of Like Facilities,

General Area

Exhibit G FAA Approval

KAZC Application

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 Notification

Exhibit L Copy of Posted Notice

Exhibit M Map of Search Area

Exhibit N Miscellaneous

Exhibit A

Commonwealth of Kentucky Trey Grayson, Secretary of State

7/22/2008

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: 67612

Jurisdiction: Kentucky

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 22nd day of July, 2008.



T762

Trey Grayson Secretary of State Commonwealth of Kentucky 67612/0481848



The First State

I, HARRIET SMITE 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 Harries Smith Windsor, Secretary

AUTHENTICATION: 3434823

040770586

2445544 8100

מה של היא מיים און ביים און

State of Delaware Secretary of State Division of Corporations Delivered 11:20 AM 10/26/2004 FILED 11:07 AM 10/26/2004 CERTIFICATE OF AMENDMENT SRV 040770586 - 2445544 FILE TO THE CERTIFICATE OF FORMATION AT&T WIRELESS PCS, LLC

- 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."
- The Certificate of Amendment shall be effective at 7:30 p.m. EDT on October 24, 2004.

[Signature on following page]

ATL01/11728913v2

IN WITNESS WHEREOF, AT&T Wireless PCS, LLC has caused this Certificate of Amendment to be executed by its duly authorized Manager this 20th day of October, 2004.

AT&T WIRELESS PCS, LLC

By: Cingular Wireless LLC, its Manager

Name: Joanne Todaro

ATL01/11728913v2

STATE OF DELAWARE
SECRETARYSOFTEM API: D7 FAX 425 828 1900
DIVISION OF CORPORATIONS
FILED 04:30 PM 09/01/1999
991373168 — 2445544

Ø003

STATE OF DELAWARE CERTIFICATE OF FORMATION OF AT&T WIRELESS PCS, LLC

AT&T LEGAL

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.

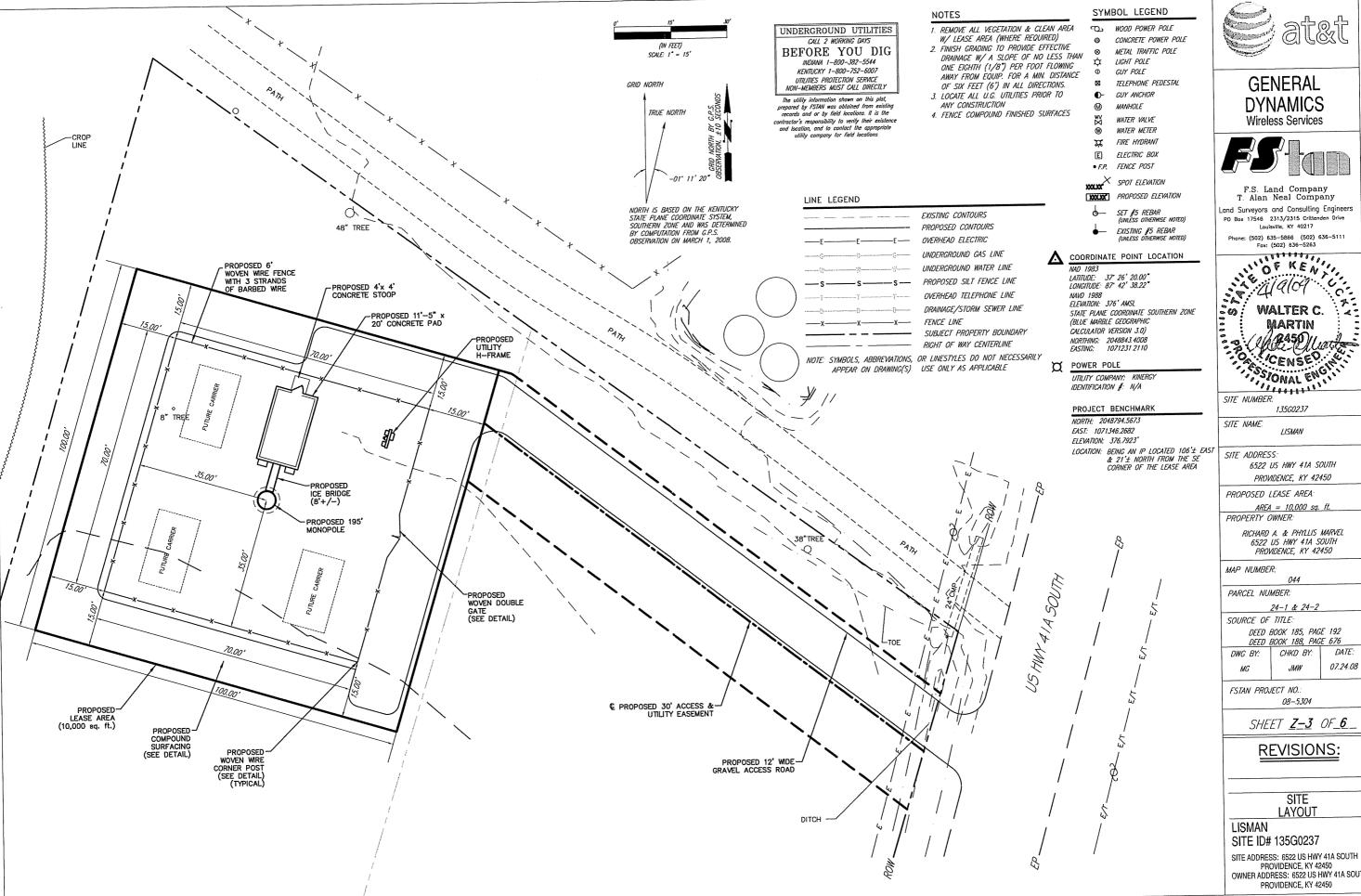
DATED this 7 day of September, 1999.

AT&T WIRELESS SERVICES, INC.,

As Authorized Person

Mark U. Thomas, Vice President

The second secon			

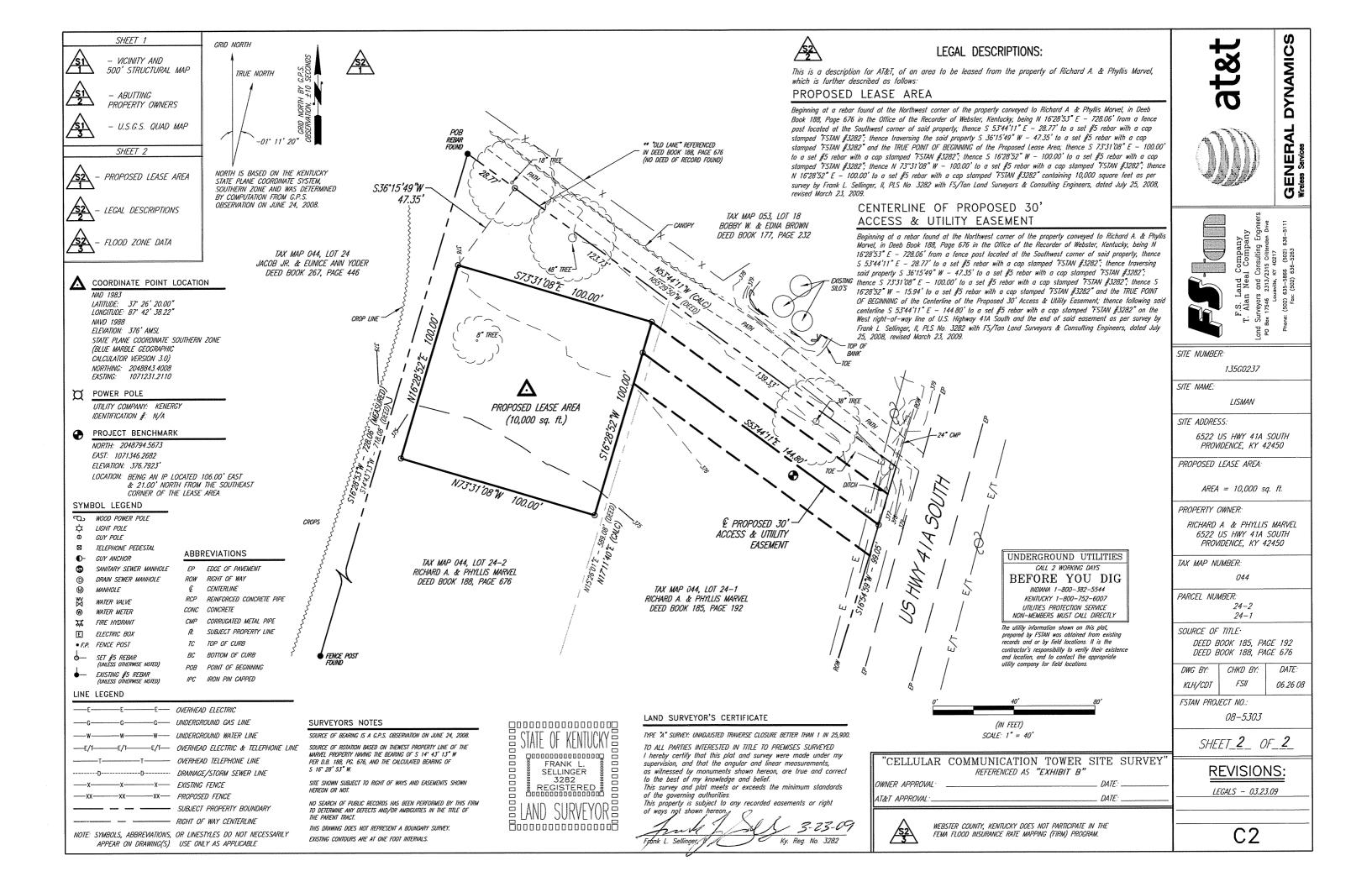


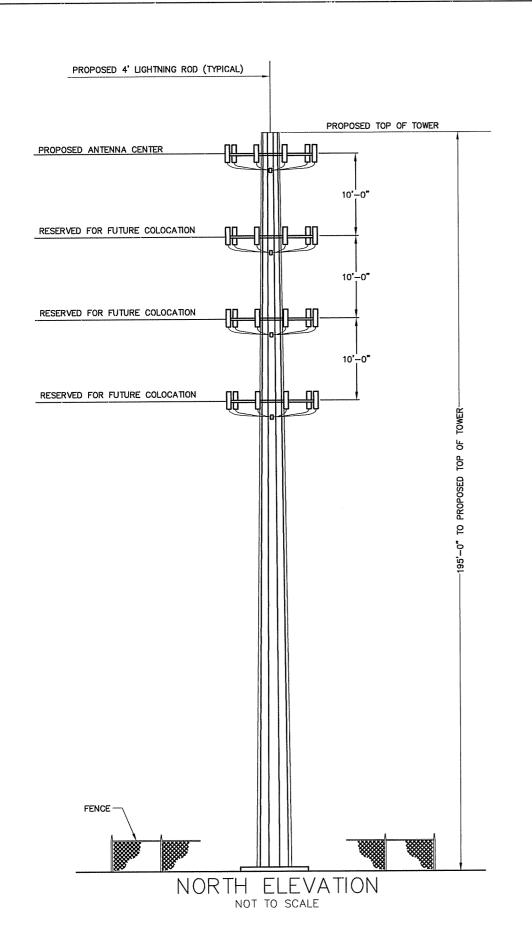


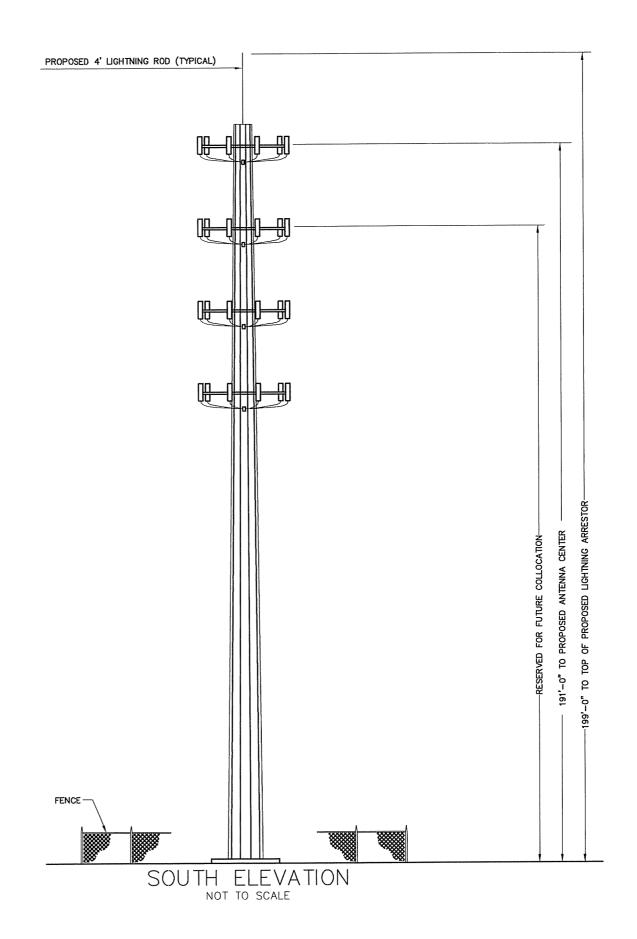




OWNER ADDRESS: 6522 US HWY 41A SOUTH







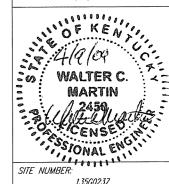


GENERAL DYNAMICS Wireless Services



Land Surveyors and Consulting Engineers PO Box 17546 2313/2315 Crittenden Drive

Phone: (502) 635-5866 (502) 636-5111 Fax: (502) 636-5263



SITE NUMBER: 1.35G0237

SITE NAME:

SITE ADDRESS:

6522 US HWY 41A SOUTH PROVIDENCE, KY 42450

LISMAN

PROPOSED LEASE AREA: AREA = 10,000 sq. ft.

PROPERTY OWNER:

RICHARD A. & PHYLLIS MARVEL 6522 US HWY 41A SOUTH PROVIDENCE, KY 42450

MAP NUMBER:

PARCEL NUMBER: 24-1 & 24-2

SOURCE OF TITLE:

DEED BOOK 185, PAGE 192 DEED BOOK 188, PAGE 676

DWG BY:

CHKD BY:

07.24.08 JMW

FSTAN PROJECT NO.:

SHEET **Z-4** OF **6**

REVISIONS:

NORTH & SOUTH **ELEVATION**

LISMAN SITE ID# 135G0237

SITE ADDRESS: 6522 US HWY 41A SOUTH PROVIDENCE, KY 42450 OWNER ADDRESS: 6522 US HWY 41A SOUTH PROVIDENCE, KY 42450

Exhibit D



6718 W. Plank Road Peoria, IL 61604 USA Phone 309-697-4400 FAX 309-697-5612

PURCHASER:

AMERICAN TOWER CORPORATION

NAME OF PROJECT:

LISMAN, WEBSTER COUNTY, KENTUCKY

195 FT. TAPERED STEEL POLE

ROHN FILE NUMBER:

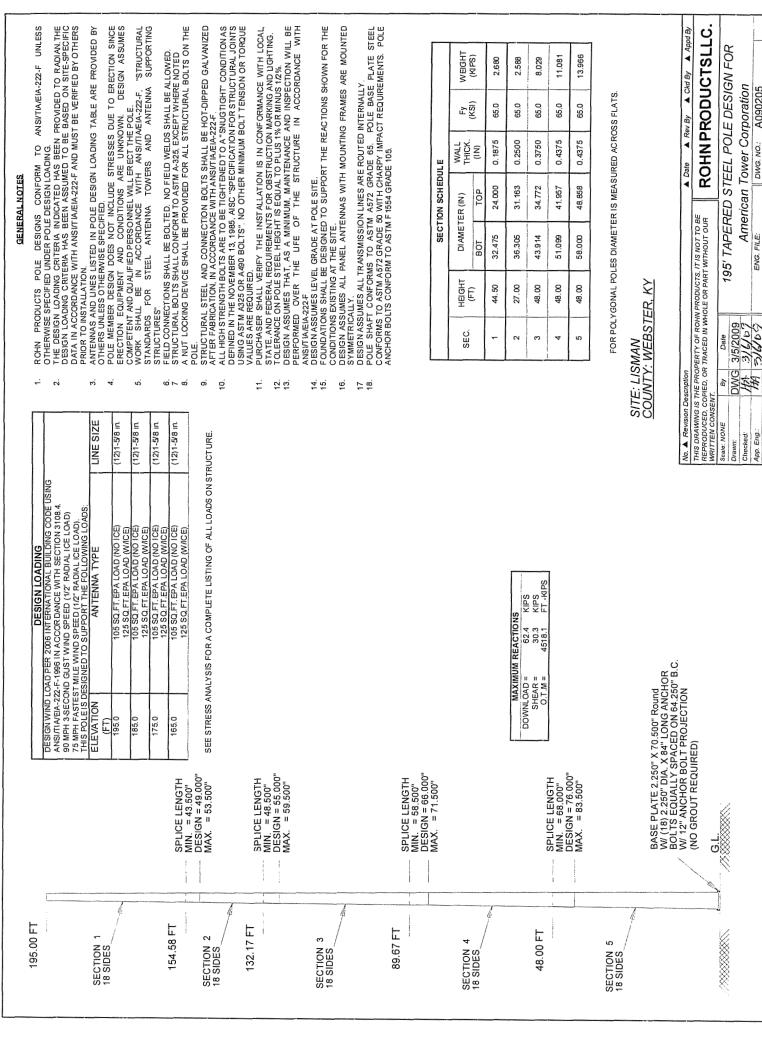
0605994, 59016EH

ROHN DRAWING NUMBER:

A090205

I CERTIFY THAT THE ATTACHED DRAWINGS AND CALCULATIONS WERE
PREPARED UNDER MY SUPERVISION IN ACCORDANCE WITH THE LOADING
CRITERIA SPECIFIED BY THE PURCHASER AND THAT I AM A REGISTERED
PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF KENTUCKY.

