

**JEFFERSON COUNTY PUBLIC SCHOOL SYSTEM  
COMMUNICATIONS FACILITY SPACE LICENSE AGREEMENT**

THIS COMMUNICATIONS FACILITY SPACE LICENSE AGREEMENT ("Agreement") is entered into effective on the date of the last party to execute this Agreement ("Effective Date"), by and between the **Board of Education of Jefferson County, Kentucky**, operating under the name **Jefferson County Public Schools ("JCPS")** and **Powertel/Memphis, Inc.**, a Delaware corporation, successor-in-interest to Powertel/Kentucky, Inc. (together with its successors and permitted assigns, "**Licensee**").

**RECITALS**

A. JCPS issued Proposal No. M-965-5656 for the use of JCPS owned or controlled tower space for wireless communications services (the "**Proposal**").

B. The Proposal included certain prohibitions, requirements and technical specifications (collectively, the "**Specifications**") to be applicable to any contract granted by JCPS in response to the Proposal. A copy of the Specifications is attached hereto as Exhibit C.

C. JCPS desires, pursuant to the Proposal, to grant Licensee the right to use tower space at the site described on the Site Designation Form attached as Exhibit A to this Agreement (the "**Site**") that is a portion of the property located at Ballard High School, 6000 Brownsboro Road, Louisville, Kentucky 40222 (the "**Property**"), and Licensee desires to accept such right pursuant to the Proposal. Exhibit A also describes the tower structure (the "**Structure**") on the Site; the unmanned radio communications equipment and related telecommunications activities of Licensee (the "**Communications Facility**") for which the Site will be used by Licensee; the initial payment to be paid by Licensee (the "**Initial Payment**"); the renewal payment to be paid by Licensee upon the first day of each five (5) year Renewal Term (defined below) (the "**Renewal Payment**") and the annual license payment to be paid Licensee (the "**Annual Fee**").

**NOW THEREFORE**, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

**AGREEMENT**

1. **SPECIFICATIONS**. Licensee shall comply with the Specifications (defined above); provided, however, to the extent any provision of this Agreement (including exhibits) conflicts with the Specifications, the provision of this Agreement shall control.

2. **REGULATORY COMPLIANCE**. During the term of this Agreement, Licensee will comply with all federal, state and local laws, orders, ordinances and regulations applicable to Licensee's access to and use of the Site.

3. **NON-INTERFERENCE**. The Communications Facility will not interfere with the educational operations of JCPS or with any communications equipment or facilities of JCPS or any other person or entity located at the Site on the date of Licensee's original installation of Licensee's Communications Facility. JCPS will not permit the installation on the

Site after such installation date of any equipment that: (a) causes technical interference problems with the Communications Facility, or (b) prevents Licensee from exercising the rights of access to the Site granted to Licensee under Sections 10 and 14 of this Agreement. Subject to Section 22, such interference shall be deemed a material breach by the interfering party, who shall, upon written notice from the other, be responsible for using commercially reasonable efforts to cause such interference to cease within forty-eight (48) hours after receipt of such notice, and if such interference does not cease within such forty-eight (48) hour period, continuing to diligently pursue the ceasing of such interference until such interference has been corrected. Subject to Section 22, in the event any such interference is not resolved within thirty (30) days after the end of such forty-eight (48) hour period, the parties acknowledge that continuing interference may cause irreparable injury and, therefore, the injured party shall have the 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 Agreement immediately upon written notice.

4. **COOPERATION.** JCPS will use commercially reasonable efforts to cooperate with Licensee, at Licensee's expense, to assist Licensee to obtain any licenses, permits or government approvals that are required for Licensee to use the Site.

5. **TERM.** The initial term of this Agreement is five (5) years commencing on the Effective Date. The term will renew automatically for three (3) additional five (5)-year renewal terms (each a "**Renewal Term**"), unless Licensee provides written notice of nonrenewal to JCPS at least sixty (60) days before the end of the initial term or before the end of such Renewal Term. This Agreement may be renewed for one or more additional terms after the end of the third Renewal Term, upon written agreement of the parties.

