

Paul B. Whitty Direct (502) 587-3655 Fax (502) 540-2260 E-mail pbw@gdm.com

RECEIVED

MAR 1 3 2009 PUBLIC SERVICE COMMISSION

March 13, 2009

VIA HAND DELIVERY

Kentucky Public Service Commission Attn: Ryan Gatewood Director, Division of Filings 211 Sower Blvd. P.O. Box 615 Frankfort, KY 40602-0615

RE: Application to Construct Wireless Communications Facility Location: 152 Dunn Store Road, Morgantown, Butler County, Kentucky 42261 Applicant: Powertel/Memphis Inc. d/b/a T-Mobile Kentucky Site Name: Dunn Store Road Case No.: 2009-00105

Dear Mr. Gatewood:

On behalf of our client, Powertel/Memphis, Inc. d/b/a T-Mobile Kentucky, we are herewith submitting an original and five (5) copies of an Application for Certificate of Public Convenience and Necessity for Construction of a Wireless Communications Facility in an area of Butler County, Kentucky outside the jurisdiction of a Planning Commission. Also enclosed are two (2) additional copies of this cover letter.

Please do not hesitate to contact me if you have any questions or comments concerning this filing, or if you need any additional material.

Sincerely,

Faresmith

Paul B. Whitty Attorney for T-Mobile Kentucky

PBW/abf

Enclosures



Paul B. Whitty Direct (502) 587-3655 Fax (502) 540-2260 E-mail pbw@gdm.com RECEIVED

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Please do not hesitate to contact me if you have any questions or comments concerning this filing, or if you need any additional material.

Sincerely,

Janesmith

Paul B. Whitty Attorney for T-Mobile Kentucky

PBW/abf

Enclosures

UNIFORM APPLICATION AND COMPLIANCE DOCUMENTS

for Powertel/Memphis, Inc. d/b/a T-Mobile Kentucky 152 Dunn Store Road Morgantown, Butler County, Kentucky 42261 9LV0326A – "Dunn Store Road" 250' Self Support Tower Docket No. 2009-00105



MAR 1 3 2009

PUBLIC SERVICE COMMISSION

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 - A. Articles of Incorporation for Powertel/Memphis, Inc.
 - B. Documentation of FCC License for Powertel/Memphis, Inc.
 - C. Site Plans, Survey & Flood Hazard Map
 - D. Tower Design & Foundation Design Drawings
 - E. Maps of Proposed Tower and Existing Towers
 - F. Character of the Area and Co-Location Report
 - G. FAA Approval Letter dated February 20, 2009
 - H. KAZC Application
 - I. Geotechnical Engineering Report dated February 9, 2009
 - J. Directions to Site
 - K. Site Lease
 - L. Identity & Qualifications of Designers & Construction Personnel
 - M. Adjoining Property Owner List with Notice Letters
 - N. Government Official Notice Letter
 - O. Notices to Be Posted On and Near Site
 - P. Notice to Be Advertised in Newspaper
 - Q. Search Ring Map

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COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF POWERTEL/MEMPHIS, INC., D/B/A T-MOBILE KENTUCKY FOR ISSUANCE OF A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO CONSTRUCT A WIRELESS COMMUNICATION FACILITY AT 152 DUNN STORE ROAD, MORGANTOWN, KENTUCKY 42261 IN THE WIRELESS COMMUNICATIONS LICENSE AREA IN THE COMMONWEALTH OF KENTUCKY IN THE COUNTY OF BUTLER

DOCKET NO. 2009-00105

SITE NAME: DUNN STORE ROAD

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

Powertel/Memphis, Inc., a Delaware corporation, d/b/a T-Mobile Kentucky

("Applicant"), by counsel, pursuant to (i) KRS §§278.020, 278.040, 278.650, 278.665 and the rules and regulations applicable thereto, and (ii) the Telecommunications Act of 1996, respectfully submits this Application requesting issuance of a Certificate of Public Convenience and Necessity ("CPCN") from the Kentucky Public Service Commission ("PSC") to construct, maintain, and operate a Wireless Communications Facility ("WCF") to serve the customers of the Applicant with wireless telecommunications service.

In support of this Application, Applicant respectfully provides and states the following

information:

1. The complete name and address of the Applicant:

Powertel/Memphis, Inc., d/b/a T-Mobile Kentucky Four Concourse Parkway, Suite 300 Atlanta, Georgia 30328

2. Applicant proposes construction of an antenna tower for cellular telecommunications services or personal communications services which is to be located in an area outside the jurisdiction of a planning commission, and Applicant submits this Application to the Commission for a Certificate of Public Convenience and Necessity pursuant to KRS §278.020 (1), 278.650, and 278.655.

3. The Applicant is authorized to conduct business in the Commonwealth of Kentucky. A copy of the Articles of Incorporation for Powertel/Memphis, Inc. is attached hereto as **Exhibit A**.

4. The Applicant is licensed to provide wireless telecommunications service in the Commonwealth of Kentucky. The proposed WCF will serve an area completely within the Applicant's Federal Communications Commission ("FCC") licensed service area. A copy of documentation evidencing the Applicant's FCC license is attached hereto as **Exhibit B**.

5. 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 increasing coverage or capacity and thereby enhancing public access to innovative and competitive wireless telecommunications services. The WCF will provide a necessary link in the Applicant's telecommunications network that is designed to meet the increasing demands for wireless services in Kentucky's wireless communications licensed area. The WCF is an integral link in the Applicant's network design that must be in place to provide adequate coverage to the service area.

6. To address the above-described service needs, Applicant proposes to construct a WCF at 152 Dunn Store Road, Morgantown Kentucky 42261 (37°09'40.39" North latitude,

86°41'04.02" West longitude), in an area located entirely within the county referenced in the caption of this Application. The property on which the WCF will be located is owned by Timothy Darrell McKinney pursuant to a Deed dated June 25, 1993, recorded at Deed Book 133, Page 227 in the office of the Butler County Clerk. The proposed WCF will consist of a 250-foot tall tower, with a 5-foot tall lightning arrestor attached at the top, for a total height of 255 feet. The WCF will also include concrete foundations to accommodate the placement of the Applicant's proprietary radio electronics equipment. The equipment will be housed in a prefabricated cabinet or shelter that will contain: (i) the transmitting and receiving equipment required to connect the WCF with the Applicant's users in Kentucky, (ii) telephone lines that will link the WCF with the Applicant's other facilities, (iii) battery back-up that will allow the Applicant to operate even after a loss of outside power, and (iv) all other necessary appurtenances. The Applicant's equipment cabinet or shelter will be approved for use in the Commonwealth of Kentucky by the appropriate building inspector having jurisdiction of the site. The WCF compound will be fenced and all access gate(s) will be secured. Further descriptions of the site layout and construction details of the WCF are shown on the site plans and a survey (which includes a 500' vicinity map and Flood Plain Certification) attached hereto as Exhibit C; and Tower Design Drawings and Foundation Design Drawings attached hereto as Exhibit D. Periodic inspections will be performed on the WCF in accordance with the applicable regulations or requirements of the PSC.

7. A map showing the proposed WCF and all towers within a 1 mile radius, and a map of all towers in the Butler County area are attached hereto as **Exhibit E**.

8. The site development plans, a vertical profile sketch of the WCF signed and sealed by a professional engineer registered in Kentucky depicting the tower height, as well as a

proposed configuration for the antennas of the Applicant and future antenna mounts, foundation design plans, and a description of the standards according to which the tower was designed, and which likewise have been signed and sealed by professional engineers licensed in Kentucky, are also included in **Exhibits C and D** attached hereto.

9. Applicant has considered the likely effects of the installation of the proposed WCF on nearby land uses and values and has concluded that there is no more suitable location reasonably available from which adequate services can be provided, and that there are no reasonably available opportunities to co-locate Applicant's antennas on an existing structure. Applicant has attempted to co-locate on suitable existing structures such as telecommunications towers or other suitable structures capable of supporting Applicant's facilities, and no other suitable or available co-location site was found to be located in the vicinity of the site. Information regarding the Applicant's efforts to achieve co-location in the vicinity is presented as **Exhibit F** attached hereto.

10. A copy of the Determination of No Hazard to Air Navigation received from the Federal Aviation Administration ("FAA"), dated February 20, 2009 is attached hereto as ExhibitG.

11. A copy of the Kentucky Airport Zoning Commission ("KAZC") Application for Permit to Construct or Alter a Structure is attached hereto as **Exhibit H.**

12. The WCF will be registered with the FCC pursuant to applicable federal requirements. Appropriate required FCC signage will be posted on the site upon receipt of the tower registration number.

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

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

15. Applicant, pursuant to a written agreement, has acquired the right to use the WCF site and associated property rights. A copy of the agreement or an abbreviated agreement recorded with the County Clerk is attached hereto as **Exhibit K**. Also included as part of **Exhibit K** is the portion of the full agreement demonstrating that in the case of abandonment a method is provided to dismantle and remove the cellular antenna tower, including a timetable for removal.

16. Personnel directly responsible for the design and construction of the proposed WCF are well qualified and experienced and are listed in **Exhibit L** attached hereto. All tower designs meet or exceed applicable laws and regulations. Timothy L. Hardy, a professional engineer registered in Kentucky, with Hardy Engineering Inc., prepared the site plans and construction drawings. Ta-Wen Lee, a professional engineer licensed in Kentucky , prepared the tower design standards. Buford H. Evans, Jr., a professional engineer licensed in Kentucky, prepared the foundation drawings.

17. The Construction Management Company for the proposed facility is Mittrix Engineering, and the Project Manager will be Jeremy Potts.

18. Flood Zone data is included and certified by a licensed professional surveyor for the Commonwealth of Kentucky on Page C2 of the Site Survey which is included in **Exhibit C** attached hereto.

19. The possibility of high winds has been considered in the design of this tower. The tower has been designed and engineered by professional engineers using computer assistance and the same accepted codes and standards as are typically used for high-rise building construction.

20. The site development plan signed and sealed by a professional engineer registered in Kentucky was prepared by Timothy L. Hardy. The site survey was performed by Frank L. Sellinger, II, a licensed professional surveyor for the Commonwealth of Kentucky, and Page C-1 of the Survey included in **Exhibit C** is drawn to a scale of no less than one inch equals 200 feet, and identifies every owner of real estate within 500 feet of the proposed tower (according to the records maintained by the Butler County Property Valuation Administrator). Every structure and every easement within 500 feet of the proposed tower or within 200 feet of the access road including intersection with the public street system is illustrated in the Survey included in **Exhibit C**.

21. Applicant has notified every person who, according to the records of the Butler County Property Valuation Administrator, owns property which is within 500 feet of the proposed tower or contiguous to the site property, by certified mail, return receipt requested, of the proposed construction. All notified property owners have been given the docket number under which the proposed Application will be processed and have been informed of their right to

request intervention. A list of the nearby property owners who received the notices, together with copies of the certified letters, are attached hereto as **Exhibit M**.

22. Applicant has notified the Butler County Judge/Executive by certified mail, return receipt requested, of the proposed construction. This notice included the PSC docket number under which the Application will be processed and informed the Butler County Judge/Executive of his right to request intervention. A copy of this notice is attached hereto as **Exhibit N**.

23. Two notice signs meeting the requirements prescribed by 807 KAR 5:063, Section 1(2), that measure at least two (2) feet in height and four (4) feet in width and that contain all required language in letters of required height, have been posted, one in a visible location on the proposed site and one on the nearest public road. Such signs shall remain posted for at least two (2) weeks after filing of the Application, and a copy of the posted text is attached hereto as **Exhibit O**.

24. Notice of the location of the proposed facility will be published on March 18, 2009 in The Butler County Banner, a newspaper of general circulation in the county in which the WCF is proposed to be located. A copy of the wording for the newspaper ad is attached hereto as **Exhibit P**.

25. The general area where the proposed facility is to be located is rural farmland. There are two barns but no residential structures located within a 500-foot radius of the proposed tower location. There is a residence located within 200 feet of the access drive at 152 Dunn Store Road, approximately 1,200 feet from the cell tower site (See Site Survey, Page C-1, included at **Exhibit C**).

26. The process that was used by the Applicant's radio frequency engineers in selecting the site for the proposed WCF was consistent with the general process used for selecting all other existing and proposed WCF facilities within the proposed network design area. Applicants radio frequency engineers have conducted studies and tests in order to develop a highly efficient network that is designed to serve the Federal Communications Commission licensed service area. The engineers determined an optimum area for the placement of the proposed facility in terms of elevation and location to provide the best quality service to customers in the service area. A radio frequency design search area prepared in reference to these radio frequency studies was considered by the Applicant when searching for sites for its antennas that would provide the coverage deemed necessary by the Applicant. Before beginning the site acquisition process, Applicant carefully evaluated locations within the search area for colocation opportunities on existing structures, and no suitable towers or other existing tall structures were found in the immediate area that would meet the technical requirements for the element of the telecommunications network to be provided by the proposed facility. A map of the area in which the tower is proposed to be located which is drawn to scale and clearly depicts the necessary search area within which the site should be located pursuant to radio frequency requirements is attached hereto as Exhibit Q.

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

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

Paul B. Whitty Greenebaum Doll & McDonald, PLLC 3500 National City Tower 101 South Fifth Street Louisville, Kentucky 40202 Telephone: (502) 587-3655 Facsimile: (502) 540-2260 pbw@gdm.com

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

Respectfully submitted,

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Paul B. Whitty Greenebaum Doll & McDonald, PLLC 3500 National City Tower 101 South Fifth Street Louisville, Kentucky 40202 Telephone: (502) 587-3655 Facsimile: (502) 540-2260 Attorney for Powertel/Memphis, Inc. d/b/a T-Mobile Kentucky

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Delaware

PAGE 1

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF MERGER, WHICH MERGES:

"POWERTEL/KENTUCKY, INC.", A DELAWARE CORPORATION,

WITH AND INTO "POWERTEL/MEMPHIS, INC." UNDER THE NAME OF "POWERTEL/MEMPHIS, INC.", A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE TWENTY-FIRST DAY OF DECEMBER, A.D. 2005, AT 11:30 O'CLOCK A.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE EFFECTIVE DATE OF THE AFORESAID CERTIFICATE OF MERGER IS THE FIRST DAY OF JANUARY, A.D. 2006, AT 12:30 O'CLOCK A.M.



Jeffrey W. Bullock, Secretary of State AUTHENTICATION: 7095216

DATE: 01-22-09

You may verify this certificate online at corp.delaware.gov/authver.shtml

State of Delaware Secretary of State Division of Corporations Delivered 11:30 AM 12/21/2005 FILED 11:30 AM 12/21/2005 SRV 051046113 - 2447268 FILE

STATE OF DELAWARE CERTIFICATE OF MERGER OF DOMESTIC CORPORATIONS

Pursuant to Title 8, Section 251(c) of the Delaware General Corporation Law, the undersigned corporation executed the following Certificate of Merger:

FIRST: The name of the surviving corporation is Powertel/Memphis, Inc.

, and the name of the corporation being merged into this surviving corporation is Powertel/Kentucky, Inc.

SECOND: The Agreement of Merger has been approved, adopted, certified, executed and acknowledged by each of the constituent corporations.

THIRD: The name of the surviving corporation is Powertel/Memphis, Inc.

a Delaware corporation.

FOURTH: The Certificate of Incorporation of the surviving corporation shall be its Certificate of Incorporation.

FIFTH: The merger is to become effective on January 1, 2006 at 12:30 a.m.

of the surviving corporation.

SEVENTH: A copy of the Agreement of Merger will be furnished by the surviving corporation on request, without cost, to any stockholder of the constituent corporations.

IN WITNESS WHEREOF, said surviving corporation has caused this certificate to be signed by an authorized officer, the 15^{+1} day of <u>December</u>, A.D., 2005

By: /S/ David A. Miller

Authorized Officer

Name: David A. Miller

Print or Type

Title: Senior Vice President

Delaware

PAGE 1

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF INCORPORATION OF "POWERTEL/KENTUCKY, INC.", FILED IN THIS OFFICE ON THE TWENTY-FIFTH DAY OF JULY, A.D. 1997, AT 9 O'CLOCK A.M.



AUTHENTICATION: 7095212

DATE: 01-22-09

You may verify this certificate online at corp.delaware.gov/authver.shtml

090058743

CERTIFICATE OF INCORPORATION

OF

POWERTEL/KENTUCKY, INC.

1. NAME

The name of this corporation is Powertel/Kentucky, Inc. (the "Corporation").

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2. **REGISTERED OFFICE AND AGENT**

The registered office of the Corporation shall be located at 1013 Centre Road, Wilmington, Delaware 19805 in the County of New Castle. The registered agent of the Corporation at such address shall be Corporation Service Company.

3. **PURPOSE AND POWERS**

The purpose of the Corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware (the "Delaware General Corporation Law"). The Corporation shall have all power necessary or helpful to engage in such acts and activities.

4. CAPITAL STOCK

4.1. Authorized Shares

The total number of shares of all classes of stock that the Corporation shall have the authority to issue is One Thousand (1,000) shares of voting common stock, all of one class, having a par value of \$.01 per share ("Common Stock")

4.2. Common Stock

4.2.1. Relative Rights

Each share of Common Stock shall have the same relative rights as and be identical in all respects to all the other shares of Common Stock.

4.2.2. Dividende

Whenever there shall have been paid, or declared and set aside for payment, to the holders of shares of any class of stock having preference over the Common Stock as to the payment of dividends, the full amount of dividends and of sinking fund or retirement payments, if any, to which such holders are respectively entitled in preference to the Common Stock, then dividends may be paid on the Common Stock and on any class or series of stock entitled to participate therewith as to dividends, out of any assets legally available for the payment of dividends thereon, but only when and as declared by the Board of Directors of the Corporation.

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4.2.3. Dissolution, Liquidation, Winding Up

In the event of any dissolution, liquidation, or winding up of the Corporation, whether voluntary or involuntary, the holders of the Common Stock shall become entitled to participate in the distribution of any assets of the Corporation remaining after the Corporation shall have paid, or set aside for payment, to the holders of any class of stock having preference over the Common Stock in the event of dissolution, liquidation or winding up the full preferential amounts (if any) to which they are entitled.

4.2.4. Voting Rights

Each holder of shares of Common Stock shall be entitled to attend all special and annual meetings of the stockholders of the Corporation and, share for share and without regard to class, together with the holders of all other classes of stock entitled to attend such meetings and to vote (except any class or series of stock having special voting rights), to cast one vote for each outstanding share of Common Stock so held upon any matter or thing (including, without limitation, the election of one or more directors) properly considered and acted upon by the stockholders.

5. INCORPORATOR; INITIAL DIRECTORS

5.1. Incorporator

The name and mailing address of the incorporator (the "Incorporator") is Jill F. Dorsey, Vice President/General Counsel, Powertel, Inc., 1233 O.G. Skinner Dr., West Point, GA 31833. The powers of the Incorporator shall terminate upon the filing of this Certificate of Incorporation.

5.2. Initial Directors

The following persons, having the following mailing addresses, shall serve as the directors of the Corporation until the first annual meeting of the stockholders of the Corporation or until their successors are elected and qualified:

NAME	MAILING ADDRESS
Fred G. Astor, Jr.	1233 O.G. Skinner Dr. West Point, Georgia 31633
Allen E. Smith	1233 O.G. Skinner Dr. West Point, Georgia 31833
Michael P. Tatom	1233 O.G. Skinner Dr. West Point, Georgia 31833

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6. BOARD OF DIRECTORS

6.1. Number; Election

The number of directors of the Corporation shall be such number as from time to time shall be fixed by, or in the manner provided in, the bylaws of the Corporation. Unless and except to the extent that the bylaws of the Corporation shall otherwise require, the election of directors of the Corporation need not be by written ballot.

6.2. Limitation of Liability

No director of the Corporation shall be liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, provided that this provision shall not eliminate or limit the liability of a director (a) for any breach of the director's duty of loyalty to the Corporation or its stockholders; (b) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law; (c) for the types of liability set forth in Section 174 of the Delaware General Corporation Law; or (d) for any transaction from which the director received any improper personal benefit.

7. INDEMNIFICATION

To the extent permitted by law, the Corporation shall fully indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding (whether civil, criminal, administrative or investigative) by reason of the fact that such person is or was a director or officer or employee or agent of the Corporation, or is or was serving at the request of the Corporation as a director or officer or employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding.

The Corporation shall advance expenses (including attorneys' fees) incurred by a director or officer in advance of the final disposition of such action, suit or proceeding upon the receipt of an undertaking by or on behalf of the director or officer to repay such amount if it shall ultimately be determined that such director or officer is not entitled to indemnification.

The Corporation shall advance expenses (including attorneys' fees) incurred by an employee or agent in advance of the final disposition of such action, suit or proceeding upon such terms and conditions, if any, as the Board of Directors deems appropriate.

8. AMENDMENT OF BYLAWS

In furtherance and not in limitation of the powers conferred by the Delaware General Corporation Law, the Board of Directors of the Corporation is expressly authorized and empowered to adopt, amend and repeal the bylaws of the Corporation.

IN WITNESS WHEREOF, the undersigned, being the Incorporator hereinabove named, for the purpose of forming a corporation pursuant to the Delaware General Corporation Law, hereby certifies that the facts hereinabove stated are truly set forth, and accordingly executes this Certificate of Incorporation as of this <u>45</u> day of July, 1997.

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Jill F. Dorsey Incorporator

Delaware

PAGE 1

The First State

I, JEFFREY W. BULLOCK, 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 "INTERCEL MEMPHIS MTA, INC.", CHANGING ITS NAME FROM "INTERCEL MEMPHIS MTA, INC." TO "POWERTEL/MEMPHIS, INC.", FILED IN THIS OFFICE ON THE SEVENTEENTH DAY OF JULY, A.D. 1996, AT 9 O'CLOCK A.M.



2447268 8100

090058743 You may verify this certificate online at corp.delaware.gov/authver.shtml

Jeffrey W. Bullock, Secretary of State AUTHENTICATION: 7095215

DATE: 01-22-09

STATE OF DELAWARE SECRETARY OF STATE DIVISION OF CORPORATIONS FILED 09:00 AM 07/17/1996 960207691 - 2447268

CERTIFICATE OF AMENDMENT

OF

CERTIFICATE OF INCORPORATION

\mathbf{OF}

INTERCEL MEMPHIS MTA, INC.

InterCel Memphis MTA, Inc. (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify as follows:

FIRST: That in accordance with the requirements of Section 242 of the General Corporation Law of the State of Delaware, the Board of Directors of the Corporation, acting by written consent signed by all of the directors of the Corporation pursuant to Section 141(f) of the General Corporation Law of the State of Delaware. duly adopted resolutions: (1) proposing and declaring advisable the changing of the Corporation's name to "Powertel/Memphis, Inc.," (2) proposing and declaring advisable the amendment of the Certificate of Incorporation of the Corporation to reflect such change and (3) recommending that such name change and amendment be submitted to the sole stockholder of the Corporation for consideration, action and approval.

SECOND: That the amendment to the Certificate of Incorporation of the Corporation is as follows:

ARTICLE FIRST of the Certificate of Incorporation of the Corporation is hereby amended to read in its entirety as follows:

"FIRST. The name of the corporation is Powertel/Memphis, Inc. (the "Corporation")."

THIRD. That thereafter, pursuant to resolution of the Board of Directors, the sole stockholder of the Corporation, acting by written consent in accordance with Sections 228 and 229 of the General Corporation law of the State of Delaware, duly approved such name change and the aforesaid amendment to the Certificate of Incorporation of the Corporation to reflect such name change.

FOURTH: That the aforesaid amendment to the Certificate of Incorporation of the Corporation was duly adopted in accordance with the provisions of Sections 141(f), 228, 229 and 242 of the General Corporation Law of the State of Delaware.

FIFTH: That upon this Certificate of Amendment of Certificate of Incorporation becoming effective, the name of the Corporation shall be changed to "Powertel/Memphis, Inc."

IN WITNESS WHEREOF, InterCel Memphis MTA, Inc. has caused this Certificate of Amendment of Certificate of Incorporation to be signed by Allen E. Smith, its President, and attested by Fred G. Astor, Jr., its Secretary, on July <u>9</u>, 1996.

By: Allen E. Smith President

Attest:

Fred G. Astor, Jr. Secretary

Delaware

PAGE 1

The First State

I, JEFFREY W. BULLOCK, 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 "SOUTH ATLANTIC PCS CORPORATION", CHANGING ITS NAME FROM "SOUTH ATLANTIC PCS CORPORATION" TO "INTERCEL MEMPHIS MTA, INC.", FILED IN THIS OFFICE ON THE TWENTIETH DAY OF FEBRUARY, A.D. 1996, AT 9:05 O'CLOCK A.M.



AUTHENTICATION: 7095214

DATE: 01-22-09

You may verify this certificate online at corp.delaware.gov/authver.shtml

STATE OF DELAWARE SECRETARY OF STATE DIVISION OF CORPORATIONS FILED 09:05 AM 02/20/1996 960046648 - 2447268

CERTIFICATE OF AMENDMENT

\mathbf{OF}

CERTIFICATE OF INCORPORATION

OF

SOUTH ATLANTIC PCS CORPORATION

South Atlantic PCS Corporation (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify as follows:

FIRST: That in accordance with the requirements of Section 242 of the General Corporation Law of the State of Delaware, the Board of Directors of the Corporation, acting by written consent signed by all of the directors of the Corporation pursuant to Section 141(f) of the General Corporation Law of the State of Delaware, duly adopted resolutions: (1) proposing and declaring advisable the changing of the Corporation's name to "InterCel Memphis MTA, Inc.," (2) proposing and declaring advisable the amendment of the Certificate of Incorporation of the Corporation to reflect such change and (3) recommending that such name change and amendment be submitted to the sole stockholder of the Corporation for consideration, action and approval.

SECOND: That the amendment to the Certificate of Incorporation of the Corporation is as follows:

ARTICLE FIRST of the Certificate of Incorporation of the Corporation is hereby amended to read in its entirety as follows:

"FIRST. The name of the corporation is InterCel Memphis MTA, Inc. (the "Corporation")."

THIRD: That thereafter, pursuant to resolution of the Board of Directors, the sole stockholder of the Corporation, acting by written consent in accordance with Sections 228 and 229 of the General Corporation Law of the State of Delaware, duly approved such name change and the aforesaid amendment to the Certificate of Incorporation of the Corporation to reflect such name change.

FOURTH: That the aforesaid amendment to the Certificate of Incorporation of the Corporation was duly adopted in accordance with the provisions of Sections 141(f), 228, 229 and 242 of the General Corporation Law of the State of Delaware.

NNDC - 60822/13 - 0237051.01

FIFTH: That upon this Certificate of Amendment of Certificate of Incorporation becoming effective, the name of the Corporation shall be changed to "InterCel Memphis MTA, Inc."

IN WITNESS WHEREOF, South Atlantic PCS Corporation has caused this Certificate of Amendment of Certificate of Incorporation to be signed by Nicholas J. Jebbia, its Executive Vice President, and attested by Fred G. Astor, Jr., its Secretary, on February 19, 1996.

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By: <u>Ichch</u> Jahr Nicholas J. Jeppia Executive Vice President

Attest:

Fred Q. Astor, Jr. Secretary

Delaware

PAGE 1

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF INCORPORATION OF "SOUTH ATLANTIC PCS CORPORATION", FILED IN THIS OFFICE ON THE TWENTY-SIXTH DAY OF OCTOBER, A.D. 1994, AT 9:30 O'CLOCK A.M.