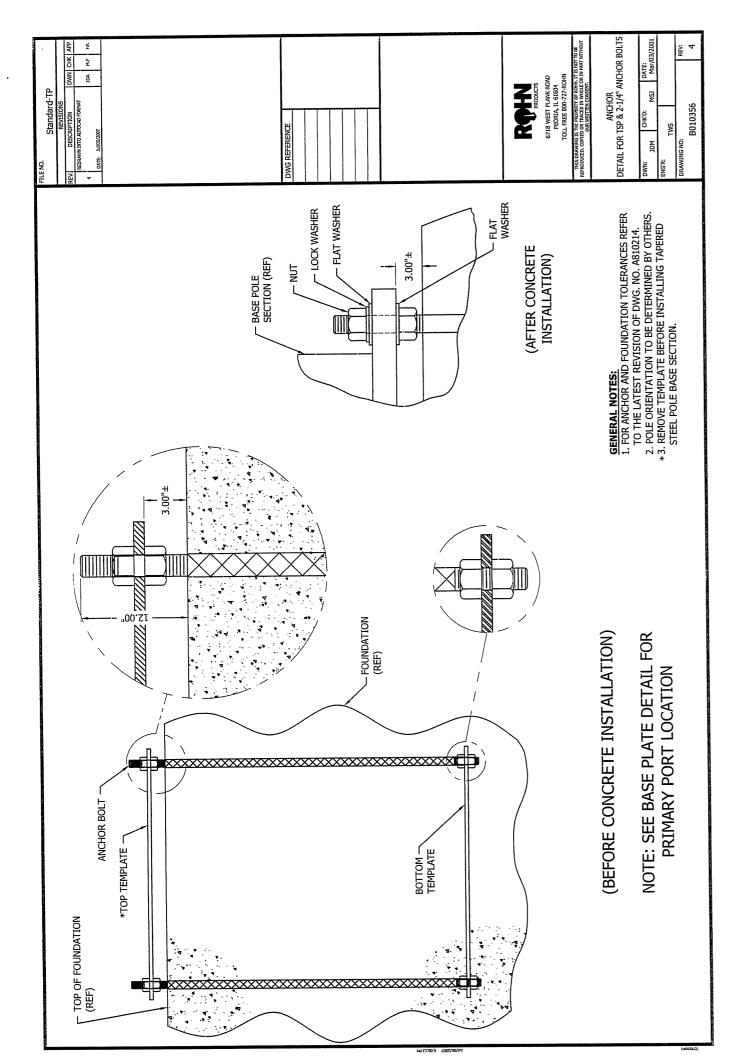




		SECT	SECTION SCHEDULE	LE		
SEC.	HEIGHT	DIAMET	DIAMETER (IN)	WALL THICK.	Fy	WEIGHT
	(1.1)	BOT	TOP	(IN)	(NSI)	(KPK)
-	44.50	32.475	24.000	0.1875	65.0	2.680
2	27.00	36.305	31.163	0.2500	65.0	2.588
က	48.00	43.914	34.772	0.3750	65.0	8.029
4	48.00	51,099	41.957	0.4375	65.0	11.081
2	48.00	58.000	48.858	0.4375	65.0	13.966

FOR POLYGONAL POLES DIAMETER IS MEASURED ACROSS FLATS.

No. ▲ Revision Description	scription			▲ Date ★ Rev By ★ Ckd By ★ Appd By
THIS DRAWING IS THE REPRODUCED, COP	THE PROPED, OR	PERTY OF ROHI	THIS DRAWING IS THE PROPERTY OF ROHN PRODUCTS. IT IS NOT TO BE REFERONCED. COPIED, OR TRACED IN WHOLE OR PART WITHOUT OUR WRITTEN CONSENT.	ROHNPRODUCTSLLC.
Scale: NONE	By	Date	105' TADEDEN	105' TABEBED STEEL BOLE DESIGNED
Drawn:	DWG	DWG 3/5/2009		STELL FOLL DESIGN FOR
Checked:	14	3/6/09	America	American Tower Corporation
App. Eng.:	144	2/4/69	ENG. FILE:	DWG. NO.: A090205
Parent File:	29	016EH	060-5994	SHEET 1 OF 1 REV.





605994 Site: 1 Cycle: 1 Design: 1 Engineer: don_g

American Tower Corp. Customer: LISMAN Site:

POLE-TPR Type:

Pole: Tapered Steel

Page: 1 03/05/2009 3:26 PM

SUMMARY OF ANALYSIS RESULTS Conditions ... : 75 mph Basic Wind Speed (0.50" radial ice) 50 mph Operational Building Code ... : ANSI/TIA/EIA-222-F-1996

Allowable Stress Increase ...: 1.33
Natural Frequency: 0.30 cps
Resonant Velocity: 4.59 mph Pole Height : 195.00 ft
Top Diameter : 24.000 in Bottom Diameter....: 58.000 in Embedment Depth: 0.00 ft

Pole Shape : 18-sided Polygon
Joint Type : Slip
Shaft Steel Weight : 37.117 kips

POLE SHAFT PROPERTIES:

Seq	Sect. Length (ft)	Wall Thickness [t] (in)	Mat'l Yield [Fy] (ksi)	Top Diameter [Dt] (in)	Bottom Diameter [Db] (in)	Slip Joint Overlap (in)	Taper (in/ft)	Steel Weight (kips)
1	44.500	0.18750	65	24.000	32.480	49.00	0.1906	2.680
2	27.000	0.25000	65	31.160	36.310	55.00	0.1907	2.588
3	48.000	0.37500	65	34.770	43.910	66.00	0.1904	8.029
4	48.000	0.43750	65	41.960	51.100	76.00	0.1904	11.081
5	48.000	0.43750	65	48.860	58.000		0.1904	12.740

Design Bend Radius = 4.0 * t inches

POLE SHAFT SECTION MAXIMUM FORCES AND MOMENTS:

				At Base of Secti	on		Max. Ratio
		Sect.	Axial	Bending	Horiz.		Actual
		Elev.	Load	Moment	Shear	Torsion	Allowable
Seq	Load Case	(ft.)	(kips)	(ft-kips)	(kips)	(ft-Kips)	[Ftot/Fb]
1	Combo008	150.50	11.4737	505.5815	19.1707	18.5400	0.8607
2	Combo008	127.58	15.4018	980.9787	20.7296	18.5400	0.9454
3	Combo008	81.42	26.4285	2057.2924	24.0087	18.5400	0.8847
4	Combo008	38.50	40.0392	3191.7722	27.1936	18.5400	0.8696
5	Combo008	0.00	53.7283	4509.1704	30.1767	18.5400	0.9291
		ACTIONS →	62.3545	4518.0558	30.3368	18.5400	_
	OPERATIONAL RE	ACTIONS 7	54.4420	1910.3950	13.4504	8.2400	(

SECTION PROPERTIES:

Seq	Weight (kips)	Location	Elev (ft)	Diam Across Flats (in)	Wall Thick [t] (in)	[W/t] Ratio	Diam/ Thick [D/t] Ratio	Area (in^2)	J (in^4)	I (in^4)
1	2.680	@Top	195.00	24.000	0.1875	20.81	128.00	14.17	2035.5	1015.2
		@Splice	154.58	31.700		28.05	169.07	18.75	4717.4	2352.8
		@Bot	150.50	32.480		28.78	173.23	19.22	5076.5	2531.9
2	2.588	@Top	154.58	31.160	0.2500	20.21	124.64	24.53	5936.0	2960.6
		@Splice	132.17	35.090		22.99	140.36	27.64	8500.2	4239.5
		@Bot	127.58	36.310		23.85	145.24	28.61	9424.8	4700.7
3	8.029	@Top	129.42	34.770	0.3750	14.59	92.72	40.94	12268.0	6118.7
		@Splice	86.92	42.860		18.39	114.29	50.57	23120.3	11531.4
		@Bot	81.42	43.910		18.88	117.09	51.82	24877.3	12407.7
4	11.081	@Top	86.50	41.960	0.4375	15.15	95.91	57.66	25181.7	12559.5
		@Splice	44.83	50.500		18.59	115.43	69.52	44133.8	22012.0
		@Bot	38.50	51.100		18.83	116.80	70.35	45739.8	22813.0
5	12.740	@Top	48.00	48.860	0.4375	17.93	111.68	67.24	39937.0	19918.8
		@Bot	0.00	58.000		21.61	132.57	79.93	67089.3	33461.2
Total	Shaft Steel	Weight = 3	7.117 kips							

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605994 Site: 1 Cycle: 1 Design: 1 Engineer: don_g American Tower Corp. LISMAN

Customer:

Site: Type:

POLE-TPR Pole: Tapered Steel

(@ Max Segment = 5.0 ft) PROPERTIES:

Node No.	Node Elev. (ft)	Diam. Across Flats (in)	Wall Thick [t] (in)	[W/t] Ratio	Diam/ Thick [D/t] Ratio	Area (in^2)	J (in^4)	I (in^4)
57	195.000	24.00	0.1875	20.81	128.00	14.17	2035.5	1015.2
56	190.958	24.77	0.1875	21.53	132.11	14.63	2239.5	1117.0
55	186.917	25.54	0.1875	22.26	136.22	15.09	2456.6	1225.3
54	182.875	26.31	0.1875	22.98	140.32	15.55	2687.4	1340.4
53	178.833	27.08	0.1875	23.70	144.43	16.00	2932.1	1462.4
52	174.792	27.85	0.1875	24.43	148.54	16.46	3191.3	1591.7
51	170.750	28.62	0.1875	25.15	152.65	16.92	3465.4	1728.4
50	166.708	29.39	0.1875	25.88	156.75	17.38	3754.7	1872.7
49	162.667	30.16	0.1875	26.60	160.86	17.84	4059.7	2024.8
48	158.625	30.93	0.1875	27.33	164.97	18.30	4380.7	2184.9
470	154.583	31.70	0.1875	28.05	169.08	18.75	4718.3	2353.3
47I	154.583	31.16	0.2500	20.21	124.64	24.53	5936.4	2960.8
46	150.500	31.94	0.2500	20.76	127.76	25.14	6396.1	3190.1
45	148.667	32.29	0.2500	21.01	129.15	25.42	6610.2	3296.9
44	146.833	32.64	0.2500	21.26	130.55	25.70	6829.0	3406.0
43	145.000	32.99	0.2500	21.50	131.95	25.98	7052.6	3517.5
42	143.167	33.34	0.2500	21.75	133.35	26.25	7281.0	3631.5
41	141.333	33.69	0.2500	22.00	134.75	26.53	7514.3	3747.8
40	139.500	34.04	0.2500 0.2500	22.24	136.15	26.81	7752.6 7995.8	3866.6 3987.9
39 38	137.667 135.833	34.39 34.74	0.2500	22.49 22.74	137.55 138.95	27.09 27.36	8244.0	4111.8
30 37	134.000	35.09	0.2500	22.74	140.34	27.64	8497.4	4238.1
360	132.167	35.44	0.2500	23.23	141.74	27.92	8755.9	4367.0
300		33,11		20120	2121.1		0.00.5	1007.
36I	132.167	34.77	0.3750	14.59	92.72	40.94	12266.4	6117.9
35	127.583	35.64	0.3750	15.00	95.05	41.98	13225.7	6596.4
34	123.792	36.36	0.3750	15.34	96.97	42.84	14054.7	7009.9
33	120.000	37.09	0.3750	15.68	98.90	43.69	14917.7	7440.3
32	116.208	37.81	0.3750	16.01	100.82	44.55	15815.2	7887.9
31	112.417	38.53	0.3750 0.3750	16.35 16.69	102.75	45.41	16748.1	8353.2
30 29	108.625 104.833	39.25 39.97	0.3750	17.03	104.67 106.60	46.27 47.13	17717.0 18722.5	8836.4 9337.9
28	101.042	40.70	0.3750	17.37	108.52	47.13	19765.3	9858.1
27	97.250	41.42	0.3750	17.71	110.45	48.85	20846.2	10397.2
26	93.458	42.14	0.3750	18.05	112.38	49.71	21965.8	10955.6
25	89.667	42.86	0.3750	18.39	114.30	50.57	23124.7	11533.6
240	86.917	43.39	0.3750	18.64	115.70	51.19	23990.4	11965.4
251	89.667	41.96	0.4375	15.15	95.91	57.66	25181.7	12559.5
24	86.917	42.48	0.4375	15.36	97.11	58.38	26146.4	13040.7
23	84.167	43.01	0.4375	15.57	98.30	59.11	27135.6	13534.0
22	80.550	43.70	0.4375	15.85	99.88	60.07	28474.0	14201.6
21	76.933	44.38	0.4375	16.13	101.45	61.02	29855.5	14890.6
20	73.317	45.07	0.4375	16.40	103.02	61.98	31281.2	15601.7
19	69.700	45.76	0.4375	16.68	104.60	62.94	32751.6	16335.1
18	66.083	46.45	0.4375	16.96	106.17	63.89	34267.4	17091.1
17	62.467	47.14	0.4375	17.24	107.75	64.85	35829.0	17869.9
16	58.850	47.83	0.4375	17.51	109.32	65.81	37437.6	18672.2
15	55.233	48.52	0.4375	17.79	110.90	66.76	39093.6	19498.2
14	51.617	49.21	0.4375	18.07	112.47	67.72	40797.8	20348.1
13	48.000	49.89	0.4375	18.35	114.04	68.67	42550.5	21222.3
120	44.833	50.50	0.4375	18.59	115.42	69.51	44125.9	22008.1
13I	48.000	48.86	0.4375	17.93	111.68	67.24	39937.0	19918.8
12	44.833	49.46	0.4375	18.17	113.06	68.08	41447.7	20672.3
11	41.667	50.07	0.4375	18.42	114.44	68.91	42996.0	21444.5
10	37.500	50.86	0.4375	18.73	116.25	70.01	45091.2	22489.5
9	33.333	51.65	0.4375	19.05	118.06	71.12	47253.4	23567.9
8	29.167	52.45	0.4375	19.37	119.88	72.22	49483.7	24680.3

605994 Site: 1 Cycle: 1 Design: 1 Engineer: don_g American Tower Corp.
LISMAN

Customer: Site:

Type:

POLE-TPR
Pole: Tapered Steel

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Node No	Node Elev. (ft)	Diam. Across Flats (in)	Wall Thick [t] (in)	[W/t] Ratio	Diam/ Thick [D/t] Ratio	Area (in^2)	J (in^4)	I (in^4)
7	25.000	53.24	0.4375	19.69	121.69	73.32	51783.1	25827.1
6	20.833	54.03	0.4375	20.01	123.50	74.42	54152.6	27008.9
5	16.667	54.83	0.4375	20.33	125.32	75.52	56593.3	28226.3
4	12.500	55.62	0.4375	20.65	127.13	76.62	59106.3	29479.6
3	8.333	56.41	0.4375	20.97	128.94	77.73	61692.5	30769.5
2	4.167	57.21	0.4375	21.29	130.76	78.83	64353.2	32096.6
1	0.000	58.00	0.4375	21.61	132.57	79.93	67089.3	33461.2

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ROHN Products LLC.

: 605994 Site: 1 Cycle: 1 Design: 1 Engineer: don_g

American Tower Corp.

Site: LISMAN

Customer:

Type: POLE-TPR

Pole: Tapered Steel

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DISCRETE APPURTENANCE PROPERTIES

Elev(ft) Description	Weight W/o Ice W/ Ice (kips) (kips)	EPA : W/o Ice W/ Ice (ft^2) (ft^2) Lines	•
195.00 105 SQ.FT. EPA LOAD (NO ICE) 125 SQ.FT. EPA LOAD (W/ ICE)	1.80 2.50	105.00 125.00 (12) 1-5/8 in.	
185.00 105 SQ.FT. EPA LOAD (NO ICE) 125 SQ.FT. EPA LOAD (W/ ICE)	1.80 2.50	105.00 125.00 (12) 1-5/8 in.	
175.00 105 SQ.FT. EPA LOAD (NO ICE) 125 SQ.FT. EPA LOAD (W/ ICE)	1.80 2.50	105.00 125.00 (12) 1-5/8 in.	
165.00 105 SQ.FT. EPA LOAD (NO ICE) 125 SQ.FT. EPA LOAD (W/ ICE)	1.80 2.50	105.00 125.00 (12) 1-5/8 in.	

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605994 Site: 1 Cycle: 1 Design: 1 Engineer: don_g

File: Customer: American Tower Corp.