6. **TERMINATION BY JCPS.** In addition to any other applicable rights or remedies hereunder or otherwise available, and notwithstanding anything in this Agreement to the contrary, JCPS may terminate this Agreement on sixty (60) days prior written notice of termination without further liability if JCPS determines that the Communications Facility unreasonably interferes with any equipment of JCPS or any equipment of any other licensee that was located on the Site prior to the date of Licensee's original installation of Licensee's Communications Facility and Licensee has failed to cure such interference to the reasonable satisfaction of JCPS in a reasonable time (which in no event shall the cure period to cure such interference be more than sixty (60) days following Licensee's receipt of JCPS' written notice of such interference). Should JCPS determine the need to remove the Structure due to renovations or expansion of a school or other JCPS-owned building, this Agreement shall be cancelled nine (9) months after notice from JCPS to Licensee, and the prorated Annual Fee for the remainder of that year of the term will be returned by JCPS to Licensee. However, if JCPS determines that there is an option to relocate the Structure on the same campus in a location acceptable to JCPS and Licensee, Licensee may at its option relocate the Structure and all communications equipment in or on the Structure, whether owned by Licensee or JCPS or any other licensee, in a manner and at such times approved by JCPS and such other licensees (and only if permitted by such other licensees), at Licensee's sole expense, in which case this Agreement shall not be cancelled (and the prorated Annual Fee for the remainder of that year of the term will not be returned by JCPS to Licensee), and this Agreement shall be amended to reflect that the Structure and such communications equipment have been relocated. If Licensee determines that the new proposed location is not acceptable, then this Agreement shall terminate upon the date that is

nine (9) months following JCPS's prior written notice of such relocation. Licensee shall also have the right to locate a cell-on-wheels, or other temporary antenna facility on the Property during a relocation period in order for Licensee to maintain service or in the event of termination due to renovations or expansion, in which case such cell-on-wheels or other temporary antenna facility may remain on the Property for up to twelve (12) months from the Structure removal date. JCPS shall cooperate with the placement of the temporary facility at a mutually acceptable location.

7. **TERMINATION BY LICENSEE.** In addition to any other applicable rights or remedies hereunder or otherwise available, Licensee may terminate this Agreement on sixty (60) days prior written notice without further liability if (1) Licensee cannot obtain or loses through no fault of Licensee any permit, license or approval required for Licensee's use of the Site, (2) it is determined by a court of competent jurisdiction that JCPS does not own or control the Site, (3) any portion of the Site or the Communications Facility is damaged or destroyed through no fault of Licensee, or is condemned or transferred in lieu of condemnation; or (4) Licensee's ability to use the Property or the Communications Facility for its intended purpose is materially degraded because of technological reasons through no fault of Licensee.

8. **PAYMENT OF INITIAL PAYMENT, RENEWAL PAYMENT AND ANNUAL FEE.** Notwithstanding any contrary provisions in Exhibit A, the Initial Payment is due within thirty (30) days of the Effective Date of this Agreement, and the Renewal Payment is due on the first day of each Renewal Term. The Annual Fee is due within thirty (30) days of the Effective Date of this Agreement, and again on each subsequent anniversary of the Effective Date. The Annual Fee will be prorated for any fractional year. The Initial Payment, the Renewal Payment and the Annual Fee are payable to JCPS at the address in Section 32.

9. **INTEREST; LATE ANNUAL FEE.** If any Initial Payment, any Renewal Payment or any Annual Fee is not paid within thirty (30) business days of when due, Licensee, upon receipt of notice from JCPS of such late payment, shall pay to JCPS a late fee for each such late payment of One Hundred Fifty and no Dollars (\$150.00), plus interest after the due date until paid at the current prime interest rate of PNC Bank.

10. **APPROVED COMMUNICATIONS FACILITY.** Licensee may use the Site for the purpose of installing, removing, replacing, modifying, maintaining and operating, at its expense, the Communications Facility, including, without limitation, antennas and microwave dishes, air conditioned equipment shelters and/or base station equipment, cable, wiring, power sources, related equipment and structures and, if applicable to the Site, an antenna support structure only for the Communications Facility, which such Communications Facility is specified on Exhibit A and Exhibit B attached hereto and made part hereof. If necessary, Licensee's equipment and facilities may be mounted on the ground near the Structure. In such case, Licensee shall provide a detailed plan of the necessary equipment and ground space, including any necessary utility easements. The plan for the use of such equipment and ground space shall be set forth on Exhibit B attached hereto and made part hereof. To the extent any provision of this Agreement conflicts with any provision in the plan for the use of such equipment and ground space set forth on Exhibit B, the provision of this Agreement shall control. Similarly, to the extent any provision of this Agreement conflicts with any provision set forth in Exhibit C, the provision of this Agreement shall control.