AUTHENTICATION: 7095213

DATE: 01-22-09

You may verify this certificate online at corp.delaware.gov/authver.shtml

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CERTIFICATE OF INCORPORATION

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OF

SOUTH ATLANTIC PCS CORPORATION

* * * * * *

FIRST. The name of the corporation is South Atlantic PCS Corporation (the "Corporation").

SECOND. The address of the registered office of the Corporation in the State of Delaware is 32 Loockerman Square, Suite L-100, in the City of Dover, Kent County, Delaware 19904. The name of its registered agent at such address is The Prentice-Hall Corporation System, Inc.

THIRD. The nature of the business or purposes to be conducted or promoted by the Corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware.

FOURTH. The total number of shares of stock which the Corporation shall have authority to issue is 1,000 shares of Common Stock with a par value of One Cent (\$.01) per share.

2....

FIFTH. The Corporation is to have perpetual existence. SIXTH. In furtherance and not in limitation of the powers conferred by the laws of the State of Delaware:

A. The Board of Directors of the Corporation is expressly authorized to adopt, amend or repeal the By-Laws of the Corporation.

B. Blections of directors need not be by written ballot unless the By-Laws of the Corporation shall so provide.

- 2 -

C. The books of the Corporation may be kept at such place within or without the State of Delaware as the By-Laws of the Corporation may provide or as may be designated from time to time by the Board of Directors of the Corporation. SEVENTE. The Corporation eliminates the personal liability of each member of its Board of Directors to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, provided, however, that, to the extent provided by applicable law, the foregoing shall not eliminate the liability of a director (i) for any breach of such director's duty of loyalty to the Corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of Title 8 of the Delaware Code or (iv) for any transaction from which such director derived an improper personal benefit. No amendment to or repeal of this provision shall apply to or have any effect on the liability or alleged liability of any director for or with respect to any acts or omissions of such director occurring prior to such amendment or repeal.

EIGHTH. The Corporation reserves the right to amend or repeal any provision contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by statute, and all rights conferred upon a stockholder herein are granted subject to this reservation.

(1, 1)

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The name and mailing address of the sole incorpo-NINTH. rator is as follows:

- 3 -

Name

Mailing Address

Testa, Hurwitz & Thibeault 53 State Street Boston, MA 02109 Suanne M. Garnier

I, THE UNDERSIGNED, being the sole incorporator hereinabove named, for the purpose of forming a corporation pursuant to the General Corporation Law of the State of Delaware, do make this certificate, hereby declaring and certifying that this is my act and deed and the facts herein stated are true, and accordingly have hereunto set my hand this 26th day of October, 1994.

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Suanne M. Garnier Sole Incorporator

PARA5675/1.AD2

Federal Communications Commission Wireless Telecommunications Bureau

Radio Station Authorization (Reference Copy Only)

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

Licensee: Powertel Memphis Licenses, Inc.

ATTN Dan M	ATTN Dan Menser		FCC Registration Number (FRN): 0001832807	
Powertel Mem 12920 SE 38th Bellevue, WA	phis Licenses, Inc. I Street 98006		Call Sign: KNLH397	File Number: 0002907447
			Radio CW - PCS	Service: Broadband
•				
Grant Date	Effective Date	Expiration Date	Pr 11	int Date

04/25/2007	04/25/2007	04/28/2017	11/21/2007
•			
Market Number: BTA26	3 Channel Block:	E Sub-M	arket Designator: 3

Market Name: Louisville, KY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date
04/28/2002			•

S	necial	Conditions	or	Waivers/Conditions
~			~ ~	

Conditions

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

file://C:\Documents and Settings\tae\Local Settings\Temporary Internet Files\OLK90\200... 11/21/2007

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To view the geographic areas associated with the license, go to the Universal Licensing System (ULS) homepage at <u>http://wireless.fcc.gov/uls/</u> and select "License Search". Follow the instruction on how to search for license information

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FCC 601 - MB September 2002

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GENERAL NOTES:

- ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THE COUNTY OF BUTLER REGULATIONS
- 2. CONTRACTOR SHALL NOTIFY ALL UTILITIES AT LEAST 24 HOURS PRIOR TO START OF CONSTRUCTION TO VERIFY LOCATION OF ALL UTILITIES SHOWN OR NOT SHOWN.
- 3. ALL UTILITIES WITHIN ROADWAY SHALL BE BACKFILLED WITH STONE.
- CONTRACTOR SHALL REPAIR AT HIS EXPENSE DAMAGE TO ANY EXISTING IMPROVEMENTS DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO DRAINAGE, UTILITIES, PAVEMENT, STRIPPING, CURBS, ETC.. REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS.
- 5. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL UNUSABLE MATERIALS FROM THE SITE.
- 6. CONTRACTOR SHALL COORDINATE WITH POWER COMPANY PROVIDING TEMPORARY SERVICE FOR CONSTRUCTION FACILITIES DURING CONSTRUCTION.
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED ABOUT THE LOCATION AND/OR ELEVATIONS OF EXISTING UTILITIES SHOWN ON THIS DRAWING. THEY ARE BASED UPON RECORDS FROM VARIOUS UTILITY COMPANIES, DEEDS, AND PLATS OF RECORD, AND WHERE POSSIBLE ACTUAL FIELD MEASUREMENTS. THIS INFORMATION IS NOT TO BE TAKEN EXACT OR COMPLETE.
- 8. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE EXACT LOCATION OF EXISTING UTILITIES WHICH MAY CONFLICT WITH PROPOSED IMPROVEMENTS.
- THIS PROJECT WILL NOT REQUIRE WATER OR SEWER SERVICE. 9.
- 10. CONTRACTOR SHALL REMOVE ANY DIRT OR MUD FROM TIRES OF ANY CONSTRUCTION VEHICLES PRIOR TO LEAVING SITE.
- REFER TO BUILDING/TOWER PLANS FOR PROPOSED DIMENSIONS AND OTHER SPECIFICS 11 WHICH ARE NOT SHOWN.
- 12. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING A PROPER TRAFFIC CONTROL PLAN FOR PUBLIC SAFETY ADJACENT TO CONSTRUCTION SITE. THE TRAFFIC CONTROL PLAN MUST BE IN ACCORDANCE WITH LATEST MUTCD EDITION.

SITE DEVELOPMENT PLANS FOR POWERTEL / MEMPHIS, INC.

SITE #: 9LV0326A SITE NAME: DUNN STORE ROAD SITE ADDRESS: 152 DUNN STORE ROAD MORGANTOWN, KENTUCKY 42261





ELECTRIC CO .: WARREN RURAL ELECTRIC COOPERATIVE CORPORATION DIRECTIONS: 112 S TYLER STREET MORGANTOWN, KY 42261 FROM LOUISVILLE: GO SOUTH ON I-65 TO BOWLING GREEN. TAKE EXIT 20. CONTACT: CUSTOMER SERVICE GO NORTH(WEST) ON WILLIAM HATCHER PARKWAY TO EXIT 7. GO NORTH ON PHONE: (270) 526-3384 HWY 231 17.3 MILES. TURN LEFT ON DUNN STORE ROAD. GO APPROX. 0.5 ALT. PHONE: (270) 843-9710 MILES TO BEGINNING OF ACCESS ROAD. (VERIFY) TELEPHONE CO .: LOGAN TELEPHONE COOPERATIVE (VERIFY) LESSEE: ENGINEER: PERMIT JURISDICTION: ESSOR: TIM MCKINNEY 152 DUNN STORE RD. powertel_m MORGANTOWN, KY 42261 PHONE: (270) 999-5862 POWERTEL / MEMPHIS, INC. LOUISVILLE MARKET 11509 COMMONWEALTH DRIVE, SUITE 9 LOUISVILLE, KENTUCKY 40299

10725 BOWLING GREEN RD MORGANTOWN, KY 42261 CONTACT: CUSTOMER SERVICE PHONE: (270) 934-4697

BUTLER COUNTY

CONTACT: REAL ESTATE

SIGNATURE AUTHORIZATIONS:		
RF ENGINEER APPROVAL:		
SIGNATURE	DATE:	
CONSTRUCTION MANAGER APPROVAL:		
SIGNATURE	DATE:	
SITE ACQUISITION AGENT APPROVAL:		
SIGNATURE	DATE:	
LAND OWNER APPROVAL:		
SIGNATURE	DATE:	
OPS APPROVAL:		
SIGNATURE	DATE:	
ZONING/PERMITTING APPROVAL:		
SIGNATURE	DATE:	








1. BOUNDARY AND EXISTING SITE FEATURES ARE BASED ON FIELD MEASUREMENTS. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN ACTUAL FIELD CONDITIONS AND THIS DRAWING.

2. CONTRACTOR SHALL FURNISH ALL MATERIALS FOR 600 AMP SERVICE.

3. GROUNDING OF ANTENNAS MOUNTS, COAX, AND EQUIPMENT SHALL BE IN ACCORDANCE WITH POWERTEL'S SPECIFICATIONS. COAX SHALL BE GROUNDED JUST BELOW ANTENNAS, AT MID-ELEVATION, AND AT BOTTOM OF TOWER.

4. SITE TO BE RESTORED BACK TO SITE OWNER'S SPECS.

5. ANY MATERIALS STORED ON SITE SHALL BE STORED IN CLOSED OR COVERED CONTAINERS AND ALL EXCESS WASTE MATERIALS WILL BE PROPERLY DISPOSED OF DAILY AND ALL SOILS REMOVED FROM SITE. NOTE NO BURNING ON SITE AT ANYTIME. ACCESS TO OTHER CUSTOMERS ON SITE MUST BE KEPT CLEAR.

6. ALL HARDWARE TO BE STAINLESS STEEL, NO PLATED METAL TO BE USED.

NO CULVERTS SHALL BE INSTALLED.

8. CONTRACTOR AND/OR DEVELOPER SHALL BE RESPONSIBLE FOR CONSTRUCTION & MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS DURING CONSTRUCTION FOR PROTECTION OF ADJACENT PROPERTIES, ROADWAYS, AND WATERWAYS. SILT FENCE SHOULD BE INSTALLED AROUND WORK AREA TO STOP DAMAGE TO OTHER CUSTOMER'S EQUIPMENT.

9. CONTRACTOR AND/OR DEVELOPER ARE RESPONSIBLE FOR PROVIDING SITE FREE OF DRAINAGE PROBLEMS.

10. CONTRACTOR AND/OR DEVELOPER SHALL BE RESPONSIBLE FOR MAINTAINING A PROPER TRAFFIC CONTROL PLAN FOR PUBLIC SAFETY ADJACENT TO CONSTRUCTION SITE. THE TRAFFIC CONTROL PLAN MUST BE IN ACCORDANCE WITH LATEST (AMUTCO) EDITION. CONTRACTOR IS TO ADHERE TO ALL SAFETY GUIDELINES, AND OSHA SPECS WHILE ON WORK SITE.

	REGISTERED PROFESSIONAL ENGINEER SEAL						
FFDINC INC	DETAILED SITE LAYOUT						
EEMING, INC.	9LV0326A SITE: DUNN STORE ROAD						
CONSULTING	MORGANTOWN, KENTUCKY						
PO BOY 708 DOWERTEL / MEMPHIS INC							
AL 35173							
FAX. (205) 661-0027	CAD NO: I VOZOG C1 SCALE: AS SHOWN DWG NO. C1						
TAN. (600) 001-9067							



X SCHEDULE									
X	COAX CABLE SIZE	MECHANICAL 2	ELECTRICAL DOWN TILT	RADIATION CENTER					
-RED	UNDEL UILL	0.	2*	250'					
-RED-RED	(4) 1 5/8"ø	0.	2'	250'					
IF-BLUE		0.	2*	250'					
IE-BLUE-BLUE	(4) 1 5/8"ø	0.	2'	250'					
REEN-GREEN		0.	2'	250'					
REEN-GREEN-GREEN	(4) 1 5/8"ø	0.	2'	250'					



REVISED 1-21-2009

1) PANEL ANTENNA (2) JUMPER, 1/2"ø x 10' 3 TMA (4) JUMPER, 1/2"ø x 6' (5) COAX, 7/8"¢ OR 1 5/8"¢ (6) TMA GROUND, #6 THW INSULATED GROUND WIRE (7) COAX GROUND KIT 8 4" x 14" x 1/4" GROUND BAR MOUNTED TO TOWER (9) (NOT USED) (10) AIS6 CABLE PART NO. ATCB-B01-010 (11) GROUND BAR MOUNTED TO TOWER (12) GROUND BAR MOUNTED ON CHERRY INSULATORS (13) COAX GROUND KIT (14) JUMPER, 1/2"ø x 12' (15) GROUND TERMINATION BAR ON CHERRY INSULATORS (16) #2 Cu SOLID TINNED GROUND WIRE 17 TMA FILTER

NOTES:

MATERIAL LIST

- 1. FOR EVERYTHING ABOVE THE TOWER BOTTOM BUSS BAR USE SINGLE HOLE LUG WITH HEAT SHRINK ON ANTENNA, TMA, TMA FILTER & 2 HOLE LUG WITH HEAT SHRINK ON BUSS BAR END OF GROUND WIRE.
- ALL GROUND CONNECTIONS STARTING AT THE TOWER BOTTOM BUSS BAR AND DOWN ARE TO BE EXOTHERMIC WELD OR 2 HOLE CADWELD LUG.
- 3. NUMBER OF ANTENNAS AND LINES TO BE INSTALLED SHALL BE AS DIRECTED BY THE CONSTRUCTION MANAGER.
- GROUNDING OF ANTENNAS, MOUNTS, COAX, AND EQUIPMENT SHALL BE IN ACCORDANCE WITH T-MOBILE'S SPECIFICATIONS.

	(HAF PBO PBO PCS PCS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS PROS	KENTUGAL ENGINEER SEAL						
	DWG. NAME: ANTENNA &	COAX GROU	NDING DETAIL						
NEERING, INC.	STA	NDARD DRAWING							
ND CONSULTING		FOR							
ET, P.O. BOX 708	POWERTEL / MEMPHIS, INC.								
. AL 35173	LC)UISVILLE, KENTUCKY							
, 7 FAX: (205) 661-9027	CAD NO: LV0326_C3 SCALE:	AS SHOWN	DWG No C3						
and the second sec									







SELF SUPPORTING SHOWN	-SEE NOTE 5 PROPOSED BE INSTALLE 1 5/8"Ø COAX GROUND KIT	1 5/8"¢ COAX D PER STRUCT	PROPOSED THE BRIDGE PROPOSED PROPOSED PROPOSED COAX GROUND KIT PROPOSED COAX GROUND KIT PROPOSED FILTER GROUND KIT CROUND KIT EQUIPMENT E	PROPOSED 1/2" JUMPERS (6'-0") PROPOSED FILTERS RBS 1 PROPOSED 1/2" JUMPERS (12'-0") RBS BASE	PROPOSED GROU
REVISIONS	BY CHK. BY	DATE		DRAWN BY : C.E. PERSONS CHECKED BY : T.L. LLARDY	DME: HARDY ENGINITIE 5 2-20-09 DME: ENGINEERING AND 2-20-09 200 UNDERL STREET
	SELF SUPPORTING SHOWN Image: Constraint of the second state o	SELF SUPPORTING SHOWN SEE NOTE 5 PROPOSED PROPOSED PROPOSED 1/4"x4"x34" GROUND BAR PROPOSED 1/4"x4"x34" GROUND BAR (IF SOLID BOND WITH TOWER IS NOT POSSIBLE USE CHERRY INSULATORS) PROPOSED GROUND RING	SELF SUPPORTING SHOWN Image: Section of the se	ELF SUPPORTING SHOWN FREPOSED I 5/8" CDAX TO FREPOSED I 5/8" CDAX TO FREPOSED I 5/8" CDAX TO FRENSONS 12' MA FREPOSED I 5/8" CDAX TO FREMSONS 12' MA FREMSONS BIN 12' MA FREMSONS FREMSONS 8' CHK BY DAE	SELF SUPPORTING SHOWN FEE HOIL 5 FINALD FER STRUCTURE 1 5/8° COM ID BIL MSKLED FER STRUCTURE 1 5/8° COM ID FINALD FER STRUCTURE 1 5/8° COM ID FINAL FE









ITEM	REVISIONS	BY	CHK. BY	DATE	C.E. PERSONS	DATE : 2-20-09	HARDY ENGIN
					CHECKED BY : T.L. HARDY	DATE : 2-20-09	ENGINEERING AND 209 LINDEN
					APPROVED BY :	DATE :	PHONE: (205) 655-1427





۸L	<u>CALL-0</u>	UT NOTES:							
0'	1 PROPOS	SED TOWER STRUCTU	re ground ring						
10	CONNECT EXISTING TOWER RING GROUND TO EQUIPMENT RING GROUND ON BOTH SIDES. KEEP INTERCONNECTING WIRING OF EQUAL LENGTH AND TYPE.								
-	3 FENCE	GROUND							
IL .UG	4 RBS G INSTAL AND A CONNE BELOW	ROUND, TYP. 2 PLACE <u>L</u> : CONTRACTOR TO S ITACH TO #2 STRANE (CT RBS TO EXTERNAL (GRADE.	ES, MAIN RBS AND FUTURE. SUPPLY AND INSTALL LUG IN RBS (2102) D COPPER TYPE THHN (GREEN) WIRE TO L GROUND RING. REMOVE INSULATION						
	5 ELECT	RICAL AND TELCO EQU	JIPMENT BUSS BARS.						
3E 	6 REMOV ATTAC BETWE COVER	/E PAINT FROM SURFA HING GROUND CONNE(EN FRAME AND LUG. AREA WITH SPRAY Z	ACE OF GENERATOR FRAME BEFORE CTION. USE DE-OX COMPOUND AFTER TIGHTENING CONNECTION ZINC OR COLD GALVANIZING COMPOUND.						
P	7 NEUTR	AL - GROUND BOND	AT SERVICE DISCONNECT.						
AWN	8 MINIMU 24 INO	JM SPACING OF SLED CHES MIN.	GROUNDING FROM SLED FOUNDATION,						
	9 ICE BI	RIDGE & SERVICE BOA	ARD POST GROUND, EACH POST TYP.						
	10 FUEL	TANK GROUND							
		LEGEN	<u>ND</u>						
		PROPOSED TOWER	R GROUND RING						
		#2 SOLID TINNED UNLESS OTHERWIS	COPPER GROUND CONDUCTOR SE SPECIFIED.						
		EXOTHERMIC WELL	D CONNECTION						
	0	3/4" x 10' COPP GROUND ROD UNI	ER CLAD STEEL LESS OTHERWISE SPECIFIED.						
	↓	#2 SOLID TINNED STEEL TO GROUNI SPECIFIED	COPPER FROM EQUIPMENT OR D RING UNLESS OTHERWISE						
	PORT LAYOU	IONS OF SITE JT HAVE BEEN	NE OF KEN						
	REFER TO COMPLE	O SHEET C1 FOR TE SITE LAYOUT	TIMOTHY L + HARDY						
			₽₽ 20374 ₽₽ \$15 T E ₽ \$						
	NOTE: CONTRACTOR TO VERIFY ALL PROPOSED								
			PECISTEDED DDAEESSIONAL ENGINEED SEAL						
FFRIN	I	DWG. NAME: GR	OUNDING LAYOUT						
CONSUL	TING	9200326	DA SHE: DUNN STUKE KUAD MORGANTOWN, KENTUCKY FOR						
STREET	3	POV	NERTEL / MEMPHIS, INC.						
FAX: (2	05) 661-9027	CAD No: LV0326_C6	AS SHOWN CG						





200 / 240 VOLT <u>1</u> PHAS	AMP BUS SE <u>3</u> WIRE					
DIRECTORY	CIRCUIT NUMBER					
OUTSIDE GFI R'CEPT	2					
	4					
RBS-1	6					
	8					
SPARE	10					
BLANK	12					
BLANK	14					
BLANK	16					
BLANK	18					
BLANK	20					
BLANK	22					
BLANK	24					
BLANK	26					
BLANK	28					
BLANK	30					
200) AMP BUS					
<u>/ 240</u> VOLT <u>1</u> PHA	SE <u>3</u> WIRE					
DIRECTORY	CIRCUIT NUMBER					
OUTSIDE GFI R'CEPT	2					
	4					
RBS-1	6					8
	8					
RBS-2	10					
222 1	12					
RB2-3	14					
BLANK	16					
BLANK	18					
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	DWG. NAME:	PANEL	BOAT	REGISTERED RRO	JLATION	IS
ERING, INC.			STAND	ARD DRAWIN	G	÷
CONSULTING		_		FOR		
P.O. BOX 708		PC	WERTEL	/ MEMPHIS	s, INC.	
35173 X: (205) 661-9027	CAD No: 11/03	26 07 1	SCALE:	AS SHOWN	DWG No	C7 1
(~~~) ~~~ ~~~		20 01.1			1	UI11



CONDUIT SCHEDULE								
SIZE (IN.)	FROM	TO	DESCRIPTION					
2"	GENERATOR	ATS	POWER					
1"	GENERATOR	UTILITY BOX	BATTERY CHARGER / ENGINE BLOCK HEATER					
1"	GENERATOR	ATS	ALARMS / 2 WRE START					
1"	GENERATOR	UTILITY BOX	ALARMS					
2"	RADIO CABINET	UTILITY BOX	POWER					
2"	RADIO CABINET	UTILITY BOX	25 PAIR CABLE / ALARMS					
1"	RADIO CABINET	UTILITY BOX	ALARMS					
1"	RADIO CABINET	UTILITY BOX	DC POWER					
	SIZE (IN.) 2" 1" 1" 2" 2" 2" 1" 1" 1"	CON SIZE (IN.) FROM 2" GENERATOR 1" GENERATOR 1" GENERATOR 1" GENERATOR 2" RADIO CABINET 2" RADIO CABINET 1" RADIO CABINET 1" RADIO CABINET	CONDUIT SC SIZE (IN.) FROM TO 2" GENERATOR ATS 1" GENERATOR UTILITY BOX 1" GENERATOR UTILITY BOX 1" GENERATOR UTILITY BOX 2" RADIO CABINET UTILITY BOX 2" RADIO CABINET UTILITY BOX 1" RADIO CABINET UTILITY BOX					







OF 9 FEET AND AN OVERALL HEIGHT OF 8 FEET FROM THE BOTTOM OF THE FABRIC TO THE TOP BARBED WIRE. THE FENCE SHALL HAVE A TOP RAIL, BOTTOM TENSION WIRE, AND THREE STRANDS OF BARBED WIRE MOUNTED ON VERTICAL EXTENSION ARMS. THE UPPER STRAND SHALL BE APPROXIMATLEY 12 INCHES ABOVE THE TOP OF THE FABRIC. POSTS SALL BE SET IN CONCRETE AND ACCESSORIES FOR FRAMEWORK SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH RESIDENTIAL STANDARDS: TERMINAL POSTS (END, CORNER, AND PULL) ARE 2-1/20 INCH, SCH. 40, 2-7/8 INCH 0.D. PIPE GATE POST (SWING POSTS) ARE GATE OR LEAF 6ft OR LESS, 2-1/20 INCH, SCH. 40, 2-7/8 INCH O.D. PIPE GATE OR LEAF OVER 6ft WIDE AND UP TO 13ft, 3-1/20 INCH, SCH. 40, 4 INCH O.D. PIPE BRACING: PIPE BRACE SAME AS TOP RAIL, WITH 3/8 INCH DIAMETER STEEL ROD TRUSS AND TIGHTENER POST TOPS: PRESSED STEEL, MALLEABLE IRON WITH PRESSED STEEL EXTENSION ARM, OR ONE-PIECE ALUMINUM CASTING; WITH HOLE FOR TOP RAIL, DESIGNED TO FIT OVER THE OUTSIDE OF THE POST AND TO PREVENT ENTRY OF MOISTURE BARBED WIRE: GALVANIZED, ASTM A121 CLASS 3; THREE 14 GAUGE MINIMUM STEEL WIRES WITH 4 POINT ROUND STRETCHER BARS: STEEL, 3/16 BY 3/4 INCH, OR EQUIVALENT CROSS-SECTIONAL AREA.

		TIMOT HAF PROF REGISTERED PROFESSIONA	KENTUGAL THY L. *					
VEEDING ING	DWG NAME: FE	ENCE DETAILS						
NEERING, INC.	STA	ANDARD DRAWING						
ND CONSULTING	FOR							
POWERTEL / MEMPHIS INC.								
AL 35173	LO	UISVILLE, KENTUCKY						
FAX: (205) 661-9027	CAD NO: LV0326_C11	AS SHOWN	DWG. No. C11					
			2					

INSTALLATION:

- 1. THE FENCE SHOULD BE PLACED ACROSS THE SLOPE ALONG A LINE OF UNIFORM ELEVATION (PERPENDICULAR TO THE DIRECTION OF THE FLOW). THE FENCE SHOULD BE LOCATED AT LEAST 10'-O" FROM THE TOE OF STEEP SLOPES TO PROVIDE SEDIMENT STORAGE AND ACCESS FOR MAINTENANCE AND CLEANOUT.
- 2. A FLAT-BOTTOM TRENCH APPROXIMATELY 4" WIDE AND 8" DEEP, OR A V-SHAPED TRENCH 8" DEEP SHOULD BE EXCAVATED. ON THE DOWN SLOPE SIDE OF THE TRENCH, DRIVE THE 2" x 2" WOOD POSTS AT LEAST 18" INTO THE GROUND, SPACING THEM NO FURTHER THAN 6'-0" APART.
- 3. POSTS SHOULD BE INSTALLED, WITH 1" TO 2" OF THE POST PROTRUDING ABOVE THE TOP OF THE FABRIC AND NO MORE THAN 3'-O" OF THE POST SHOULD PROTRUDE ABOVE THE GROUND. THE MINIMUM FENCE HEIGHT (HEIGHT OF FILTER FABRIC ABOVE GRADE) SHALL BE 18". THE MAXIMUM FENCE HEIGHT (HEIGHT OF FILTER FABRIC ABOVE GRADE) SHALL BE 24 INCHES.
- 4. THE FILTER FABRIC SHOULD BE PURCHASED IN A CONTINUOUS ROLL AND CUT TO LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHOULD BE WRAPPED TOGETHER ONLY AT A SUPPORT POST WITH BOTH ENDS SECURELY FASTENED TO THE POST, WITH A MINIMUM 6" OVERLAP.
- 5. EXTRA-STRENGTH FILTER CLOTH (50 POUNDS / LINEAR INCH MINIMUM TENSILE STRENGTH) SHOULD BE USED. A 2" WIDE LATHE SHALL BE STAPLED OVER THE FILTER FABRIC TO SECURELY FASTEN IT TO THE UPSLOPE SIDE OF THE POSTS. THE STAPLES USED SHOULD BE 1.5" HEAVY-DUTY WIRE STAPLES SPACED A MAXIMUM OF 8" APART.
- 6. PLACE THE BOTTOM 12" OF THE FILTER FABRIC INTO THE 8" DEEP TRENCH, EXTENDING THE REMAINING 4" TOWARDS THE UPSIDE OF THE TRENCH AND BACK FILL THE TRENCH WITH SOIL OR GRAVEL AND COMPACTED.