Site: LISMAN POLE-TPR Type:

Pole: Tapered Steel

PRESSURES

	Elev.		W/o Io	e	With 3	[ce	Operat:	ional
Seg.	(ft)	Kz	G _h ·qz	Cf	G _h ·qz	Cf	G _{h'} qz	Cf
1-11	192.979	1.656	40.308	0.650	30.276	0.650	17.915	0.650
1-10	188.938	1.646	40.065	0.650	30.093	0.650	17.807	0.650
1-9	184.896	1.636	39.818	0.650	29.908	0.650	17.697	0.650
1-8	180.854	1.626	39.568	0.650	29.720	0.650	17.586	0.650
1-7	176.813	1.615	39.313	0.650	29.528	0.650	17.472	0.650
1-6	172.771	1.605	39.054	0.650	29.334	0.650	17.357	0.650
1-5	168.729	1.594	38.791	0.650	29.136	0.650	17.240	0.650
1-4	164.688	1.583	38.523	0.650	28.935	0.650	17.121	0.650
1-3	160.646	1.572	38.250	0.650	28.730	0.650	17.000	0.650
1-2	156.604	1.560	37.973	0.650	28.522	0.650	16.877	0.650
1-1	152.542	1.549	37.689	0.650	28.309	0.650	16.751	0.650
2-12	152.542	1.549	37.689	0.650	28.309	0.650	16.751	0.650
2-11	149.583	1.540	37.479	0.650	28.151	0.650	16.657	0.650
2-10	147.750	1.535	37.347	0.650	28.052	0.650	16.599	0.650
2-9	145.917	1.529	37.214	0.650	27.952	0.650	16.539	0.650
2-8	144.083	1.524	37.080	0.650	27.851	0.650	16.480	0.650
2-7	142.250	1.518	36.944	0.650	27.749	0.650	16.420	0.650
2-6	140.417	1.512	36.807	0.650	27.647	0.650	16.359	0.650
2-5	138.583	1.507	36.670	0.650	27.543	0.650	16.298	0.650
2-4	136.750	1.501	36.530	0.650	27.438	0.650	16.236	0.650
2-3	134.917	1.495	36.390	0.650	27.333	0.650	16.173	0.650
2-2	133.083	1.489	36.248	0.650	27.226	0.650	16.110	0.650
2-1	129.875 129.875	1.479 1.479	35.996 35.996	0.650 0.650	27.037 27.037	0.650 0.650	15.998	0.650
3-13 3-12	125.688	1.465	35.660	0.650	26.785	0.650	15.998 15.849	0.650 0.650
3-12	121.896	1.453	35.350	0.650	26.552	0.650	15.711	0.650
3-10	118.104	1.440	35.032	0.650	26.313	0.650	15.570	0.650
3-9	114.313	1.426	34.707	0.650	26.069	0.650	15.425	0.650
3-8	110.521	1.412	34.374	0.650	25.819	0.650	15.277	0.650
3-7	106.729	1.398	34.033	0.650	25.562	0.650	15.126	0.650
3-6	102.938	1.384	33.683	0.650	25.300	0.650	14.970	0.650
3-5	99.146	1.369	33.324	0.650	25.030	0.650	14.810	0.650
3-4	95.354	1.354	32.954	0.650	24.752	0.650	14.646	0.650
3-3	91.563	1.339	32.575	0.650	24.467	0.650	14.478	0.650
3-2	88.292	1.325	32.238	0.650	24.214	0.650	14.328	0.650
3-1	85.542	1.313	31.948	0.650	23.996	0.650	14.199	0.650
4-14	88.292	1.325	32.238	0.650	24.214	0.650	14.328	0.650
4-13	85.542	1.313	31.948	0.650	23.996	0.650	14.199	0.650
4-12	82.358	1.299	31.603	0.650	23.738	0.650	14.046	0.650
4-11	78.742	1.282	31.200	0.650	23.435	0.650	13.867	0.650
4-10	75.125	1.265	30.784	0.650	23.122	0.650	13.682	0.650
4-9	71.508	1.247	30.353	0.650	22.799	0.650	13.490	0.650
4-8 4-7	67.892 64.275	1.229 1.210	29.906 29.442	0.650 0.650	22.463 22.114	0.650	13.292	0.650
4-6	60.658	1.190	28.959	0.650	21.752	0.650 0.650	13.085 12.871	0.650 0.650
4-5	57.042	1.169	28.455	0.650	21.732	0.650	12.647	0.650
4-4	53.425	1.148	27.927	0.650	20.977	0.650	12.412	0.650
4-3	49.808	1.125	27.374	0.650	20.561	0.650	12.166	0.650
4-2	46.417	1.102	26.828	0.650	20.150	0.650	11.923	0.650
4-1	43.250	1.080	26.291	0.650	19.748	0.650	11,685	0.650
5-12	46.417	1.102	26.828	0.650	20.150	0.650	11.923	0.650
5-11	43.250	1.080	26.291	0.650	19.748	0.650	11,685	0.650
5-10	39.583	1.053	25.634	0.650	19.254	0.650	11.393	0.650
5-9	35.417	1.020	24.832	0.650	18.652	0.650	11.037	0.650
5-8	31.250	1.000	24.336	0.650	18.279	0.650	10.816	0.650
5-7	27.083	1.000	24.336	0.650	18.279	0.650	10.816	0.650
5-6	22.917	1.000	24.336	0.650	18.279	0.650	10.816	0.650
5-5	18.750	1.000	24.336	0.650	18.279	0.650	10.816	0.650
5-4	14.583	1.000	24.336	0.650	18.279	0.650	10.816	0.650
5-3	10.417	1.000	24.336	0.650	18.279	0.650	10.816	0.650
5-2	6.250	1.000	24.336	0.650	18.279	0.650	10.816	0.650
5-1	2.083	1.000	24.336	0.650	18.279	0.650	10.816	0.650

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ROHN Products LLC.

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03/05/2009

File: 605994 Site: 1 Cycle: 1 Design: 1 Engineer: don_g

Customer: American Tower Corp.

Site: LISMAN
Type: POLE-TPR

8.333

4.167

0.000

2

52.309

53.728

53.728

4257.76

4383.10

4509.16

8.89

8.89

8.89

0.00

0.00

0.00

29.86

30.18

30.18

18.540

18.540

18.540

0.121 0.001

0.000

0.000 0.000 0.000

0.031

0.137

0.068

Type: POLE-TPR Pole: Tapered Steel

MOMENTS, FORCES AND DEFLECTIONS

Shear Operational Moment Axial My Mz Vz Torsion Deflection Twist Sway (kips) Node __Elev. (ft-k) (deg) (ft-k) (ft-k) (kips) (in) (deg) (kips) 57 195.000 1.934 0.00 1.80 0.00 4.36 4.245 71.549 0.094 3.402 4.58 4.245 68.670 0.091 3.396 56 190.958 2.204 18.70 1.81 0.00 7.01 6.618 65,800 0.089 55 186.917 3.443 38.45 2.84 0.00 3.383 54 182.875 4.624 68.71 3.78 0.00 9.23 8.758 62.944 0.085 3.360 60.112 0.081 53 178.833 5.066 108.57 3.91 0.00 9.68 9.004 3.327 0.00 13.83 13.528 57.313 0.077 3.283 52 174.792 7.158 150.47 5.91 51 170.750 7.576 210.24 5.93 0.00 14.08 13.528 54.554 0.072 16.67 51.848 0.067 271.17 7.25 0.00 16.422 3.160 50 166.708 9.056 49 10.292 343.26 8.22 0.00 18.64 18.540 49.204 0.061 3.080 162.667 2.988 8.25 0.00 18.90 18.540 46.633 0.055 48 158.625 10,786 423.81 47 154.583 11.474 505.51 8.28 0.00 19.17 18.540 44.143 0.050 2.886 2.823 589.34 0.00 19.37 18.540 41.699 0.045 150.500 12.046 8.31 46 148.667 12.318 627.42 8.32 0.00 19.49 18.540 40.623 0.043 2.781 45 12.591 39.563 0.042 665.74 8.33 0.00 19.61 18.540 2.738 44 146.833 19.74 18.540 38.519 0.040 2.694 43 145.000 12.865 704.30 8.35 0.00 13.142 743.10 8.36 0.00 19.86 18.540 37.493 0.038 42 143.167 36.484 0.037 782.15 8.37 0.00 19.99 18.540 2.603 41 141.333 13.421 20.12 35.493 0.035 821.43 8.38 0.00 18.540 2.556 40 139.500 13,701 137.667 13.983 860.95 8.39 0.00 20.24 18.540 34.519 0.034 2.509 39 38 135.833 14.267 900.71 8.41 0.00 20.37 18.540 33.565 0.032 2.460 20.50 18.540 32.629 0.031 37 134.000 14.553 940.71 8.42 0.00 2.412 980.94 8.43 20.73 18.540 31.711 0.030 36 132.167 15.402 0.00 2.362 1082.79 8.45 0.00 21.03 18.540 29.474 0.027 2.296 16.505 35 127.583 34 123.792 17.304 1168.40 8.48 0.00 21.30 18.540 27.679 0.025 2.221 33 120.000 18.112 1255.10 8.50 0.00 21.57 18.540 25.944 0.024 2.145 18.540 8.52 0.00 21.85 24.270 0.022 32 116.208 18.935 1342.91 2.068 18.540 22.657 0.021 31 112.417 19.769 1431.80 8.54 0.00 22.12 1.990 21.107 0.020 30 20.615 1521.78 8.56 0.00 22.41 18.540 1.912 108.625 1612.82 8.58 0.00 22.69 18.540 19.618 0.018 29 104.833 21.475 1.834 1704.93 8.60 0.00 22.97 18.540 18.192 0.017 1.756 28 22.345 101.042 27 97.250 23.224 1798.08 8.62 0.00 23.26 18.540 16.827 0.016 1.678 26 93.458 24.117 1892.28 8.64 0.00 23.55 18.540 15.525 0.015 1.599 8.65 0.00 23.80 18.540 14.285 0.014 1987.50 1.521 25 89.667 25.187 24 86.917 26.428 2057.27 8.67 0.00 24.01 18.540 13.418 0.013 24 86.917 26.428 2057.27 8.67 0.00 24.01 18.540 13.418 0.013 1.486 27.540 2127.74 8.68 0.00 24.25 18.540 12.572 0.012 1.451 23 84.167 22 80.550 28.528 2221.31 8.70 0.00 24.52 18.540 11.498 0.012 1.383 21 76,933 29.528 2315.79 8.71 0.00 24.80 18.540 10.475 0.011 1.316 9.502 0.010 0.00 25.07 18.540 20 73.317 30.538 2411.17 8.73 1.249 19 69.700 31.560 2507.42 8.74 0.00 25.35 18.540 8.581 0.009 1.183 32.598 2604.54 8.76 0.00 25.62 18.540 7.709 0.009 18 66.083 1.11 17 62.467 33.647 2702.51 8.77 0.00 25.89 18.540 6.887 0.008 1.051 2801.31 8.78 0.00 26.17 18.540 6.114 0.007 58.850 34.707 0.986 16 15 55.233 35.782 2900.92 8.79 0.00 26.44 18.540 5.391 0.007 0.922 14 51.617 36.869 3001.32 8.81 0.00 26.71 18.540 4.716 0.006 0.858 13 48.000 38.287 3102.48 8.82 0.00 26.96 18.540 4.089 0.006 0.795 12 44.833 40.039 3191.76 8.83 0.00 27.19 18.540 3.574 0.005 0.757 0.00 18.540 12 44.833 40.039 3191.76 8.83 27.19 3.574 0.005 0.757 11 3281.75 8.83 0.00 27.46 18.540 3.084 0.005 41.667 41.558 0.719 8.85 0.00 10 37.500 42.844 3401.05 27.75 18.540 2.489 0.004 0.643 33.333 44.148 3521.17 8.86 0.00 28.04 18.540 1.960 0.004 0.568 3642.06 1.495 0.003 29.167 45.467 8.86 0.00 28.33 18.540 0.494 25.000 0.00 46.801 3763.71 8.87 28.63 18.540 1.095 0.003 0.421 20.833 48.152 3886.11 8.88 0.00 28.93 18.540 0.758 0.002 0.349 49.521 4009.26 8.88 0.00 29.24 0.484 0.002 16.667 18.540 0.277 12.500 50.907 4133.14 8.89 0.00 29.54 18.540 0.272 0.001

Allowable

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Actual /

605994 Site: 1 Cycle: 1 Design: 1 Engineer: don_g

Actual Stresses

American Tower Corp.
LISMAN
POLE-TPR Customer:

Site: Type:

Pole: Tapered Steel

ACTUAL AND ALLOWABLE STRESSES

			Ac:	tual Stress	es		Allowable	Actual /
	•	Axial	Bending	Shear	Torsion	Combined	Stress	Allowable
	Elevation	[fa]	[fb]	[fv]	[ft]	[Ftot]	[Fb]	[Ftot/Fb]
Node	(ft)	(ksi)	(ksi)	(ksi)	(ksi)	(ksi)	(ksi)	Ratio
				0.608	0.303	1.583	52.000	0.0304
57	195.000	0.136	0.000					
56	190.958	0.151	2.526	0.619	0.284	3.101	52.000	0.0596
55	186.917	0.228	4.883	0.919	0.416	5.610	52.000	0.1079
54	182.875	0.297	8.217	1.174	0.519	9.005	52.000	0.1732
53	178.833	0.317	12.249	1.197	0.503	12.905	52.000	0.2482
		0.435	16.041	1.662	0.714	16.982	52.000	0.3266
52	174.792							
51	170.750	0.448	21.211	1.646	0.676	22.029	51.689	0.4262
50	166.708	0.521	25.930	1.898	0.778	26.854	51.075	0.5258
49	162.667	0.577	31.153	2.067	0.834	32.125	50.461	0.6366
48	158.625	0.590	36.555	2.044	0.793	37.468	49.847	0.7517
			41.490		0.754	42.376	49.233	0.8607
470	154.583	0.612	41.490	2.023	0.754	42.376	49.233	0.0007
471	154.583	0.468	32.414	1.547	0.588	33.089	52.000	0.6363
46	150.500	0.479	35.949	1.524	0.560	36.606	52.000	0.7040
45	148.667	0.485	37.437	1.517	0.547	38.090	52.000	0.7325
44	146.833	0.490	38.867	1.510	0.536	39.516	52.000	0.7599
43	145.000	0.495	40.241	1.504	0.524	40.888	52.000	0.7863
			41.563	1.497	0.513	42.207	52.000	0.8117
42	143.167	0.501						
41	141.333	0.506	42.833	1.491	0.503	43.476	52.000	0.8361
40	139.500	0.511	44.054	1.485	0.492	44.697	52.000	0.8596
39	137.667	0.516	45.229	1.479	0.482	45.872	52.000	0.8821
38	135.833	0.521	46.360	1.473	0.473	47.002	52.000	0.9039
							52.000	
37	134.000	0.527	47.448	1.468	0.463	48.091		0.9248
360	132.167	0.552	48.495	1.469	0.454	49.160	52.000	0.9454
						~	FO 000	0 5510
36I	132.167	0.376	33.964	1.002	0.317	34.417	52.000	0.6619
35	127.583	0.393	35.646	0.991	0.301	36.108	52.000	0.6944
34	123.792	0.404	36.928	0.984	0.289	37.397	52.000	0.7192
33	120.000	0.415	38.116	0.977	0.278	38.592	52.000	0.7422
32	116.208	0.425	39.217	0.970	0.267	39.700	52.000	0.7635
31	112.417	0.435	40.238	0.964	0.257	40.728	52.000	0.7832
30	108.625	0.446	41.185	0.958	0.248	41.683	52.000	0.8016
29	104.833	0.456	42.065	0.953	0.239	42.571	52.000	0.8187
28	101.042	0.466	42.882	0.947	0.230	43.395	52.000	0.8345
27	97.250	0.475	43.641	0.942	0.222	44.162	52.000	0.8493
26	93.458	0.485	44.346	0.937	0.215	44.875	52.000	0.8630
25	89.667	0.498	45.001	0.931	0.208	45.542	52.000	0.8758
240	86.917	0.516	45.448	0.928	0.203	46.006	52.000	0.8847
251	89.667	0.437	40.455	0.817	0.186	40.928	52.000	0.7871
24	86.917	0.453	40.833	0.814	0.182	41.322	52.000	0.7947
23	84.167	0.466	41.194	0.812	0.177	41.695	52.000	0.8018
22	80.550	0.475	41.640	0.808	0.172	42.149	52.000	0.8106
21	76.933	0.484	42.055	0.804	0.166	42.572	52.000	0.8187
20	73.317	0.493	42.440	0.800	0.161	42.965	52.000	0.8262
19	69.700	0.501	42.797	0.797	0.156	43.330	52.000	0.8333
18	66.083	0.510	43.127	0.793	0.152	43.668	52.000	0.8398
			43.434					
17	62.467	0.519		0.790	0.147	43.983	52.000	0.8458
16	58.850	0.527	43.717	0.787	0.143	44.273	52.000	0.8514
15	55.233	0.536	43.978	0.784	0.139	44.542	52.000	0.8566
14	51.617	0.544	44.218	0.780	0.135	44.791	52.000	0.8614
13	48.000	0.558	44.439	0.777	0.131	45.024	52.000	0.8658
120	44.833	0.576	44.618	0.774	0.128	45.221	52.000	0.8696
10-	40 000	0 500	16 366	ממד ח	0 127	16 063	E2 000	0 0021
131	48.000	0.569	46.366	0.793	0.137	46.963	52.000	0.9031
12	44.833	0.588	46.529	0.790	0.134	47.144	52.000	0.9066
11	41.667	0.603	46.680	0.788	0.130	47.310	52.000	0.9098
10	37.500	0.612	46.860	0.784	0.126	47.498	52.000	0.9134
9	33.333	0.621	47.017	0.780	0.122	47.664	52.000	0.9166
8	29.167	0.630	47.153	0.776	0.119	47.808	52.000	0.9194

RIH

ROHN Products LLC.

File: Customer:

605994 Site: 1 Cycle: 1 Design: 1 Engineer: don_g

mer: American Tower Corp.
LISMAN

Site: LISM Type: POLE

: POLE-TPR
Pole: Tapered Steel

Page: 8 03/05/2009 3:26 PM

	Actual Stresses				Allowable	Actual /		
		Axial	Bending	Shear	Torsion	Combined	Stress	Allowable
	Elevation	[fa]	[fb]	[fv]	[ft]	[Ftot]	[Fb]	[Ftot/Fb]
Node_	(ft)	(ksi)	(ksi)	(ksi)	(ksi)	(ksi)	(ksi)	Ratio
7	25.000	0.638	47.269	0.773	0.115	47.932	52.000	0.9218
6	20.833	0.647	47.366	0.769	0.112	48.037	52.000	0.9238
5	16.667	0.656	47.446	0.766	0.109	48.126	52.000	0.9255
4	12.500	0.664	47.510	0.763	0.105	48.198	52.000	0.9269
3	8.333	0.673	47.560	0.760	0.102	48.256	52.000	0.9280
2	4.167	0.682	47.596	0.758	0.100	48.300	52.000	0.9289
1	0.000	0.672	47.619	0.747	0.097	48.314	52.000	0.9291

605994 Site: 1 Cycle: 1 Design: 1 Engineer: don_g

Customer: Site:

American Tower Corp.