Prior to any material alteration of the Communications Facility by Licensee, JCPS shall approve Licensee's plans for alteration, such approval not to be unreasonably withheld, conditioned or delayed. JCPS shall signify approval by signing off on the final construction drawings and shall signify disapproval by sending Licensee written notice of such disapproval. Any notice of such disapproval must state with specificity the reasons for JCPS's objections and what Licensee must do to make the drawings approvable by JCPS. JCPS further agrees to cooperate with Licensee so that Licensee can modify the final construction drawings for JCPS's reasonable approval as provided above. JCPS shall have ten (10) days from the date of receipt of final construction drawings or any modified final construction drawings to approve or disapprove of the same or the final construction drawings shall be deemed approved.

All installation and alteration work shall be designed by a licensed structural engineer, performed at Licensee's expense in a good and workmanlike manner and in accordance with applicable building uses, and shall not adversely affect the structural integrity or maintenance of the Site or the Structure.

JCPS grants Licensee a non-exclusive right of vehicular and pedestrian access to the Site for the purposes stated above, for placement of an underground grounding system, and for access to the appropriate source of electric, telephone and other utilities, in the reasonable discretion of Licensee.

11. **LIENS.** Licensee shall keep the Site and the Structure free from any liens arising from any work performed, material furnished, or obligations incurred by or at the request of Licensee.

12. **POSSESSION.** Licensee (1) accepts the Site and the Structure AS IS, WHERE IS with all faults, for the purposes for which the same is licensed, and (2) waives any claims against JCPS in respect of defects in the Site or the Structure, unless expressly provided hereunder, or if resulting from the willful or gross negligent act or omission of JCPS, its employees, agents or contractors.

13. **UTILITIES.** Licensee may at its expense obtain electric, telephone and any other utility service (including, but not limited to, the installation of emergency power generators) that is necessary for the operation of the Communications Facility; provided, however, the exact locations of any equipment installed on the Property in connection with any such utility service shall be subject to JCPS' prior written approval.

14. **ACCESS.** Access to the Site for non-emergency visits for the purposes stated above will be Monday through Saturday, 7 am to 7 pm. In an emergency, Licensee will have immediate access to the Site at any time, after first giving telephone notice to the JCPS Manager of Real Estate or his designee at the following telephone number: (502) 485-3462.

15. **TAXES AND OTHER CHARGES.** Licensee will pay all taxes and other charges imposed by any federal, state or local authority attributable solely to the Communications Facility. Licensee will not be responsible for payment of any other taxes or charges attributable to the Site or the Structure. If JCPS receives notice of any personal property or real property tax assessment against JCPS, which may affect Licensee and is directly

attributable to Licensee's installation, JCPS shall provide timely notice of the assessment to Licensee sufficient to allow Licensee to consent to or challenge such assessment, whether in a Court, administrative proceeding, or other venue, on behalf of JCPS and/or Licensee. Further, JCPS shall provide to Licensee any and all documentation associated with the assessment and shall execute any and all documents reasonably necessary to effectuate the intent of this Section 15.

**16. REQUIRED INSURANCE OF LICENSEE.** Licensee shall, during the term of this Agreement and at Licensee's expense, keep in force not less than the following insurance with reputable national insurers:

Property Insurance: coverage for fire, extended coverage, vandalism, and malicious mischief, for not less than ninety percent (90%) of the full replacement cost of the Communications Facility.

Commercial General Liability Insurance: operations hazard, independent contractor hazard, contractual liability and products and completed operations liability, for not less than Five Million Dollars (\$5,000,000) combined single limit per occurrence (bodily injury, personal injury and property damage liability). The limit required above may be satisfied through the combination of primary and excess liability policies. Licensee shall list JCPS as an additional insured on its Commercial General Liability Insurance.