INSPECTION AND MAINTENANCE:

- 1. INSPECT SILT FENCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24-HOURS AFTER EACH RAINFALL EVENT THAT PRODUCES 1/2" OR MORE OF PRECIPITATION CHECK FOR AREAS WHERE RUNOFF HAS ERODED A CHANNEL BENEATH THE FENCE, OR WHERE THE FENCE WAS CAUSED TO SAG OR COLLAPSE BY RUNOFF OVER TOPPING THE FENCE.
- 2. IF THE FENCE FABRIC TEARS, BEGINS TO DECOMPOSE, OR IN ANY OTHER WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED SECTION OF FENCE IMMEDIATELY.
- 3. SEDIMENT MUST BE REMOVED WHEN IT REACHES APPROXIMATELY 1/3 THE HEIGHT OF THE FENCE, ESPECIALLY IF HEAVY RAINS ARE EXPECTED.

FLAT-BOTTOM TRENCH DETAIL

FILTER FABRIC

BACKFILL TRENCH WITH-

FILTER FABRIC

COMPACTED EARTH

RUNOFF

2" WIDE LATH

4. SILT FENCE SHOULD BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER TEMPORARY BMPs ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHOULD BE REMOVED OR STABILIZED ON SITE. DISTURBED AREAS RESULTING FROM FENCE REMOVAL SHALL BE PERMANENTLY STABILIZED.



V-SHAPED TRENCH DETAIL

HARDY	DATE :		DATE	CHK. BY	BY	A REVISIONS	ITEM
	2-20-09	U.E. FERSUNS					
ENGIN		LUCTURED D1 :	+		+		
209 LIN	2-20-09	T.L. HARDY					
TR	DATE :	APPROVED BY :		ļ	<u> </u>		
PHONE: (205)			+				

2" WIDE LATH

FILTER FABRIC

BACKFILL TRENCH WITH COMPACTED EARTH





SHEET 1				
- VICINITY AND 500' STRUCTURAL MAP	A ®	MAP NO. 60, LOT 12 01 MCKINNEY, TIMOTHY DARRELL 152 DUNN STORE ROAD MORGANTOWN, KY 42261 DEED BOOK 133, PAGE 227 NO ZONING	Û	MAP NO. 60, LOT 14 07 BRIAN WOODWARD 213 DUNN STORE RD MORGANTOWN, KY 42261 DEED BOOK 183, PAGE 248 NO ZONING
SUEET 2		WAR NO CO LOT 11		
- ABUTTING PROPERTY OWNERS	₿	MAP NO. 80, LOT TT PHELPS, MICHAEL L & SHELIA J. 6478 BOWLING GREEN ROAD MORGANTOWN, KY 42261 DEED BOOK 115, PAGE 670 NO ZONING	M	MAR NO. 60, LOI 14 RENEER, CHRIS P.O. BOX 767 MORGANTOWN, KY 42261 DEED BOOK 173, PAGE 413 NO ZOMING
A SHELT S				
SZ - PROPOSED LEASE AREA	©	MAP NO. 60, LOT 12.02 COOK, WILLIAM L & MARY P.O. BOX 436 MORGANTOWN, KY 42261 DEED BOOK 190, PAGE 666	N	MAP NO. 60, LOT 14.08 ROHEN, WALTER & TORI 494 DUNN STORE RD MORGANTOWN, KY 42261 DEED BOOK 160, PAGE 430
		NO ZONING		NO ZONING
52 3 - FLOOD ZONE DATA	0	MAP NO. 60, LOT 12 PHELPS, MICHAEL L & SHELIA J 6478 BOWLING GREEN ROAD MORGANTOWN, KY 42261 DEED BOOK 139, PAGE 207 NO ZONING	0	MAP NO. 60, LOT 19 REEVES, HAROLD & BARBARA 508 DUNN STORE RD MORGANTOWN, KY 42261 DEED BOOK 115, PAGE 255 NO ZONING
	Ē	MAP NO. 60, LOT 12.03 PHELPS, MICHAEL L 6478 BOWLING GREEN ROAD MORGANTOWN, KY 42261 DEED BOOK 159, PAGE 21 NO ZONING	P	MAP NO. 60, LOT 12.04 MCKINNEY, TIMOTHY 152 DUNN STORE RD MORGANTOWN, KY 42261 DEED BOOK 173, PAGE 82 NO ZONING
	Ð	MAP NO. 60, LOT 13 ZIATER, ROBERT 220 DUNN STORE RD. MORGANTOWN, KY 42261 DEED BOOK 187, PAGE 378 NO ZONING		
	٦	MAP NO. 60, LOT 15 SWEETMAN, M & JM C/O WILLIAMS, JANICE 1306 ELROD RD. BOWLING GREEN, KY 42101 NO DEED OF RECORD FOUND NO ZONING		
	(H)	MAP NO. 60, LOT 14.01 COMBS, EARL 103 CHICKASAW DR MORGANTOWN, KY 42261 DEED BOOK 160, PAGE 416 NO ZONING		
	0	MAP NO. 60, LOT 14.03 MOORE, SAMUEL 5. P.O. BOX 773 MORGANTOWN, KY 42261 DEED BOOK 189, PAGE 51 NO ZONING		
	٩	MAP NO. 60, LOT 14.04 CAMP, JASON 354 DUNN STORE RD. MORGANTOWN, KY 4.2261 DEED BOOK 159, PAGE 4.22 NO ZONING		
	ß	MAP NO. 60, LOT 14 06 WOODWARD, BRIAN 412 DUNN STORE ROAD MORGANTOWN, KY 42261 DEED BOOK 183, PAGE 248 NO ZONING		





T • Mobile

FLOOD MAP (NOT REQUIRED ON ROOFT OPS)



T • Mobile •



- -

Customer Name: <u>T-MOBILE (TENNESSEE)</u> <u>Site: 9LV0326 DUNN STORE ROAD-- WARREN COUNTY, KY</u>



FAT

P.O. BOX 8597 FORT WORTH, TX 76124-0597 PHONE: (800) 433-1816 FAX: (817) 255-8656

	J O	B DATA	4			
Page 1 of 1		Job No.		J081218001-I		
By	HD/tw	Design No.		S08-0471-1 Dec 18 2008		
Chk'd By	TW	Rev. No. 0	Rev. Date			
Structure	250-FT SST					
Ref. No.	0400\0471\J081218001-I\J081218001-I.out					
Design Standard	ANSI/TIA-222-0	G-2005 Adde	ndum 1			

GENERAL DESIGI	N CONDITIONS
Design Wind Speed: 90.00(mph)	Structure Class: II
ced Wind Speed: 30.00(mph)	Exposure Category: C
Service Wind Speed: 60.00(mph)	Topographic Category: 1
ce Thickness: 0.75(in)	_
CC Informedu, criedini	

	ANTENNA LIST									
No.	Elev.(FT)		Antenna	Mount Type	AZ (')	COAX				
1	250	(1)	Lightning Rod		0					
2	250	74)	TMBX-6517-R2M	AM110-P-12'	0	18)LDF7P-50A				
3	250	(4)	TMBX-6517-R2M	AM110-P-12	120					
4	250	(4)	TMBX-6517-R2M	AM110-P-12'	240					
5	235	(4)	TMBX-6517-R2M	AM110-P-12'	0	12)LDF7P-50A				
6	235	(4)	TMBX-6517-R2M	AM110-P-12'	120					
7	235	(4)	TMBX-6517-R2M	AM110-P-12'	240					
8	220	74	TMBX-6517-R2M	AM110-P-12'	0	12)LDF7P-50A				
9	220	(4	TMBX-6517-R2M	AM110-P-12'	120					
10	220	(4) TMBX-6517-R2M	AM110-P-12'	240					

	LINFAR	APPU	RTENANCES	
T	ED POLTS ON ONE LEG			
) Wayaquide Ladder: ()	-250' On	Tower Face (AZ): 60 deg	_
+	Waysquide Ladder: 0	'-235' On	Tower Face (AZ): 180 deg	_
4		'-220' On	Tower Face (AZ): 300 deg	
)-wavequide Ludder. O	220 011	TONOT TODO THEFT	-

COAXIAL LINES DISTRIBUTION								
HFIGHT	FACE 1	FACE 2	FACE 3	TOTAL				
250' 18D		-	-	18				
235'		12D	-	12				
220'	_	-	12D	12				
(D = DOUBLE STACKED)								



	č,			•	
	Jefe L		\square	E.	,
(1)	INTE	RIOR	BRA(CING Fa	FND
(1)	(EL	. 10'	to	70'))

	MEMBER TABLE LEGEND
D	L3X3X3/16
G	L4X4X1/4
F	L3 1/2X3 1/2X1/4
С	L2 1/2X2 1/2X3/16
Ε	L3X3X1/4
В	L2X2X3/16
Y	L1 3/4X1 3/4X3/16

FACTORED BASE	REACTIONS	
UPLIFT/LEG:	333.7 KIPS.	O.T. MOMENT:
COMP./LEG:	400.2 KIPS	MAX. DOWNLOAD:
HORIZ./LEG:	40.3 KIPS.	TOTAL SHEAR:
EST.WEIGHT:	37.5KIPS. (N	lo SPL or Gussets)

9117.1FT--KIPS. 54.5 KIPS. 68.1 KIPS.





Date and Time: 12/18/2008 11:39:57 AM



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 Contract:
 S08-0471-I:J081218001-I

 Project:
 250-FT:SST:13-SECTIONS

Revision: 0 Site: 9LV0326 DUNN STORE ROAD- WARREN C Engineer: HD/tw

Section A: PROJECT DATA

Project Title:	250-FT:SST:13-SECTIONS
Customer Name:	T-Mobile (Tennessee)
Site:	9LV0326 DUNN STORE ROAD- WARREN COUNTY, KY
Contract No.:	S08-0471-I:J081218001-I
Revision:	0
Engineer:	HD/tw
Date:	Dec 18 2008
Time:	11:38:45 AM

Design Standard: ANSI/TIA-222-G-2005 Addendum 1

GENERAL DESIGN CONDITIONS

Start wind direction: End wind direction: Increment wind direction: Elevation above ground: Gust Response Factor Gh: Structure class: Exposure category: Topographic category: Material Density: Young's Modulus: Poisson Ratio: Weight Multiplier: Minimum Bracing Resistance as per 4.4.1	0.00 (Deg) 330.00 (Deg) 30.00 (ft) 0.85 II C 1 490.1(lbs/ft^3) 29000.0(ksi) 0.30 1.03
WIND ONLY CONDITIONS: Basic Wind Speed (No Ice): Directionality Factor Kd: Importance Factor I: Wind Load Factor: Dead Load Factor: Dead Load Factor for Uplift:	90.00(mph) 0.85 1.00 1.60 1.20 0.90
WIND AND ICE CONDITIONS: Basic Wind Speed (With Ice): Directionality Factor Kd: Importance Factor I: Ice Thickness: Ice Density: Wind Load Factor: Dead Load Factor: Ice Load Factor:	30.00(mph) 0.85 1.00 0.75(in) 56.19(lbs/ft^3) 1.00 1.20 1.00
WIND ONLY SERVICEABILITY CONDITIONS: Serviceability Wind Speed: Directionality Factor Kd: Importance Factor I: Wind Load Factor: Dead Load Factor:	60.00(mph) 0.85 1.00 1.00 1.00
PATTERN LOADING (IF APPLICABLE) CONDITIONS: Basic Wind Speed (No Ice): Directionality Factor Kd:	90.00(mph) 0.85

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 Contract: S08-0471-I:J081218001-I
 Revision: 0

 Project: 250-FT:SST:13-SECTIONS
 Site: 9LV0326 DUNN STORE ROAD- WARREN C

 Date and Time: 12/18/2008 11:39:57 AM
 Engineer: HD/tw

Section B: STRUCTURE GEOMETRY

TOWER GEOMETRY

Cross-Section	Height	Tot Height	# of Secti	on Bot Width	Top Width
	(ft)	(ft)		(in)	(in)
Triangular	250.00	250.00	13	336.00	48.00

SECTION GEOMETRY

Sec	Sec. Name	Elevat	ion	Widtl	ns			Ma	sses			Brcg.
		Bottom	Тор	Bottom	Тор	Legs	Brcg.	Sec.Brc	Int.Brc	Sect.	Database	Clear.
#		(ft)	(ft)	(in)	(in)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(in)
13	2X20A000040410	240.00	250.00	48	48	438	197	0	0	634	489	0.787
12	4X20A000040620	220.00	240.00	72	48	847	369	0	0	1217	1101	0.787
11	4X22A000060820	200.00	220.00	96	72	1027	449	0	0	1476	3029	0.787
10	GX25C000081020	180.00	200.00	120	96	1167	510	135	0	1812	3274	0.787
9	GX27C000101220	160.00	180.00	144	120	1403	563	165	0	2130	2114	0.787
8	GX30D000121420	140.00	160.00	168	144	1659	752	246	0	2657	2657	0.787
7	GX32D000141620	120.00	140.00	192	168	1936	827	284	0	3047	3053	0.787
6	GX32E000161820	100.00	120.00	216	192	1954	1194	390	0	3538	4762	0.787
5	GX35F000182020	80.00	100.00	240	216	2252	1527	436	0	4214	5331	0.787
4	BX35CCD0202220	60.00	80.00	264	240	2247	1099	750	120	4215	5816	0.787
3	BX37DDD0222420	40.00	60.00	288	264	2675	1398	916	132	5120	5328	0.787
2	BX37DDF0242620	20.00	40.00	312	288	2541	1468	985	222	5215	8186	0.787
1	BX40DDF0262820	0.00	20.00	336	312	2970	1541	1192	240	5943	7030	0.787
Tota	l Mass:					23116	11893	5497	713	41220	52169	

PANEL GEOMETRY

Sec#	Pnl#	Туре	SecBrcg	Mid. Horiz Continuous	Horiz	Height	Bottom Width	Top Width	Plan Bracing	Hip Bracing	Gusset Plate	Gusset Plate
				0011021100000					52002119	y	Area	Weight
						(ft)	(in)	(in)			(ft^2)	(lbs)
13	2	х	(None)		Yes	5.0	48.0	48.0	(None)	(None)	0.850	17.35
13	1	X	(None)		None	5.0	48.0	48.0	(None)	(None)	0.850	17.35
12	4	Х	(None)		None	5.0	54.0	48.0	(None)	(None)	0.737	15.02
12	3	Х	(None)		None	5.0	60.0	54.0	(None)	(None)	0.737	15.02
12	2	х	(None)		None	5.0	66.0	60.0	(None)	(None)	0.737	15.02
12	1	х	(None)		None	5.0	72.0	66.0	(None)	(None)	0.737	15.02
11	4	Х	(None)		None	5.0	78.0	72.0	(None)	(None)	0.753	15.34
11	3	Х	(None)		None	5.0	84.0	78.0	(None)	(None)	0.753	15.34
11	2	Х	(None)		None	5.0	90.0	84.0	(None)	(None)	0.753	15.34
11	1	Х	(None)		None	5.0	96.0	90.0	(None)	(None)	0.753	15.34
10	2	х	2-Subdiv.	. No	None	10.0	108.0	96.0	(None)	(None)	1.055	21.54
10	1	Х	2-Subdiv.	. No	None	10.0	120.0	108.0	(None)	(None)	1.055	21.54
9	2	х	2-Subdiv.	. No	None	10.0	132.0	120.0	(None)	(None)	1.200	24.50
9	1	Х	2-Subdiv.	. No	None	10.0	144.0	132.0	(None)	(None)	1.200	24.50
8	2	х	2-Subdiv.	. No	None	10.0	156.0	144.0	(None)	(None)	1.345	27.46
8	1	Х	2-Subdiv.	. No	None	10.0	168.0	156.0	(None)	(None)	1.345	27.46
7	2	х	2-Subdiv.	. No	None	10.0	180.0	168.0	(None)	(None)	1.491	30.42
7	1	х	2-Subdiv.	. No	None	10.0	192.0	180.0	(None)	(None)	1.491	30.42
6	2	Х	2-Subdiv.	. No	None	10.0	204.0	192.0	(None)	(None)	1.636	33.38
6	1	х	2-Subdiv.	. No	None	10.0	216.0	204.0	(None)	(None)	1.636	33.38
5	2	Х	2-Subdiv.	. No	None	10.0	228.0	216.0	(None)	(None)	1.200	36.34
5	1	Х	2-Subdiv.	. No	None	10.0	240.0	228.0	(None)	(None)	1.200	36.34
4	1	Х	4-Subdiv.	. Yes	None	20.0	264.0	240.0	2-Subdiv.	(None)	3.488	71.15
3	1	Х	4-Subdiv.	. Yes	None	20.0	288.0	264.0	2-Subdiv.	(None)	3.681	112.70

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Contr	Contract: S08-0471-I:J081218001-I Revision: 0												
Proje	ect: 250	-FT:SST:13-SECTION	IS			Si	te: 9LV	0326 DUN	N STOR	E ROAD-	WARREN C		
Data	and Tin	$\sim 12/18/2008 11.3$	20.57	ΔМ		En	Tineer.	HD /+w					
Date	and III	le. 12/10/2000 11.5		232.1		EII	grineer.	mb/ cw					
7/1	Tog	CD 2 1/A	n 5 7 2	ar 50monsion	6-1 000	7325V							
7/1	Diag	1 3 4 3 4 7 4	NJE	gr.JUTENSTON Poltod	2-0 625	72227 7225V	1 250	1 500	0 250	3 000			
7/1	Secul	121/2221/222/16	736	Bolted	1-0.625	N305V	1.250	1 250	0.250	1 975			
//1	Sechi	LZ 1/2X2 1/2X3/10	A30	BOILEU	1-0.025	AJZJA	1.230	1.230	0.230	1.075			
6/2	Lea	SR 3 1/4	a572	ar 50Tension	6-1 000	A 325X							
6/2	Diag	1.32321/4	736	Boltod	2-0 625	A325X	1 250	1 500	0 250	3 000			
6/2	Dray Socul	1 3 4 3 4 3 / 1 6	72C	Poltod	1-0 625	7325V	1 250	1 500	0.250	1 975			
6/1	Sechi		A50 7570	ar Elmonoion	6 1 000	AJZJA	1.230	1.300	0.230	1.075			
6/1	Diag	JR J 1/4	NJC	gr.Julenston	2 0 625	AJZJA	1 250	1 500	0 250	2 000			
6/1	Diag	L3X3X1/4	A30	Bolted	2-0.625	AJZJX	1.250	1,500	0.250	3.000			
6/1	Sechi	L3X3X3/10	A36	Bolted	1-0.625	A325X	1.250	1,500	0.250	1.8/5			
5/2	no ľ	971/2	7572	ar 50Tension	6-1 000	N 3 2 5 V							
5/2	Dig	1/2 + 1/2 + 2	776	gr.JUIEIISIUII	2-0 625	A325A	1 250	1 750	0 250	3 000			
5/2	Diay	LO 1/2XJ 1/2X1/4	A30	Dolted	2-0.025	AJZJA	1 250	1,750	0.250	1 075			
5/2	Sechi		A30	Borced	1-0.625	ASZSA	1.250	1.500	0.250	1.0/5			
5/1	Leg	SR 3 1/2	A572	gr.SUTension	6-1.000	AJZJX	1 050	1 750	0 050	2 000			
5/1	Diag	L3 1/2x3 1/2x1/4	A36	Bolted	2-0.625	A325X	1.250	1.750	0.250	3.000			
5/1	SecHl	L3x3x3/16	A36	Bolted	1-0.625	A325X	1.250	1.500	0.250	1.875			
4 / 1	Terr	CD 2 1/2	* 5 7 9	ar Fomanaian	C 1 000	3 3 3 E V							
4/1	Leg	SK S 1/2	AD 12	gr.surension	0-1.000	ASSON	1 250	1 250	0.250	2 000	0 250 4 00		
4/1 4/1	DIAG	212 1/222 1/223/10	ASO	Borted	2-0.625	ASZSA	1.250	1.250	0.250	3.000	0.250 4.00		
4/1	Secul	L2 1/2X2 1/2X3/16	A36	BOILEG	1-0.625	A325X	1.250	1.250	0.250	1.8/5			
4/1	SecD2	L2 1/2x2 1/2x3/16	A36	Bolted	1-0.625	A325X	1.250	1.250	0.250	1.875			
4/1	SecHl	L3x3x1/4	A36	Bolted	1-0.625	A325X	1.250	1.500	0.250	1.875			
4/1	SecH2	L2x2x3/16	A36	Bolted	1-0.625	A325X	1.250	0.875	0.250	1.875			
4/1	SecH3	L2x2x3/16	A36	Bolted	1-0.625	A325X	1.250	0.875	0.250	1.875			
4/1	PlanHl	L3x3x3/16	A36	Bolted	1-0.625	A325X	1.125	1.500	0.375	1.875			
3/1	T.e.r	4/2 F 92	a572	ar 50Tension	6-1 125	1225X							
3/1	Diad	21.32323/16	A36	Bolted	2-0 625	A325X	1 250	1 500	0 375	3 000	0 375 4 00		
3/1	Dray SecD1	12 1/2 2 1/2 2 1/2 2 1 6	736	Polted	1_0_625	7325V	1 250	1 250	0.375	1 975	0.575 4.00		
2/1	Secol	$L_2 = 1/2X_2 = 1/2X_3/10$	AJU NJC	Dolted	1 0 625	NJOEV	1.250	1 250	0.375	1.075			
3/1 3/1	Secoz	$L_2 1/2X_2 1/2X_3/10$	ASO	Bolled	1-0.625	AJZJA	1.250	1.250	0.375	1.075			
3/1	Sechi	L3 1/2X3 1/2X1/4	A36	Bolted	1-0.625	AJZJX	1.250	1.750	0.375	1.875			
3/1	SecH2	L2 1/2x2 1/2x3/16	A36	Bolted	1-0.625	A325X	1.250	1.250	0.3/5	1.8/5			
3/1	SecH3	L2 1/2x2 1/2x3/16	A36	Bolted	1-0.625	A325X	1.250	1.250	0.375	1.875			
3/1	PlanH1	L3x3x3/16	A36	Bolted	1-0.625	A325X	1.125	1.500	0.375	1.875			
2/1	Lea	SR 3 3/4	A572	gr.50Tension	6-1,125	A325X							
2/1	Diag	$21.3 \times 3 \times 3 / 16$	A36	Bolted	2-0.625	A325X	1,250	1,500	0.375	3,000	0.375 4.00		
2/1	SecD1	1.2 1/2x2 1/2x3/16	A36	Bolted	1-0 625	A325X	1 250	1.250	0.375	1.875			
2/1	SecD2	1/2 + 1/2 + 2 + 1/2 + 3/16	A36	Bolted	1-0.625	A325X	1 250	1 250	0 375	1 875			
$\frac{2}{2}$	SecH1	12 1/2x2 1/2x3/10	736	Bolted	1-0.625	73257	1 250	1 750	0,375	1 875			
2/1	Sechi	13 1/2x3 1/2x1/4	A30 A36	Bolted	1 0 625	MJZJA	1.250	1 250	0.375	1 075			
2/1	Sechz	$1/2 1/2 \times 2 1/2 \times 3/10$	ADC AD	Bolted	1 0 625	AJZJA NODEV	1.250	1.250	0.373	1 075			
2/1	Sechs	$L_2 1/2X2 1/2X3/10$	A30	Bolted	1-0.625	A325X	1.250	1.250	0.375	1.075			
2/1	PlanHi	L3 1/2x3 1/2x1/4	A36	Bolted	1-0.625	A325X	1.125	1./50	0.3/5	1.8/5			
1/1	Lea	SR 4	A572	gr.50Tension	6-1,250	A325X							
1/1	Dian	21.3x3x3/16	A36	Bolted	2-0.625	A325X	1.250	1.500	0.375	3,000	0.375 4 00		
1/1	SecD1	1.3v3v3/16	A36	Bolted	1-0 625	1323A	1 250	1 500	0 375	1 875			
1/1	Pech1	134343/10	736	Bolted	1-0.625	7323A	1 250	1 500	0.375	1 875			
1/1	Secuz Cocui	T 1 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	N26	DOLLED	1-0.023	NOVEN	1 250	7.JUU	0.313	1 075			
1/1	Sechi	L4X4X1/4	AJO	ported	1-0.025	AJZJA	1.250	2.000	0.3/3	1.075			
1/1	SecHZ	$L_2 = 1/2X_2 = 1/2X_3/16$	AJD	Boited	1-0.625	HJZJX	1.200	1.250	0.3/3	1.075			
1/1	SecH3	LZ 1/2XZ 1/2X3/16	A36	ROTTED	1-0.625	AJZ5X	1.250	1.250	0.375	1.8/5			
1/1	PlanHl	ьз 1/2x3 1/2x1/4	A36	Bolted	1-0.625	A325X	1.125	1./50	0.375	1.875			

Page B 3





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 File: L:\Designs\08-0400\0471\J081218001-I\J081218001-I.out

 Contract: S08-0471-I:J081218001-I
 Revision: 0

 Project: 250-FT:SST:13-SECTIONS
 Site: 9LV0326 DUNN STORE ROAD- WARREN C

 Date and Time: 12/18/2008 11:39:57 AM
 Engineer: HD/tw

Section D: TRANSMISSION LINE DATA

Transmission Lines Position

No.	Bot El (ft)	Top El (ft)	Desc.	Radius (ft)	Az.	Orient.	No.	No. of Rows	Part of Face	Vert.	Antenna	User Ka
1	0.00	250.00	LDF7P-50A	13.37	60.00	7.20	18	2		No	TMBX-6517-R2	M
2	0.00	235.00	LDF7P-50A	13.37	180.00	127.20	12	2		No	TMBX-6517-R2	M
3	0.00	220.00	LDF7P-50A	13.37	300.00	247.20	12	2		No	TMBX-6517-R2	M.