Type:

LISMAN POLE-TPR

Pole: Tapered Steel

Page: 9 03/05/2009 3:26 PM

	SUMMARY OF B	ASEPLATE DESIGN
PLATE		ANCHOR BOLTS
Pole Diameter at Base	= 58.00 in.	Size = 2.25 in. X 84 in. Long
Plate Diameter	= 70.50 in.	Grade = ASTM A615
Plate Thickness	= 2.25 in.	
Plate Weight (Black)	= 1157.13 lbs	No. Of Bolts = 18
Fy	= 50.00 ksi	Bolt Circle = 64.250 in.
Fu	= 65.00 ksi	Fy = 75.00 ksi

MAXIMUM POLE REACTIONS:

Axial = 62.35 kips

Moment = 4,518.06 ft-kips

Shear = 30.34 kips

Torsion = 18.54 ft-kips

ANCHOR BOLTS:

Axial = 150.7 kips/bolt

Moment = 2.1 in-kips/bolt

Shear = 2.1 kips/bolt

Axial Capacity = 243.8 kips/bolt

Moment Capacity = 105.2 in-kips/bolt

Shear Capacity = 182.8 kips/bolt

ANCHOR BOLT STRESS RATIO = 0.922 < 1.0 OK

PLATE:

Bolt Group Tension Capacity = 3,948.7 kips = 6,675.7 kipsPlate Tension Capacity = 12,069.4 kips

Plate Shear Capacity

PLATE STRESS RATIO = 0.592 < 1.0 OK

AMERICAN TOWER CORPORATION

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

273115 - LISMAN KY, KY

PROJECT DESCRIPTION:

PRIMARY FOUNDATION DESIGN FOR A 195' "ROHN" MONOPOLE

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: 273115

SITE NAME: LISMAN KY, KY

SITE ADDRESS: 6522 US HWY 41A SOUTH

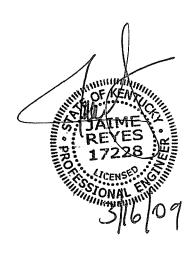
PROVIDENCE, KY 42450

PROPERTY OWNER: AMERICAN TOWER CORPORATION

ATC JOB NUMBER: 43119272A

DATE: 3/16/09

REVISION: 0



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

DRAWING INDEX

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.



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

PROJECT SUMMARY

CUSTOMER	SITE NUMBER	SITE NAME	ATC JOB NUMBER	SITE ADDRESS	DATE	DRAWING NUMBER	REVISION
OPERATIONS STRUCTURAL	273115	LISMAN KY, KY	43119272A	6522 US HWY 41A SOUTH PROVIDENCE, KY 42450	3/16/09	вом	0

BILL OF MATERIALS								
QUANTITY REQUIRED	QUANTITY SHIPPED	PART NUMBER	DESCRIPTION	LENGTH	DRAWING NUMBER	WEIGHT (lbs)	COMMENTS	
			REBARS					
33			#5 REBAR GRADE 40	21'-6"	A-1,A-2	740		
34			#10 REBAR GRADE 60	26'-0"	A-1,A-2	3804		
		111111111111111111111111111111111111111						

			VIV. 1					
	_							
	_							
					TOTAL WEIGHT:	4544	PAGE 1 OF	

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

- 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.
- ACI 318: AMERICAN CONCRETE INSTITUTE, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE. 318-99.
- 4. CRSI: CONCRETE REINFORCING STEEL INSTITUTE, MANUAL OF STANDARD PRACTICE, LATEST EDITION.
- AISC: AMERICAN INSTITUTE OF STEEL CONSTRUCTION, MANUAL OF STEEL CONSTRUCTION, LATEST EDITION.
- 6. 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, LINI FSS 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

 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

 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.



STRUCTUR AL ENGINEERING 8505 FREEPORT PARKWAY SUITE 135 IRVING, TX 75063 (972) 999-8900 Tel. (972) 999-8940 Fax

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TOWER CORPORATION AND THEIR USE AND
PUBLICATION SHALL BE RESTRICTED TO THE
ORIGINAL SITE FOR WHICH THEY ARE PREPARED.
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EXCEPT BY WRITTEN FERMISSION FROM AMERICAN
TOWER CORPORATION ITTLE TO THESE
PLANS AND/OR SPECIFICATIONS SHALL REMAIN
WITH AMERICAN TOWER CORPORATION WITHOUT
PREJUDICE AND VISUAL CONTACT WITH THEM
SHALL CONSTITUTE FRAM FACE EXPENCE
OF ADCEPTANCE OF THESE RESTRICTIONS.

REV.	DESCR	RIPTION	BY	DATE
	FIRST	ISSUE	CAB	3/16/09
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SITE NUMBER: 273115

SITE NAME:

LISMAN KY, KY

SITE ADDRESS:

6522 US HWY 41A SOUTH PROVIDENCE, KY 42450

DRAWN BY: CAB

CHECKED BY: HY

DATE DRAWN: 3/13/09

ATC JOB NO: 43119272A

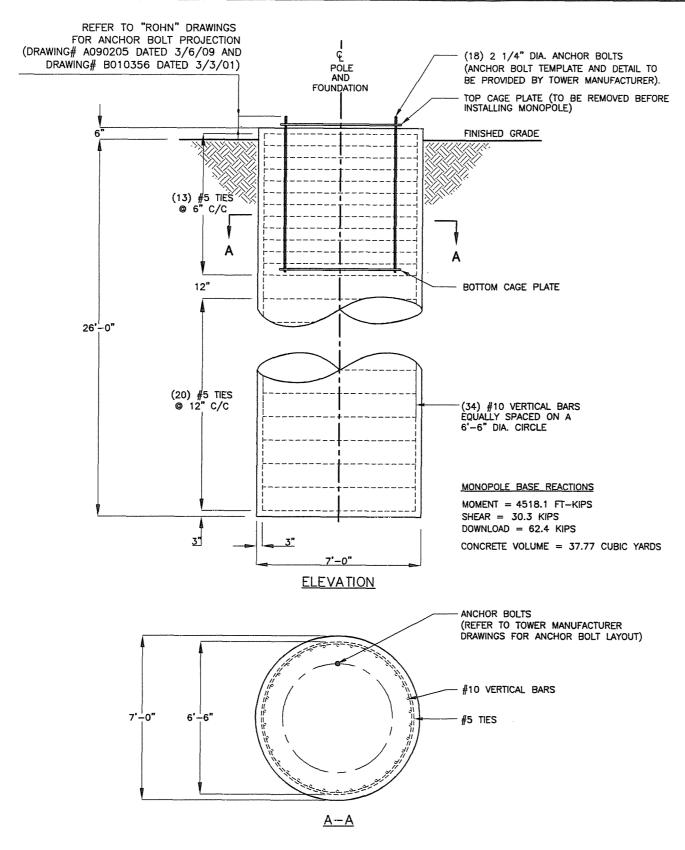
SHEET TITLE:

IBC GENERAL NOTES

REV. #

SHEET NUMBER:

N.T.S.



NOTES

- 1. FOUNDATION DESIGNED FOR A "ROHN" 195' MONOPOLE (ENG. FILE# 060-5994, DRAWING# A090205 DATED 3/6/09). REFERENCE "ROHN" DRAWINGS FOR ANCHOR BOLT INSTALLATION REQUIREMENTS.
- FOUNDATION DESIGN WAS BASED ON SOIL REPORT PROVIDED BY TRI-STATE GEOSCIENCES, LLC WITH PROJECT# 08CTCIV0307G DATED 10/13/08. REFERENCE THE SOIL REPORT FOR ADDITIONAL CONSIDERATIONS AND REQUIREMENTS.
- 3. VERY HARD WEATHERED SHALE AND LIMESTONE (RQD=0 TO 18) WERE ENCOUNTERED BELOW 13.5'. THE USE OF HEAVY TOOLS OR ROCK BITS WILL BE REQUIRED.
- 4. GROUNDWATER WAS REPORTED AT A DEPTH OF ABOUT 5' BELOW THE GRADE SURFACE. THE USE OF TEMPORARY STEEL CASING MAY BE REQUIRED.
- 5. CONCRETE SLUMP: 5"~7"
- 5. FOUNDATION REACTIONS WERE OBTAINED FROM "ROHN" TOWER DESIGN DRAWING (ENG. FILE# 060-5994, DRAWING# A090205 DATED 3/6/09).
- 6. LEAVING PIER HOLE OPEN OVERNIGHT IS NOT ALLOWED.

STRUCTURAL

ENGINEERING

8505 FREEPORT PARKWAY

SUITE 135

IRVING, TX 75063

(972) 999-8900 Tel.

(972) 999-8940 Fax

WISE ANT

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OF ACCEPTANCE OF THESE RESTRICTIONS.

	DESCRIPTION	BY	DATE
	FIRST ISSUE	CAB	3/16/09
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SITE NUMBER: 273115
SITE NAME:

LISMAN KY, KY

SITE ADDRESS: 6522 US HWY 41A SOUTH PROVIDENCE, KY 42450

DRAWN BY: CAB
CHECKED BY: HY
DATE DRAWN: 3/13/09
ATC JOB NO: 43119272A

SHEET TITLE:

DRILLED PIER FOUNDATION DETAILS (PRIMARY DESIGN)

REV. #

SHEET NUMBER:

		BAF	R LIST F	OR REINF	ORCING	STEEL (DRI	LLED PIER FOU	NDATION PRIMARY DESIGN)	
QTY REQ'D.	BAR SIZE		L LENGT	WE	OTAL CIGHT LBS)	TYPE	DIMENSION	BENDING DIAGRAM	
33	#5	21	'-6"		40	TIE	A= 6'-6" OVERLAP= 1'-1	OVERLAP	
						BENT		A	4 1/2" RADIUS
34	#10	20	6'0"	3	B04	STRAIGHT	A=26'-0"	A	
				& WEIG	T	SPEC	IAL NOTES	STANDARD REBAR HO	
BAR NO	LBS PE			INCHES 375	GRADE	-	ŀ	90° HOOK 5"	135° HOOKS 8"
<u>3</u>	.373			500	1		ŀ	7"	10"
4 5	1.04			625	40			9"	-
<u>5</u> 6	1.50			750	-	1	ŀ	10"	_
7	2.04			875	1		ŀ	1'-0"	_
8	2.67			.000	-			1'-2"	_
9	3.40			.128	60		ŀ	1'-4"	_
10	4.30			.270	1			1'5"	_

GENERAL FOUNDATION CONSTRUCTION NOTES

- ALL REBAR (HORIZONTAL & VERTICAL) SHALL BE SECURELY WIRE TIED TO PREVENT DISPLACEMENT DURING POURING OF CONCRETE.
- 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".
- BACKFILL SHALL BE SELECTED MATERIAL, WELL COMPACTED IN LAYERS NOT EXCEEDING 12".
- BACKFILL SHALL BE PLACED SO AS TO PREVENT ACCUMULATION OF WATER AROUND THE FOUNDATION.
- 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).
- REINFORCING STEEL PLACEMENT: PLUS OR MINUS 1/2" INCLUDING CONCRETE COVER.



STRUCTURAL

NGINEERING

8505 FREEPORT PARKWAY
SUITE 135

IRVING, TX 75063

(972) 999-8900 Tel.

(972) 999-8940 Fax

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SPECIFICATION AS INSTRUMENTS OF SERMICE.
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	FIRST	ISSUE	CAB	3/16/09
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SITE NUMBER: 273115
SITE NAME:

LISMAN KY, KY

SITE ADDRESS: 6522 US HWY 41A SOUTH PROVIDENCE, KY 42450

DRAWN BY: CAB

CHECKED BY: HY

DATE DRAWN: 3/13/09

ATC JOB NO: 43119272A

SHEET TITLE:

BAR LIST FOR REINFORCING STEEL AND GENERAL NOTES

REV. #

SHEET NUMBER: A-2

AMERICAN TOWER CORPORATION

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

273115 - LISMAN KY, KY

PROJECT DESCRIPTION: =

SECONDARY FOUNDATION DESIGN FOR A 195' "ROHN" MONOPOLE.

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: 273115

SITE NAME: LISMAN KY, KY

SITE ADDRESS: 6522 US HWY 41A SOUTH

PROVIDENCE, KY 42450

PROPERTY OWNER: AMERICAN TOWER CORPORATION

ATC JOB NUMBER: 43119272B

DATE: 3/16/09

REVISION: 0



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

DRAWING INDEX

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.



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CUSTOMER	SITE NUMBER	SITE NAME	ATC JOB NUMBER	SITE ADDRESS	DATE	DRAWING NUMBER	REVISION
OPERATIONS STRUCTURAL	273115	LISMAN KY, KY	43119272B	6522 US HWY 41A SOUTH PROVIDENCE, KY 42450	3/16/09	ВОМ	0

BILL OF MATERIALS										
QUANTITY REQUIRED	QUANTITY SHIPPED	PART NUMBER	DESCRIPTION	LENGTH	DRAWING NUMBER	WEIGHT (lbs)	COMMENTS			
			REBARS							
12		~-	#5 REBAR GRADE 40	21'-6"	A-1,A-2	269				
34		7.7	#10 REBAR GRADE 60	7'-3 7/8"	A-1,A-2	1072				
176			#8 REBAR GRADE 60	31'-6"	A-1,A-2	14803				
										
										
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	1			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
				-						
					TOTAL WEIGHT:	16144	PAGE 1 O			

GENERAL

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- 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, 318-99.
- 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. 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, LINESS 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

	HOTHE OF ZERY OOK DIVE BOT HOT EXCEEDING O'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.



structural engineering 8505 FREEPORT PARKWAY SUITE 135 IRVING, TX 75063 (972) 999-8900 Tel. (972) 999-8940 Fax

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SITE NUMBER: 273115

SITE NAME:

LISMAN KY. KY

SITE ADDRESS:

6522 US HWY 41A SOUTH PROVIDENCE, KY 42450

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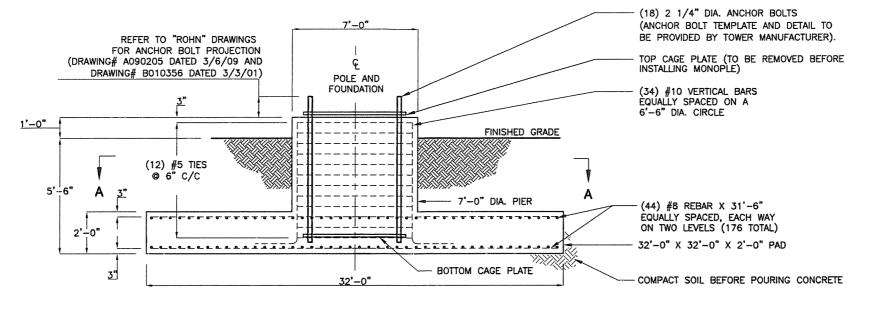
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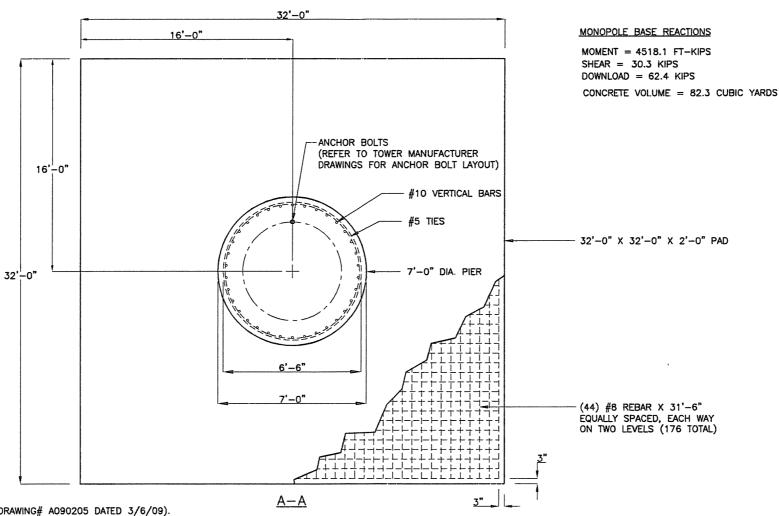
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ELEVATION



<u>NOTES</u>

- FOUNDATION DESIGNED FOR A "ROHN" 195' MONOPOLE (ENG. FILE# 060-5994, DRAWING# A090205 DATED 3/6/09). REFERENCE "ROHN" DRAWINGS FOR ANCHOR BOLT INSTALLATION REQUIREMENTS.
- 2. FOUNDATION DESIGN WAS BASED ON SOIL REPORT PROVIDED BY TRI-STATE GEOSCIENCES, LLC WITH PROJECT#08CTCIV0307G DATED 10/13/08. REFERENCE THE SOIL REPORT FOR ADDITIONAL CONSIDERATIONS AND REQUIREMENTS.
- 3. MEDIUM STIFF CLAY WAS REPORTED FROM THE GRADE TO THE 13.5' BELOW GRADE.
- 4. GROUNDWATER WAS ENCOUNTERED @ APPROX. 5'-3" BELOW THE GRADE SURFACE. THE USE OF DEWATERING METHOD MAY BE REQUIRED IN CONSTRUCTION.
- 5. CONCRETE SLUMP: 2"~4
- 6. FOUNDATION REACTIONS WERE OBTAINED FROM "ROHN" TOWER DESIGN DRAWING (ENG. FILE# 060-5994, DRAWING# A090205 DATED 3/6/09).
- 7. FOUNDATION BASE SHOULD REST ON FIRM AND LEVELED SURFACE.