Workers' Compensation and Employer's Liability Insurance to meet statutory requirements.

The coverage amounts set forth may be met by a combination of underlying and umbrella policies so long as in combination the limits equal or exceed those stated.

Certificates of insurance will be delivered to JCPS no later than thirty (30) days after the Effective Date. Licensee shall notify JCPS in writing not less than thirty (30) days before any cancellation.

**17. INDEMNIFICATION.** Licensee will indemnify JCPS and save it harmless from and against any and all claims, actions, damages, liability and expense arising from or out of:

[1] any occurrence in, upon or at the Site or the Structure caused by the negligent act or omission of Licensee or its agents, customers, invitees, concessionaires, contractors, servants, vendors, materialmen or suppliers, unless caused by the willful or negligent act or omission of JCPS or JCPS' employees, contractors, invitees, tenants or licensees; or

[2] any occurrence caused by Licensee's or Licensee's employees', contractors' or agents' violation of any law, regulation or ordinance applicable to Licensee's or Licensee's employees', contractors' or agents' use of or presence on the Site or the Structure.

18. **ASSIGNMENT BY LICENSEE.** Licensee may assign or sublicense this Agreement to any parent, subsidiary or affiliate of Licensee; any partnership, venture or new corporation formed by Licensee; or any purchaser of substantially all of the assets of Licensee. For purposes of the foregoing provision, "parent, subsidiary or affiliate" means any entity that wholly owns Licensee, any entity that is wholly owned by Licensee, or any entity that is wholly owned by either such entity. Any other assignment, sublicense or other transfer shall be void unless approved in writing by JCPS, such approval not to be unreasonably withheld, conditioned or delayed

19. **REPAIRS - LICENSEE'S OBLIGATION.** Licensee shall, at all times during the term of this Agreement at Licensee's expense, maintain and make all repairs to the Communications Facility as are required to keep the Structure in a structurally safe and sound condition, including periodic inspections and maintenance of the Communications Facility (including without limitation any of Licensee's ground space equipment), the Structure and the Site. If Licensee does not make such repairs within thirty (30) days after receipt of notice from JCPS that such repairs are required (the "Repairs Notice"), then JCPS may make the repairs, and Licensee shall pay JCPS on demand JCPS' actual costs of the repairs, plus overhead provided JCPS supplies documentation evidencing said costs. Notwithstanding the foregoing, in the event that Licensee does not agree that such repairs are needed, it shall procure a report, at Licensee's sole cost, made by a licensed engineer to issue a written opinion therein, and shall present such report to JCPS evidencing such engineer's findings within thirty (30) days of the receipt of the Repairs Notice. The parties shall then work together toward a mutually amicable solution taking into account such report.

If emergency repairs to the Communications Facility (including without limitation any of Licensee's ground space equipment) are needed to protect persons, or property, or to allow the use of the Site, Licensee shall make such repairs within twenty-four (24) hours after telephone notice to Licensee from the JCPS Manager of Real Estate. If Licensee does not make such repairs within twenty-four (24) hours after such telephone notice has been given, JCPS may make such repairs at Licensee's expense, plus overhead provided JCPS supplies documentation evidencing said costs.

20. **REPAIRS - JCPS' OBLIGATION.** JCPS shall, during the term of this Agreement, and at JCPS' expense, keep the Site, Structure and any improvements located thereon owned or controlled by JCPS in a structurally sound and safe condition subject to the obligations of Licensee for maintenance and repairs to the Communications Facility (including without limitation any of Licensee's ground space equipment) under Section 19 of this Agreement. In no event shall Licensee be required to provide maintenance or repairs to the Structure; provided, however, if repairs and/or maintenance are needed to the Structure in JCPS's sole opinion, JCPS may provide or cause to be provided such repairs and/or maintenance, and thereafter Licensee shall reimburse JCPS for Licensee's pro rata share (to be reasonably determined by JCPS) of the cost of such repairs and/or maintenance so long as JCPS supplies documentation to Licensee evidencing such cost.