Transmission Lines Details

No.	Desc.	Width (in)	Depth (in)	Unit Mass (lb/ft)	Line Spacing (in)	Row Spacing (in)
1	LDF7P-50A	2.01	2.01	0.92	2.500	2.000
2	LDF7P-50A	2.01	2.01	0.92	2.500	2.000
3	LDF7P-50A	2.01	2.01	0.92	2.500	2.000





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File: Contr Proje Date	L:\Desi act: S08 act: 250- and Time	gns\08-0 -0471-I: FT:SST:1 : 12/18/	400\047: J0812180 3-SECTIO 2008 11	1\J0812 001-I ONS :39:57	218001-I\ AM	J08121	8001-1.out	Revision: 0 Site: 9LV032 Engineer: HI	26 DUNN D/tw	STORE	ROAD-	WARREN	C
Secti Load	L on G: WI Combinatio	ND LOAD :	DATA Wi	nd Only	,								
Wind	Direction		0.	00 (deg	1)								
Wind	Pressure												
Secti	on Panel	Bot E (ft)	Llev To (f	op Elev t)	Kz	Kzt	Wind Pressu (psf)	re Ice Thick (tiz) (in	ness >				
13	2	245.0	0 25	0.00	1.53	1.00	36.68	0.000					
10	1	240.0)0 24	5.00	1.53	1.00	36.52	0.000					
12	4	230.0)U 24 ND 23	5 00	1.52	1 00	36.20	0.000					
	2	225.0	0 23	0.00	1.50	1.00	36.03	0.000					
	1	220.0	0 22	5.00	1.50	1.00	35.87	0.000					
11	4	215.0	0 22	20.00	1.49	1.00	35.69	0.000					
	3	210.0	0 21	5.00	1.48	1.00	35.52	0.000					
	2	205.0	0 21	0.00	1.48	1.00	35.34	0.000					
	1	200.0	0 20	15.00	1.47	1.00	35.16	0.000					
10	2	190.0	0 20	0.00	1.46	1.00	34.88	0.000					
0	1	180.0	10 IS		1.44	1.00	34.50	0.000					
9	2	160.0	0 10		1.42	1.00	33 68	0.000					
8	2	150.0	0 16	50.00	1.39	1.00	33.24	0.000					
0	1	140.0	0 15	50.00	1.37	1.00	32.77	0.000					
7	2	130.0	0 14	10.00	1.35	1.00	32.28	0.000					
	1	120.0	00 13	30.00	1.33	1.00	31.77	0.000					
6	2	110.0	00 12	20.00	1.30	1.00	31.21	0.000					
_	1	100.0	0 11	0.00	1.28	1.00	30.62	0.000					
5	2	90.00		0.00	1.25	1.00	29.98	0.000					
Δ	1	60.00) 90) 90	0.00	1.22	1 00	29.29	0.000					
7	1	40.00) 60	0.00	1.09	1.00	26.19	0.000					
2	1	20.00) 40	0.00	0.98	1.00	23.52	0.000					
1	1	0.00	20	0.00	0.85	1.00	20.36	0.000					
Calcu	lated Eff	ective Wir	nd Areas										
Sec.	Pan, Flat	App. Flat	t Round	App. Re	ound Area	Solid	. Flat Roun	nd Flat Round	Eff.				
0001	Area	Area	Area	Area	Ice	Ratio	Drag Drag	g Dir Dir	Area				
	(ft^2)	(ft^2)	(ft^2)	(ft^2)	(ft^2)				(ft^2)				
13	2 3.33	0.00	1.67	0.00	0.00	0.24	2.47 1.44		8.98				
12	4 2 61	0.00	1 67	0.00	0.00	0.19	2.62 1.50	0.80 1.00	7.98				
12	3 2.71	0.00	1.67	0.00	0.00	0.18	2.67 1.52	0.80 1.00	8.34				
	2 2.82	0.00	1.67	0.00	0.00	0.17	2.71 1.55	0.80 1.00	8.70				
	1 2.93	0.00	1.67	0.00	0.00	0.16	2.75 1.56	5 0.80 1.00	9.06				
11	4 3.05	0.00	1.88	0.00	0.00	0.15	2.76 1.57	0.80 1.00	9.69				
	3 3.17	0.00	1.88	0.00	0.00	0.15	2.79 1.58	0.80 1.00	10.04				
	2 3.29	0.00	1.88	0.00	0.00	0.14	2.81 1.59	0.80 1.00	10.40				
	1 3.41	0.00	1.88	0.00	0.00	0.13	2.83 1.60	0.80 1.00	10.75				
10	2 7.86	0.00	4.17	0.00	0.00	0.14	2.82 1.59	0.80 1.00	24.35				
0	1 0.3U	0.00	4.1/	0.00	0.00	0.13	2 86 1 63		20.00 27 92				
Э	2 0.90	0.00	4.59	0.00	0.00	0.12	2.89 1 63	3 0.80 1.00	29.16				
8	2 11.8	3 0.00	5.01	0.00	0.00	0.13	2.84 1.61	0.80 1.00	34.92				



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-0.89 -0.87 1.94 -3.36 6.57

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File: L:\Designs\08-0400\0471\J081218001-I\J081218001-I.out Contract: S08-0471-I:J081218001-I Revision: 0 Project: 250-FT:SST:13-SECTIONS Site: 9LV0326 DUNN STORE ROAD- WARREN C Date and Time: 12/18/2008 11:39:57 AM Engineer: HD/tw 6 TMBX-6517-R2M 4 AM110-P-12' 235 0.00 -24.92 0.00 -0.90 -0.87 1.79 3.10 -6.14 TMBX-6517-R2M 4 AM110-P-12' -0.90 -0.87 1.79 -3.10 6.14 0.00 ~24.92 0.00 235 7 8 TMBX-6517-R2M 4 AM110-P-12' 220 0.00 ~30.28 0.00 -1.08 -0.87 -3.88 0.00 0.00 9 TMBX-6517-R2M 4 AM110-P-12' 10 TMBX-6517-R2M 4 AM110-P-12' 220 0.00 -24.92 0.00 0.00 -24.92 0.00 -0.89 -0.87 1.94 3.36 -6.57

Load	Combination	

Wind Only - Max Tension

Wind Direction

220

Wind Pressure

Section	Panel	Bot Elev (ft)	Top Elev (ft)	Kz	Kzt	Wind Pressure (psf)	Ice Thickness (tiz) (in)
13	2	245.00	250.00	1.53	1.00	36.68	0.000
	1	240.00	245.00	1.53	1.00	36.52	0.000
12	4	235.00	240.00	1.52	1.00	36.36	0.000
	З	230.00	235.00	1.51	1.00	36.20	0.000
	2	225.00	230.00	1.50	1.00	36.03	0.000
	1	220.00	225.00	1.50	1.00	35.87	0.000
11	4	215.00	220.00	1.49	1.00	35.69	0.000
	3	210.00	215.00	1.48	1.00	35.52	0.000
	2	205.00	210.00	1.48	1.00	35.34	0.000
	1	200.00	205.00	1.47	1.00	35.16	0.000
10	2	190.00	200.00	1.46	1.00	34.88	0.000
	1	180.00	190.00	1.44	1.00	34.50	0.000
9	2	170.00	180.00	1.42	1.00	34.10	0.000
	1	160.00	170.00	1.41	1.00	33.68	0.000
8	2	150.00	160.00	1.39	1.00	33.24	0.000
	1	140.00	150.00	1.37	1.00	32.77	0.000
7	2	130.00	140.00	1.35	1.00	32.28	0.000
	1	120.00	130.00	1.33	1.00	31.77	0.000
6	2	110.00	120.00	1.30	1.00	31.21	0.000
	1	100.00	110.00	1.28	1.00	30.62	0.000
5	2	90.00	100.00	1.25	1.00	29.98	0.000
	1	80.00	90.00	1.22	1.00	29.29	0.000
4	1	60.00	80.00	1.17	1.00	28.12	0.000
3	1	40.00	60.00	1.09	1.00	26.19	0.000
2	1	20.00	40.00	0.98	1.00	23.52	0.000
1	1	0.00	20.00	0.85	1.00	20.36	0.000

Calculated Effective Wind Areas

Sec.	Pan	. Flat	App.Flat	Round	App.Rot	und Area	Solid.	Flat Round	Flat Round	Eff.
		Area	Area	Area	Area	Ice	Ratio	Drag Drag	Dir Dir	Area
		(ft^2)	(ft^2)	(ft^2)	(ft^2)	(ft^2)				(ft^2)
13	2	3.33	0.00	1.67	0.00	0.00	0.24	2.47 1.44	0.80 1.00	8.98
	1	2.68	0.00	1.67	0.00	0.00	0.21	2.57 1.48	0.80 1.00	7.97
12	4	2.61	0.00	1.67	0.00	0.00	0.19	2.62 1.50	0.80 1.00	7.98
	3	2.71	0.00	1.67	0.00	0.00	0.18	2.67 1.52	0.80 1.00	8.34
	2	2.82	0.00	1.67	0.00	0.00	0.17	2.71 1.55	0.80 1.00	8.70
	1	2.93	0.00	1.67	0.00	0.00	0.16	2.75 1.56	0.80 1.00	9.06
11	4	3.05	0.00	1.88	0.00	0.00	0.15	2.76 1.57	0.80 1.00	9.69
	3	3.17	0.00	1.88	0.00	0.00	0.15	2.79 1.58	0.80 1.00	10.04





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File	: L:\Designs	\08-0400\	0471\J081	218001-	I\J0812	18001-I.out				
Cont	ract: S08-04'	71-I:J081	218001-1			1	Revision: 0			
Proj	ect: 250-FT:S	SST:13-SE	CTIONS				Site: 9LV0326 D	UNN STORE	ROAD-	WARREN C
Date	and Time: 12	2/18/2008	11:39:57	AM		1	Engineer: HD/tw			
					(ft^2) (ft^2)				
1	Lightning Rod	1		250	0.00	-0.75 0.00	-0.03 -0.01	0.00	0.00	0.00
2	TMBX-6517-R2M	4 AM110	-P-12'	250	0.00	-30.28 0.00	-1.11 -0.87	-3.28	0.00	0.00
3	TMBX-6517-R2M	4 AM110	-P-12'	250	0.00	-24.92 0.00	-0.92 -0.87	1.64	2.84	-5.70
4	TMBX-6517-R2M	4 AM110	-P-12'	250	0.00	-24.92 0.00	-0.92 -0.87	1.64	-2.84	5.70
5	TMBX-6517-R2M	4 AM110	-P-12'	235	0.00	-30.28 0.00	-1.10 -0.87	-3.58	0.00	0.00
6	TMBX-6517-R2M	4 AM110	-P-12'	235	0.00	-24.92 0.00	-0.90 -0.87	1.79	3.10	-6.14
7	TMBX-6517-R2M	4 AM110	-P-12'	235	0.00	-24.92 0.00	-0.90 -0.87	1.79	-3.10	6.14
8	TMBX-6517-R2M	4 AM110	-P-12'	220	0.00	-30.28 0.00	-1.08 -0.87	-3.88	0.00	0.00
9	TMBX-6517-R2M	4 AM110	-P-12	220	0.00	-24.92 0.00	-0.89 -0.87	1.94	3.36	-6.57
10	TMBX-6517-R2M	4 AM110	-P-12'	220	0.00	-24.92 0.00	-0.89 -0.87	1.94	-3.30	6.5/
Load	Combination		Wind and	Ice						
Wind	Direction		0.00 (deg	g)						
Wind	Pressure									
Secti	ion Panel	Bot Elev	Top Elev	Kz	Kzt	Wind Pressu	re Ice Thickness			
		(ft)	(ft)			(psf)	(tiz) (in)			
13	2	245 00	250 00	1 53	1 00	2 55	1 836			
10	1	240.00	245.00	1.53	1.00	2.53	1.832			
12	4	235.00	240.00	1.52	1.00	2.53	1.828			
	3	230.00	235.00	1.51	1.00	2.51	1.824			
	2	225.00	230,00	1.50	1.00	2.50	1.821			
	1	220.00	225.00	1.50	1.00	2.49	1.816			
11	4	215.00	220.00	1.49	1.00	2.48	1.812			
	3	210.00	215.00	1.48	1.00	2.47	1.808			
	2	205.00	210.00	1.48	1.00	2.45	1.804			
	1	200.00	205.00	1.47	1.00	2.44	1.799			
10	2	190.00	200.00	1.46	1.00	2.42	1.793			
	1	180.00	190.00	1.44	1.00	2.40	1.783			
9	2	1/0.00	180.00	1.42	1.00	2.31	1.113			
o	1	150.00	160.00	1 20	1.00	2.34	1.705			
0	1	140.00	150.00	1 37	1 00	2.31	1 740			
7	2	130.00	140.00	1.35	1.00	2.24	1.728			
,	1	120.00	130.00	1.33	1.00	2.21	1.715			
6	2	110.00	120.00	1,30	1.00	2.17	1.700			
	1	100.00	110.00	1.28	1.00	2.13	1.685			
5	2	90.00	100.00	1.25	1.00	2.08	1.668			
	1	80.00	90.00	1.22	1.00	2.03	1.650			
4	1	60.00	80.00	1.17	1.00	1.95	1.618			
3	1	40.00	60.00	1.09	1.00	1.82	1.565			
2	1	20.00	40.00	0.98	1.00	1.63	1.487			
1	1	0.00	20.00	0.85	1.00	1.41	1.332			
Calc	ulated Effecti	ve Wind Ar	eas							
Sec.	Pan. Flat Ap	p.Flat Ro	ound App.R	ound Are	ea Solid	d. Flat Round	d Flat Round E	ff.		
	Area Ar	ea Ar	rea Area	Ice	e Ratio	o Drag Drag	Dir Dir A	rea		
	(ft^2) (ft	^2) (ft'	`2) (ft^2)	(ft^2	2)		(ft	^2)		

13 2 3.29 0.00 1.67 0.00 7.99 0.62 1.79 1.36 0.80 1.00 17.83

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10 million							

ENGINEERING SOFTWARE TSTower - v 3.8.4 Tower Analysis Program (c) 1997-2006 TowerSoft www.TSTower.com



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File Cont Proj	: L:\Designs [\] ract: S08-04 [*] ect: 250-FT:S	\08-0400\0 71-I:J0812 SST:13-SEC	471\J081: 18001-I TIONS	218001-	-I\J081	.218001-	·I.out Re Si	evision: te: 9LV	0 70326 DU	NN STORE	ROAD-	WARREN C
Date	and Time: 12	2/18/2008	11:39:57	AM			Er	ngineer:	HD/tw			
1	1 72.73 26	.64 1.5	7 1.20	0.	70	102.12						
App.	Concentrated 1	Loads										
Ant.	Description	Qty Mount	Desc. 1	Elev. (ft)	CaAc X-Dir E-W (ft^2)	CaAc Y-Dir N-S (ft^2)	XForce E-W (Kips)	YForce N-S (Kips)	ZForce (Kips)	M-x (kipsft)	M-y (kipsft)	M-z (kipsft)
1 2 3 4 5 6 7 8 9 10	Lightning Rod TMBX-6517-R2M TMBX-6517-R2M TMBX-6517-R2M TMBX-6517-R2M TMBX-6517-R2M TMBX-6517-R2M TMBX-6517-R2M TMBX-6517-R2M TMBX-6517-R2M	1 4 AM110- 4 AM110- 4 AM110- 4 AM110- 4 AM110- 4 AM110- 4 AM110- 4 AM110- 4 AM110- 4 AM110-	P-12' P-12' P-12' P-12' P-12' P-12' P-12' P-12' P-12' P-12'	250 250 250 235 235 235 235 220 220 220	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	-4.57 -52.59 -49.07 -52.45 -48.92 -48.92 -52.31 -48.76 -48.76	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	-0.01 -0.13 -0.13 -0.13 -0.13 -0.12 -0.12 -0.12 -0.13 -0.12 -0.12	-0.01 -0.87 -0.87 -0.87 -0.87 -0.87 -0.87 -0.87 -0.87 -0.87 -0.87	0.00 -3.28 1.64 1.64 -3.58 1.79 1.79 -3.88 1.94 1.94	0.00 0.00 2.84 -2.84 0.00 3.10 -3.10 0.00 3.36 -3.36	0.00 0.00 -0.79 0.79 0.00 -0.85 0.85 0.85 0.00 -0.91 0.91
Load	Combination		Wind Only	y - Ser	viceabil	lity						
Wind	Direction		0.00 (de	g)								
Wind	Pressure											
Sect	ion Panel	Bot Elev (ft)	Top Elev (ft)	Kz	Kzt	Wind (ps	Pressure f)	Ice Th (tiz)	ickness (in)			
13	2	245.00	250.00	1.53	1.00	$ \begin{array}{ccc} 0 & 10. \\ 0 & 10. \end{array} $	19 14	0.00	0			
12	4	235.00	240.00	1.52	1.00	0 10.	10	0.00	0			
	3	230.00	235.00	1.51	1.00	0 10.	06	0.00	0			
	2	225.00	230.00	1.50	1.00	0 10.	01	0.00	0			
	1	220.00	225.00	1.50	1.0	0 9.9	6	0.00	0			
11	4	215.00	220.00	1.49	1.00	0 9.9	2	0.00	0			
	2	210.00	213.00	1 48	1.0	0 9.0 0 9.0	2	D.00	0			
	1	200.00	205.00	1.47	1.0	0 9.7	7	0.00	0			
10	2	190.00	200.00	1.46	1.0	0 9.6	9	0.00	0			
	1	180.00	190.00	1.44	1.0	0 9.5	8	0.00	0			
9	2	170.00	180.00	1.42	1.0	0 9.4	7	0.00	0			
	1	160.00	170.00	1.41	1.0	0 9.3	5	0.00	0			
8	2	150.00	160.00	1.39	1.0	0 9.2	3	0.00	0			
	1	140.00	150.00	1.37	1.0	0 9.1	0	0.00	0			
7	2	130.00	140.00	1.35	1.0	U 8.9	1	0.00	0			
c	1	110 00	120.00	1 20	1.0	0 8.8 0 0 0	27	0.00	0			
0	2	100.00	110 00	1 28	1 0	0 8 5	1	0.00	0			
5	2	90.00	100.00	1,25	1.0	0 8.3	3	0.00	0			
5	1	80.00	90.00	1.22	1.0	0 8.1	4	0.00	0			
4	1	60.00	80.00	1.17	1.0	0 7.8	1	0.00	0			
3	1	40.00	60.00	1.09	1.0	0 7.2	8	0.00	0			
2	1	20.00	40.00	0.98	1.0	0 6.5	3	0.00	0			
1	1	0.00	20.00	0.85	1.0	0 5.6	5	0.00	0			





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File	'ile: L:\Designs\08-0400\0471\J081218001-I\J081218001-I.out													
Cont:	ract:	S08047	1-I	:J0812180	01-I					Revision:	0			
Proje	ect:	250-FT:S	ST:	13-SECTIC	NS					Site: 9LV	0326 DU	NN STORE	ROAD-	WARREN C
Date	and	Time: 12	/18	/2008 11:	39:57	AM				Engineer:	HD/tw			
6	2	29.71 0.0	0	1.58	1.20		0.66	31.14						
	1	29.71 0.0	0	1.58	1.20		0.66	31.14						
5	2	29.71 0.0	0	1.58	1.20		0.66	31.14						
	1	29.71 0.0	0	1.58	1.20		0.66	31.14						
4	1	59.41 0.0	0	1.58	1.20		0.66	62.28						
3	1	59.41 0.0	0	1.58	1.20		0.66	62.28						
2	1	59.41 0.0	0	1.58	1.20		0.66	62.28						
1	1	59.41 0.0	0	1.58	1.20		0.66	62.28						
App.	Conce	entrated L	oads	5										
Ant.	Descr	iption	Qty	Mount Des	c.)	Elev. (ft)	CaAc X-Dir E-W (ft^2)	CaAc Y-Dir N-S (ft^2)	XForce E-W (Kips	e YForce N-S) (Kips)	ZForce (Kips)	M-x (kipsft)	M-y (kipsft)	M-z (kipsft)
1	Light	ning Rod	1			250	0.00	-0.75	0.00	-0.01	-0.01	0.00	0.00	0.00
2	TMBX-	-6517-R2M	4	AM110-P-1	2'	250	0.00	-30.28	0.00	-0.31	-0.87	-3.28	0.00	0.00
3	TMBX-	-6517-R2M	4	AM110-P-1	2'	250	0.00	-24.92	0.00	-0.25	-0.87	1.64	2.84	-1.58
4	TMBX-	-6517-R2M	4	AM110-P-1	2'	250	0.00	-24.92	0.00	-0.25	-0.87	1.64	-2.84	1.58
5	TMBX-	6517-R2M	4	AM110-P-1	2'	235	0.00	-30.28	0.00	-0.31	-0.87	-3.58	0.00	0.00
6	TMBX-	-6517-R2M	4	AM110-P-1	2'	235	0.00	-24.92	0.00	-0.25	-0.87	1.79	3.10	-1.71
7	TMBX-	-6517-R2M	4	AM110-P-1	2'	235	0.00	-24.92	0.00	-0.25	-0.87	1.79	-3.10	1.71
8	TMBX-	-6517-R2M	4	AM110-P-1	2'	220	0.00	-30.28	0.00	-0.30	-0.87	-3.88	0.00	0.00
9	TMBX-	-6517-R2M	4	AM110-P-1	2'	220	0.00	-24.92	0.00	-0.25	-0.87	1.94	3.36	-1.82
10	TMBX-	6517-R2M	4	AM110-P-1	2'	220	0.00	-24.92	0.00	-0.25	-0.87	1.94	-3.36	1.82





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File Cont:	: L:\De ract: S	signs\08 08-0471-	-0400\047 I:J081218	71\J0812180 3001-I	001-I\J00	31218001	-I.out	Revisi	on:	0					
Proje	ect: 25	0-FT:SST	:13-SECTI	IONS				Site:	9LV	0326	DUNN	STORE	ROAD-	WARRE	NC
Date	and Ti	me: 12/1	8/2008 11	L:39:57 AM				Engine	er:	HD/	tw				
33	140.0	8.8	8.7	-0.1	0.56	0.55	-0.01								
30	130.0	7.6	7.5	-0.1	0.52	0.52	0.01								
27	120.0	6.5	6.4	-0.1	0.46	0.46	-0.01								
24	110.0	5.5	5.5	~0.1	0.43	0.42	0.01								
21	100.0	4.6	4.6	-0.1	0.37	0.37	-0.01								
18	90.0	3.9	3.8	-0.1	0.34	0.34	0.01								
15	80.0	3.1	3.1	~0.1	0.31	0.30	-0.01								
12	60.0	1.9	1.8	0.0	0.21	0.21	0.03								
9	40.0	1.0	0.9	0.0	0.16	0.15	-0.01								
5	20.0	0.3	-0.3	0.0	0.07	-0.07	0.03								
5	Combina	U.U	0.0	U.U	Nov Topci	0.00	0.00								
цоац	COMDINA	CT011	14	ina onry -	Max Tensi	011									
Wind	Directi	on	М	laximum disp	lacements										
Node	Elev.	N-S Disp	W-E Disp	Vert.Disp	N-S Rot	W-E Rot	Twist								
	(ft)	(in)	(in)	(in)	(Deg)	(Deg)	(Dec	1)							
81	250.0	29.1	29.0	-0.1	1.12	1.13	0.03								
78	245.0	27.9	27.8	-0.1	1.12	1.13	0.03								
75	240.0	26.7	26.7	-0.1	1.10	1.11	-0.03								
72	235.0	25.6	25.5	-0.1	1.10	1.10	0.03								
69	230.0	24.4	24.3	-0.1	1.08	1.08	-0.03	i							
66	225.0	23.3	23.2	-0.1	1.04	1.05	0.03								
63	220.0	22.2	22.1	-0.1	1.03	1.03	-0.02	!							
60	215.0	21.1	21.0	-0.1	1.00	1.00	0.02								
57	210.0	20.1	20.0	-0.1	0.97	0.97	-0.02								
54	205.0	19.1	19.0	-0.1	0.94	0.94	0.02								
51	200.0	18.1	18.0	-0.1	0.89	0.89	-0.02								
48	190.0	16.2	16.1	-0.1	0.82	0.82	0.03								
45	180.0	14.5	14.4	-0.1	0.77	0.77	~0.02	2							
42	1/0.0	12.9	12.8	-0.1	0./1	0.71	0.02								
39	160.0	11.4	11.3	-0.1	0.65	0.65	~0.01								
36	150.0	10.0	9.9	-0.1	0.60	0.60	0.01								
33	120.0	8.8	8.1	-0.1	0.56	0.55	~0.01	•							
50	120.0	7.6	1.5	-0.1	0.52	0.52	-0.01								
21	110 0	6.5	0.4 5 5	-0.1	0.40	0.40	0.01	•							
24	100.0	5.5	5.5	-0.1	0.43	0.42	-0.01								
18	40 N	3.9	3.8	0 0	0.34	0.34	0.01	-							
15	80.0	3.1	3.1	0.0	0.31	0.30	-0.01	1							
12	60.0	1.9	1.8	0.0	0.21	0.21	0.03	-							
9	40.0	1.0	0.9	0.0	0.16	0.15	-0.0								
6	20.0	0.3	-0.3	0.0	0.07	-0.07	0.03								
3	0.0	0.0	0.0	0.0	0.00	0.00	0.00								
Load	Combina	ition	V	Vind and Ice	9										
Wind	Directi	on	N	Maximum disp	placements	3									
Node	Elev.	N-S Disp	W-E Disp	Vert.Disp	N-S Rot	W-E Rot	Twist	:							
	(ft)	(in)	(in)	(in)	(Deg)	(Deg)	(Deg	1)							
81	250.0	3.6	3.6	-0.4	0.14	0.14	0.00								
78	245.0	3.5	3.4	-0.4	0.14	0.14	0.00								
75	240.0	3.3	3.3	-0.4	0.14	0.14	0.00								
72	235.0	3.2	3.1	-0.4	0.14	0.14	0.00								
					Pa	ge H 2									





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 File: L:\Designs\08-0400\0471\J081218001-I\J081218001-I.out