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STRUCTURAL
ENGINEERING
8505 FREEPORT PARKWAY
SUITE 135
IRVING, TX 75063
(972) 999-8900 Tel.
(972) 999-8940 Fax
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LISMAN KY, KY

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	ATC JOB NO:	43119272B							

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PIER AND PAD FOUNDATION DETAILS (SECONDARY DESIGN

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	·	BAR	LIST FOR RE	INFORCING S	TEEL (PIER	AND PAD FOU	NDATION SE	CONDARY DESIGN)	
QTY REQ'D.	BAR SIZE		L LENGTH F BAR	TOTAL WEIGHT	TYPE	DIMENSION	BENDI	NG DIAGRAM	
NEQ D.	SIZL			(LBS)		 			
12	# 5	21	'-6"	269		A= 6'-6"			
						OVERLAP= 1'	1"		`
			***************************************					()	A
					TIE				
								OVE	RLAP
								<i>y</i> _ <i>y</i> _	
						A 51 58		<u></u>	
34	#10	7	'-3 7/8"	1072		A= 5'-5"			
						B= 1'-3"		A	5"
						RADIUS= 5"			RADIUS
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176	ll o			11007		. 741 07			
176	#8		1'-6"	14803		A=31'-6"			
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			SIZES & V		SPEC	IAL NOTES	STANDA	RD REBAR HO	
BAR NO	LBS PE		DIA. INCH	ES GRADE	-			90° HOOK	135° HOOK
3	.373		.375					5" 7"	8" 10"
5	1.04		.500 .625	40				9"	-
6	1.50		.750		-			10"	_
7	2.04		.875					1'-0"	_
8	2.67		1.000	60				1'-2"	_
9	3.40		1.128					1'-4"	-
10	4.30		1.270					1'-5"	

GENERAL FOUNDATION CONSTRUCTION NOTES

- ALL REBAR (HORIZONTAL & VERTICAL) SHALL BE SECURELY WIRE TIED TO PREVENT DISPLACEMENT DURING POURING OF CONCRETE.
- CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS.
- REINFORCED CONCRETE CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH ACI STANDARDS 318.
- 4. MINIMUM CONCRETE COVER OVER REBAR IS 3".
- BACKFILL SHALL BE SELECTED MATERIAL, WELL COMPACTED IN LAYERS NOT EXCEEDING 12".
- BACKFILL SHALL BE PLACED SO AS TO PREVENT ACCUMULATION OF WATER AROUND THE FOUNDATION.
- 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).
- REINFORCING STEEL PLACEMENT: PLUS OR MINUS 1/2" INCLUDING CONCRETE COVER.



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ATC JOB NO:	43119272B				

SHEET TITLE:

BAR LIST FOR REINFORCING STEEL AND GENERAL NOTES

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Geotechnical Exploration
Self-Supporting Tower
Providence, Webster County, Kentucky
Project No: 08CTCIV0307G

October 13, 2008

Prepared for:

Civil & Environmental Consultants, Inc. Ms. Lori Parker 405 Duke Drive, Suite 270 Franklin, TN 37067

Prepared by:

*Tri-State Geosciences, LLC*A subsidiary of Gallet & Associates, Inc.

CANNON

John D. Cannon, P.E. Senior Geotechnical Engineer



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Project No. 08CTCI

EXECUTIVE SUMMARY

This report presents the results of the Geotechnical Exploration performed for a self-supp tower in Providence, Kentucky. The purpose of this study was to explore the general subst conditions of the subject site and determine the effect on design and construction of foundation proposed tower.

The field exploration program consisted of drilling and sampling one (1) Standard Penetration (SPT) boring. The subsurface exploration indicated that the soil at the site is suitable for supp shallow foundations provided that the design of foundations, site preparation and construction accordance with the recommendations presented in this report.

The soil profile consisted of topsoil underlain by residual soil. The stiff clayey silt (ML) and clay (CL/CH) was encountered to the depth of auger refusal, 13.5 feet. Rock was cored to a de 15 feet below auger refusal. The boring was terminated about 28.5 feet below ground surface site appears suitable for support of a shallow foundation on stiff residual soil or a drilled foundation extending through soil and the upper weathered rock, bearing on sound, weathered at a depth of at least 20 feet.

The development of the site as relates to ancillary structures should include stripping and remo vegetative cover, and any other deleterious materials that fall within the proposed construction After clearing and prior to placement of any fill, the exposed subgrade should be thoro proofrolled with a fully loaded tandem-axle dump truck or other similar equipment with pneu tires. Any soft or deflecting soils disclosed by proofrolling should be undercut and replaced suitable properly compacted engineered fill.

It should be noted that this section is only intended to represent a brief summary o findings, and is not a detailed account of all the information compiled in preparation of report. For more detailed design recommendations and specific site conditions recommend reviewing this report in its entirety.





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Appendix A Appendix B Appendix C	Soil Boring Logs Field Exploratory Procedures Key to Test Data	

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Self Supporting Tower Providence, Kentucky October 13, 2008	Project No. 08CTCIV0307G	
1.0 O	BJECTIVES OF EXPLORATION	
recommendations for design and c	as to obtain data on general subsurface conditions and to provide construction of foundations. An assessment of site environmental ollutants in the soil, surface water, or ground water of the site was all exploration.	
<u>2.</u>	O PROJECT INFORMATION	
shown on the Site Location Ma Environmental Consultants (CEC) information was not available at grading will be required to achieve	Hwy 41 A South in Providence, Webster County, Kentucky, as p, Figure 1. Based on the information provided by Civil & the project will consist of a self-supporting. Structural loading the time of report preparation. We anticipate only minimal site desired elevations. The tower is proposed to be constructed on a face elevation at the base will be approximately 410 feet (MSL).	
<u>3.</u> (SCOPE OF EXPLORATION	
near the proposed tower base locat using the Standard Penetration Te Appendix A. The drilling and s procedures summarized in Appendix at 13.5 fe coring 15 feet beyond auger refusal rock samples were delivered to our professional staff. Soil and rock de Log in Appendix A. Information or based on field logs and visual class	oration included a site reconnaissance and drilling one (1) boring ion, as shown on Figure 2. Soils were sampled at regular intervals set (SPT). The field test results are shown on the boring log in sampling were performed in general accordance with ASTM dix B. The soil sampling was completed to the depth of auger set below ground level. Samples of rock were then obtained by with the boring terminated 28.5 feet below ground level. Soil and laboratory where they were visually classified by a member of our escriptions and other information are included on the Soil Boring in the logs represents our interpretation of the subsurface conditions sification of samples. Strata boundaries shown on the Soil Boring soil layers that may not be as distinct in larger excavations as	
<u>4.0</u>	AREA AND SITE GEOLOGY	
Plateau Physiographic Province, w New York. The formations that und and sandstone, which are flat to subjected to weathering and erosion and have been subject to at least of Erosion has produced a series of de-	ong the west edge of the Mississippian Plateau of the Appalachian hich extends almost unbroken from Central Alabama to southern derlie this province consist primarily of limestone, dolomite, shale, gently dipping and have been uplifted in the geologic past and a. These formations range in age from Cambrian to Pennsylvanian one extensive period of erosion since their structural deformation. Emply dissected valleys. The valleys are formed over more soluble whereas bedrock more resistant to solution weathering (sandstone, pridgetops.	
	the site is underlain by the the Patoka Formation (Pp), Middle to a consists of shale and limestone previously mapped as the Lisman nestone Member.	
Galet	Copyright 2008© In State Governor, IIC and realizing of Gold & Annexistic for	

5.0 SITE & SUBSURFACE CONDITIONS

5.1 SITE CONDITIONS

At the time of drilling, the site was undeveloped and covered with volunteer grass, weeds and scattered trees. Trees surrounded the property from all sides and an existing house with garage is present.

5.2 SUBSURFACE CONDITIONS

13.5'-18.5' 18.5' - 23.5' 18 18.5' - 23.5' 18 18.5' - 23.5' 18 18.5' - 23.5' 18 18.5' - 23.5' 18 18.5' - 23.5' 18 18.5' - 23.5' 18 18.5' - 23.5' 18 18.5' - 23.5' 18 18.5' - 23.5' 18 18.5' - 23.5' 18 18.5' - 23.5' 18 18.5' - 23.5' 18 18.5' - 23.5' 18 18 18 18 18 18 18 18 18 1				T	
18.5'-23.5' 78 8.3 Limestone Recovery is the percentage of the total length of recovered rock core pieces to the length of the run. RQD, rock quality designation, is the ratio, expressed as a percentage, of the total length of pieces that are more than 4 inches long divided by the total length of the core run. The rock of descriptions are provided as an indicator of relative strength and soundness for foundation supports are provided as an indicator of relative strength and soundness for foundation supports are provided as an indicator of relative strength and soundness for foundation supports are provided as an indicator of relative strength and soundness for foundation supports are provided as an indicator of relative strength and soundness for foundations are provided as an indicator of relative strength and soundness for foundations are provided as an indicator of relative strength and soundness for foundations are considered suitable for foundations and for grind during the drilling provided that weathered shale has a tendency to wash and/or grind during the drilling provided that weathered shale has a tendency to wash and/or grind during the drilling provided to suitable for foundations are considered suitable for foundations are considered suitable for foundations ground water was encountered at a depth of about 5.3 feet. We anticipate any ground encountered during construction will be "perched" above the soil-rock interface. Fluctuations ground water levels can occur because of variations in seasonal moisture and locally heavy revents. If the tower utilizes shallow foundations, a relatively minor amount of groundwater coefficients and developed provided to be a major complicating factor foundation construction. If a drilled pier foundation is chosen, water should be controllable utombination of temporary casing and dewatering pumps.		Core Interval	Recovery (%)	RQD (%)	Rock Quality
Recovery is the percentage of the total length of recovered rock core pieces to the length of the run. RQD, rock quality designation, is the ratio, expressed as a percentage, of the total length of pieces that are more than 4 inches long divided by the total length of the core run. The rock of descriptions are provided as an indicator of relative strength and soundness for foundation supplied by the total length of the core run. The rock of descriptions are provided as an indicator of relative strength and soundness for foundation supplied in general, shale bedrock with a recovery in excess of 70 percent is considered suitable for found support. 5.3 GROUND WATER CONDITIONS Ground water was encountered at a depth of about 5.3 feet. We anticipate any ground encountered during construction will be "perched" above the soil-rock interface. Fluctuations are provided as a relatively minor amount of groundwater construction. If the tower utilizes shallow foundations, a relatively minor amount of groundwater constructed, depending on precipitation, but is not expected to be a major complicating factor foundation construction. If a drilled pier foundation is chosen, water should be controllable uncombination of temporary casing and dewatering pumps. 6.0 SITE PREPARATION RECOMMENDATIONS Since only one boring was drilled, it is possible that variations in soil conditions we rencountered during construction. To permit correlation between the anticipated substructions and the actual subsurface conditions encountered during the construction phase recommend that an engineer or qualified soils technician from TSG be retained for the construction phase recommend that an engineer or qualified soils technician from TSG be retained for the construction.		· · · · · · · · · · · · · · · · · · ·			
Recovery is the percentage of the total length of recovered rock core pieces to the length of the run. RQD, rock quality designation, is the ratio, expressed as a percentage, of the total length of pieces that are more than 4 inches long divided by the total length of the core run. The rock of descriptions are provided as an indicator of relative strength and soundness for foundation supplies and that weathered shale has a tendency to wash and/or grind during the drilling parting general, shale bedrock with a recovery in excess of 70 percent is considered suitable for foundations support. 5.3 GROUND WATER CONDITIONS Ground water was encountered at a depth of about 5.3 feet. We anticipate any ground encountered during construction will be "perched" above the soil-rock interface. Fluctuations ground water levels can occur because of variations in seasonal moisture and locally heavy revents. If the tower utilizes shallow foundations, a relatively minor amount of groundwater coencountered, depending on precipitation, but is not expected to be a major complicating factor foundation construction. If a drilled pier foundation is chosen, water should be controllable uncombination of temporary casing and dewatering pumps. 6.0 SITE PREPARATION RECOMMENDATIONS Since only one boring was drilled, it is possible that variations in soil conditions we encountered during construction. To permit correlation between the anticipated substructions and the actual subsurface conditions encountered during the construction phase recommend that an engineer or qualified soils technician from TSG be retained for the construction struction.			<u> </u>	**************************************	Interbedded Shale and
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Project No. 08CTCIV0307G

preparation. If the project team chooses to retain another firm to provide the construction phase services, that firm should carefully read our report and agree to sign on as the Geotechnical Engineer of Record and agree with the recommendations prior to start of work. Furthermore, if this project will be designed per IBC, the firm selected for the construction phase services and special inspections should NOT be under the contractor's contract since Section 1704 of the IBC requires the owner to contract directly with the firm providing special inspection.

The actual construction means and methods are the responsibility of the contractor(s). The following construction related items pertain to general site preparation for the foundation support and are **not** intended to address all possible construction related concerns.

No significant surface preparation is required for the tower foundation itself. However, if grading is done for associated buildings or pavements, all vegetation, topsoil, roots, asphalt, base stone, and any debris should be stripped and removed from the site. The generally loose/soft condition of surface soils indicates a strong probability that undercutting and backfilling with engineered fill will be required in the upper 3 to 4 feet. As an alternative, foundations should bear on the stiff/dense residual/highly weathered rock surface. Where subgrade improvement is undertaken, the area should be proofrolled to identify any areas of instability. One of TSG's geotechnical engineers, and/or technicians should observe subgrades and proofrolling operations. Proofrolling should not be done after a period of wet weather to avoid degrading an otherwise acceptable subgrade. Proofrolling should be performed with a heavily loaded tandem axle dump truck or similar approved construction equipment. The equipment should make at least four passes over each section, with the last two passes perpendicular to the first two. Positive surface drainage should be maintained to prevent the accumulation of water on subgrades. If the exposed subgrades become excessively wet or frozen, or if conditions differ from those described previously in this report are encountered, TSG should be contacted. Subgrade stabilization requirements will be refined during the grading process based on the performance of the subgrades during proofrolling.

It should be pointed out that the enclosed recommendations could be amended depending on the actual finish grade elevations. We request permission to evaluate the finish site plans and possibly amend our recommendations accordingly.

6.1 FILL SELECTION, PLACEMENT AND COMPACTION

All material to be used as fill should be evaluated, tested and approved by the geotechnical engineer.



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and soften if placed and compacted below optimum moisture. Thus the grading contractor should be prepared to add moisture or aerate to reduce moisture as needed.

6.2 FOUNDATION EXCAVATIONS

The bottom surface of footing excavations may become loosened by bucket teeth, equipment movement, or other disturbance, requiring additional compaction effort. The foundation excavation should be observed by a geotechnical engineer or qualified representative from our office acting under the supervision of the geotechnical engineer to verify that all loose, soft or other undesirable material is removed and that the foundation bears on satisfactory undisturbed residual material or suitably compacted fill. At the time of such observation, it may be necessary to perform hand auger borings, a hand penetrometer probe and/or density tests in the base of the foundation excavations to verify that the above recommendations are adhered to. The necessary depth of penetration testing will be established during inspection.

If soft soils are encountered in footing excavations for incidental structures and it is inconvenient to lower the footing bearing elevation, the proposed footing elevation may be re-established by backfilling after the undesirable material has been removed. Lean concrete, compacted soil or dense-graded base stone may be used to backfill the bottom of the excavation to the design bearing elevation. Fill materials other than concrete should be compacted to a dry density of at least 98 percent of the maximum standard Proctor density value (ASTM D-698) provided the footing is designed as outlined in this report. Open-graded (washed) stone should not be used for this purpose to limit water infiltration and softening of foundations subgrades. An only minor amount of additional undercutting is expected.

Exposure to the environment may weaken soils at the foundation bearing level if excavations remain open. Therefore, concrete should be placed as soon as possible after excavations are made. Bearing soils softened by surface water intrusion or exposure must be removed from the foundation excavation bottom before placement of concrete. If the excavation must remain open overnight, or if rainfall becomes imminent while bearing soils are exposed, we recommend placing a 2- to 4-inch-thick "mud-mat" of "lean" concrete on the bearing soils for protection. Foundation bearing areas should be level or suitably benched, and free of loose soil, water, and debris.

7.0 FOUNDATION RECOMMENDATIONS

These recommendations are based in part on the project information and soil conditions encountered, as well as past experience on projects involving similar soils and loading conditions. Changes in geometry, structural information, and floor elevations can have a significant effect on the applicability of the recommendations. For this reason, TSG should be given the opportunity to review this report when the final structural design has been completed.

7.1 FOUNDATION DESIGN

Considering the nature of the proposed project and the subsurface data encountered, we believe the subsurface conditions to be suitable for the use of either shallow foundations or drilled piers for support of the tower.

7.2 SHALLOW FOUNDATIONS

Based on the conditions encountered, shallow foundations may be used, provided they bear on the stiff residual soil. We recommend bearing foundations at a depth of at least 5 feet below the existing





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ground surface. Under sustained loads, foundations bearing on stiff or better residual soils may be sized for a maximum allowable bearing pressure of 3 kips per square foot (ksf) for static and transient loading conditions. This bearing value provides a minimum factor of safety of at least three (3).

The estimated modulus of subgrade reaction (k) of intact stiff residual soil is 125 pci (pounds per square inch per inch of deflection). The actual modulus value may be higher, but it is likely an excessive amount of movement would be required to fully develop the modulus. Consequently, a lower value is recommended for design of the mat.

Uplift forces will be resisted by the dead load of the structure, the buoyant weight of the foundation, and the buoyant weight of backfill above the foundation, considering the soil directly above the footing and extending out from the top edge at an angle of 30° below the vertical. An appropriate factor of safety should be applied to lateral and uplift forces calculated using these values.