21. **SURRENDER OF SITE.** Upon the expiration or termination of this Agreement for any cause, Licensee shall peacefully vacate the Site in good order and condition except for reasonable wear and tear resulting from Licensee's use of the Site. Licensee will

remove the Communications Facility, but the Structure and any improvements made to the Structure that are not part of the Communications Facility will remain the property of JCPS. Licensee will repair any damage to the Site or the Structure caused by Licensee's use of the Site or the Structure (except for reasonable wear and tear) and Licensee will repair any damage caused by removal of the Communications Facility.

**22. DEFAULT AND REMEDIES.** The occurrence of any one or more of the following events constitutes an "event of default" by Licensee: (1) if Licensee fails to pay any Initial Payment, any Renewal Payment, any Annual Fee or any other sum payable by Licensee within thirty (30) days following receipt of written notice from JCPS of the delinquency; (2) if the Site or the Structure is made subject to any lien arising from any work performed, material furnished, or obligations incurred by or at the request of Licensee, and such lien is not removed within thirty (30) days following receipt of written notice from JCPS of the existence of such lien; (3) if Licensee fails to perform any other term of this Agreement, and such failure continues (a) for more than the cure period (if any) expressly set forth in this Agreement applicable to such failure, or (b) if no such cure period is expressly set forth in this Agreement applicable to such failure thirty (30) days after written notice from JCPS, except such thirty (30) day cure period will be extended as reasonably necessary to permit Licensee to complete such cure of such failure if Licensee continuously and diligently pursues completion of such cure; (4) if any petition is filed by or against Licensee, under the federal Bankruptcy Code or any similar law (and is not dismissed within ninety (90) days after the filing thereof), or Licensee is adjudged bankrupt or insolvent in proceedings filed under the federal Bankruptcy Code or any similar law; (5) if a receiver, custodian, or trustee is appointed for Licensee or for any of its assets and is not vacated within sixty (60) days; or (6) if Licensee becomes insolvent or makes a transfer in fraud of creditors.

If an event of default occurs, JCPS (without notice or demand except as expressly required above) may seek any remedy available to it at law or in equity, and, in addition to any other rights of JCPS set forth in this Agreement, JCPS may terminate this Agreement upon thirty (30) days prior written notice to Licensee, in which event Licensee will immediately surrender the Site to JCPS.

Notwithstanding anything in this Agreement to the contrary, if JCPS is in breach of any representation, warranty or agreement in this Agreement, and such failure continues for more than thirty (30) days after written notice from Licensee, except such thirty (30) day cure period will be extended as reasonably necessary to permit JCPS to complete the cure of such failure if JCPS continuously and diligently pursues completion of such cure, Licensee may upon thirty (30) days prior written notice to JCPS terminate this Agreement.

**23. QUIET ENJOYMENT.** JCPS covenants and warrants that Licensee will have the use of the Site for the purposes described in this Agreement, subject to the provisions of this Agreement, during the term of this Agreement.

**24. COVENANTS AND WARRANTIES.** JCPS warrants that JCPS owns fee simple title, or has a leasehold interest, or has a valid license, to the Site and has rights of access thereto.

Each party represents and warrants to the other that it has power and authority to make this Agreement, that the making and performance thereof will not violate any laws or agreements under which such party is bound, that such party is a duly existing legal entity, and the party is qualified to do business in Kentucky.

## **25. ENVIRONMENTAL MATTERS**

JCPS represents and warrants to Licensee that it has no knowledge of any Environmental Hazards on or affecting the Site. Licensee will not bring to, transport across or dispose of any Environmental Hazards on the Site without JCPS' prior written approval, which approval shall not unreasonably be withheld, except Licensee may keep on the Site substances used in back up power units (such as batteries and diesel generators) commonly used in the wireless telecommunications industry without the necessity of obtaining prior consent.

**"Environmental Hazards"** means hazardous substances, hazardous wastes, pollutants, asbestos, polychlorinated biphenyl (PCB), petroleum or other fuels (including crude oil or any fraction or derivative thereof) and underground storage tanks. **"Hazardous substances"** shall be as defined in the Comprehensive Environmental Response, Compensation, and Liability Act, and regulations promulgated thereunder. **"Pollutants"** shall be as defined in the Clean Water Act, and regulations.