 Contract: S08-0471-I:J081218001-I
 Revision: 0

 Project: 250-FT:SST:13-SECTIONS
 Site: 9LV0326 DUNN STORE ROAD- WARREN C

 Date and Time: 12/18/2008 11:39:57 AM
 Engineer: HD/tw

3 0.0 0.0 0.0 0.0 0.00 0.00 0.00





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Fort Worth, TX

File	e: I	:\Designt: S08	ns\08-040 -0471-T:J0	0\0471\J081218001- 81218001-T	I\J081	218001	-I.out	: Revision:	0				
Project: 250-FT.SST:13-SECTIONS							Site: QLU	ROAD-)- WARREN C				
Date		d Time	12/18/20	08 11.30.57 AM				Engineer:	4D/+w	N DIORE	10110	112321111221	G
Date	= 41	id itme	. 12/10/20	00 11.39.37 AM				Bigrieer.	III)/ CW				
4	1	60.00	Diag	$21.2 \ 1/2x2 \ 1/2x3/16$	29 01	182.9	12.2	43.2	11 9	11.8	0.98		
3	ĩ	40.00	Diag	21.3x3x3/16	30.48	155.8	20.3	45.7	12.4	12.3	0.61		
2	1	20 00	Diag	21.3x3x3/16	32 02	161 5	18 9	45.7	12 9	12.8	0.68		
1	1	0 00	Diag	21.3x3x3/16	33 61	167 4	17 6	45 7	13 2	13.2	0.75		
**		0.00	Drug	200808710	55.01	207.1	1,.0	10.,	10.0	10.4	01/0		
13	2	245.00	Horiz	L2x2x3/16	4.00	113.8	11.6	8.3	0.7	0.7	0.08		
10	2	190.00	SecHl	L2x2x3/16	4.26	131.1	9.3	8.3	2.2	2.2	0.26		
10	1	180.00	SecHl	L2x2x3/16	4.76	146.4	7.5	8.3	2.6	2.6	0.35		
9	2	170.00	SecH1	L2x2x3/16	5.26	161.7	6.1	8.3	2.8	2.8	0.45		
9	1	160.00	SecHl	L2x2x3/16	5.75	177.0	5.1	8.3	3.1	3.1	0.61		
8	2	150.00	SecH1	L2 1/2x2 1/2x3/16	6.25	153.1	8.7	10.9	3.3	3.3	0.38		
8	1	140.00	SecHl	L2 1/2x2 1/2x3/16	6.75	165.4	7.4	10.9	3.6	3.6	0.48		
7	2	130.00	SecH1	L2 1/2x2 1/2x3/16	7.25	177.6	6.4	10.9	3.7	3.7	0.57		
7	1	120.00	SecHl	L2 1/2x2 1/2x3/16	7.75	189.8	5.6	10.9	4.0	4.0	0.71		
6	2	110.00	SecH1	L3x3x3/16	8.25	167.8	8.7	11.1	4.3	4.3	0.49		
6	1	100.00	SecH1	L3x3x3/16	8.75	178.0	7.8	11.1	4.6	4.6	0.60		
5	2	90.00	SecH1	L3x3x3/16	9.25	188.2	7.0	11.1	4.7	4.7	0.68		
5	1	80.00	SecH1	L3x3x3/16	9.75	198.3	6.3	11.1	5.0	5.0	0.80		
4	1	60.00	SecH1	$1.3 \times 3 \times 1/4$	10.51	213.8	7.1	14.8	5.4	5.4	0.76		
4	1	60 00	SecH2	1.2x2x3/16	5 26	161 7	6.1	8.3	5 4	5.4	0.88		
4	1	60 00	SecH3	1.2x2x3/16	5 26	161.7	6.1	8.3	5 4	5.4	0.88		
Δ	1	60.00	SecD1	1.2 1/2v2 1/2v3/16	6 91	169 1	7 1	10 9	3.7	37	0 52		
4	1	60.00	SecD2	$1/2 \times 2 \times 2 \times 2 \times 3 \times 1 \times 1 \times 3 \times 1 \times 1 \times 3 \times 1 \times 1 \times 1$	7 60	186 0	5 9	10.9	37	3 7	0.63		
1	1	60.00	DecD2	12 1/2A2 1/2A3/10	10 / 9	213 1	5 1	10.9	0.1	0 1	0.05		
7	1	40.00	E Lanni	13 1/223 1/221/4	11 51	200 1	0.5	1/ 9	57	57	0.01		
ວ າ	1	40.00	Secut	10 1/2X0 1/2X1/4	TT.JT	140 0	2.5	14.0	5.7	5.7	0.00		
2	1	40.00	Sechz	1/2X2 1/2X3/10	5.15	140.9	10.2	10.9	5.7	5.7	0.50		
נ ר	-1	40.00	Sechs	L2 1/2X2 1/2X3/10	3.73	170.5	10.2	10.9	5.7	5.7	0.50		
3	1	40.00	Secul	L2 1/2X2 1/2X3/16	7.29	1/8.5	6.4	10.9	3.8	3.8	0.60		
3	- -	40.00	Secuz	L2 1/2X2 1/2X3/10	1.95	194.8	5.4	10.9	3.8	3.0	0.71		
3	T	40.00	PlanHl	L3x3x3/16	11.48	233.5	4.5	9.8	0.1	0.1	0.02		
2	1	20.00	SecH1	L3 1/2x3 1/2x1/4	12.51	217.5	8.1	14.8	6.3	6.3	0.78		
2	1	20.00	SecH2	L2 1/2x2 1/2x3/16	6.25	153.1	8.7	10.9	6.3	6.3	0.73		
2	1	20.00	SecH3	L2 1/2x2 1/2x3/16	6.25	153.1	8.7	10.9	6.3	6.3	0.73		
2	1	20.00	SecD1	L2 1/2x2 1/2x3/16	7.68	188.2	5.7	10.9	4.1	4.1	0.71		
2	1	20.00	SecD2	L2 1/2x2 1/2x3/16	8.33	203.9	4.9	10.9	4.1	4.1	0.83		
2	1	20.00	PlanHl	L3 1/2x3 1/2x1/4	12.48	217.0	8.1	13.1	0.1	0.1	0.01		
1	1	0.00	SecHl	L4x4x1/4	13.51	202.6	10.7	14.8	6.6	6.6	0.62		
1	1	0.00	SecH2	L2 1/2x2 1/2x3/16	6.75	165.4	7.4	10.9	6.6	6.6	0.89		
1	1	0.00	SecH3	L2 1/2x2 1/2x3/16	6.75	165.4	7.4	10.9	6.6	6.6	0.89		
1	1	0.00	SecD1	L3x3x3/16	8.09	164.5	9.1	11.1	4.1	4.1	0.45		
1	1	0.00	SecD2	L3x3x3/16	8.71	177.2	7.8	11.1	4.1	4.1	0.53		
1	1	0.00	PlanH1	L3 1/2x3 1/2x1/4	13.48	234.5	6.9	13.1	0.1	0.1	0.01		
Loac Winc	i Co i Di	mbinatic rection	'n	Wind Only Maxímum									
Sec	Pnl	Elev	МТуре	Desc.	Len	kl/r	Gov. comp.	Gov. tens.	Max Compr.	Max Tens.	Asses. Ratio		
		(ft)			(ft)		(Kips)	(Kips)	(Kips)	(Kips)			
13	2	245.00	Leg	SR 2	5.00	120.0	49.3	82.3	3.5	1.1	0.07		
13	1	240.00	Leg	SR 2	5.00	120.0	49.3	82.3	8.9	6.3	0.18		
12	4	235.00	Leg	SR 2	5.01	120.2	49.1	82.3	14.2	11.3	0.29		
12	З	230.00	Leg	SR 2	5.01	120.2	49.1	82.3	21.9	16.2	0.45		

Page L 2
TowerSoft Engineering Software

TSTower - v 3.8.4 Tower Analysis Program (c) 1997-2006 TowerSoft www.TSTower.com



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File:	L:\Des	igns\08-040	00\0471\J081218001·	-I\J081	218001	-I.ou	E			<u></u>
Contr	Contract: S08-0471-I:J081218001-I Revision: 0									
Proje	ct: 250	-FT:SST:13	-SECTIONS				Site: 9L	V0326 DUI	IN STORE	ROAD- WARREN C
Date	and Tim	e: 12/18/20	008 11:39:57 AM				Engineer	: HD/tw		
7 2	2 130.00) SecH1	L2 1/2x2 1/2x3/16	7.25	177.6	6.4	10.9	3.7	3.7	0.57
7	1 120.00	SecH1	$L_2 1/2x_2 1/2x_3/16$	7.75	189.8	5.6	10.9	4.0	4.0	0.71
6 2	2 110.00) SecH1	L3x3x3/16	8.25	167.8	8.7	11.1	4.3	4.3	0.49
6 3	1 100.00	SecH1	L3x3x3/16	8.75	178.0	7.8	11.1	4.6	4.6	0.60
5 2	2 90.00	SecH1	L3x3x3/16	9.25	188.2	7.0	11.1	4.7	4.7	0.68
5 3	1 80.00	SecHl	L3x3x3/16	9.75	198.3	6.3	11.1	5.0	5.0	0.80
4	1 60.00	SecH1	L3x3x1/4	10.51	213.8	7.1	14.8	5.4	5.4	0.76
4	1 60.00	SecH2	L2x2x3/16	5.26	161.7	6.1	8.3	5.4	5.4	0.88
4 :	1 60.00	SecH3	L2x2x3/16	5.26	161.7	6.1	8.3	5.4	5.4	0.88
4	1 60.00	SecD1	L2 1/2x2 1/2x3/16	6.91	169.1	7.1	10.9	3.7	3.7	0.52
4	1 60.00	SecD2	L2 1/2x2 1/2x3/16	7.60	186.0	5.9	10.9	3.7	3.7	0.63
4	1 60.00	PlanHl	L3x3x3/16	10.48	213.1	5.4	9.8	0.1	0.1	0.01
3.	1 40.00	SecHi	L3 $1/2x3 1/2x1/4$	11.51	200.1	9.5	14.8	5.7	5.7	0.60
J.	1 40.00	SecH2	L2 $1/2x2 1/2x3/16$	5.75	140.9	10.2	10.9	5./	5.7	0.56
J.	1 40.00	SecH3	L2 1/2x2 1/2x3/16	5./5	140.9	10.2	10.9	5.7	5.7	0.56
3.	1 40.00	Secul	$L_2 1/2X_2 1/2X_3/16$	7.29	104.0	6.4	10.9	3.8	3.8	0.60
3.	1 40.00	Secuz	T3X3X3/16	1.95	194.0	J.4 4 5	10.9	3.8	3.8	0.71
ວ . າ	1 40.00	Planni	T 2 1 / 2 2 1 / 2 2 1 / 4	12 51	233.5	4.J 0 1	9.0	6.2	6.2	0.02
2.	1 20.00	SecH2	1.2 1/2x3 1/2x1/4 1.2 1/2y2 1/2y3/16	6 25	153 1	0.1 8 7	10 9	6.3	63	0.78
2	1 20.00	SecH3	$1/2 \times 1/2 \times 2 \times 1/2 \times 3/16$	6 25	153.1	87	10.9	63	63	0.73
2	1 20.00	SecD1	$1/2x^2 = 1/2x^3/16$	7 68	188 2	57	10.9	4 1	4 1	0.73
2	1 20.00	SecD2	$1/2x^2 = 1/2x^3/16$	8.33	203.9	4 9	10.9	4 1	4 1	0.83
2	1 20.00	PlanHl	L3 1/2x3 1/2x1/4	12.48	217.0	8.1	13.1	0.1	0.1	0.01
1	1 0.00	SecH1	$1.4 \times 4 \times 1/4$	13.51	202.6	10.7	14.8	6.6	6.6	0.62
1	1 0.00	SecH2	L2 1/2x2 1/2x3/16	6.75	165.4	7.4	10.9	6.6	6.6	0.89
1	1 0.00	SecH3	L2 1/2x2 1/2x3/16	6.75	165.4	7.4	10.9	6.6	6.6	0.89
1	1 0.00	SecD1	L3x3x3/16	8.09	164.5	9.1	11.1	4.1	4.1	0.45
1	1 0.00	SecD2	L3x3x3/16	8.71	177.2	7.8	11.1	4.1	4.1	0.53
1	1 0.00	PlanHl	L3 1/2x3 1/2x1/4	13.48	234.5	6.9	13.1	0.1	0.1	0.01
Load (Wind 1	Combinati Direction	lon	Wind Only - Max Maximum	Tension						
Sec Pi	nl Elev	МТуре	Desc.	Len	kl/r	Gov. comp.	Gov. tens.	Max Compr.	Max Tens.	Asses. Ratio
	(ft)			(ft)		(Kips)	(Kips)	(Kips)	(Kips)	
13	2 245.00) Leg	SR 2	5.00	120.0	49.3	82.3	3.2	1.4	0.06
13	1 240.00) Leg	SR 2	5.00	120.0	49.3	82.3	8.6	6.7	0.18
12	4 235.00) Leg	SR 2	5.01	120.2	49.1	82.3	13.9	11.6	0.28
12	3 230.00) Leg	SR 2	5.01	120.2	49.1	82.3	21.2	16.8	0.43
12	2 225.00) Leg	SR 2	5.01	120.2	49.1	82.3	30.0	25.1	0.61
12	1 220.00) Leg	SR 2	5.01	120.2	49.1	82.3	36.9	31.6	0.75
11	4 215.00) Leg	SR 2 1/4	5.01	106.8	77.8	123.5	46.2	38.8	0.59
11	3 210.00) Leg	SR 2 1/4	5.01	106.8	77.8	123.5	56.0	47.9	0.72
11	2 205.00) Leg	SR 2 1/4	5.01	106.8	77.8	123.5	64.6	55.9	0.83
11	1 200.00) Leg	SR 2 1/4	5.01	106.8	77.8	123.5	73.6	64.2	0.95
10	2 190.00) Leg	SR 2 1/2	10.02	101.8	103.6	182.5	85.4	75.1	0.82
10	1 180.00) Leg	SR 2 1/2	10.02	101.2	104.5	182.5	102.0	90.0	0.98
9	2 170.00) Leg	SR 2 3/4	10.02	91.6	144.7	182.5	117.3	103.9	0.81
9	1 160.00) Leg	SR 2 3/4	10.02	91.3	145.4	182.5	133.0	117.8	0.91
8.	2 150.00) Leg	SR 3	10.02	83.4	191.5	251.8	148.0	131.1	0.77
8 7	1 120 0	лед	SK 3	10.02	83.U 76 F	192.2	221.8	170 7	144.5	0.85
/	L 130.00	, ned	PLT C YC	TO.02	10.0	243.3	220.2	T10.1	101.1	0.13

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TowerSoft Engineering software

TSTower - v 3.8.4 Tower Analysis Program (c) 1997-2006 TowerSoft www.TSTower.com



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File	: I	:\Desig	ms\08-040	0\0471\J081218001-	I\J081	218001	-I.out	£				
Cont	rac	t: S08-	-0471-I:J0	81218001-I				Revision:	0			
Proj	ect	: 250-H	T:SST:13-	SECTIONS				Site: 9LV	0326 DUN	N STORE	ROAD- WARREN C	
Date	ar	d Time:	: 12/18/20	08 11:39:57 AM				Engineer:	HD/tw			
3	1	40.00	SecH2	L2 1/2x2 1/2x3/16	5.75	140.9	10.2	10.9	5.7	5.7	0.55	
3	1	40.00	SecH3	L2 1/2x2 1/2x3/16	5.75	140.9	10.2	10.9	5.7	5.7	0.55	
3	1	40.00	SecDl	L2 1/2x2 1/2x3/16	7.29	178.5	6.4	10.9	3.7	3.7	0.59	
3	1	40.00	SecD2	L2 1/2x2 1/2x3/16	7.95	194.8	5.4	10.9	3.7	3.7	0.70	
3	1	40.00	PlanHl	L3x3x3/16	11.48	233.5	4.5	9.8	0.1	0.1	0.02	
2	1	20.00	SecH1	L3 1/2x3 1/2x1/4	12.51	217.5	8.1	14.8	6.2	6.2	0.77	
2	1	20.00	SecH2	L2 1/2x2 1/2x3/16	6.25	153.1	8.7	10.9	6.2	6.2	0.72	
2	1	20.00	SecH3	L2 1/2x2 1/2x3/16	6.25	153.1	8.7	10.9	6.2	6.2	0.72	
2	1	20.00	SecD1	L2 1/2x2 1/2x3/16	7.68	188.2	5.7	10.9	4.0	4.0	0.70	
2	1	20.00	SecD2	L2 1/2x2 1/2x3/16	8.33	203.9	4.9	10.9	4.0	4.0	0.82	
2	1	20.00	PlanHl	L3 1/2x3 1/2x1/4	12.48	217.0	8.1	13.1	0.1	0.1	0.01	
1	1	0.00	SecHl	L4x4x1/4	13.51	202.6	10.7	14.8	6.5	6.5	0.61	
1	1	0.00	SecH2	L2 1/2x2 1/2x3/16	6.75	165.4	7.4	10.9	6.5	6.5	0.88	
1	1	0.00	SecH3	L2 1/2x2 1/2x3/16	6.75	165.4	7.4	10.9	6.5	6.5	0.88	
1	1	0.00	SecD1	L3x3x3/16	8.09	164.5	9.1	11.1	4.1	4.1	0.45	
1	1	0.00	SecD2	L3x3x3/16	8.71	177.2	7.8	11.1	4.1	4.1	0.52	
1	1	0.00	PlanHl	L3 1/2x3 1/2x1/4	13.48	234.5	6.9	13.1	0.1	0.1	0.01	
Load	Cor	mbinatio	n	Wind and Ice								
Wind	Di	rection		Maximum								
Sec	Pnl	Elev	MType	Desc.	Len	kl/r	Gov.	Gov.	Max	Max	Asses.	
							comp.	tens.	Compr.	Tens.	Ratio	
							cap.	cap.				
		(ft)			(ft)		(Kips)) (Kips)	(Kips)	(Kips)		
13	2	245.00	Leg	SR 2	5.00	120.0	49.3	82.3	3.5	0.0	0.07	
13	1	240.00	Leg	SR 2	5.00	120.0	49.3	82.3	4.7	0.0	0.10	
12	4	235.00	Leg	SR 2	5.01	120.2	49.1	82.3	5.9	0.0	0.12	
12	3	230.00	Leg	SR 2	5.01	120.2	49.1	82.3	10.2	0.0	0.21	
12	2	225.00	Leg	SR 2	5.01	120.2	49.1	82.3	12.1	0.0	0.25	
12	1	220.00	Leg	SR 2	5.01	120.2	49.1	82.3	13.7	0.0	0.28	
11	4	215.00	Leg	SR 2 1/4	5.01	106.8	77.8	123.5	18.3	0.0	0.23	
11	3	210.00	Leg	SR 2 1/4	5.01	106.8	77.8	123.5	20.7	0.0	0.27	
11	2	205.00	Leg	SR 2 1/4	5.01	106.8	77.8	123.5	22.6	0.0	0.29	
11	1	200.00	Leg	SR 2 1/4	5.01	106.8	77.8	123.5	24.9	0.0	0.32	
10	2	190.00	Leg	SR 2 1/2	10.02	101.8	103.6	182.5	27.6	0.0	0.27	
10	1	180.00	Leg	SR 2 1/2	10.02	101.2	104.5	182.5	32.0	0.0	0.31	
9	2	170.00	Leg	SR 2 3/4	10.02	91.6	144.7	182.5	35.9	0.0	0.25	
9	1	160.00	Leg	SR 2 3/4	10.02	91.3	145.4	182.5	40.2	0.0	0.28	
8	2	150.00	Leg	SR 3	10.02	83.4	191.5	251.8	44.1	0.0	0.23	
8	1	140.00	Leg	SR 3	10.02	83.0	192.2	251.8	48.5	0.0	0.25	
7	2	130.00	Leg	SR 3 1/4	10.02	76.5	243.5	330.3	52.7	0.0	0.22	
7	1	120.00	Leg	SR 3 1/4	10.02	76.4	243.8	330.3	57.1	0.0	0.23	
6	2	110.00	Leg	SR 3 1/4	10.02	76.2	244.2	330.3	61.5	0.0	0.25	
6	1	100.00	Leg	SR 3 1/4	10.02	76.1	244.7	330.3	66.1	0.0	0.27	
5	2	90.00	Leg	SR 3 1/2	10.02	70.5	301.2	330.3	70.6	0.0	0.23	
5	1	80.00	Leg	SR 3 1/2	10.02	70.5	301.2	330.3	75.4	0.0	0.25	
4	1	60.00	Leg	SR 3 1/2	20.03	68.7	306.8	330.3	82.3	0.0	0.27	
3	1	40.00	Leg	SR 3 3/4	20.03	64.1	368.4	416.3	92.0	0.0	0.25	
2	1	20.00	Leq	SR 3 3/4	20.03	64.1	368.4	416.3	101.7	0.0	0.28	
1	1	0.00	Leg	SR 4	20.03	60.1	434.5	528.0	111.4	0.0	0.26	
			-									
13	2	245.00	Diag	L1 3/4x1 3/4x3/16	6.40	100.2	11.8	17.9	0.2	0.3	0.02	
13	1	240.00	Diag	L1 3/4x1 3/4x3/16	6.40	100.2	11.8	17.9	0.3	0.2	0.03	
12	4	235.00	Diag	Ll 3/4x1 3/4x3/16	6.56	139.3	7.2	17.9	0.4	0.1	0.05 *	

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Con Pro	Contract: S08-0471-I:J081218001-I Project: 250-FT:SST:13-SECTIONS						Revision: 0 Site: 9LV0326 DUNN STORE ROAD- WARREN C					
Dat	e a:	nd Time	: 12/18/2	2008 11:39:57 AM			Enginee	r: HD/tw	đ			
1	1	0.00	SecH3	L2 1/2x2 1/2x3/16	6.75	165.4 7.4	10.9	1.9	1.9	0.26		
1	1	0.00	SecD1	L3x3x3/16	8.09	164.5 9.1	11.1	1.2	1.2	0.13		

	-				0.05	20110 210				
1	1	0.00	SecD2	L3x3x3/16	8.71	177.2 7.8	11.1	1.2	1.2	0.15
1	1	0.00	PlanH1	L3 1/2x3 1/2x1/4	13.48	234.5 6.9	13.1	0.0	0.0	0.00

Note: The asterisk (*) placed after the assessment ratio marks cases where the diagonal's capacity in X-braced panel without support in crossover point is governing due to Tension/Compression ratio below limit.

The slenderness is calculated as per: ANSI/TIA-222-G, Table 4-6

Load Combination Wind Direction			n	Wind Only ~ Serv Maximum	iceabil:	ity					
Sec	Pnl	Elev	МТуре	Desc.	Len	kl/r	Gov. comp.	Gov. tens.	Max Compr.	Max Tens.	Asses. Ratio
		(ft)			(ft)		(Kips)	(Kips)	(Kips)	(Kips)	
13	2	245.00	Leg	SR 2	5.00	120.0	49.3	82.3	1.6	0.0	0.03
13	1	240.00	Leg	SR 2	5.00	120.0	49.3	82.3	3.2	1.1	0.06
12	4	235.00	Leg	SR 2	5.01	120.2	49.1	82.3	4.7	2.4	0.10
12	3	230.00	Leg	SR 2	5.01	120.2	49.1	82.3	7.5	3.0	0.15
12	2	225.00	Leg	SR 2	5.01	120.2	49.1	82.3	10.1	5.2	0.21
12	1	220.00	Leg	SR 2	5.01	120.2	49.1	82.3	12.1	6.9	0.25
11	4	215.00	Leg	SR 2 1/4	5.01	106.8	77.8	123.5	15.5	8.1	0.20
11	3	210.00	Leg	SR 2 1/4	5.01	106.8	77.8	123.5	18.4	10.4	0.24
11	2	205.00	Leg	SR 2 1/4	5.01	106.8	77.8	123.5	20.9	12.6	0.27
11	1	200.00	Leg	SR 2 1/4	5.01	106.8	77.8	123.5	23.6	14.7	0.30
10	2	190.00	Leg	SR 2 1/2	10.02	101.8	103.6	182.5	27.1	17.5	0.26
10	1	180.00	Leg	SR 2 1/2	10.02	101.2	104.5	182.5	32.1	21.3	0.31
9	2	170.00	Leg	SR 2 3/4	10.02	91.6	144.7	182.5	36.7	24.8	0.25
9	1	160.00	Leg	SR 2 3/4	10.02	91.3	145.4	182.5	41.4	28.2	0.29
8	2	150.00	Leg	SR 3	10.02	83.4	191.5	251.8	46.0	31.5	0.24
8	1	140.00	Leg	SR 3	10.02	83.0	192.2	251.8	50.8	34.8	0.26
7	2	130.00	Leg	SR 3 1/4	10.02	76.5	243.5	330.3	55.5	38.0	0.23
7	1	120.00	Leg	SR 3 1/4	10.02	76.4	243.8	330.3	60.3	41.2	0.25
6	2	110.00	Leg	SR 3 1/4	10.02	76.2	244.2	330.3	65.1	44.3	0.27
6	1	100.00	Leg	SR 3 1/4	10.02	76.1	244.7	330.3	70.1	47.4	0.29
5	2	90.00	Leg	SR 3 1/2	10.02	70.5	301.2	330.3	75.1	50.5	0.25
5	1	80.00	Leg	SR 3 1/2	10.02	70.5	301.2	330.3	80.2	53.6	0.27
4	1	60.00	Leg	SR 3 1/2	20.03	68.7	306.8	330.3	87.8	58.1	0.29
3	1	40.00	Leg	SR 3 3/4	20.03	64.1	368.4	416.3	98.2	64.0	0.27
2	1	20.00	Leg	SR 3 3/4	20.03	64.1	368.4	416.3	108.7	69.7	0.30
1	1	0.00	Leg	SR 4	20.03	60.1	434.5	528.0	119.3	75.1	0.27
13	2	245.00	Diag	L1 3/4x1 3/4x3/16	6.40	100.2	11.8	17.9	0.5	0.5	0.04
13	1	240.00	Díag	Ll 3/4x1 3/4x3/16	6.40	100.2	11.8	17.9	0.6	0.6	0.05
12	4	235.00	Diag	Ll 3/4x1 3/4x3/16	6.56	107.2	11.0	17.9	0.6	0.5	0.05
12	3	230.00	Diag	Ll 3/4xl 3/4x3/16	6.90	112.0	10.4	17.9	1.0	0.9	0.09
12	2	225.00	Diag	L1 3/4x1 3/4x3/16	7.25	117.0	9.8	17.9	0.9	0.9	0.09
12	1	220.00	Diag	L1 3/4x1 3/4x3/16	7.62	122.2	9.1	17.9	0.9	0.9	0.10
11	4	215.00	Diag	L1 3/4x1 3/4x3/16	8.01	127.2	8.6	17.9	1.2	1.2	0.14
11	3	210.00	Diag	L1 3/4x1 3/4x3/16	8.40	132.7	7.9	17.9	1.2	1.2	0.15
11	2	205.00	Diag	L1 3/4x1 3/4x3/16	8.81	138.3	7.3	17.9	1.2	1.1	0.17
11	1	200.00	Diag	L1 3/4x1 3/4x3/16	9.22	144.1	6.7	17.9	1.2	1.2	0.17
10	2	190.00	Diag	L2 1/2x2 1/2x3/16	13.13	146.3	9.5	21.6	1.7	1.6	0.17

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Contract: S08-0471-I:J081218001-I Project: 250-FT:SST:13-SECTIONS Date and Time: 12/18/2008 11:39:57 AM Revision: 0 Site: 9LV0326 DUNN STORE ROAD- WARREN C Engineer: HD/tw