7.3 DRILLED SHAFT FOUNDATIONS

The design of the foundations for drilled shafts bearing on sound rock will utilize both end bearing and skin friction/adhesion along the circumference of the shaft imbedded in the rock. Based on 7.5 ksf bearing for sound, weathered rock, allowable capacities for bearing and uplift resistance have been estimated for piers of varying diameters and depths and are provided in Figures 3 and 4. The figures are based on the assumption that stiff soil is encountered at a depth of 4 feet, highly weathered rock at 13.5 feet, and sound weathered rock below a depth of 18.5 feet. If the depths to weathered and sound rock differ, the bearing depth of the pier should be altered accordingly. Figure 3 provides the allowable capacities for support of downward axial forces. These include components of adhesion between the soils and the concrete as well as bearing at the bottom of the pier. Figure 4 provides allowable uplift capacities that include only adhesion and friction between the concrete portions of the pier embedded in the rock. The values shown on these charts provide a factor of safety of at least three (3) against shear failure. In any case, we recommend bearing the pier at least 5 feet into sound weathered rock.

The following notes are general recommendations for drilled pier construction:

- As the drilled pier hole is advanced, a temporary protective steel casing should be installed in the drilled hole. A properly designed steel casing will greatly reduce the possibility of sidewall collapse. Additionally, steel casing will reduce mud and water intrusion into the excavation and allow worker access for cleaning and observation of the bearing materials.
- The protective steel casing may be extracted as the concrete is placed. However, the contractor should maintain a sufficient volume of concrete inside the casing to prevent the intrusion of soil and water below the casing.
- In dry pier holes or where the water has been pumped out of the hole, we recommend the concrete be directed through a centering chute or tremie at the surface to limit contact with the reinforcing steel. This procedure will reduce side flow and segregation of the concrete.
- Concrete designed for higher slump ranges is recommended. A slump ranging from five (5) to seven (7) inches is recommended for dry pier construction where the protective casing is pulled. A slump of 7 to 8 inches is recommended for concrete placed by tremie or pumping methods. Concrete with slumps in these ranges is better suited to fill irregularities along the sides, bottom of the pier, and displace water as it is placed.





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7.4 LATERAL LOADS

Lateral forces may be resisted by friction acting along the base on the foundation and by passive resistance acting against the face of the foundation, when the concrete is cast neat against the sidewalls of the excavation. A coefficient of friction (n) of 0.35 may be used to calculate the friction forces acting along the bottom of the mat. A passive pressure lateral earth pressure coefficient (Kp) of 2.6 may be used (Φ =28°) for soil. The moist unit weight of the soil is estimated to be 115 pounds per cubic foot. Because of desiccation cracks and other near-surface effects, ignore the upper three feet of soil when calculating passive resistance. Appropriate factors of safety should be applied to each of these values.

If drilled piers are used to resist uplift and lateral anchor loads, the lateral resistance may be estimated by using a lateral modulus of subgrade reaction of 800 pci (psi per inch of deflection). This value can be used with the projected area of the length of the pier embedment into the rock to determine the lateral capacity. A typical allowable deflection for a laterally loaded pier is 0.25 inch. Because of differential weathering, unknown joint spacing and other variables, we recommend applying a factor of safety of 5.

7.5 SEISMIC RECOMMENDATIONS

The site is located at latitude 37° 26' 21" N and longitude 87° 42' 39" W and is in Providence, Webster County, Kentucky. Based on the 2006 International Building Code (IBC) and based on the provisions listed in the IBC, this site is classified as "Class C". Using the IBC information, the short and 1.0 second spectral accelerations were determined for ground motions with a 2 percent probability of exceedance in 50 years (Recurrence Interval of 2,475 years). The acceleration values were determined using IBC spectral acceleration data provided by the United States Geological Survey (USGS) Earthquake Hazards Program for Site Class B. Site coefficients were then used to modify the results per the IBC. The design spectral acceleration values are listed in the lower row of the table. These values were not determined by a site-specific seismic study, but were derived from interpolation of values provided by IBC.

The acceleration values were determined using IBC spectral acceleration data provided by the United States Geological Survey (USGS) Earthquake Hazards Program for Site Class B. These values were not determined by a site-specific seismic study, but were derived from interpolation of values provided by IBC.





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The following spectral accelerations requirements indicate the following values:

IBC Design Value	0.2 Sec Period Spectral Response	1.0 Sec Period Spectral Response
Horizontal Spectral Accelerations, (g) for Class B Sites	$S_s = 0.751$	$S_1 = 0.221$
Site Coefficients	$F_a = 1.10$	F ₁ = 1.579
Site Modified Spectral Accelerations (g) for Class C Sites	S _{MS} =0.826	S _{M1} =0.349
Site Modified Design Spectral Accelerations, (g) for Class C Sites	$S_{DS} = 0.551$	$S_{D1.0} = 0.233$

$$S_{DS} = (S_S) \times (F_a) \times (\frac{1}{3})$$
 $S_{D1} = (S_1) \times (F_V) \times (\frac{1}{3})$

8.0 BASIS OF RECOMMENDATIONS

The conclusions and recommendations presented herein are based on currently accepted engineering principles and practices and on existing testing standards. The recommendations provided herein were developed from the information obtained from the field and laboratory programs that were performed at the specific locations and dates indicated on the boring logs. The nature and extent of variations throughout the geological profile may vary from the locations explored. If the location or structural characteristics of the proposed development should change, TSG should be retained prior to issue of contract documents to review and revise the provided recommendations.

Due to the variation in subsurface conditions and the probability that the actual conditions will vary from those encountered in the preparation of this report, TSG should be retained during the construction phase of the work to review and confirm actual field conditions. If the project chooses to retain another firm to provide the construction phase services, that firm should ca read our report and agree to sign on as the Geotechnical Engineer of Record and agree v recommendations prior to start of work. If this project is designed per the IBC, the firm s for the construction phase services and special inspections should NOT be under the contra contract, as indicated in Section 1704 of the IBC, which states the owner is to contract direct the firm providing Special Inspection.

This report is for the exclusive use of Civil & Environmental Consultants, Inc. and ass designers and builders of the project described herein, and may only be applied to this specific The right to rely upon this report and the data within may not be assigned without TS Geosci LLC's written permission.





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Project No. 08CTCIV0307G

Our exploration services include storing the collected samples and making them available for inspection for a period of 30 days. The samples then are discarded unless requested otherwise.





FIELD EXPLORATORY PROCEDURES

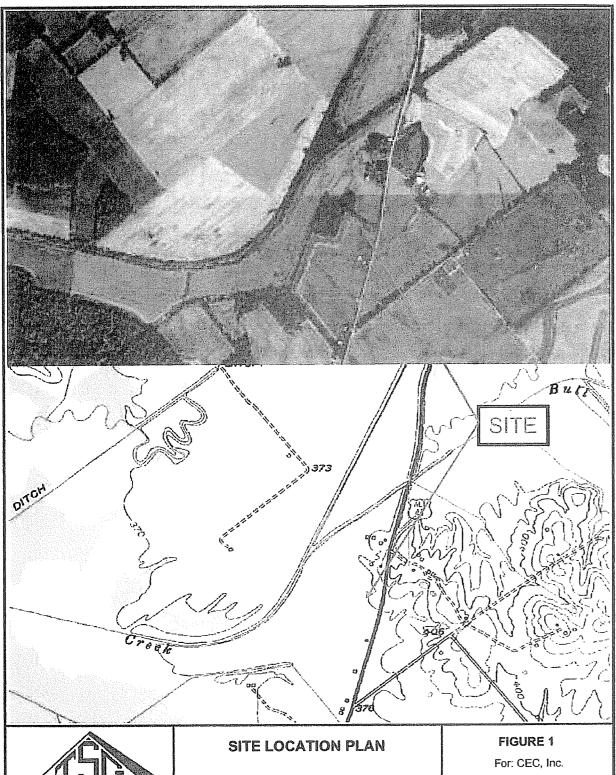
Soil Test Boring and Standard Penetration Test (SPT) Sampling

All boring and sampling operations were conducted in general accordance with ASTM D 1586. The borings were advanced by mechanically turning steel, continuous flight, hollow-stem augers into the ground. At regular intervals (four in the upper 10 feet, then every 5 feet), soil samples were obtained with a standard 1.4-inch I.D., 2-inch O.D., split-tube sampler. The sampler was driven with a hammer that weights 140 pounds that is dropped 30 inches. The number of blows necessary to drive the sampler 18 inches is recorded in 3 increments of 6 inches each. The first increment is normally disregarded as the sampler may be penetrating loose cuttings. The number of hammer blows required to drive the sampler the final foot is considered to be the N-Value or standard penetration resistance. If denser soil or rock is encountered, more than 50 blows may be required to advance the sampler 6 inches. At 50 blows with less than 6 inches of penetration, the test is terminated at that depth. The N-Values provide information about the consistency of the underlying soil. Correlations and inferences can be made using these values to certain index properties of the insitu soil, such as strength, density, and settlement characteristics.

Representative portions of the soil samples obtained from the split-tube sampler were sealed in plastic bags and transported to our laboratory, where they were examined by our engineer to verify the driller's field classifications. Soil Boring Logs are attached, graphically showing the soil descriptions and penetration resistances.





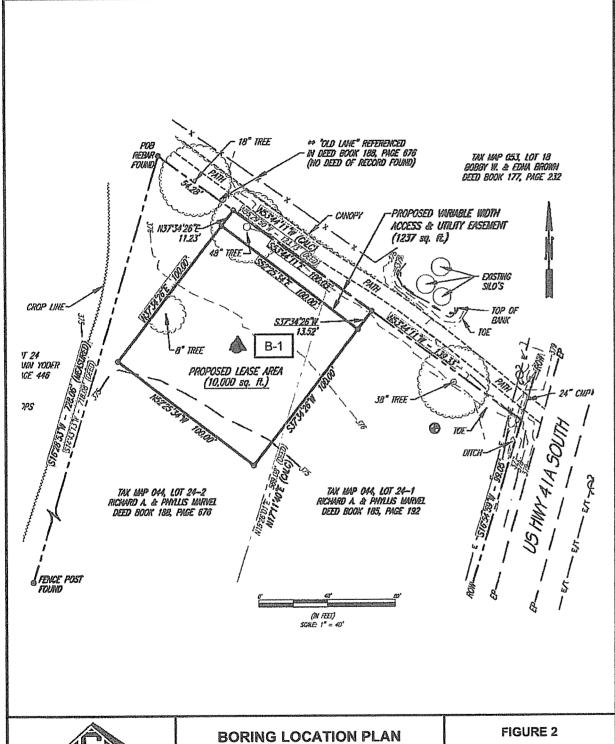




Tri-State Geosciences, LLC 6228 Bonny Oaks Dr. – Chaltanooga, TN 37416 (423) 855-5563 fax (423) 855-5249 Project Name: Self Supporting Tower (Lisman)
Location: Providence, Kentucky

For: CEC, Inc.
Project No: 08CTCIV0307G
Date: October 13, 2008

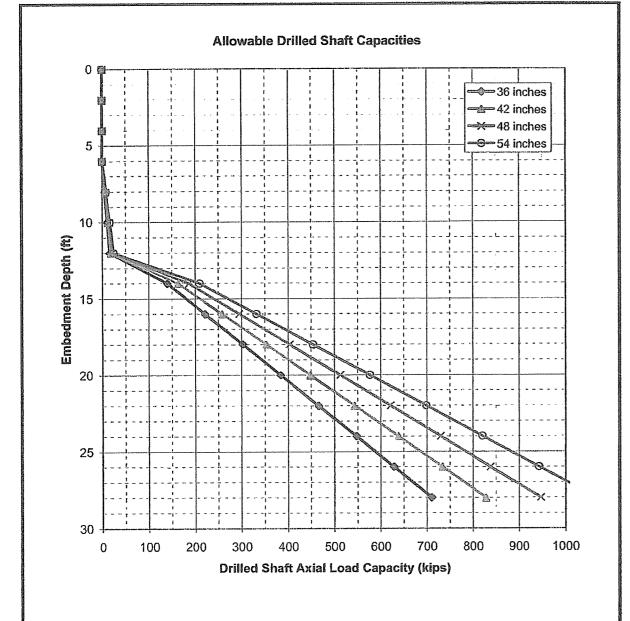
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Tri-State Geosciences, LLC 6228 Bonny Oaks Dr. – Chattanooga, TN 37416 (423) 855-5563 fax (423) 855-5249 Project: Self Supporting Tower Providence, Kentucky For: CEC, Inc
Project No: 08CTCIV0307G
Date: October 13, 2008

Not to Scale



Passive resistance against the face of the pier may be used to resist lateral forces.

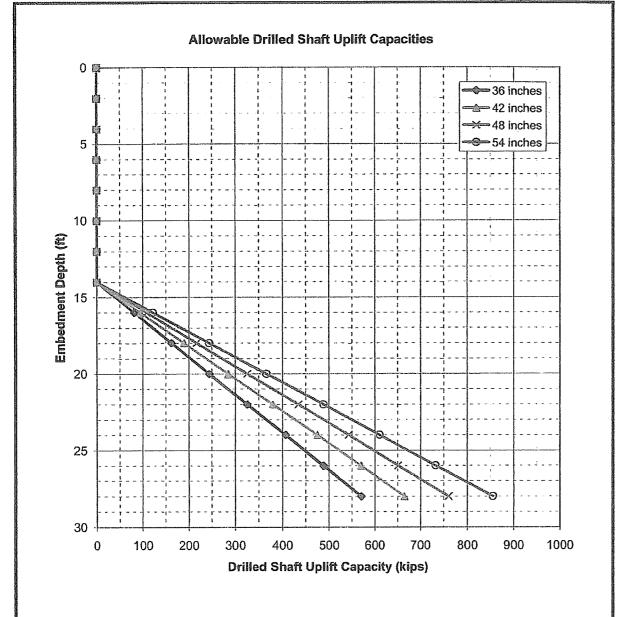


Tri-State Geosciences, LLC a subsidiary of Gallet & Associates, Inc. 6228 Bonny Oaks Drive Chattanooga, TN 37416 (423) 855-5563

Self Supporting Tower Providence, Webster County, Kentucky

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FIGURE For: CEC, Inc. Franklin, Tennessee



Passive resistance against the face of the pier may be used to resist lateral forces.

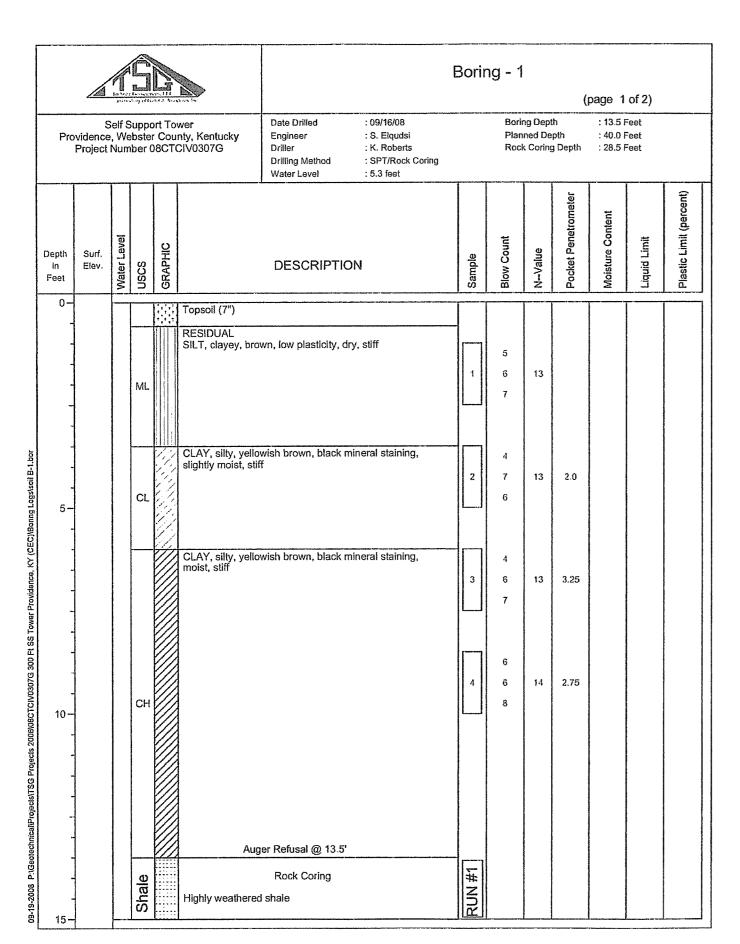


Tri-State Geosciences, LLC

a subsidiary of Gallet & Associates, Inc. 6228 Bonny Oaks Drive Chattanooga, TN 37416 (423) 855-5563 Self Supporting Tower
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For: CEC, Inc.

FIGURE



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Important Information About Your

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Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared solely for the client. No one except you should rely on your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. And no one — not even you — should apply the report for any purpose or project except the one originally contemplated.

Read the Fell Resert

Serious problems have occurred because those relying on a geotechnical engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

A Coolectrical Engineering Report is Based on A Unique Set of Project-Specific Factors

Geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical engineering report that was:

- not prepared for you.
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical engineering report include those that affect:

 the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,

- elevation, configuration, location, orientation, or weight of the proposed structure,
- composition of the design team, or
- project ownership.

As a general rule, always Inform your geotechnical engineer of project changes—even minor ones—and request an assessment of their impact. Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.

Substriace Conditions Can Change

A geolechnical engineering report is based on conditions that existed at the time the study was performed. Do not rely on a geotechnical engineering report whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. Always contact the geotechnical engineer before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.

Host Geotechnical Findings Are Professional Outsions

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ—sometimes significantly—from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide construction observation is the most effective method of managing the risks associated with unanticipated conditions.

A Report's Recommendations Are *Not* Final

Do not overrely on the construction recommendations included in your report. Those recommendations are not final, because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations only by observing actual

subsurface conditions revealed during construction. The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's recommendations if that engineer does not perform construction observation.

A Geotechnical Engineering Report is Subject to Misinterprotation

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Lower that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing construction observation.