Except where caused by the acts of JCPS or its employees, contractors or agents, Licensee agrees to defend, indemnify and hold harmless JCPS 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 JCPS may suffer or incur due to the existence of any Environmental Hazards on the Property or the migration of any Environmental Hazards to other properties or the release of any Environmental Hazards into the environment (collectively, **"Actions"**), that relate to or arise from the Licensee's (or Licensee's employees', contractors, or agents') activities on the Property. This Section 25 shall survive the termination or expiration of this Agreement.

**26. SUBORDINATION AGREEMENT.** This Agreement is subject and subordinate to the lien of all mortgages and deeds of trust which may now exist or hereafter be placed on or against the Site or the interest therein of JCPS or the Jefferson County School District Finance Corporation, without the necessity of having further instruments executed by Licensee to effect such subordination, but only upon the condition that any such mortgagee, beneficiary or trustee expressly agrees not to disturb the rights of Licensee under this Agreement.

**27. ENTIRE AGREEMENT.** This Agreement is the entire agreement and understanding between the parties, and supersedes all offers, negotiations and other agreements concerning the subject matter.

**28. SEVERABILITY.** If any provision of this Agreement is invalid or unenforceable with respect to any party, the remainder of this Agreement or the application of such provision to persons other than those as to whom it is held invalid or unenforceable,



is not to be affected and each provision of this Agreement is valid and enforceable to the fullest extent permitted by law.

29. **BINDING EFFECT.** This Agreement will be binding on and inure to the benefit of the respective parties and their successors and permitted assigns.

30. **CAPTIONS.** The captions of this Agreement are inserted for convenience only and are not to be construed as limiting the scope or intent of its provisions.

31. **NO WAIVER.** No provision of this Agreement will be deemed to have been waived by either party unless the waiver is in writing and signed by the party against whom enforcement is attempted. No custom or practice which may develop between the parties in the administration of this Agreement shall waive or lessen any party's right to insist upon strict performance of the terms of this Agreement. The rights granted in this Agreement are cumulative of every other right or remedy that the enforcing party may otherwise have at law or in equity or by statute, and the exercise of one or more rights or remedies will not prejudice or impair the concurrent or subsequent exercise of other rights or remedies.

32. **NOTICE.** Any notice or demand under this Agreement shall be made by certified or registered mail, return receipt requested or reliable overnight courier (with written confirmation of delivery) to the address of other parties set forth below:

**JCPS:**

Jefferson County Public Schools  
3001 Crittenden Drive  
Louisville, KY 40209-1104  
Attention: Franklin Jones,  
Manager of Real Estate

**LICENSEE:**

T-Mobile USA, Inc.  
12920 SE 38<sup>th</sup> Street  
Bellevue, WA 98006  
Attn: Lease Compliance  
Site # 9LV1709A

**with a copy to:**

Jefferson County Public Schools  
P.O. Box 34020  
Louisville, KY 40232-4020  
Attention: Legal Counsel

Any such notice is deemed received one business day following deposit with a reliable overnight courier or five (5) business days following deposit in the mails as required above. JCPS or Licensee may designate any other address by written notice to the other.

33. **GOVERNING LAW.** This Agreement is governed by the laws of Kentucky. Any action or claim arising from, under or pursuant to this Agreement shall be

brought in the courts, state or federal, within Jefferson County, Kentucky, and each party expressly waives the right to bring any legal action or claims in any other courts.

34. **NO LIENS.** The Communications Facility will at all times be and remain the property of Licensee and will not be subject to any lien or encumbrance created or suffered by JCPS. Licensee has the right to make such public filings as it deems necessary or desirable to evidence Licensee's ownership of the Communications Facility. JCPS waives all JCPS' or landlord's lien on any property of Licensee (whether created by statute or otherwise). Notwithstanding the foregoing, in the event of termination or expiration of this Agreement, if the Communications Facility is not removed from the Site within sixty (60) days thereafter, any equipment remaining at the Site shall be deemed abandoned, JCPS' waiver of lien shall be voided, and JCPS shall have title to the remaining equipment.