Section M: SECTION PROPERTIES DATA

Sec	Pan	Memb. Type	Steel Grade	Conn. Type	Bolts	Bolt Size (in)	Bolt End Grade Dist (in)	Gusset . Thick. (in)	kl/r	Comp Cap. (Kips)	Tens Cap. (Kips)	Bolt Cap. (Kips)	Bear. Cap. (Kips)	Block Shear (Kips)
13	2	Leq	A572 gr.50	Tensio	n 4	0.625	A325X 0.93	B N/A	120.0	49.3	141.5	82.3T	N/A	N/A
13	2	Diag	A36	Bolted	2	0.500	A325X 1.12	5 0.250	100.2	11.8	17.9	19.4S	20.6	19.1
13	2	Horiz	A36	Bolted	1	0.625	A325X 1.25	0.250	113.8	11.6	20.3	15.25	11.1	8.3
13	1	Leg	A572 gr.50	Tension	n 4	0.625	A325X 0.93	B N/A	120.0	49.3	141.5	82.3T	N/A	N/A
13	1	Diag	A36	Bolted	2	0.500	A325X 1.12	5 0.250	100.2	11.8	17.9	19.4S	20.6	19.1
12	4	Leg	A572 gr.50	Tensio	n 4	0.625	A325X 0.93	B N/A	120.2	49.1	141.5	82.3T	N/A	N/A
12	4	Diag	A36	Bolted	2	0.500	A325X 1.12	5 0.250	107.2	11.0	17.9	19.4S	20.6	19.1
12	3	Leg	A572 gr.50	Tension	n 4	0.625	A325X 0.93	B N/A	120.2	49.1	141.5	82.3T	N/A	N/A
12	3	Diag	A36	Bolted	2	0.500	A325X 1.12	5 0.250	112.0	10.4	1/.9	19.4S	20.6	19.1
12	2	Leg	A572 gr.50	Tensio	n 4	0.625	A325X 0.93	B N/A	120.2	49.1	141.5	82.3T	N/A	N/A
12	2	Diag	A36	Bolted	2	0.500	A325X 1.12	5 U.25U	120.2	9.8	1/.9	19.45	20.0	19.1 N/7
12	1	Leg	AS/2 gr.SU	Peltod	1 4	0.625	AJZJA 0.93	5 0 250	120.2	49.L 0.1	17 0	10 /0	20 6	10 1
12	Т	Diag	AJO	BOILED	2	0.500	A323A 1.12	5 0.250	122.2	9.1	11.9	19.43	20.0	19.1
11	4	Leg	A572 gr.50	Tensio	n 6	0.625	A325X 0.93	8 N/A	106.8	77.8	179.0	123.51	N/A	N/A
11	4	Diag	A36	Bolted	2	0.500	A325X 1.12	5 0.250	127.2	8.6	17.9	19.4S	20.6	19.1
11	3	Leg	A572 gr.50	Tensio	n 6	0.625	A325X 0.93	8 N/A	106.8	77.8	179.0	123.51	N/A	N/A
11	3	Diag	A36	Bolted	2	0.500	A325X 1.12	5 0.250	132.7	7.9	17.9	19.4S	20.6	19.1
11	2	Leg	A572 gr.50	Tensio	n 6	0.625	A325X 0.93	8 N/A	106.8	11.8	179.0	123.51	N/A	N/A
11	2	Diag	A36	Bolted	2	0.500	A325X 1.12	5 0.250	138.3	1.3	17.9	19.45	20.6	19.1
11	1	Leg	A572 gr.50	Tension	n 6	0.625	A325X 0.93	B N/A	106.8	11.8	179.0	123.51	N/A	N/A
11	1.	Diag	A36	Bolted	2	0.500	A325X 1.12	5 0.250	144.1	6.7	17.9	19.45	20.0	19.1
10	2	Leg	A572 gr.50	Tensio	n 6	0.750	A325X 1.12	5 N/A	101.8	103.6	221.1	182.51	N/A	N/A
10	2	Diag	A36	Bolted	2	0.625	A325X 1.25	0 0.250	146.3	9.5	26.5	30.4S	24.2	21.6
10	2	SecH1	A36	Bolted	1	0.625	A325X 1.25	0 0.250	131.1	9.3	20.3	15.2S	11.1	8.3
10	1	Leg	A572 gr.50	Tensio	n 6	0.750	A325X 1.12	5 N/A	101.2	104.5	221.1	182.51	N/A	N/A
10	1	Diag	A36	Bolted	2	0.625	A325X 1.25	0 0.250	152.7	8.7	26.5	30.4S	24.2	21.6
10	1	SecH1	A36	Bolted	1	0.625	A325X 1.25	0 0.250	146.4	7.5	20.3	15.25	11.1	8.3
9	2	Leg	A572 gr.50	Tensio	n 6	0.750	A325X 1.12	5 N/A	91.6	144.7	267.5	182.51	N/A	N/A
9	2	Diag	A36	Bolted	2	0.625	A325X 1.25	0 0.250	159.2	8.0	26.5	30.4S	24.2	21.6
9	2	SecH1	A36	Bolted	1	0.625	A325X 1.25	0 0.250	161.7	6.1	20.3	15.2S	11.1	8.3
9	1	Leg	A572 gr.50	Tensio	n 6	0.750	A325X 1.12	5 N/A	91.3	145.4	267.5	182.51	N/A	N/A
9	1	Diag	A36	Bolted	2	0.625	A325X 1.25	0 0.250	166.2	7.4	26.5	30.4S	24.2	21.6
9	1	SecH1	A36	Bolted	1	0.625	A325X 1.25	0 0.250	177.0	5.1	20.3	15.25	11.1	8.3
8	2	Leg	A572 gr.50	Tensio	n 6	0.875	A325X 1.31	3 N/A	83.4	191.5	318.4	251.81	N/A	N/A
8	2	Diag	A36	Bolted	2	0.625	A325X 1.25	0 0.250	148.4	11.2	32.8	30.4S	24.2	22.8
8	2	SecH1	A36	Bolted	1	0.625	A325X 1.25	0 0.250	153.1	8.7	26.5	15.2S	11.1	10.9
8	1	Leg	A572 gr.50	Tensio	n 6	0.875	A325X 1.31	3 N/A	83.0	192.2	318.4	251.81	N/A	N/A
8	1	Diag	A36	Bolted	2	0.625	A325X 1.25	0 0.250	154.7	10.3	32.8	30.4S	24.2	22.8
8	1	SecH1	A36	Bolted	1	0.625	A325X 1.25	0 0.250	165.4	7.4	26.5	15.25	11.1	10.9
7	2	Leg	A572 gr.50	Tensio	n 6	1.000	A325X 1.50	0 N/A	76.5	243.5	373.6	330.31	N/A	N/A
7	2	Diag	A36	Bolted	2	0.625	A325X 1.25	0 0.250	160.9	9.5	32.8	30.4S	24.2	22.8
7	2	SecHl	A36	Bolted	1	0.625	A325X 1.25	0 0.250	177.6	6.4	26.5	15.2S	11.1	10.9
7	1	Leg	A572 gr.50	Tensio	n 6	1.000	A325X 1.50	O N/A	76.4	243.8	373.6	330.31	N/A	N/A
7	1	Diag	A36	Bolted	2	0.625	A325X 1.25	0 0.250	167.4	8.8	32.8	30.4S	24.2	22.8
7	1	SecHl	A36	Bolted	1	0.625	A325X 1.25	0 0.250	189.8	15.6	26.5	15.25	11.1	10.9

Page M 1





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 File: L:\Designs\08-0400\0471\J081218001-I\J081218001-I.out

 Contract: S08-0471-I:J081218001-I
 Revision: 0

 Project: 250-FT:SST:13-SECTIONS
 Site: 9LV0326 DUNN STORE ROAD- WARREN C

 Date and Time: 12/18/2008 11:39:57 AM
 Engineer: HD/tw

Section N: LEG REACTION DATA

Load Comb Wind Dire	ection		Max Envel Maximum	Lope	
	Force-Y Download	Force-Y Uplift	Shear-X	Shear-Z	Max Shear
	(Kips)	(Kips)	(Kips)	(Kips)	(Kips)
	400.16	333.72			40.27
Load Com Wind Dire	oination ection		Wind Only Maximum	ł	
Support	Force-Y	Force-Y Uplift	Shear-X	Shear-Z	Max Shear
	(Kips)	(Kips)	(Kips)	(Kips)	(Kips)
	400.16	327.69			40.27
Load Com Wind Dire	oination ection		Wind Only Maximum	y - Max Te	nsion
Support	Force-Y Download	Force-Y Uplift	Shear-X	Shear-Z	Max Shear
	(Kips)	(Kips)	(Kips)	(Kips)	(Kips)
	394.13	333.72			39.94
Load Com Wind Dire	bination ection		Wind and Maximum	Ice	
Support	Force-Y Download	Force-Y Uplift	Shear-X	Shear-Z	Max Shear
	(Kips)	(Kips)	(Kips)	(Kips)	(Kips)
	116.11	0.00			8.55
Load Com Wind Dir	bination ection		Wind Onl Maximum	y - Servic	eability
Support	Force-Y Download	Force-Y Uplift	Shear-X	Shear-Z	Max Shear
	(Kips)	(Kips)	(Kips)	(Kips)	(Kips)
	123.40	78.78			11.87





Licensed to: FWT Inc. Fort Worth, TX

 File: L:\Designs\08-0400\0471\J081218001-I\J081218001-I.out

 Contract: S08-0471-I:J081218001-I
 Revision: 0

 Project: 250-FT:SST:13-SECTIONS
 Site: 9LV032

 Date and Time: 12/18/2008 11:39:57 AM
 Engineer: HI

Revision: 0 Site: 9LV0326 DUNN STORE ROAD- WARREN C Engineer: HD/tw

DESIGN SPECIFICATION

Design Standard: ANSI/TIA-222-G-2005 Add.1 Basic Wind Speed (No Ice) = 90.0 (mph) Basic Wind Speed (With Ice) = 30.0 (mph) Design Ice Thickness = 0.75 (in) Structure Class = II Exposure Category = C Topographic Category = 1

Sct.	Length (ft)	Top Width (in)	Bot Width (in)
1	20.00	312.00	336.00
2	20.00	288.00	312.00
3	20.00	264.00	288.00
4	20.00	240.00	264.00
5	20.00	216.00	240.00
6	20.00	192.00	216.00
7	20.00	168.00	192.00
8	20.00	144.00	168.00
9	20.00	120.00	144.00
10	20.00	96.00	120.00
11	20.00	72.00	96.00
12	20.00	48.00	72.00
13	10.00	48.00	48.00

MAXIMUM	BASE	REACTIONS	

	Bare	lced
Download (Kips)	400.2	116.1
Uplift (Kips)	333.7	0.0
Shear (Kips)	40.3	8.6





	FOUN	DATION	DESIGN	LOADS:
1	171		-	



GENERAL NOTES

- G1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS. ALL DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER.
- G2. THE SIZE AND SPACING OF STRUCTURAL ELEMENTS SHALL NOT BE CHANGED WITHOUT THE ENGINEER'S APPROVAL
- DETAILS SHOWN ARE TYPICAL: THEREFORE, SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS G3 UNLESS OTHERWISE NOTED.
- THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. G4
- G5. ALL STRUCTURAL AND NON-STRUCTURAL ITEMS SHALL BE TEMPORARILY BRACED DURING CONSTRUCTION UNTIL ALL STRUCTURAL ELEMENTS THAT ARE REQUIRED FOR STABILITY, SUCH AS LATERAL BRACING, ANCHOR BOLTS, ETC., HAVE BEEN INSTALLED.
- G6. CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS OF EXISTING UTILITIES, GROUND DRAINS. DRAIN PIPES, VENTS, OR ANY OTHER MECHANICAL DEVICES PRESENT BEFORE COMMENCING WORK. CONTRACTOR SHALL PROTECT EXISTING FACILITIES, UTILITIES, COAX AND UTILITY LINES FROM DAMAGE. NOTIFY ENGINEER IMMEDIATELY OF ANY CONFLICTS ARISING FROM THIS VERIFICATION.
- G7. INCORRECTLY FABRICATED, DAMAGED, MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE OWNER PRIOR TO REMEDIAL OR CORRECTIVE ACTION.
- G8. CONTRACTOR(S) SHALL COOPERATE WITH THE OWNER'S REPRESENTATIVE, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
- G9. CONSTRUCTION SHALL BE IN ACCORDANCE WITH APPLICABLE OSHA REGULATIONS, AND PER THE 2007 KENTUCKY BUILDING CODE (IBC 2006), AND ANSI/TIA-222-G, AND SHALL BE PERFORMED ONLY IN "GOOD WEATHER". GOOD WEATHER MEANS LITTLE OR NO WIND AND RAIN AND MINIMUM TEMPERATURE OF 50 DEGREES F. CONTACT ENGINEER FOR ADDITIONAL INSTRUCTIONS IF "GOOD WEATHER" CANNOT BE ACHIEVED.
- G10. DESIGN WIND SPEED IS 90 MPH PER ANSI/TIA-222-G.

REINFORCED CONCRETE NOTES

- C1. CONCRETE SHALL CONFORM TO ACI 301 & 318. AND SHALL HAVE A COMPRESSIVE STRENGTH OF 4000 PSI AFTER 28 DAYS.
- C2. AGGREGATES SHALL BE CLEAN AND WELL-GRADED WITH A MAXIMUM SIZE OF 1-1/2". CONCRETE COMPRESSIVE TESTS SHALL CONFORM TO ASTM C39.
- C3. USE NORMAL WEIGHT CONCRETE.
- C4. USE ASTM A615 GRADE 60 FOR ALL CONCRETE REINFORCING STEEL.
- ALL CONCRETE REINFORCEMENT SHALL BE ACCURATELY PLACED, RIGIDLY SUPPORTED, AND C5. FIRMLY TIED IN PLACE WITH BAR SUPPORTS AND SPACERS IN ACCORDANCE WITH ACI 301 & 318.
- C6. MAXIMUM PERMISSIBLE SLUMP = 4".
- APPLY A WATER REPELLENT SEALANT TO ALL EXPOSED CONCRETE SURFACES. USE W.R. C7. MEADOWS "SEAL-TIGHT #1200," OR EQUIVALENT, APPLIED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- C8. FIELD-VERIFY SOIL PARAMETERS PRIOR TO CONSTRUCTION, AND REPORT ANY DISCREPANCIES TO THE ENGINEER. SOIL PARAMETERS FOR FOUNDATION DESIGN WERE OBTAINED FROM THE "GEOTECHNICAL ENGINEERING STUDY". DATED 02/09/09. BY ASHER. INC., ASHER PROJECT No. 009-016.

SHOP FABRICATION DRAWING SUBMITTAL

- F1. THE GENERAL CONTRACTOR/CONSTRUCTION MANAGER IS RESPONSIBLE FOR ASSURING THAT ALL SUBMITTALS COMPLY WITH THE LATEST PROJECT PLANS, SPECIFICATIONS, GOVERNING CODES AND REGULATIONS, AND IS SOLELY RESPONSIBLE FOR CONFIRMING ALL QUANTITIES. DIMENSIONS, FABRICATION TECHNIQUES, AND COORDINATING WORK WITH ALL TRADES.
- F2. SHOP DRAWINGS SHALL BE SUBMITTED IN A TIMELY MANNER TO ALLOW ADEQUATE TIME FOR PROCESSING
- F3. ALL SUBMITTALS ARE TO BE ACCOMPANIED BY A LETTER OF TRANSMITTAL.
- F4. ALL SHOP DRAWINGS MUST BEAR FVIDENCE OF THE CONTRACTOR'S APPROVAL PRIOR TO SUBMITTAL
- F5. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER PRIOR TO FABRICATION.





T-Mobile USA Site Map Butler County Kentucky



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9LV0326 / Dunn Store Road

Character of the Area and Co-Location Statement

Powertel/Memphis Inc., doing business as T-Mobile Kentucky, proposes to construct a 250' Self Support Tower at 152 Dunn Store Road, Morgantown, KY 42261. There are no co-location opportunities located in the search area or within one mile of the proposed site. The general character of the area is predominately agricultural with some rural residential. There is only one residential structure within 500' southwest of the proposed tower and it is owned and used by the owner of the parent tract. There is one mobile home within 200' of the access road near Dunn Store Road. The owner of the parent tract utilizes the property to harvest hay. The site is a high, open, grassed area which is surrounded by wooded slopes. Given the remote area, the tower will have little to no visual impact on residential development.

There is adequate access and utilities at the proposed location. In researching this area, the conclusion is that there is no more suitable location reasonably available from which adequate service to the area can be provided. T-Mobile Kentucky will meet all noticing, publication and posting requirements.

3291252_1.doc





Federal Aviation Administration Air Traffic Airspace Branch, ASW-520 2601 Meacham Blvd. Fort Worth, TX 76137-0520 Aeronautical Study No. 2009-ASO-457-OE

Issued Date: 02/20/2009

Ken Bischoff T-Mobile 11509 Commonwealth Drive, Suite 9 Louisville, KY 40299

** 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 9LV0326A Dunn Store Road
Location:	Woodbury, KY
Latitude:	37-09-40.39N NAD 83
Longitude:	86-41-04.02W
Heights:	260 feet above ground level (AGL)
	916 feet above mean sea level (AMSL)

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

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

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

At least 10 days prior to start of construction (7460-2, Part I)

X Within 5 days after the construction reaches its greatest height (7460-2, Part II)

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

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

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

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

If we can be of further assistance, please contact our office at (847) 294-7458. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2009-ASO-457-OE.

Signature Control No: 616655-108348506 Fred Souchet Specialist (DNE)

Attachment(s) Frequency Data Map(s)

Frequency Data for ASN 2009-ASO-457-OE

LOW	HIGH	FREQUENCY		ERP
FREQUENCY	FREQUENCY FREQUENCY		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



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Kentucky

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

APPLICATION FOR PERMIT TO CONSTRUCT OR ALTER INSTRUCTIONS INCLUDED	RASIRUCTURE
INSTRUCTIONS INCLUDED 1. APPLICANT – Name, Address, Telephone, Fax, etc. T-Mobile USA Attn:Ken Bischoff 11509 Commonwealth Drive Louisville, KY 40299 2. Representative of Applicant Name, Address, Telephone, Fax T-Mobile USA Attn:Kevin Blewitt 11509 Commonwealth Drive Louisville, KY 40299 Phone: (502) 297-6207, Fax (502) 297-6251	9. Latitude: 37 9 40 39 " 10. Longitude: 86 • 41 4 02 " 11. Datum: X NAD83 NAD27 Other
3. Application for: 🛛 New Construction 🗖 Alteration 🔲 Existing	17. Total Structure Height (AGL): 260.00 Fee
4. Duration: ⊠ Permanent □ Temporary (Months Days) 5. Work Schedule: Start 3/1/2009 End 7/31/2009	 18. Overall Height (#16 + #17) (AMSL): <u>916.00</u> Fee 19. Previous FAA and/or Kentucky Aeronautical Study Number(s):
 6. Type: X Antenna Tower Crane Building Power Line Landfill Water Tank Other 7. Marking/Painting and/or Lighting Preferred: Red Lights and Paint Dual - Red & Medium Intensity White White - Medium Intensity Dual - Red & High Intensity White White - High Intensity Other 8. FAA Aeronautical Study Number 2009-ASO-457-OE 21. Description of Proposal: Erection of a self support tower. 	 20. Description of Location: (Attach USGS 7.5 minute Quadrangle Mag or an Airport layout Drawing with the precise site marked and any certified survey) 152 Dunn Store Road, Morgantown, KY 42261
22. Has a "NOTICE OF CONSTRUCTION OR ALTERATION" (FAA Form 7460-1) been filed with the Federal Aviation Administration?
CERTIFICATION: L bereby certify that all the above statements made by me are	true, complete and correct to the best of my knowledge and belief.
Kevin Blewitt, Senior RF Engineer	1/29/2009
Printed Name and Title Signature PENALTIES: Persons failing to comply with Kentucky Revised Statutes (KRS 18 050;Series) are liable for fines and/or imprisonment as set forth in KRS 183.990(3) in further penalties.	Date 3.861 through 183.990) and Kentucky Administrative Regulations (602 KAF . Non-compliance with Federal Aviation Administration Regulations may resul
Commission Action:	man, KAZC
	Date

Notice of Proposed Construction or Alteration - Off Airport

Project Name: T-MOB-000111843-09

Sponsor: T-Mobile

Details for Case : 9LV0326A Dunn Store Road

Show Project Summary

Case Status	ین داد می شود. این از این می این این این این این این این این این ای	₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩	999 - 992 - 997 - 997 - 997 - 997 - 997 - 997 - 997 - 997 - 997 - 997 - 997 - 997 - 997 - 997 - 997 - 997 - 99	*****	······································		
ASN: 2009-ASO-	457-OE		Date Accep	oted:	01/29/2009		
Status: Accepted			Date Deter	mined:			
			Letters:		None		
			Documents	5			
Construction / Alte	eration Info	rmation	Structure	Summa	ry		
Notice Of:	Construct	ion	Structure 1	Type: A	ntenna Tow	er	
Duration:	Permaner	it	Structure N	Name: 9	LV0326A Du	inn St	ore Road
if Temporary	: Months:	Days:	FCC Numbe	er:			
Work Schedule - Star	t: 03/01/20	09	Prior ASN:				
Work Schedule - End	: 07/31/20	09					
State Filing:	Filed with	State					
Structure Details			Common	Frequen	cy Bands		
Latitude:	an 2 an air Martin ^a ' 1940 a baile an ann an ann an ann ann ann ann ann a	37° 9' 40.39" N	Low Freq	High Freq	Freq Unit	ERP	ERP Unit
Longitude:		86° 41' 4.02" W	800	849	MHz	500	Ŵ
Horizontal Datum:		NAD83	851 869	866 894	MHz MHz	500 500	W
Site Elevation (SE):		656 (nearest foot)	896 901	901 902	MHz MHz	500 7	W W
Structure Height (AG	L):	260 (nearest foot)	930 931	931	MHz	3500	W
Requested Marking/I	.ighting:	Dual-red and medium intensity	932	932.5	MHz	17	dBW
	Other :		935 940	940 941	MHz	3500	Ŵ
Recommended Marking / Lighting:			1850 1930	1910 1990	MHz MHz	1640 1640	w w
Nearest City:		Woodbury	2305 2345	2310 2360	MHz MHz	2000	W
Nearest State:		Kentucky	2010	2.500		2000	
Description of Location:		A hilly area in central KY.	Specific Frequencies		ies		
Description of Proposal:		Proposing a 250' self support tower with a 10' lightning arrestor.		*****			



T-MOBILE Date: January 7, 2009

T-Mobile Attn: Hamlet Hope 11509 Commonwealth Drive Louisville, Ky. 40299

Re: FAA "2-C" Letter T-Mobile/Louisville PCS Site Name: T-Mobile/Louisville PCS Site No.: Property Owner: T-Mobile /Louisville PCS Site Locale: FSTAN Project No:

Dunn Store Road 9LV0326 A Michael L. & Shelia J. Phelps 152 Dunn Store Road, Morgantown, KY 42261 08-5668

Dear Hamlet,

This is to advise you that we have conducted a Global Positioning System (GPS) Observation for this project in order to establish a geographical position and elevation for the proposed antenna at this location.

The base station used for the GPS observation is described as follows: Station designated "KY HWY DIST 3 CORS ARP" in Bowling Green, KY.

Horizontal values are based upon the following datum: NAD 83 Vertical values are based upon the following datum: NGVD 29

Geographic Coordinates of the Proposed Self-Support Tower are as follows:

LATITUDE: 37° 09' 40.39" NORTH

LONGITUDE: 86° 41' 04.02" WEST

Ground elevation at the site is 656 FEET (AMSL) Height of proposed tower is 250 FEET (AGL) Height of proposed lightning arrestor is 260 FEET (AGL) Overall height elevation is 916 FEET (AMSL)

The accuracy of the above stated "Proposed Self-Support Tower" values meet or exceed "2-C" accuracy as required by the Federal Aviation Administration (horizontal accuracy \pm 50 feet, vertical accuracy \pm 20 feet).

Kentucky State Plane Coordinates (South 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 "DK3318".

If you have any questions concerning this information please contact us at any time.

Sincerely, FRANK L SELLINGER #3282 LICENSED PROFESSIONAL LAND SURVEYOR

CONSULTANT Frank L. Sellinger, PLS-No. 3282

FStan Land Surveyors and Consulting Engineers 2315 Crittenden Drive, Louisville, Ky. 40217 Phone: 502-635-5866 Fax: 502-636-5263

2315 Crittenden Drive PO Box 17546 Louisville, KY 40217 Phone: (502) 636-5111 (502) 635-5866 Fax: (502) 636-5263



GEOTECHNICAL ENGINEERING STUDY

.

PROPOSED COMMUNICATIONS TOWER DUNN STORE ROAD SITE MORGANTOWN, KENTUCKY BUTLER COUNTY

ASHER PROJECT NO. 009-016

Prepared For:

Mr. Dean Davis T-Mobile South, LLC 3800 Ezell Road, Suite 815 Nashville, TN 37211

Prepared By:

Asher, Inc. 1021 S. Floyd Street Louisville, Kentucky 40203

February 9, 2009

Environmental & Engineering Consulting

February 9, 2009

Mr. Dean Davis T-Mobile South, LLC 3800 Ezell Road, Suite 815 Nashville, TN 37211

RE: Geotechnical Engineering Study Proposed Communications Tower Dunn Store Road Site Morgantown, Kentucky Butler County

Dear Mr. Davis,

Asher, Inc. has completed a Geotechnical Engineering Study for the above referenced project. This report contains the findings of our subsurface exploration, geotechnical recommendations to aid design of foundations, and construction recommendations with regard to site work; fill placement, and foundation installation and inspection.

We appreciate the opportunity to be of service to you on this project. If we can be of further assistance, or if you have any questions regarding this report, please contact our office.

Sincerely,

Jacob D. Brown, P.E. Project Engineer

Rice

Richard A. Linker, P. E. President



TABLE OF CONTENTS

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	3.1 3.2	Site Development and Foundations
4.0	CONS	STRUCTION RECOMMENDATIONS
	4.1 4.2 4.3 4.4	Subgrade Preparation5Engineered Fill5Foundation Excavations6Construction Dewatering6
5.0	QUAL	IFICATIONS

APPENDICES

Site Location Plan Aerial Photograph Geologic Map Geologic Map Legend Location of Test Borings Test Boring Logs

1.0 PROJECT INFORMATION

The site is located north of the residence at 152 Dunn Store Rd. in Morgantown, Ky. The proposed lease area is located near the top of a hill at the center of the property. The area currently consists of a grass pasture, and slopes downhill to the northeast. No ponding water was observed at the time of our site visit.

Proposed for construction is a 250 ft. lattice tower and access road. The tower is expected to have either mat foundations bearing on friable sandstone bedrock or drilled shafts. We assume that the equipment building/cabinets will be pre-fabricated structures supported on conventional shallow foundations.

2.0 SUBSURFACE EXPLORATION

The subsurface conditions were explored by conducting two borings within the proposed lease area. The boring locations are shown on the plan included in the Appendix. The boring logs (also included in the Appendix) describe the materials and conditions encountered at each location.

A 2 to 10 in. surficial layer of topsoil was encountered in the borings. Beneath the topsoil, natural sandy orange-brown lean clay was encountered to a depth of about 4 to 5 ft. The lean clay was noted to be stiff to hard with Standard Penetration Test results (N-Values) ranging from 20 to 50+ blows per ft. Spoon refusal was encountered in both borings at depths ranging from 4.4 to 4.7 ft. In B-1, very difficult drilling was encountered from 4.4 ft. to 15.0 ft. Very friable sandstone was encountered in this zone. One 5 ft. rock core run was advanced in Boring B-1 from 15 to 20 ft. Sound, continuous sandstone was encountered. The sandstone was noted to be friable during coring operations. Asher observed the core water washing the sandstone out of the hole during drilling.

3.0 DESIGN RECOMMENDATIONS

The following design recommendations have been developed on the basis of the previously described project characteristics and subsurface conditions. Please notify our office if the project description included herein is incorrect, or if the location of the proposed tower is changed. Asher Inc. would then review the new project description to determine if revisions to our recommendations are necessary.

3.1 Site Development and Foundations

Based on the subsurface conditions encountered, the tower is expected to have either mat foundations bearing on sandstone bedrock or drilled shafts.

SHALLOW FOUNDATIONS

If mat foundations are used, the footings can be proportioned using a net allowable bearing capacity of 4,000 psf with the base bearing at a depth of at least 5 ft. below existing grades. The sandstone encountered can be removed using an excavator equipped with a ripper bucket. Site Classification B can be used for seismic design. Based on the results of the field tests, it is estimated that the foundation settlements if mat foundations are used should not exceed about 1 in. Differential settlements should not exceed 3/4 in.

DRILLED PIERS

The drilled piers should be sized using a maximum allowable end-bearing pressure of 30 kips per square ft. (15 tons per sq. ft.) for piers bearing on sound continuous bedrock. We recommend that the piers be socketed at least 5 ft. into bedrock. Site Classification B can be used for seismic design.

While the bedrock was noted to be fresh and continuous, it should be noted that rock conditions can vary across the site. The following construction considerations are recommended for drilled shaft construction:

DRILLED PIERS (CONT.)

- Provide a minimum drilled shaft diameter of 30 inches to reasonably enter the drilled shaft excavation for cleaning, bottom preparation, and observation.
- . Install a temporary protective steel casing to prevent side wall collapse, prevent excessive mud and water intrusion, and to allow workers to safely enter, clean and observe the drilled shaft.
- Observe the drilled shaft excavation after the bottom of the hole is leveled, cleaned of any mud or extraneous material, and de-watered.

A 2-inch diameter probe hole should be drilled to a depth of 5 feet into the rock-bearing material for all drilled piers. These probe holes are usually drilled with a pneumatic percussion drill. The engineer should check the probe hole using a hooked-end steel feeler rod to assess the rock continuity and to check for the presence of coal seams in the sandstone formation. If this check indicates a coal seam in the rock, the drilled shaft should be excavated deeper. Additional probe holes may be required by the geotechnical engineer to check foundations supported on marginal material.

Total and differential settlements of the tower foundations bearing on competent bedrock, using the recommended bearing pressure would be less than 1/2 in.