Do Not Redraw the Engineer's Lous

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should never be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, but recognize that separating logs from the report can elevate risk.

Give Contractors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, but preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. Be sure contractors have sufficient time to perform additional study. Only then might you be in a position to give contractors the best information available to you, white requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

Read Responsibility Provisions Closely

Some clients, design professionals, and contractors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that

have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations" many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. Read these provisions closely. Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The equipment, techniques, and personnel used to perform a geoenvironmental study differ significantly from those used to perform a geotechnical study. For that reason, a geotechnical engineering report does not usually relate any geoenvironmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. Unanticipated environmental problems have led to numerous project failures. If you have not yet obtained your own geoenvironmental information, ask your geotechnical consultant for risk management guidance. Do not rely on an environmental report prepared for someone else

Ohtain Professional Assistance To Deal with Diverse strategies can be applied during building design, construcoperation, and maintenance to prevent significant amounts of mold growing on indoor surfaces. To be effective, all such strategies sho devised for the express purpose of mold prevention, integrated into prehensive plan, and executed with diligent oversight by a professi mold prevention consultant. Because just a small amount of water moisture can lead to the development of severe mold infestations. ber of mold prevention strategies focus on keeping building surface While groundwater, water infiltration, and similar issues may have addressed as part of the geotechnical engineering study whose fine are conveyed in this report, the geotechnical engineer in charge of project is not a mold prevention consultant; none of the service formed in connection with the neotechnical engineer's st were designed or conducted for the purpose of mold prev tion. Proper implementation of the recommendations co. in this report will not of itself he sufficient to prevent mo growing in or on the structure involved.

Rely, on Your ASTE-Number Geotechnoial Engineer for Additional Assistance

Membership in ASFE/The Best People on Earth exposes geotechnical engineers to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a construction project. Confer with you ASFE-member geotechnical engineer for more information.



8811 Colesville Road/Suite G106, Sitver Spring, MD 20910 Telephone: 301/565-2733 Facsimile: 301/589-2017 e-mail: info@asfe.org www.asfe.org

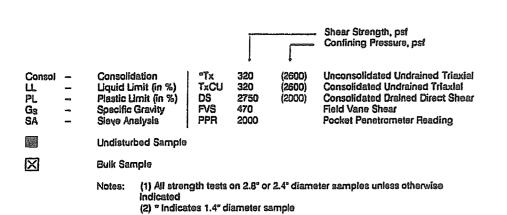
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UNIFIED SOIL CLASSIFICATION SYSTEM



KEY TO TEST DATA

PLATE

& ASSOCIATES, INC.

DRAWN JOB NUMBER APPROVED BY DATE REVISED DATE



Competing Utilities, Corporations or Persons

American Tower

Crown Communication

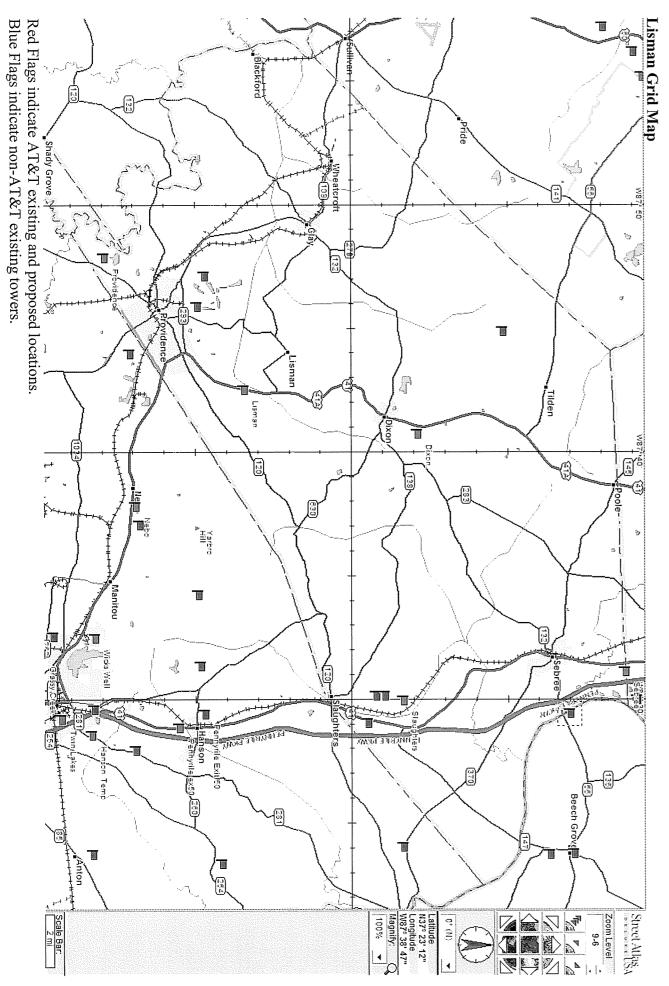
SBA Towers

Verizon

Sprint / Nextel

T-Mobile

Bluegrass Cellular



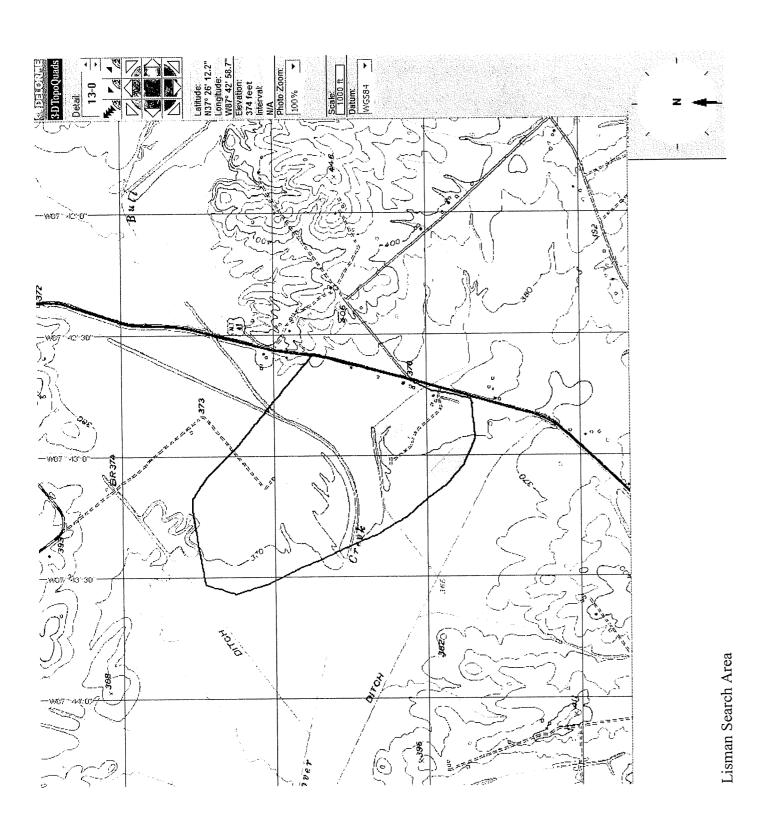
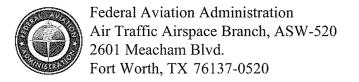


Exhibit G



Aeronautical Study No. 2008-ASO-4237-OE

Issued Date: 02/20/2009

AT&T Mobility LLC Muayyad Mustafa (LKB) 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 WPOI215 - Lisman

Location: Providence, KY

Latitude: 37-26-20.00N NAD 83

Longitude: 87-42-38.22W

Heights: 270 feet above ground level (AGL)

646 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) 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

See attachment for additional condition(s) or information.

This determination expires on 08/20/2010 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 subject to review if an interested party files a petition that is received by the FAA on or before March 22, 2009. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave., Washington, D.C. 20591.

This determination becomes final on April 01, 2009 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Office of Airspace and Rules via telephone -- 202-267-8783 - or facsimile 202-267-9328.

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.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

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

If we can be of further assistance, please contact Fred Souchet, at (847)294-7458. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2008-ASO-4237-OE.

Signature Control No: 589019-108351246 (DNH) Kevin P. Haggerty

Manager, Obstruction Evaluation Service

Page 2 of 6

Attachment(s)
Additional Information
Frequency Data
Map(s)

Additional information for ASN 2008-ASO-4237-OE

This proposed 270 ft. Antenna Tower would be located approximately 1.48 nautical miles northeast of the Providence (8M9) Airport. It would exceed the obstruction standards of Title 14, Code of Federal Regulations, Part 77:

Section 77.23(a)(2) by 53 feet - a height that exceeds a specified height within three miles of the airport reference point, as applied to 8M9.

The proposal was not circularized to the public for comments, as circularization is not required for structures that would exceed the above-cited standard and would be located outside the traffic pattern airspace. This does not affect the public's right to petition for review determinations regarding structures, which meet this criterion.

The proposed structure is located outside and/or below the traffic pattern airspace for all categories of aircraft that would normally utilize 8M9.

Aeronautical study disclosed that the proposed structure would have no effect on any existing or proposed arrival, departure, or en route instrument flight rule (IFR) operations or procedures.

Study for possible visual flight rules (VFR) effect disclosed that the proposed structure would have no effect on any existing or proposed arrival or departure VFR operations or procedures. It would not conflict with airspace required to conduct normal VFR traffic pattern operations at 8M9 or any other known public use or military airports.

At 270 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations. The proposed structure would be appropriately obstruction marked and/or lighted to make it more conspicuous to airmen should circumnavigation be necessary.

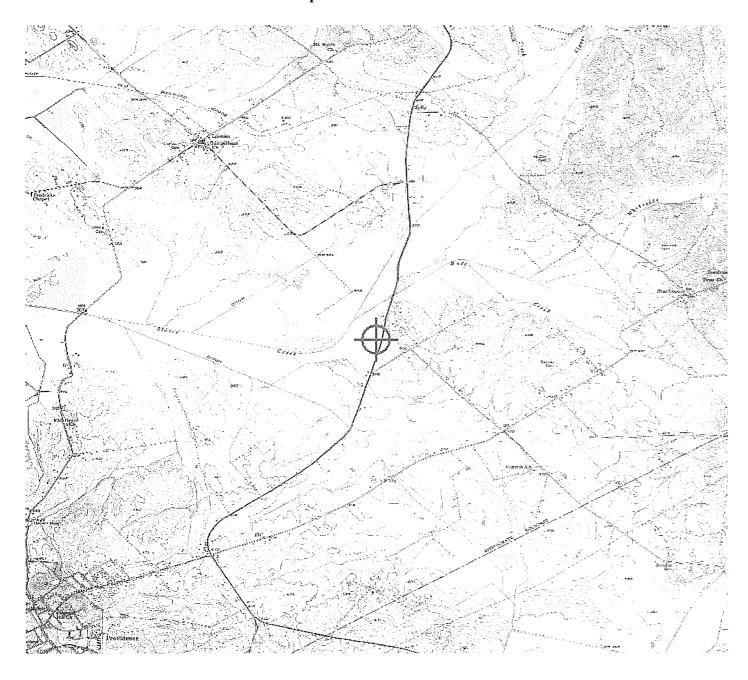
Therefore, it is determined that the proposed tower would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

Page 4 of 6

Frequency Data for ASN 2008-ASO-4237-OE

LOW	HIGH	FREQUENCY		ERP
FREQUENCY	FREQUENCY	UNIT	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

TOPO Map for ASN 2008-ASO-4237-OE



Kentuckij[®]

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

Kentucky Transportation Cabinet, Kentucky Airport Zoning Commission, 90 Air APPLICATION FOR PERMIT TO CONSTRUCT OR ALTERINSTRUCTIONS INCLUDED	
1. APPLICANT Name, Address, Telephone, Fax, etc. AT&T Wireless Attn: Lisa Glass 5310 Maryland Way Brentwood, TN 37027 (615) 221-3583 2. Representative of Applicant Name, Address, Telephone, Fax MPM, Inc. Attn: Roy Johnson 3605 Mattingly Road Buckner, KY 40010 (502) 222-4256 3. Application for: New Construction Alteration Existing 4. Duration: Permanent Temporary (Months	9. Latitude: 37 ° 26 20 00 " 10. Longitude: 87 ° 42 · 38 22 " 11. Datum: Nadas Nadas Nadar Other 12. Nearest Kentucky City: Providence County Nebster 13. Nearest Kentucky public use or Military airport: Providence - Webster County Airport 14. Distance from #13 to Structure: 1.49 NM / 9,032 feet 15. Direction from #13 to Structure: Northeast 16. Site Elevation (AMSL): 376 Feet 17. Total Structure Height (AGL): 199 Feet 18. Overall Height (#16 + #17) (AMSL): 575 Feet 19. Previous FAA and/or Kentucky Aeronautical Study Number(s): AS-117-8M9-2008-141 20. Description of Location: (Attach USGS 7.5 minute Quadrangle Map or an Airport layout Drawing with the precise site marked and any certified survey) See attached airspace study, 1A letter and topo map
Site Name: Lisman This tower received KAZC rejection	at 310'
22. Has a "NOTICE OF CONSTRUCTION OR ALTERATION" (FAA Form 7480-1 No ⊠ Yes, When 7/31/08 CERTIFICATION: I hereby certify that all the above statements made by me are Roy Johnson - Owner MPM Roy D. Johnson Printed Name and Title PENALTIES: Persons failing to comply with Kentucky Revised Statutes (KRS 18050:Series) are liable for fines and/or imprisonment as set forth in KRS 183.990(3 in further penaltiles.	true, complete and correct to the best of my knowledge and belief. March 04, 2009 Date 83.861 through 183.990) and Kentucky Administrative Regulations (602 KAR
Commission Action: □ Chai	irman, KAZC Administrator, KAZC
☐ Disapproved	Date

AT&T 1650 LYNDON FARMS COURT LOUISVILLE, KY 40223

Date: June 25, 2008

FSTAN Project No: 08-5303 Site Name: Lisman For Aeronautical Study No. Location: City Providence, Ky. County Webster U.S.G.S. Quadrangle: Nebo, Ky. (NAD 27) LATITUDE 37° 26' 19.84" LONGITUDE 87° 42' 38.18"

LATITUDE

SITE ELEVATION (NAVD 88)

LONGITUDE

1A Letter

(NAD 83)

I Certify, to the best of my knowledge and belief, that the horizontal and vertical datum as established from the referenced U.S.G.S. Quadrangle, is accurate to 1A Reporting requirements of \pm 20 feet horizontally and \pm 3 vertically.

37° 26' 20.00"

87° 42' 38.22"

376' ± AMSL

The horizontal datum (coordinates) are in terms of the North American Datum of 1927 (NAD 27) and 1983 (NAD 83) and expressed as degrees, minutes and seconds.

The vertical datum (heights) are in terms of the National Geodetic Vertical Datum of 1988 and are determined to the nearest foot.

Kentucky State Plane Coordinates (Southern Zone) were established with Trimble Global Positioning Systems (GPS) receivers. This site has ties to the National Geodetic Reference System established by the National Geodetic Survey, formerly the U.S. Coast & Geodetic Survey by measurements to PID Station "DK3316", designated as "KY HWY DIST 2 CORS ARP".

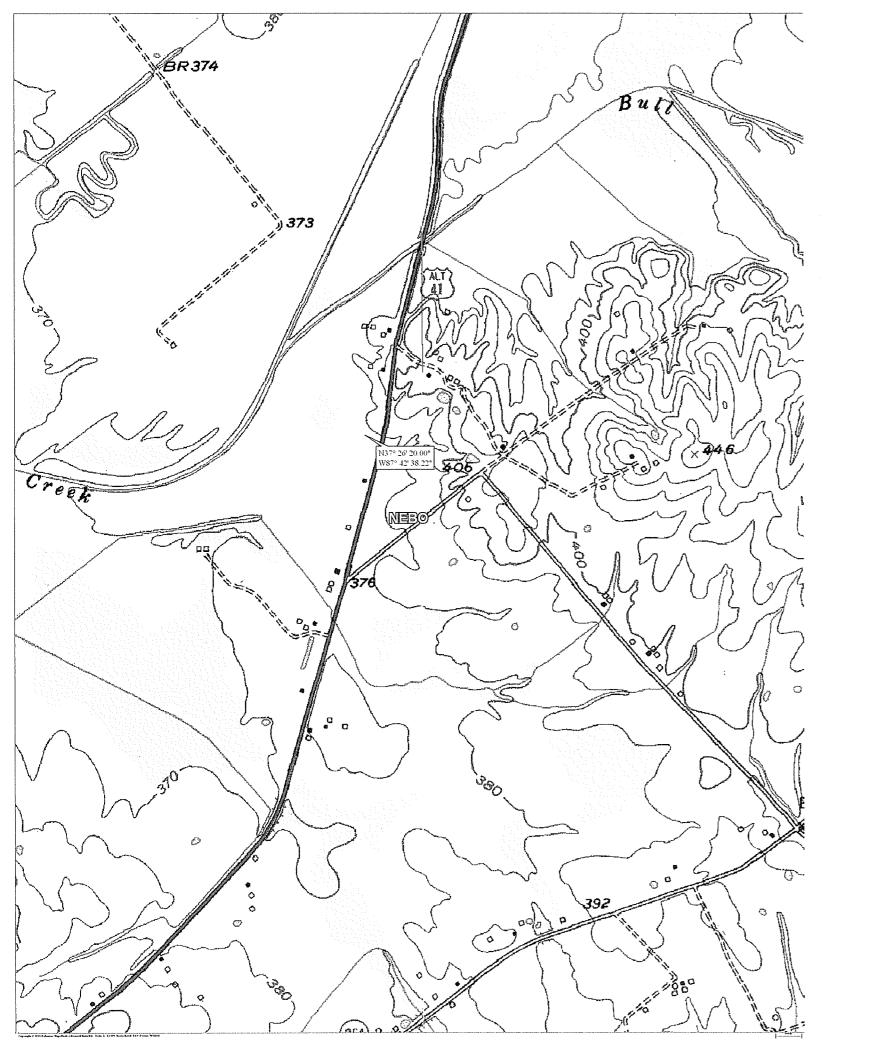
CONSULTANT

FRANK L.
SELLINGER

W3282
LICENSED
PROFESSIONAL
LAND SURVEYOR

LIAND SURVEYOR

Frank L. Sellinger, II, KY PLS No. 3282 FSTAN Land Surveyors and Consulting Engineers 2313/2315 Crittenden Drive, Louisville, Ky. 40217 Phone: 502-635-5866 Fax: 502-636-5263



ULS License

Cellular License - KNKN674 - NEW CINGULAR WIRELESS PCS, LLC

Call Sign KNKN674 Radio Service CL - Cellular Status Active Auth Type Regular

Market

Market CMA444 - Kentucky 2 - Union Channel Block A
Submarket 0 Phase 2

Dates

 Grant
 08/21/2001
 Expiration
 10/01/2011

 Effective
 02/08/2007
 Cancellation

Five Year Buildout Date

12/05/1996

Control Points

1 1650 Lyndon Farms Court, LOUISVILLE, KY

P: (502)329-4700

Licensee

FRN 0003291192 Type Limited Liability Company

Licensee

NEW CINGULAR WIRELESS PCS, LLC P:(469)229-7422 5601 LEGACY DRIVE, MS: A-3 F:(469)229-7297

PLANO, TX 75024 E:KELLYE.E.ABERNATHY@CINGULAR.COM

ATTN KELLYE E. ABERNATHY

Contact

AT&T MOBILITY LLC P:(202)255-1679
DAVID C JATLOW F:(561)279-2097

11760 US HIGHWAY 1 E:DAVID.JATLOW@CINGULAR.COM

NORTH PALM BEACH, FL 33408

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

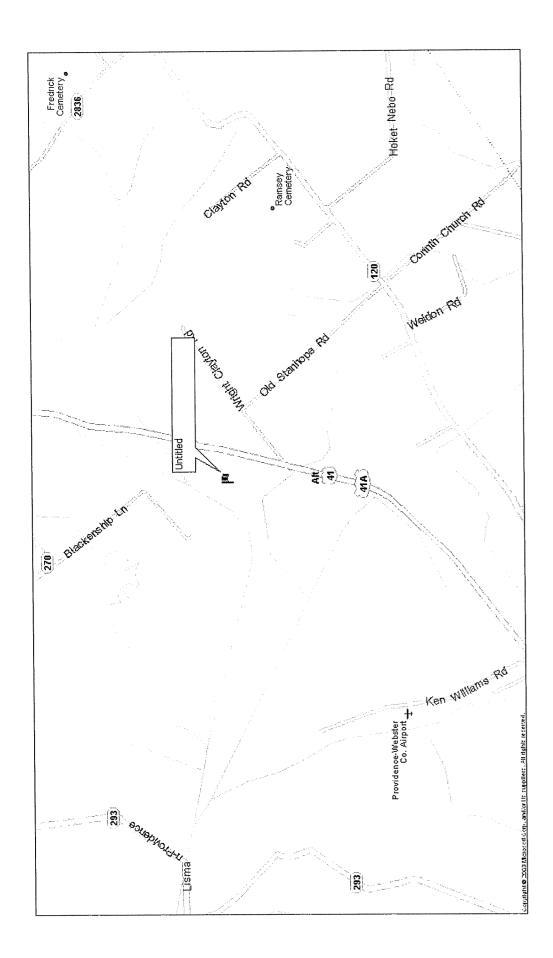
The Applicant answered "No" to each of the Basic Qualification questions.

Demographics

Race

Ethnicity Gender

Exhibit I



Directions to Site: From Dixon at the corner of U.S. Hwy 41A and State Route 132 (Leeper Street), proceed South on U.S. Hwy 41A approximately 6.3 miles to site on left.

Prepared by: Briggs Law Office, PSC (502) 254-9756

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Market: South Region – Kentucky _______
Cell Site Number: 135PO237 ______
Cell Site Name: Lisman _____
Fixed Asset Number: 10128969 •

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 Richard Marvel and Phyllis Marvel, husband and wife, having a mailing address of 6522 US Hwy 41A South, Providence, KY 42450 (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, Georgia 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 6522 US Hwy 41A South, Providence KY 42450, in the County of Webster, 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").
- 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 Six Hundred and No/100 Dollars (\$600.00) no later than ten (10) days prior to the expiration date of the Initial Option Term.

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- (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.
- 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.
- 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

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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. <u>APPROVALS</u>

- (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

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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. <u>INTERFERENCE.</u>

- (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.
- 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.

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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 eraployees, 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

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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 ary 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 structural 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

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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 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. <u>NOTICES.</u> 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:

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If to Tenant: New Cingular Wireless PCS, LLC

Attn: Network Real Estate Administration

Re: Cell Site #135PO237; Cell Site Name:Lisman

Fixed Asset No: 10128969

P.O. Box 1630

Alpharetta, GA 30009

(For Overnight Mail)

New Cingular Wireless PCS, LLC

Attn: Legal Department

Re: Cell Site #135PO237; Cell Site Name: Lisman

Fixed Asset No: 10128969 12555 Cingular Way Alpharetta, GA 30004

With a copy to: New Cingular Wireless PCS, LLC

Attn: Legal Department

Re: Cell Site #135PO237; Cell Site Name: Lisman

Fixed Asset No: 10128969 5565 Glenridge Connector

Suite 1700

Atlanta, GA 30342

If to Landlord: Richard & Phyllis Marvel

6522 US Hwy 41A South Providence, KY 42450

Either party hereto may change the place for the giving of actice 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. <u>CONDEMNATION</u>. 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

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will not diminish Landlord's recovery. Tenant will be entitled to reimbursement for any prepaid Rent on a prorata basis.

- 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 person 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.

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

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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. <u>MISCELLANEOUS.</u>

- (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

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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]

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

Richard Marvel & Phyllis Marvel

"TENANT"

"LANDLORD"

New Cingular Wireless PCS, LLC, By: AT&T Mobility Corporation Its Manager

Print Name:

[ACKNOWLEDGMENTS APPEAR ON THE NEXT PAGE]

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FOR LANDLORD:

Richard MARVEL

STATE OF Kentucky COUNTY OF Webster

Notary Public

My Commission Expires: 0 /-05 -0 9

FOR TENANT:

[NOTARIAL SEAL]

STATE OF Tennessee
COUNTY OF Williamson

Before me, a Notary Public in and for the State and County aforementioned, personally appeared with the personal production of the within named bargainor, a relative break that such person as such respective break the foregoing instrument for the purpose therein contained, by personally signing the name of the corporation as New Cinquian Wireless PCS, LLC.

Witness my hand and seal, at office in BRENTWOOD, 7N, this the 7th day of OCTOBER, 2008.



Name: ERICA L. CLANTON
Notary Public

My Commission Expires: MAY 8, 2012

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EXHIBIT 1

DESCRIPTION OF PREMISES Page ____ of ____

to the Agreement dated OCTOBER 715, 200 g, by and between Richard Marvel and Phyllis Marvel a husband and wife as Landlord, and New Cingular Wireless PCS LLC a Deleware limited liability company as

The Premises are described and/or depicted as follows:

Property Description and Site Sketch Attached

Notes:

- This Exhibit may be replaced by a land survey and/or construction drawings of the Premises once received by Tenant.
- Any setback of the Premises from the Property's boundaries shall be the distance required by the applicable governmental authorities.
- Width of access road shall be the width required by the applicable governmental authorities, including police and fire departments.
 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.

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JOSHINE

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AM CINGULAR NETWORK-TN 10/08/2008 09:32 6152213626 CODEDINATE POINT LOCATION OF THE PROPERTY LOCA - ABITAK PROVERNY CHREKES - U.S.G.S. QUAD MAP THE OF BILLION TO CHEEN THE CHEEN TH MORTH IS BUEED ON THE MEHITHOMY STATE FLAME CONSIDERALE STOTEM, SOUTHERN TOOK AND HIS PREFERENCE OF CONFRINTAL FROM CIP'S, CROST MAINEY ON LINE SY, LONG. (10,000 sq. n.) MITTED SEEDS (COLC) TAY MAP CS., LOT 18 BODEY H. & EDM EROBY OSED-BOOK 177, FACE Z.C. US HWY 41A SOUTH ETALIE ONNI, ISBUCO NEL MARC (IEM) FECENI ETA L'COI NELENEZ ANT MARC (IEM) FECENI MRCE OF THLE.

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GRED BROW 1 GANGO A. & FAIRLIS WANG. 6522 US HAY 41A SQUTH FROMDENCE NY 42450 ADDRESS:

BE22 US HHY AM SOUTH

RECIPIENS: NEST: WARN = 10,000 st. II. REVISIONS: atet F.S. Land Company
T. Alan Medi Company
T. Alan Medi Company
T. Alan Medi Company
Land Surveyets and Consuling Chipmen
To Gen 1746 2 121/1218 Consulted Drive
Land Mark Not 40117
Perce (100) 471–4180 (200) 4230–4111
Perce (100) 471–4180 (200) 4230–4111 OF 2

GENERAL DYNAMICS

Exhibit J

TODD R. BRIGGS

17300 POLO FIELDS LANE
LOUISVILLE, KENTUCKY 40245

TELEPHONE (502) 254-9756

FACSIMILE (502) 254-5717

Notice of Proposed Construction Wireless Telecommunications Facility

Jacob Jr. & Evince Ann Toder 8628 State Route 132 East Sebree, KY 42455

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 6522 U.S. Highway 41A South, Providence, Kentucky 42450. A map showing the location is attached. The proposed facility will include a 195 foot monopole, plus related ground facilities.

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

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 2009-00159 in any correspondence.

Sincerely,

Todd R. Briggs

Counsel for New Cingular Wireless PCS, LLC

TODD R. BRIGGS

17300 POLO FIELDS LANE

LOUISVILLE, KENTUCKY 40245

TELEPHONE (502) 254-9756

FACSIMILE (502) 254-5717

Notice of Proposed Construction Wireless Telecommunications Facility

Bobby W. & Edna Brown 1149 State Route 874 Dixon, KY 42409

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 6522 U.S. Highway 41A South, Providence, Kentucky 42450. A map showing the location is attached. The proposed facility will include a 195 foot monopole, plus related ground facilities.

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Sincerely,

All Key

Todd R. Briggs

Counsel for New Cingular Wireless PCS, LLC

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17300 POLO FIELDS LANE

LOUISVILLE, KENTUCKY 40245

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FACSIMILE (502) 254-5717

Notice of Proposed Construction Wireless Telecommunications Facility

William L. Brooks C/o Joyce Gamble P.O. Box 719 Mail Drop KT0034 Evansville, IN 47705

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 6522 U.S. Highway 41A South, Providence, Kentucky 42450. A map showing the location is attached. The proposed facility will include a 195 foot monopole, plus related ground facilities.

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

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 2009-00159 in any correspondence.

Sincerely,

Todd R. Briggs

Counsel for New Cingular Wireless PCS, LLC

Exhibit K

TODD R. BRIGGS

17300 POLO FIELDS LANE

LOUISVILLE, KENTUCKY 40245

TELEPHONE (502) 254-9756

FACSIMILE (502) 254-5717

Via Certified Mail Return Receipt Requested

Honorable James Townsend Webster County Judge Executive P.O. Box 155 Dixon, KY 42409-0155

RE: Notice of Proposal to Construct Wireless Telecommunications Facility Kentucky Public Service Commission--Case No. 2009-00159

Dear Judge Townsend:

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 6522 U.S. Highway 41A South, Providence, Kentucky 42450. A map showing the location is attached. The proposed facility will include a 195 foot monopole, 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 2009-00159 in any correspondence.

Sincerely,

Todd R. Briggs

Counsel for New Cingular Wireless PCS, LLC



PUBLIC NOTICE

New Cingular Wireless PCS, LLC proposes to construct a telecommunications

on this site. If you have any questions please contact:

Briggs Law Office, PSC 17300 Polo Fields Lane Louisville, KY 40245 (502) 254-9756

is Lane Of Public Se 1245 211 Sowe 120 Box

Please refer to Commission's

in your correspondence.

Executive Director
Public Service Commission
211 Sower Boulevard
P.O. Box 615
Frankfort, KY 40602
Executive Director
Briggs Law O
17300 Polo F
17300

PUBLIC NOTICE

New Cingular Wireless PCS, LLC proposes to construct a telecommunications

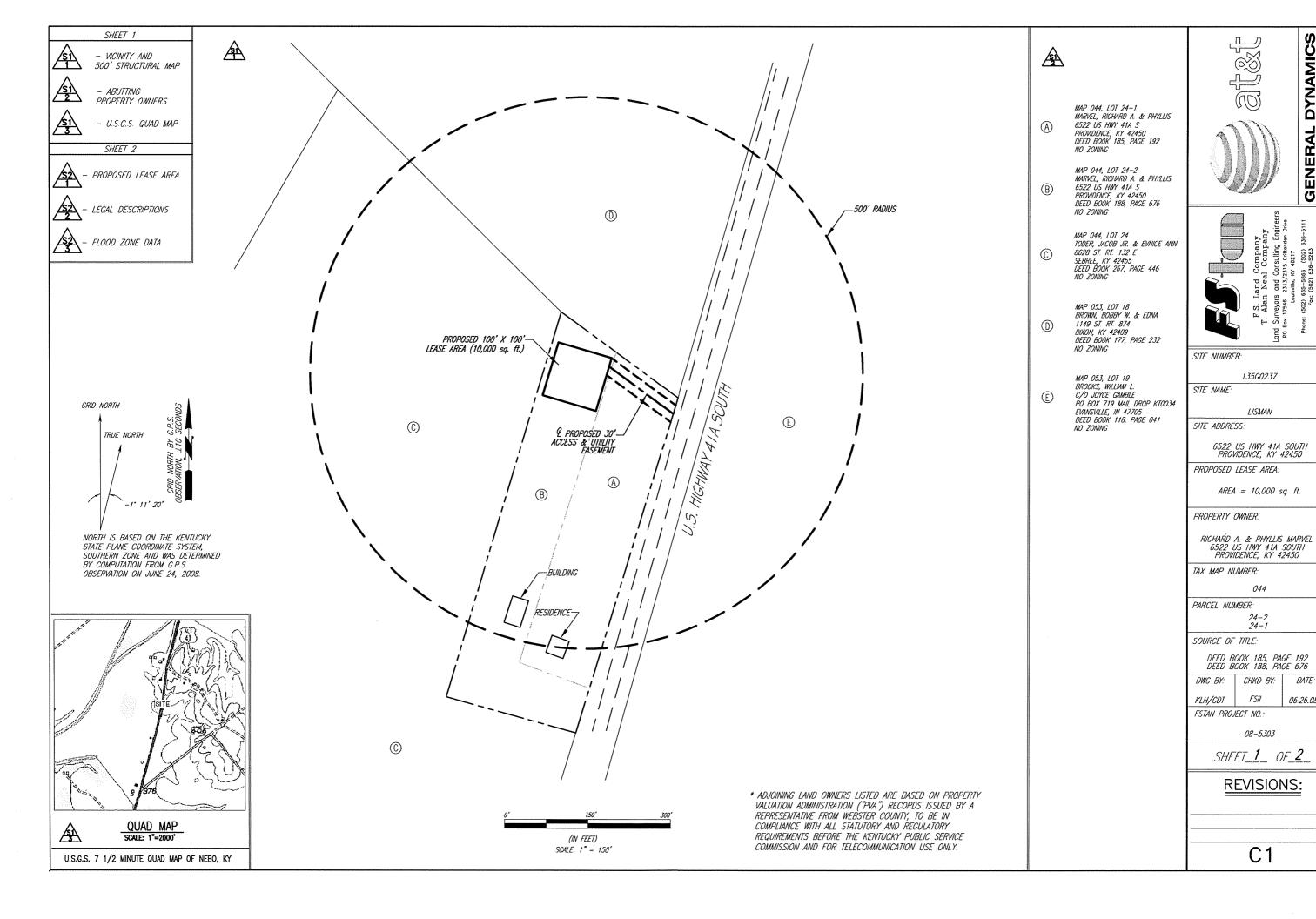
near this site. If you have any questions please contact:

Briggs Law Office, PSC 17300 Polo Fields Lane Of Louisville, KY 40245 (502) 254-9756

Executive Director
Public Service Commission
211 Sower Boulevard
P.O. Box 615
Frankfort, KY 40602

Please refer to Commission's Case #2009-00159

in your correspondence.



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CHKD BY:

08-5303

FSII

DATE

06.26.08





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

April 7, 2009

To Whom It May Concern:

Dear Sir or Madam:

This letter is to state the need of the proposed AT&T site called Lisman, to be located in Webster County, KY. The Lisman site is necessary to improve coverage and eliminate interference in southern Webster County. This site will improve the coverage and reduce interference on US Hwy 41A, State Hwy 120, State Hwy 293, and the surrounding area. Our closest existing site to this area is over 5.5 miles away; thus, there is currently no dominant server in this area. This lack of a dominant server causes many quality issues for the customers. Currently customers in this area experience high dropped calls and may experience poor call quality or areas of no service. With the addition of this site, the customers in this area of Webster County will experience improved reliability, better in-building coverage, and improved access to emergency 911 services.

Sherri A Lewis

RF Design Engineer

ShiAle-



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

April 7, 2009

To Whom It May Concern:

SK-AL-

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 Lisman 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

USA
Proud Sponsor of the US Olympic Team



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

April 7, 2009

To Whom It May Concern:

Dear Sir or Madam:

This letter is to serve as documentation that the proposed AT&T site called Lisman, to be located in Webster County, KY at Latitude 37-26-20 North, Longitude 087-42-38.22 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

Sc. Ale-

USA
Proud Sponsor of the US Olympic Team