Building Foundations

The proposed equipment cabinet(s) can be supported on conventional shallow foundations. The footings can be proportioned using a net allowable bearing capacity of 3,000 psf. Site Classification B can be used for seismic design. Wall footings must be at least 16 in. wide and column footings must be at least 24 in. wide to provide an adequate factor of safety for bearing capacity. All exterior footings and footings in unheated areas must bear at least 30 inches below final exterior grade for frost protection. Interior footings in heated areas can bear at nominal depths below the floor (at least 12 inches). Upon approval of the subgrade, it is recommended that the cabinet floor slab be supported on a 4-in. layer of KY Dense Graded Aggregate (DGA) crushed limestone compacted to 100 percent of the standard Proctor.

3.2 Pavements

All pavement subgrade surfaces should be uniformly sloped to facilitate drainage and to avoid ponding of water beneath the pavement. Assuming proper subgrade preparation and drainage, a California Bearing Ratio (CBR) value of 3 is recommended. This value applies for the soil subgrade that is stable under a proofroll inspection, and for soil that is recompacted to 95 percent of the standard Proctor maximum dry density.

In areas that would be limited to automobiles and light trucks, the following asphalt or granular pavement sections are recommended.

Light Truck Areas

4.0 in. KY DGA6.0 in. KY No. 3 Crushed Limestone6 oz. Nonwoven Filter Fabric

Light Truck Areas

2.0 in. asphalt concrete base8.0 in. KY DGA

All paving material should comply with the current Kentucky Department of Highway Specifications. The DGA granular base should be compacted to at least 98 percent of the standard Proctor maximum dry density (ASTM D-698). It should not be expected that the pavement would be maintenance free. However, the required maintenance work should be within normal limits.

4.0 CONSTRUCTION RECOMMENDATIONS

Variations in subsurface conditions must be expected during construction. It is therefore recommended that the geotechnical engineer be retained to review the soils-related phases of the project and to correlate the subsurface data with the soil conditions that are encountered during construction.

4.1 Subgrade Preparation

Prior to construction or the placement of new engineered fill, the exposed subgrade should be evaluated by the project geotechnical engineer. The evaluation should include proofrolling of the exposed subgrade with a loaded dump truck. If unsuitable material were disclosed, the geotechnical engineer would recommend an appropriate remedial measure at that time. The sandy clay soils encountered just beneath the pavement surface will be sensitive to moisture and heavy construction equipment, and may require aeration and re-compaction or undercutting to reach firm subgrade. The severity of this potential problem depends to a great extent on the weather conditions prevailing during construction.

The contractor should exercise discretion when selecting equipment sizes and also control surface water while the subgrade soils are exposed. It may be necessary to undercut and stabilize the proposed pavement areas with crushed stone, or use a geotextile fabric to improve the subgrade, especially if the sitework is done during wet weather conditions.

4.2 Engineered Fill

Engineered fill should be placed on a prepared subgrade that has been evaluated by the geotechnical engineer. Engineered fill should be compacted to at least 98 percent of the standard Proctor maximum dry density (ASTM D-698). The geotechnical engineer or his representative should monitor engineered fill placement and compaction operations.

Field density tests should be performed on each lift as necessary to insure that the specified compaction is being achieved. Fill should be placed in horizontal lifts and each lift should be compacted to the specified density. Lift thickness of 8 in. and 12 in. should be used for clayey soils and granular soils, respectively. The on site soils are suitable for use as engineered fill.

4.3 Foundation Excavations

All concrete for foundations should be poured the same day the excavation is made. If this is not practical, the foundation excavation should be adequately protected. Soils exposed in the base of all excavations must be protected against rain and freezing. Surface water should be drained away from all excavations and not allowed to pond.

4.4 Construction Dewatering

At the time of our field investigation, no groundwater was encountered in the depths explored by our borings. Therefore, the water level appeared to be below the expected maximum excavation depth at the site for the expected foundations. However, due to seasonal variations in rainfall, local groundwater levels could rise to above the bottom of the excavation. Recommendations for construction dewatering can be made during construction if needed.

5.0 QUALIFICATIONS

Our professional services have been performed, our findings obtained, and our recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices. This warranty is in lieu of all other warranties, either express or implied. Asher, Inc. is not responsible for the independent conclusion, opinions or recommendations made by others based on the field exploration and laboratory test data presented in this report.

The nature and extent of variation and change in the subsurface conditions at the site may not become evident until the course of construction. Construction monitoring by the geotechnical engineer or his representative is therefore considered necessary to verify the subsurface conditions and to check that the soil connected construction phases are properly carried out. If significant variations or changes are in evidence, it may then be necessary to reevaluate the recommendations of this report.

Furthermore, if the project characteristics are altered significantly from those discussed in this report, if the project information contained in this report is incorrect, or if additional information becomes available, a review must be made to determine if any modification in the recommendations will be required.

APPENDIX

Site Location Plan Aerial Photograph Geologic Map Geologic Map Legend Location of Test Borings Test Boring Logs






Kentucky Geological Survey Geologic Information Service Map Legend

Geologic Units In Current View:

1:24,000 scale data (detailed geology)				
Qal	Alluvium (Quaternary - Quaternary)			
Qt	Terrace deposits (Tertiary - Quaternary)			
Ptc	Tradewater and Caseyville Formations (Lower Pennsylvanian - Middle Pennsylvanian)			
Pt	Tradewater Formation (Lower Pennsylvanian - Middle Pennsylvanian)			
МІ	Leitchfield Formation (Upper Mississippian - Upper Mississippian)			
Mv	Vienna Limestone (Upper Mississippian - Upper Mississippian)			
Mgd	Glen Dean Limestone (Upper Mississippian - Upper Mississippian)			

Symbols:

B



fossil location

PRINT THIS PAGE

NOTE: in order to print colors, make sure your browser is enabled to print background colors. <u>Internet Explorer Instructions</u>: Go to Tools --> Internet Options --> Advanced --> Under the "Printing" header, click the "Print

background colors and images" box. <u>Firefox Instructions</u>: Go to File --> Page Setup --> Click the "Print Background (colors & images)" box.

Page 1 of 1

Kentucky Geological Survey Geologic Information Service

Geologic and feature descriptions for visible themes

Print This Page

ID Location Info:

KY Single Zone (north,east): 3583599.6244262, 4648906.04491426 NAD-83 Decimal Degree (lat,lon): 37.161084, -86.684588 State: Kentucky County: Butler Quadrangle (tile code): Morgantown (Q24)

Elevation: 660, 650, 620, 640, 630

- Legend and descriptions for geologic units in the ID location:

- Hide Clipped Stratigraphic Column Images
- Note: Economic descriptions in this report are historic in nature and may not reflect current conditions

Description Source:

Geologic map of the Morgantown quadrangle, Butler and Warren Counties, Kentucky

view stratigraphic column (.pdf) for this quadrangle: GQ-1040

Tradewater Formation

Pt (Lower Pennsylvanian - Middle Pennsylvanian)

USGS Unit Info: <u>GEOLEX (id: 4149)</u>

Mapped or described as these unit(s) on the original GQ:

Tradewater Formation (GQ-1040):

TRADEWATER AND CASEYVILLE FORMATIONS

USGS Unit Info: not available

Primary Lithology: Sandstone, siltstone, shale, limestone, underclay, and coal

Above Mining City coal

Sandstone, siltstone, shale, limestone, underclay, and coal: Sandstone, light- to medium-gray; weathers yellowish brown and pink; fine to medium grained; micaceous; very thin to very thick bedded, locally crossbedded; locally interbedded with siltstone and shale. Siltstone, light- to medium-gray; weathers yellowish gray: laminated to very thin bedded; generally interbedded with shale. Shale, light- to dark-gray; weathers yellowish gray to yellowish brown; locally carbonaceous and silty; in places contains nodules of siderite. Limestone, light- to medium-gray; very fine to coarse grained; fossiliferous; ranges from 6 to 14 inches in thickness; locally consists of two thin beds separated by shale; grades laterally into interbedded shale and siltstone; at some localities directly overlies Mining City coal bed; locally separated from Mining City coal bed by shale as much as 5 feet thick. Underclay, gray; locally associated with Mining City coal bed. Unnamed coal bed, poorly exposed; reported by local coal miners to be 0 to 18 inches thick; identified at only one locality, 11/2 miles southwest of Morgantown. Mining City coal bed of Crider (1915, P-1651 178), poorly exposed, locally absent, measured thicknesses range from 18 to 48 inches; reported by local coal miners to be as much as 54 inches thick.

No.4 to Mining City coal interval:

Sandstone, siltstone, shale, limestone, underclay, and coal. Shale immediately above upper limestone bed characteristically gray and maroon. Curlew Limestone Member occurs as two beds separated by shale interval which ranges from 6 to 48 inches in thickness. Well exposed in strip mine areas. Upper limestone bed fine- to coarse grained; decalcified and silicified at many localities and yields rectangular blocks of fossiliferous chert; ranges from 1 to 10 feet in thickness; average thickness about 4 to 5 feet; locally absent. Lower limestone, fine-grained, fossiliferous; average thickness of 3 to 4 feet. The "marker coal bed" of local miners is well exposed in strip mine areas; averages 6 inches but may be as much as 10 inches thick; at one locality the "marker coal bed" is directly overlain by the upper limestone bed; elsewhere this coal bed occurs 4 to 14 feet below the top of the upper limestone bed; probably equivalent to Cates coal bed as defined by McFarlan (1943, p. 274). No. 4 coal bed is poorly exposed; average thickness reported as 36 inches by local coal

miners. Equivalent to Topmiller coal bed and Dunbar coal bed of Crider (1915, p. 175), Equivalent to No. 4 coal bed of Western Kentucky coal basin (Kehn and others, 1967). No. 4a coal bed exposed at strip mine in Pipe Spring Hollow, Local miners report coal at this horizon in holes drilled to locate No. 4 coal bed. Probably equivalent to unnamed coal bed of Crider (1915, p. 165) 40 feet below Mining City coal bed.

USGS Unit Info: not available Primary Lithology: Sandstone, siltstone, shale, limestone, underclay, and coal

TRADEWATER AND CASEYVILLE FORMATIONS

Sandstone, siltstone, shale, limestone, underclay, and coal: Sandstone, light- to medium-gray; weathers yellowish brown and pink; fine to medium grained; micaceous; very thin to very thick bedded, locally crossbedded; locally interbedded with siltstone and shale. Siltstone, light- to medium-gray; weathers yellowish gray: laminated to very thin bedded; generally interbedded with shale. Shale, light- to dark-gray; weathers yellowish gray to yellowish brown; locally carbonaceous and silty; in places contains nodules of siderite. Limestone, light- to medium-gray; very fine to coarse grained; fossiliferous; ranges from 6 to 14 inches in thickness; locally consists of two thin beds separated by shale; grades3 laterally into interbedded shale and siltstone: at some localities directly overlies Mining City coal bed; locally separated from Mining City coal bed by shale as much as 5 feet thick. Underclay, gray; locally associated with Mining City coal bed. Unnamed coal bed, poorly exposed; reported by local coal miners to be 0 to 18 inches thick; identified at only one locality, 11/2 miles southwest of Morgantown. Mining City coal bed of Crider"(1915, P-1651 178), poorly exposed, locally absent, measured thicknesses range from 18 to 48 inches; reported by local coal miners to be as much as 54 inches thick.

Sandstone, siltstone, shale, limestone, underclay, and coal. Shale immediately above upper limestone bed characteristically gray and maroon. Curlew Limestone Member occurs as two beds separated by shale interval which ranges from 6 to 48 inches in thickness. Well exposed in strip mine areas. Upper limestone bed fine- to coarse grained; decalcified and silicified at many localities and yields rectangular blocks of fossiliferous chert; ranges from 1 to 10 feet in thickness; average thickness about 4 to 5 feet; locally absent. Lower limestone, fine-grained, fossiliferous; average thickness of 3 to 4 feet. The "marker coal bed" of local miners is well exposed in strip mine areas; averages 6 inches but may be as much as 10 inches thick; at one locality the "marker coal bed" is directly overlain by the upper limestone bed; elsewhere this coal bed occurs 4 to 14 feet below the top of the upper limestone bed; probably equivalent to Cates coal bed as defined by McFarlan (1943, p. 274). No. 4 coal bed is poorly exposed; average thickness reported as 36 inches by local coal miners. Equivalent to Topmiller coal bed and Dunbar coal bed of Crider (1915, p. 175). Equivalent to No. 4 coal bed of Western Kentucky coal basin (Kehn and others, 1967). No. 4a coal bed exposed at strip mine in Pipe Spring Hollow. Local miners report coal at this horizon in holes drilled to locate No. 4 coal bed. Probably equivalent to unnamed coal bed of Crider (1915, p. 165) 40 feet below Mining City coal bed.



For

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PROPOSED LEASE AREA

160'

Beginning at a Stone found at the Southeast corner of the property conveyed to Timothy Darre the Clerk of Butler County, Kentucky, said Stone being N 78'41'08" W – 360.28' from an IPC traversing the property conveyed to Timothy Darrell McKinney in Deed Book 133, Page 227 in s rebar with a cap stamped "FSTAN #3282" and the IRUE POINT OF BEGINNING of the Proposed rebar with a cap stamped "FSTAN #3282"; thence N 37'44'02" W – 60.00' to a set #5 rebar – 60.00' to a set #5 rebar with a cap stamped "FSTAN #3282"; thence S 37'44'02" E – 60.0 square feet as per survey by Frank L. Sellinger, I, PLS No. 3282 with FS/Tan Land Surveyors

Dunn Store Road Tower Site Morgantown, Kentucky T-Mobile South, LLC Asher No. 009-016

RA

(IN FEET)

SCALE: 1" = 80'

BORING LOCATION PLAN (FIGURE 4)

BORING LOG

Boring No.: B-1

ELEV.: 657.0

Asher Project No.: 009-016 Project: Dunn Store Road Tower Site Location: Morgantown, KY

Client: T-Mobile South, LLC

Date: February 5, 2009

Elev (feet)	Depth (feet)	Sample Number	SPT Blows / 6"	N	Percent Moisture	Description of Material
		1	4-13-9	22		LEAN CLAY (CL), sandy, VERY STIFF to
						HARD, orangish brown, moist
		2	15-50/.1	50+	18.7	_
652.6	5	3	28-50/.4	50+	11.4	SPOON REFUSAL AT 4.4 FT.
						SANDSTONE - very friable, MEDIUM,
						orangish brown
	_					
	15					
			Rec (%)		RQD (%)	SANDSTONE - friable, MEDIUM HARD,
			64		0	orangish brown
			64		0	
	20					
						CORING TERMINATED AT 20 FT.
	_					
	25					
Notes:	No groun	dwater was	s encountered	d during	g drilling.	
	Topsoil -	10 in.	1 . 10	.1	1. 1	
	Elevations were interpolated from the supplied Topographic Survey performed by FS Tan.					ographic Survey performed by FS Tan.
	Low recovery and RQD due to friable sandstone present.					

ASHER, INC.

P.O. Box 17534 Louisville, KY 402017 (502) 589-0073

• •

Directions to 152 Dunn Store Rd, Morgantown, KY 42261-8231

Total Time: 10 mins, Total Distance: 5.77 mi

			Distance
P	1.	Start at 110 N MAIN ST, MORGANTOWN going toward W G L SMITH ST	go 2 mi
	2.	Continue on BOWLING GREEN RD(US-231)	go 3.6 mi
	3.	Turn R on DUNN STORE RD	go 0.17 mi
ß	4.	Arrive at 152 DUNN STORE RD, MORGANTOWN, on the R	

Time: 10 mins, Distance: 5.77 mi

YAHOO! LOCAL



When using any driving directions or map, it's a good idea to do a reality check and make sure the road still exists, watch out for construction, and follow all traffic safety precautions. This is only to be used as an aid in planning.

Directions from Morgantown City Hall (County Seat) 110 N. Main Street, Morgantown, Butler County, Kentucky 42261 to T-Mobile Cell Tower Site: 152 Dunn Store Road, Morgantown, KY 42261 Directions printed by: Theresa A. Tharp, Paralegal Greenebaum Doll & McDonald PLLC 3500 National City Tower Louisville, KY 40202 (502) 587-3748

SITE LEASE WITH OPTION

THIS SITE LEASE WITH OPTION (this "Lease") is by and between Timothy Darrell McKinney, an individual ("Landlord") and Powertel/Memphis. Inc., a Defaware corporation ("Tenant").

1. Option to Lease

(a) In consideration of the payment of Option Fee") by Tenant to Landlord. Landlord hereby grants to Tenant an option to lease a portion of the real property described in the <u>seed Exhibit A</u> (the "Property") on the terms and conditions set forth herein (the "Option"). The Option shall be for an initial term of twelve (12) months, commencing on the Effective Date (as defined below) (the "Option Period"). The Option Period may be extended by Tenant for an additional twelve (12) months upon written notice to Landlord and payment of the sum of the

(b) During the Option Period and any extension thereof, and during the Initial Term and any Renewal Term (as those terms are defined below) of this Lease. Landlord agrees to cooperate with Tenant in obtaining, at Tenant's expense, all licenses and permits or authorizations required for Tenant's use of the Premises (as defined below) from all applicable government and/or regulatory entities (including, without limitation, zoning and land use authorities, and the Federal Communications Commission ("FCC") ("Governmental Approvals"), including all land use and zoning permit applications, and Landlord agrees to cooperate with and to allow Tenant, at no cost to Landlord, to obtain a title report, zoning approvals and variances land-use permits. Landlord expressly grants to Tenant a right of access to the Property to perform any surveys, soil tests, and other engineering procedures or environmental investigations ("Tests") on the Property deemed necessary or appropriate by Tenant to evaluate the suitability of the Property for the uses contemplated under this Lease. During the Option Period and any extension thereof, and during the Initiat Term or any Renewal Term of this Lease. Landlord agrees that it will not interfere with Tenant's efforts to secure other licenses and permits or authorizations that relate to other property. During the Option Period and any extension thereof. Fenant may exercise the Option by so notifying t and/ord in writing, at Landlord's address in accordance with Section 12 hereof.

(c) If Tenant exercises the Option, then Landlord hereby leases to 'renant that portion of the Property sufficient for placement of the Antenna Facilities (as defined below), together with all necessary space and easements for access and utilities, as generally described and depicted in the attached <u>Exhibit B</u> (collectively referred to hereinafter as the "Premises"). The Premises, located at 152 Dunn Store Rd, Morgantown, Butler County, KY 42261, comprises approximately 3.600 square feet.

2. <u>Ferm</u> The initial term of this Lease shall be five (5) years commencing on the date of exercise of the Option (the "Commencement Date"), and terminating at midnight on the last day of the initial term (the "Initial Term")

3. <u>Renewal</u>—Tenant-shall-have the right-to extend this Lease for five (5) additional-and-successive five-year terms (each a "Renewal Lerm") on the same terms and conditions as set forth herein. This Lease shall automatically renew-for each successive Renewal Term unless Leann notifies Landlord, in writing, of Tenant's intention not to renew this Lease, at least-thirty (30) days prior to the expiration of the Initial Term-or any Renewal—Term. It Fenant shall remain in possession of the Premises at the expiration of this Lease, and expiration of the Same terms and conditions as an another expiration of the Initial Term-written agreement, such tenancy shall be deemed a month-to-month tenancy under the same terms and conditions of this Lease.

4. Reut

(a) From and after the Commencement Date. Tenant shall pay Landlord or designee, as rent.

- first payment of Rent shall be due within twenty (20) days following the Commencement Date and shall be prorated based can use stays remaining in the month following the Commencement Date, and thereafter Rent will be payable monthly in advance by the fifth day of each month to Landlord at the address specified in Section 12 below. If this Lease is terminated for any reason (other than a default by Tenant) at a time other than ou the last day of a month. Rent shall be prorated as of the date of termination and all prepaid Rent shall be immediately refinded to tenant Landlord, its successors assigns and/or designee, if any, will submit to Tenant any documents required by Tenant in connection with the payment of Rent, including, without limitation, an IRS Form W-9

(b) During the Initial Term and any Renewal Terms,

5 <u>Permitted Use</u> The Premises may be used by Tenant for the transmission and reception of radio communication signals and for the construction, installation, operation, maintenance, repair, removal or replacement of related facilities, including, without limitation, tower and base, antennas, microwave dishes, equipment shelters and/or cabinets and related activities.

6. <u>Interference</u> Tenant shall not use the Premises in any way which interferes with the use of the Property by Landlord or lessees or licensees of Landlord with rights in the Property prior in time to Tenant's (subject to Tenant's rights under this Lease, including, without limitation, non-interference). Similarly, Landlord shall not use, nor shall Landlord permit its lessees, licensees, employees, invitees or agents to use, any portion of the Property in any way which interferes with the operations of Tenant. Such interference shall be deemed a material breach by the interfering party, who shall, upon written notice from the other, be responsible for terminating said interference. In the event any such interference does not cease promptly, the parties acknowledge that continuing interference may cause irreparable injury and, therefore, the injured party shall have the

Site Number 9UV0326 Site Name: <u>Dunn Store Rd</u> Marker <u>Louissille</u> Site Lease - version 9/21/07

right, in addition to any other rights that it may have at law or in equity, to bring a court action to enjoin such interference or to terminate this Lease immediately upon written notice.

7. Improvements; Utilities; Access.

(a) Tenant shall have the right, at its expense, to creet and maintain on the Premises improvements, personal property and facilities necessary to operate its communications system, including, without limitation, radio transmitting and receiving antennas, microwave dishes, tower and base, equipment shelters and/or cabinets and related cables and utility lines and a location based system, as such location based system may be required by any county, state or federal agency/department, including, without limitation, additional antenna(s), coaxial cable, base units and other associated equipment (collectively, the "Antenna Facilities"). Tenant shall have the right to alter, replace, expand, enhance and upgrade the Antenna Facilities at any time during the term of this Lease. Tenant shall neither interfere with any aspects of construction nor attempt to direct construction personnel as to the location of or method of installation of the Antenna Facilities and the Easements (as defined below). The Antenna Facilities shall remain the exclusive property of Tenant and shall not be considered fixtures. Tenant shall have the right to remove the Antenna Facilities at any time during and upon the expiration or termination of this Lease.

(b) Tenant, at its expense, may use any and all appropriate means of restricting access to the Antenna Facilities, including, without limitation, the construction of a fence.

(c) Tenant shall, at Tenant's expense, keep and maintain the Antenna Facilities now or hereafter located on the Property in commercially reasonable condition and repair during the term of this Lease, normal wear and tear and casualty excepted. Upon termination or expiration of this Lease, the Premises shall be returned to Landlord in good, usable condition, normal wear and tear and casualty excepted.

(d) Tenant shall have the right to install utilities, at Tenant's expense, and to improve the present utilities on the Property (including, but not limited to, the installation of emergency power generators). Landlord agrees to use reasonable efforts in assisting Tenant to acquire necessary utility service. Fenant shall, wherever practicable, install separate meters for utilities used on the Property by Tenant. In the event separate meters are not installed. Tenant shall pay the periodic charges for all utilities attributable to Tenant's use, at the rate charged by the servicing utility. Landlord shall diligently correct any variation, interruption or failure of utility service.

(c) As partial consideration for Rent paid under this Lease. Landlord hereby grants Tenant easements on, under and across the Property for ingress, egress, utilities and access (including access for the purposes described in Section 1) to the Premises adequate to install and maintain utilities, including, but not limited to, the installation of power and telephone service cable, and to service the Premises and the Antenna Facilities at all times during the Initial Term of this Lease and any Renewal Term (collectively, the "Easements"). The Easements provided hereunder shall have the same term as this Lease

(f) Tenant shall have 24-hours-a-day, 7-days-a-week access to the Premises at all times during the Initial Term of this Lease and any Renewal Term, at no charge to Tenant.

(g) Landlord shall maintain and repair all access roadways from the nearest public roadway to the Premises in a manner sufficient to allow vehicular and pedestrian access at all times, at its sole expense, except for any damage to such roadways caused by Tenant.

8. Termination. Except as otherwise provided herein, this Lease may be terminated, without any penalty or further liability as follows:

(a) upon thirty (30) days' written notice by Landlord if Tenant fails to cure a default for payment of amounts due under this Lease within such thirty (30) day period;

(b) immediately upon written notice by Tenant if Tenant notifies Landlord of any unacceptable results of any Tests prior to Tenant's installation of the Antenna Facilities on the Premises, or if Tenant does not obtain, maintain, or otherwise forfeits or cancels any license (including, without limitation, an FCC license), permit or any Governmental Approval necessary to the installation and/or operation of the Antenna Facilities or Tenant's business;

(e) upon thirty (30) days' written notice by Tenant if Tenant determines that the Property or the Antenna Facilities are inappropriate or unnecessary for Tenant's operations for economic or technological reasons:

(d) immediately upon written notice by Tenant if the Premises or the Antenna Facilities are destroyed or damaged so as in Tenant's reasonable judgment to substantially and adversely affect the effective use of the Antenna Facilities. In such event, all rights and obligations of the parties shall cease as of the date of the damage or destruction, and Tenant shall be entitled to the reimbursement of any Rent prepaid by Tenant. If Tenant elects to continue this Lease, then all Rent shall abate until the Premises and/or the Antenna Facilities are restored to the condition existing immediately prior to such damage or destruction; or

(c) at the time title to the Property transfers to a condemning authority pursuant to a taking of all or a portion of the Property sufficient in Tenant's determination to render the Premises unsuitable for Tenant's use. Landlord and Tenant shall each be entitled to pursue their own separate awards with respect to such taking. Sale of all or part of the Property to a purchaser with the power of eminent domain in the face of the exercise of the power shall be treated as a taking by condemnation.

Site Number 91.V0326 Site Name: Dunn Store Rd Market: Louisville

9. Default and Right to Cure. Notwithstanding anything contained herein to the contrary and without waiving any other rights granted to it at law or in equity, each party shall have the right, but not the obligation, to terminate this Lease on written notice pursuant to Section 12 hereof, to take effect immediately, if the other party fails to perform any covenant or commits a material breach of this Lease and fails to diligently pursue a cure thereof to its completion after thirty (30) days' written notice specifying such failure of performance or default

10. Taxes. Landlord shall pay when due all real property taxes for the Property, including the Premises. In the event that Landlord fails to pay-any-such real property taxes or other fees and assessments. Tenant shall have the right, but not the obligation, to pay such owed amounts and deduct them from Rent amounts due under this Lease. Notwithstanding the foregoing, Tenant shall pay any personal property tax, real property tax or any other tax or fee which is directly attributable to the presence or installation of Tenant's Antenna Facilities, only for so long as this Lease remains in effect. If Landlord receives notice of any personal property or real property tax-assessment against Landlord, which may affect Tenant and is directly attributable to Tenant's installation, Landlord shall provide timely notice of the assessment to Tenant sufficient to allow Tenant to consent to or challence such assessment, whether in a Court, administrative proceeding, or other venue, on behalf of Landlord and/or Tenant, Further, Landlord shall provide to Tenant any and all documentation associated with the assessment and shall execute any and all documents reasonably necessary to effectuate the intent of this Section-10. In the event real property taxes are assessed against Landlord or Tenant for the Premises or the Property. Tenant shall have the right, but not the obligation, to terminate this Lease without further liability after thirty (30) days? written notice to Landlord, provided Tenant pays any real property taxes assessed as provided herein-

11. Insurance and Subrogation and Indemnification.

(a) Tenant will maintain Commercial General Liability Insurance in amounts of One Million and no/100 Dollars (\$1,000,000.00) per occurrence and Two Million and no/100 Dollars (\$2,000,000.00) aggregate Tenant may satisfy this requirement by obtaining the appropriate endorsement to any master policy of liability insurance Tenant may maintain.

(b) Landlord and Tenant hereby mutually release each other (and their successors or assigns) from liability and waive all right of recovery against the other for any loss or damage covered by their respective first party property insurance policies for all perils insured thereunder. In the event of such insured loss, neither party's insurance company shall have a subrogated claim against the other.

(c) Subject to the property insurance waivers set forth in subsection 11(b), Landlord and Tenant each agree to indemnify and hold harmless the other party from and against any and all claims, damages, costs and expenses, including reasonable attorney fees, to the extent caused by or arising out of the negligent acts or omissions or willful misconduct in the operations or activities on the Property by the indemnifying party or the employees, agents, contractors, licensees, tenants and/or subtenants of the indemnifying party, or a breach of any obligation of the indemnifying party under this Lease The indemnifying party's obligations under this section are contingent upon its receiving prompt written notice of any event giving rise to an obligation to indemnify the other party and the indemnified party's granting it the right to control the defense and settlement of the same.

(d) Notwithstanding anything to the contrary in this Lease, the parties hereby confirm that the provisions of this Section 11 shall survive the expiration or termination of this Lease

(e) Tenant shall not be responsible to Landlord, or any third-party, for any claims, costs or damages (including, fines and penalties) attributable to any pre-existing violations of applicable codes, statutes or other regulations governing the Property

12. Notices. All notices, requests, demands and other communications shall be in writing and are effective three (3) days after deposit in the U.S. mail, certified and postage paid, or upon receipt if personally delivered or sent by next-business-day delivery via a nationally recognized overnight courier to the addresses set forth below. Landlord or Tenant may from time to time designate any other address for this purpose by providing written notice to the other party.

<u>If to Tenant, to:</u> T-Mobile USA, Inc. 12920 SE 38 th Street Bellevue, WA 98006 Attn: PCS Lease Administrator	If to Landlord, to: Timothy Darrell McKinney 152 Dunn Store Rd Morgantown, KY 42261
With a copy to: Atin: Legal Dept. 12920 SE 38 th Street Bellevue, WA 98006	Send Rent payments to: Timothy Darrell McKinney 152 Dunn Store Rd Morgantown, KY 42261
And with a copy to: Powertel/Memphis, Inc. 3800 Ezell Nashville, TN 37211 Attn: Lease Administration Manager	
	3

13. Quiet Enjoyment, Title and Authority. As of the Effective Date and at all times during the Initial Term and any Renewal Terms of this Lease, Landlord covenants and warrants to Tenant that (i) Landlord has full right, power and authority to execute and perform this Lease; (ii) Landlord has good and unencumbered fee title to the Property free and clear of any liens or mortgages, except those heretofore disclosed in writing to Tenant and which will not interfere with Tenant's rights to or use of the Premises; (iii) execution and performance of this Lease will not violate any laws, ordinances. covenants, or the provisions of any mortgage, lease, or other agreement binding on Landlord; and (iv) Tenant's quiet enjoyment of the Premises or any part thereof shall not be disturbed as long as Tenant is not in default beyond any applicable grace or cure period.

14. Environmental Laws. Landlord represents that it has no knowledge of any substance, chemical or waste (collectively, "Hazardous Substance") on the Property that is identified as hazardous, toxic or dangerous in any applicable federal, state or local law or regulation. Landlord and Tenant shall not introduce or use any Hazardous Substance on the Property in violation of any applicable law. Landlord shall be responsible for, and shall promptly conduct any investigation and remediation as required by any applicable environmental laws, all spills or other releases of any Hazardous Substance not caused solely by Tenant, that have occurred or which may occur on the Property. Each party agrees to defend, indemnify and hold harmless the other from and against any and all administrative and judicial actions and rulings, claims, causes of action, demands and liability (collectively, "Claims") including, but not limited to, damages, costs, expenses, assessments, penalties, fines, losses, judgments and reasonable attorney fees that the indemnitee may suffer or incur due to the existence of any Hazardous Substances on the Property or the migration of any Hazardous Substance to other properties or the release of any Hazardous Substance into the environment (collectively, "Actions"), that relate to or arise from the indemnitor's activities on the Property. Landlord agrees to defend, indemnify and hold Tenant harmless from Claims resulting from Actions on the Property not caused by Landlord or Tenant prior to and during the Initial Term and any Renewal Term. The indemnifications in this section specifically include, without limitation, costs incurred in connection with any investigation of site conditions or any cleanup. remedial, removal or restoration work required by any governmental authority. This Section 14 shall survive the termination or expiration of this Lease.

15. <u>Assignment and Subleasing</u>. Tenant shall have the right to assign or otherwise transfer this I ease and the Easements (as defined above) granted herein upon written notice to Landlord. Upon such assignment, Tenant shall be relieved of all liabilities and obligations hereunder and Landlord shall look solely to the assignee for performance under this Lease and all obligations hereunder. Tenant may sublease the Premises, upon written notice to Landlord.

Landlord shall have the right to assign or otherwise transfer this Lease and the Easements granted herein, upon written notice to Tenant except for the following; any assignment or transfer of this Lease which is separate and distinct from a transfer of Landlord's entire right, title and interest in the Property, shall require the prior written consent of Tenant which may be withheld in Tenant's sole discretion. Upon Tenant's receipt of (i) an executed deed or assignment and (ii) an IRS Form W-9 from assignee, and subject to Tenant's consent, if required, Landlord shall be relieved of all liabilities and obligations hereunder and Tenant shall look solely to the assignee for performance under this Lease and all obligations hereunder.

Additionally, notwithstanding anything to the contrary above, Landlord or Tenant may, upon notice to the other, grant a security interest in this Lease (and as regards the Tenant, in the Antenna Facilities), and may collaterally assign this Lease (and as regards the Tenant, in the Antenna Facilities) to any mortgagees or holders of security interests, including their successors or assigns (collectively "Secured Parties"). In such event, Landlord or Tenant, as the case may be, shall execute such consent to leasehold financing as may reasonably be required by Secured Parties.

16. <u>Successors and Assigns</u>. This Lease and the Easements granted herein shall run with the land, and shall be binding upon and inure to the benefit of the parties, their respective successors, personal representatives and assigns.

17. Waiver of Landlord's Lien. Landlord hereby waives any and all lien rights it may have, statutory or otherwise, concerning the Antenna Facilities or any portion thereof, which shall be deemed personal property for the purposes of this Lease, whether or not the same is deemed real or personal property under applicable laws, and Landlord gives Tenant and Secured Parties the right to remove all or any portion of the same from time to time, whether before or after a default under this Lease, in Tenant's and/or Secured Party's sole discretion and without Landlord's consent

18 Miscellaneous

(a) The prevailing party in any litigation arising hereunder shall be entitled to reimbursement from the other party of its reasonable attorneys' fees and court costs, including appeals, if any

(b) This Lease constitutes the entire agreement and understanding of the parties, and supersedes all offers, negotiations and other agreements with respect to the subject matter and property covered by this Lease. Any amendments to this Lease must be in writing and executed by both parties.

(c) Landlord agrees to cooperate with Tenant in executing any documents necessary to protect Tenant's rights in or use of the Premises. A Memorandum of Lease in substantially the form attached hereto as <u>Exhibit C</u> may be recorded in place of this Lease by Tenant.

(d) In the event the Property is encumbered by a mortgage or deed of trust, Landlord agrees, upon request of Tenant, to obtain and furnish to Tenant a non-disturbance and attornment agreement for each such mortgage or deed of trust, in a form reasonably acceptable to Tenant.

(c) Tenant may obtain title insurance on its interest in the Premises. Landlord agrees to execute such documents as the title company may require in connection therewith.

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Site Number:9LV0326Site Name:Dunn Store RdMarket:Louisville

Site Lease - version 9.21 07

(f) This Lease shall be construed in accordance with the laws of the state in which the Property is located, without regard to the conflicts of law principles of such state.

(g) If any term of this Lease is found to be void or invalid, the remaining terms of this Lease shall continue in full force and effect. Any questions of particular interpretation shall not be interpreted against the drafter, but rather in accordance with the fair meaning thereof. No provision of this Lease will be deemed waived by either party unless expressly waived in writing by the waiving party. No waiver shall be implied by delay or any other act or omission of either party. No waiver by either party of any provision of this Lease shall be deemed a waiver of such provision with respect to any subsequent matter relating to such provision.

(h) The persons who have executed this Lease represent and warrant that they are duly authorized to execute this Lease in their individual or representative capacities as indicated.

(i) This Lease may be executed in any number of counterparts, each of which shall be deemed an original, but all of which together shall constitute a single instrument.

(j) All Exhibits referred to herein and any Addenda are incorporated herein for all purposes. The parties understand and acknowledge that Exhibits A and B may be attached to this Lease and the Memorandum of Lease, in preliminary form. Accordingly, the parties agree that upon the preparation of final, more complete exhibits, Exhibits A and/or B, as the case may be, may be replaced by Tenant with such final, more complete exhibits(s)

(k) If either party is represented by any broker or any other leasing agent, such party is responsible for all commission fee or other payment to such agent, and agrees to indemnify and hold the other party harmless from all claims by such broker or anyone claiming through such broker.

;

The effective date of this Lease is the date of execution by the last party to sign (the "Effective Date").

LANDLORD: Timothy Darrell McKinney

By:	I inoth	\mathcal{Q}	MSKing
Printed Name:	Timostia)	D,	Mcterney
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Date:	1-7-04		anga, promotion di <mark>mananan appene at la constitucione ander anno ante ante ante ante ante ante ante ante</mark>

TENANT: Powertel/Memphis, Inc.

By:	
Printed Name:	Dean Davis
l'itle:	Interim Director of Network Engineering and Operations
Date:	

T-Mobile Legal Approval

EXHIBIT A Legal Description

The Property is legally described as follows:

A 15.780 acre tract of land located off Dunn Store Road, Morgantown, Butler County, Kentucky and being more particularly described as follows: Beginning at an iron pin in the line of Michael and Shelia Phelps said pin being approximately 92.92 feet from Dunn Store Road; thence with the line of Phelps N 78 deg. 42 min. W 201.27 feet to an iron pin; thence S 75 deg. 17 min. 05 sec. W 235.61 feet to a stone (found); thence N 81 deg. 25 min. 10 sec. W 1070.24 feet to a stone (found); thence N 17 deg. 51 min. 49 sec. E 602.39 feet to an iron pin; thence S 77 deg. 19 min. 24 sec. E 1222.13 feet to an iron pin; thence S 12 deg. 46 min. 05 sec. W 385.09 feet to an iron pin; thence S 78 deg. 42 min. E 205.57 feet to an iron pin; thence with an existing ingress and egress easement S 19 deq. 28 min. 03 sec. W 30.31 feet to an iron pin, being the point of beginning. The above description based on survey by Danny T. Cook, P.L.S. #2877, Butler County Surveyor, dated May 10, 1993, attached hereto.

The above property is subject to an easement of ingress and egress as set out in Deed Book 110, Page 478, in the Office of the Butler County Court Clerk.

Being the same property conveyed to Shelia Johnson Taylor, from Kenneth Coots, et al, by Deed dated January 4, 1984, and of record in Deed Book 110, Page 478, in the Office of the Butler County Court Clerk.

Also being the same property conveyed to Michael L. Phelps and wife, Shelia J. Phelps, from Shelia J. Taylor Phelps and husband, Michael L. Phelps, by Deed dated

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EXHIBIT B

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The location of the Premises within the Property (together with access and utilities) is more particularly described and depicted as follows:

[Enter Premises description here or on attachment(s).]

-

EXHIBIT C

Memorandum of Lease

MEMORANDUM OF LEASE

Assessor's Parcel Number: Map 60-12.01 Between Timothy Darrell McKinney ("Landlord") and Powertel/Memphis, Inc. ("Tenant")

A Site Lease with Option (the "Lease") by and between Timothy Darrell McKinney, an individual ("Landlord") and Powertel/Memphis, Inc., a Delaware corporation ("Tenant") was made regarding a portion of the following property:

See Attached Exhibit "A" incorporated herein for all purposes

The Option is for a term of twelve (12) months after the Effective Date of the Lease (as defined under the Lease), with up to one additional twelve (12) month renewal ("Optional Period").

The Lease is for a term of five (5) years and will commence on the date as set forth in the Lease (the "Commencement Date"). Tenant shall have the right to extend this Lease for five (5) additional and successive five-year terms.

IN WITNESS WHEREOF, the parties hereto have respectively executed this memorandum effective as of the date of the last party to sign.

LANDLORD: Timothy Darrell McKinney

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Date:	1 - Uli - Uli
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TENANT:	Powertel/Memphis,	Inc
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By:	
Printed Name:	Dean Davis
Fitle:	Interim Director of Network Engineering and Operations
Date:	
Printed Name:	

[Notary block for Landlord]

[Landlord Notary block for an Individual] STATE OF *Develop*) COUNTY OF *Belley*) This instrument was acknowledged before me on *Develop* Hibby Timothy Darrell McKinney. Dated: <u>I-DI-O</u> <u>Notary Public</u> <u>Notary Publ</u>

(Use this space for notary stamp/seal)

[Notary block for Tenant]

STATE OF)) ss.
COUNTY OF)

I certify that I know or have satisfactory evidence that Dean Davis is the person who appeared before me, and said person acknowledged that he signed this instrument, on oath stated that he was authorized to execute the instrument and acknowledged it as the Interim Director of Network Engineering and Operations of Powertel/Memphis, Inc., a Delaware corporation, to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

Dated

Notary Public Print Name _____ My commission expires _____

(Use this space for notary stamp/seal)

Memorandum of Lease Exhibit A Legal Description

The Property is legally described as follows:

A 15,780 acre tract of land located off Dunn Store Road, Morgantown, Butler County, Kentucky and being more particularly described as follows: Beginning at an iron pin in the line of Michael and Shelia Phelps said pin being approximately 92.92 feet from Dunn Store Road; thence with the line of Phelps N 78 deg. 42 min. W 201.27 feet to an iron pin; thence S 75 deg. 17 min. 05 sec. W 235.61 feet to a stone (found); thence N 81 deg. 25 min. 10 sec. W 1070.24 feet to a stone (found); thence N 17 deg. 51 min. 49 sec. E 602.39 feet to an iron pin; thence S 77 deg. 19 min. 24 sec. E 1222.13 feet to an iron pin; thence S 12 deg. 46 min. 05 sec. W 385.09 feet to an iron pin; thence S 78 deg. 42 min. E 205.57 feet to an iron pin; thence with an existing ingress and egress easement S 19 deg. 28 min. 03 sec. W 30.31 feet to an iron pin, being the point of beginning. The above description based on survey by Danny T. Cook, P.L.S. #2877, Butler County Surveyor, dated May 10, 1993, attached hereto.

The above property is subject to an easement of ingress and egress as set out in Deed Book 110, Page 478, in the Office of the Butler County Court Clerk.

Being the same property conveyed to Shelia Johnson Taylor, from Kenneth Coots, et al, by Deed dated January 4, 1984, and of record in Deed Book 110, Page 478, in the Office of the Butler County Court Clerk.

Also being the same property conveyed to Michael L. Phelps and wife, Shelia J. Phelps, from Shelia J. Taylor Phelps and husband, Michael L. Phelps, by Deed dated

4

ADDENDUM TO SITE LEASE WITH OPTION [Additional Terms]

In the event of conflict or inconsistency between the terms of this Addendum and this Lease, the terms of the Addendum shall govern and control. All capitalized terms shall have the same meaning as in this Lease.

Paragraph 3 deleted and replaced with the following:

3. <u>Renewal</u>. Tenant shall have the right to extend this Lease for five (5) additional and successive five-year terms (each a "Renewal Term") on the same terms and conditions as set forth herein. This Lease shall automatically renew for each successive Renewal Term unless Tenant notifies Landlord, in writing, of Tenant's intention not to renew this Lease, at least thirty (30) days prior to the expiration of the Initial Term or any Renewal Term.

Paragraph 7(a) and 7(g) will be deleted and replaced with the following:

7(a) a) Tenant shall have the right, at its expense, to erect and maintain on the Premises improvements, personal property and facilities necessary to operate its communications system, including, without limitation, radio transmitting and receiving antennas, microwave dishes, tower and base, equipment shelters and/or cabinets and related cables and utility lines and a location based system, as such location based system may be required by any county, state or federal agency/department, including, without limitation, additional antenna(s), coaxial cable, base units and other associated equipment (collectively, the "Antenna Facilities"). Tenant shall have the right to alter, replace, expand, enhance and upgrade the Antenna Facilities at any time during the term of this Lease. Tenant shall cause all construction to occur lien-free and in compliance with all applicable laws and ordinances. Landlord acknowledges that it shall neither interfere with any aspects of construction nor attempt to direct construction personnel as to the location of or method of installation of the Antenna Facilities and the Easements (as defined below). The Antenna Facilities shall remain the exclusive property of Tenant and shall not be considered fixtures. Tenant shall have the right to remove the Antenna Facilities at any time during and upon the expiration or termination of this Lease. Tenant shall remove all above ground improvements of the Antenna Facilities and all below ground improvements of the Antenna Facilities to a depth of 24" within 120 days following the expiration or early termination of this Lease.

7 (g) Any access roadways required by Tenant for access to the Premises will be installed, maintained and repaired at the cost of Tenant, except for any damage to such access roadways caused by Landlord Tenant shall install and maintain a turn-around area at the Antenna Facilities. Tenant shall not use any of the Landlords existing access drive ways

Paragraph 8(c) deleted and replaced with the following:

8 (c) upon six (6) months' tent paid by Tenant to Landlord and thirty (30) days' written notice by Tenant if Tenant determines that the Property or the Antenna Facilities are inappropriate or unnecessary for Tenant's operations for economic or technological reasons;

Paragraph 10 deleted and replaced with the following:

10. Taxes Landlord shall pay when due all real property taxes for the Property, as assessed by the taxing authority of the appropriate jurisdiction. In the event that Landlord fails to pay any such real property taxes or other fees and assessments not directly attributable to Tenant's installation, Tenant shall have the right, but not the obligation, to pay such owed amounts and deduct them from Rent amounts due under this Lease. Notwithstanding the foregoing. Tenant shall pay any personal property tax, real property tax or any other tax or fee which is directly attributable to the presence or installation of Tenant's Antenna Facilities, only for so long as this Lease remains in effect. If Landlord receives notice of any personal property or real property tax assessment against Landlord, which may affect Tenant and is directly attributable to Tenant's installation. Landlord shall provide timely notice of the assessment to Tenant sufficient to allow Tenant to consent to or challenge such assessment, whether in a Court, administrative proceeding, or other venue, on behalf of Landlord and/or Tenant. Tenant will provide the Butler County Tax Assessor, Planning and Zoning department and the Permitting Department with a legal description of the Premises as well as Tenants' noticing information Tenant will not pay any taxes prior to the Commencement of the Lease. Further, Landlord shall provide to Tenant any and all documents reasonably necessary to effectuate the intent of this Section 10.

Paul B. Whitty Direct (502) 587-3655 Fax (502) 540-2260 E-mail pbw@gdm.com

March ____, 2009

VIA CERTIFIED MAIL - RETURN RECEIPT REQUESTED

 RE: Notice of Proposed Construction of Wireless Communications Facility Site Name: Dunn Store Road/9LV0326A
Site Address: 152 Dunn Store Road, Morgantown, Butler County, Kentucky 42261
Docket No. 2009-00105

Dear Neighbor:

Powertel/Memphis, Inc. d/b/a T-Mobile Kentucky ("T-Mobile") has filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on property located at 152 Dunn Store Road, Morgantown, Butler County, Kentucky 42261. The proposed facility will include a 250-foot tall antenna tower, plus a 5-foot lightning rod and related ground facilities.

This notice is being sent to you because the Butler County Property Valuation Administrator's records indicate that you may own property that is within 500' of the proposed tower site <u>or</u> that is contiguous to the property on which the tower is to be located. You have a right to submit testimony to the PSC in writing, or to request intervention in the PSC's proceedings on the application. You may contact the PSC for additional information concerning this matter at: Kentucky Public Service Commission, Executive Director, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602, Phone: (502) 564-3940. Please refer to Docket Number 2009-00105 in your correspondence or telephone calls.

We have attached a map showing the site location for the proposed tower. T-Mobile's radio frequency engineers assisted in selecting the proposed site for the tower, based on location and elevation needed to improve coverage and to provide quality service to wireless communications customers in this area. Please feel free to contact me at (502) 587-3655 with any comments or questions.

Sincerely,

Paul B. Whitty Attorney for T-Mobile Kentucky PBW/abf

Enclosure

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Notice List T-Mobile/Butler County "DUNN STORE ROAD" 152 Dunn Store Road Morgantown, Butler County, KY 42261 Map 60, Parcel 12.01

ALL PROPERTIES WITHIN 500 FEET OF TOWER SITE OR CONTIGUOUS TO PROPERTY ON WHICH TOWER IS TO BE LOCATED

Map 60, Parcel 11 Michael L. & Shelia J. Phelps 6478 Bowling Green Road Morgantown, KY 42261

Map 60, Parcel 14 Chris Reneer P.O. Box 767 Morgantown, KY 42261

Map 60, Parcel 14.04 Jason Camp 354 Dunn Store Rd. Morgantown, KY 42261

Map 60, Parcel 13 Robert Ziater 220 Dunn Store Rd. Morgantown, KY 42261

Map 60, Parcel 12 Michael L. & Shelia J. Phelps 6478 Bowling Green Road Morgantown, KY 42261

GOVERNMENT OFFICIAL:

Map 60, Parcel 12.04 Timothy McKinney 152 Dunn Store Rd. Morgantown, KY 42261

Map 60, Parcel 19 Harold & Barbara Reeves 508 Dunn Store Rd. Morgantown, KY 42261

Map 60, Parcel 14.07 Brian Woodward 213 Dunn Store Rd. Morgantown, KY 42261

Map 60, Parcel 14.03 Samuel S. Moore P.O. Box 773 Morgantown, KY 42261

Map 60, Parcel 15 M. & J.M. Sweetman c/o Janice Williams 1306 Elrod Rd. Bowling Green, KY 42101

Hon, David Fields

Morgantown, KY 42261

P.O. Box 626

Butler County Judge Executive

Map 60, Parcel 12.02 William L. & Mary Cook P.O. Box 436 Morgantown, KY 42261

Map 60, Parcel 14.08 Walter & Tori Rohen 494 Dunn Store Rd. Morgantown, KY 42261

Map 60, Parcel 14.06 Brian Woodward 412 Dunn Store Rd. Morgantown, KY 42261

Map 60, Parcel 14.01 Earl Combs 103 Chickasaw Dr. Morgantown, KY 42261

Map 60, Parcel 12.03 Michael L. Phelps 6478 Bowling Green Road Morgantown, KY 42261

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Paul B. Whitty Direct (502) 587-3655 Fax (502) 540-2260 E-mail pbw@gdm.com

March ____, 2009

VIA CERTIFIED MAIL - RETURN RECEIPT REQUESTED Hon. David Fields Butler County Judge Executive P.O. Box 626 Morgantown, KY 42261

RE: Notice of Proposed Construction of Wireless Communications Facility Site Name: Dunn Store Road/9LV0326A Site Address: 152 Dunn Store Road, Morgantown, Butler County, Kentucky 42261 Docket No. 2009-00105

Dear Judge Fields:

Powertel/Memphis, Inc. d/b/a T-Mobile Kentucky ("T-Mobile") has filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on property located at 152 Dunn Store Road, Morgantown, Butler County, Kentucky 42261. The proposed facility will include a 250-foot tall antenna tower, plus a 5-foot lightning rod and related ground facilities.

You have a right to submit testimony to the PSC in writing, or to request intervention in the PSC's proceedings on the application. You may contact the PSC for additional information concerning this matter at: Kentucky Public Service Commission, Executive Director, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602, Phone: (502) 564-3940. Please refer to Docket Number 2009-00105 in your correspondence or telephone calls.

We have attached a map showing the site location for the proposed tower. T-Mobile's radio frequency engineers assisted in selecting the proposed site for the tower, based on location and elevation needed to improve coverage and to provide quality service to wireless communications customers in this area. Please feel free to contact me at (502) 587-3655 with any comments or questions.

Sincerely,

Paul B. Whitty Attorney for T-Mobile Kentucky

PBW/abf Enclosure

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SITE NAME: DUNN STORE ROAD <u>152 Dunn Store Road</u> Morgantown, Butler County, Kentucky 42261

NOTICE SIGNS

The signs are to be at least (2) feet by four (4) feet in size, of durable material, with the text printed in black letters at least one (1) inch in height against a white background, except for the word "tower" which is at least (4) inches in height.

Sign to be posted on site:

Powertel/Memphis Inc. d/b/a T-Mobile Kentucky proposes to construct a telecommunications **tower** on this site. If you have questions, please contact Paul B. Whitty, Greenebaum Doll & McDonald, PLLC, 3500 National City Tower, Louisville, Kentucky 40202, (502) 587-3655, or the Executive Director, Public Service Commission, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky, 40602, (502) 564-3940. Please refer to Docket Number 2009-00105 in your correspondence or telephone calls.

Sign to be posted on nearest public road:

Powertel/Memphis Inc. d/b/a T-Mobile Kentucky proposes to construct a telecommunications **tower** near this site. If you have questions, please contact Paul B. Whitty, Greenebaum Doll & McDonald, PLLC, 3500 National City Tower, Louisville, Kentucky 40202, (502) 587-3655, or the Executive Director, Public Service Commission, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky, 40602, (502) 564-3940. Please refer to Docket Number 2009-00105 in your correspondence or telephone calls.

3288822_1 doc

Tharp, Theresa A.

From: Tharp, Theresa A.

Sent: Wednesday, March 11, 2009 11:03 AM

To: 'banner@jpinews.com'

Subject: Legal Ad for T-Mobile for The Butler County Banner (Butler)

Please place the following legal ad in The Butler County Banner. We would like for the ad to run on Wednesday, March 18, 2009.

Powertel/Memphis, Inc. d/b/a T-Mobile Kentucky proposes to construct a telecommunications tower at 152 Dunn Store Road, Morgantown, Butler County, Kentucky 42261. For questions or comments please contact Paul Whitty, Attorney, Greenebaum Doll & McDonald PLLC, 3500 National City Tower, Louisville, Kentucky 40202; or Kentucky Public Service Commission, Executive Director, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to Docket Number 2009-00105 in your correspondence.

Please forward your invoice for this ad directly to my attention, at the address shown below. I will see that payment is processed immediately.

We will also need proof of publication, please, and ask that you send that to my attention as well.

Thank you for your assistance with this matter.

Sheresa A. Sharp Paralegal Greenebaum Doll & McDonald, FLLC 3500 National City Tower Louisville, KY 40202 Office: (502) 587-3748 Fax: (502) 540-2291 Cell: (502) 541-8212 Email: tae@gdm.com

${\mathbb T}\cdot {\mathbb M}_0$ map from RF showing search area with candidate depicted

9600326



3-D Tops Quarke Copyright & 1899 De Lormes Vin result, ME 64096 Scence Data: USISS 176 ft Scale: 1: 20,590 Depart 13-3 Datama: WGS24

8550 West Bryn Mawr, Chicago, IL 60631

Revised 5/8/2006