35. **FORCE MAJEURE.** If a party is delayed or hindered in, or prevented from the performance required under this Agreement (except for payment of monetary obligations) by reason of earthquakes, landslides, strikes, lockouts, labor troubles, failure of power, riots, insurrection, war, acts of God or other reason of like nature not the fault of the party delayed, such party is excused from such performance of the period of delay. The period for the performance of any such act shall then be extended for the period of such delay.

36. **REQUIRED CONSENTS.** JCPS represents and warrants that JCPS has obtained all required consents in connection with entering into this Agreement (including, without limitation, all master landlord, lender and secured party consents, if applicable). If any other consent, authorization or approval of JCPS is required or requested by Licensee from time to time under the Agreement, such approval, consent or authorization shall not be unreasonably withheld, conditioned or delayed.

37. **RECORDING OF DOCUMENTS.** JCPS agrees to cooperate with the recording of a Memorandum of Agreement requested by Licensee under Section 38 (together with such changes and exhibits therein as may be required to comply with local law and requirements) in the recording jurisdiction where the Property is located. Licensee agrees to cooperate with the recording of a release of any Memorandum of Agreement requested by JCPS under Section 38 (together with such changes and exhibits therein as may be required to comply with local law and requirements) in the recording jurisdiction where the Property is located.

38. **MISCELLANEOUS.** Upon the written request of Licensee, JCPS shall promptly execute and deliver to Licensee a recordable Memorandum of Agreement in the form of the Memorandum of Agreement attached hereto as **Exhibit D.** Upon the termination or expiration of this Agreement and upon written request of JCPS, Licensee shall promptly execute and deliver to JCPS a recordable release of any Memorandum of Agreement recorded pursuant to the immediately preceding sentence, in the form reasonably acceptable to JCPS. Each party will execute, within twenty (20) days after written request, an estoppel certificate or statement certifying that this Agreement is unmodified and in full force and effect or, if modified, describing such modification(s), and that the other party is not in default (beyond applicable cure periods), except as specified in the statement. The estoppel certificate may also certify the current rent amount and whether any rent has been paid in advance.

IN TESTIMONY WHEREOF, witness the signatures on behalf of each of the parties to this Communications Facility Space License Agreement effective as of the Effective Date, as defined above.

**"JCPS":**

**BOARD OF EDUCATION OF JEFFERSON  
COUNTY, KENTUCKY**

By: \_\_\_\_\_

~~Donna M. Hargens, Ed.D.~~

Martin Pollio Ed.D., Acting Superintendent

Date: \_\_\_\_\_

**"LICENSEE":**

**POWERTEL/MEMPHIS, INC.,** a Delaware corporation

By: \_\_\_\_\_

Name: \_\_\_\_\_ Michael Bloom

Title: \_\_\_\_\_ Director, Engineering & Operations

Date: \_\_\_\_\_ 6/30/17

Joel Linderoth

Digitally signed by Joel Linderoth  
DN: cn=Joel Linderoth, o=L&R Partners, LLP, ou=Legal  
Dept, email=joel@l&rpartners.com, c=US  
Date: 2017.06.20 16:02:11 -0700

Attachments:

**Exhibit A** - Site Designation Form

**Exhibit B** - Equipment and Ground Space Plan and Survey

**Exhibit C** - Specifications

**Exhibit D** - Form of Memorandum of Agreement

Site Number: 9LV1709A  
Site Name: Ballard High School

**EXHIBIT A**

**SITE DESIGNATION FORM**

**LICENSEE:** Powertel/Memphis, Inc. ("T-Mobile")

**DESCRIPTION OF THE SITE:** The Site is an old tower located at Ballard High School on which at least New Cingular Wireless PCS, LLC (known as AT&T) is currently located on and ground space beneath and surrounding such tower to be used by Licensee pursuant to, and as shown in, the detailed plans for equipment and ground space and the survey attached hereto and incorporated herein as Exhibit B.

**STRUCTURE LOCATED ON THE SITE TO BE USED BY LICENSEE:** This is a 150' Self-Support Tower no longer being used by Ballard High School ("Structure").

**COMMUNICATIONS FACILITY TO BE PLACED IN OR ON THE STRUCTURE:** The Communications Facility under this Agreement shall consist of the equipment placed on the Structure as described in the detailed plans attached hereto and incorporated herein as Exhibit B. In addition to the right to place such equipment on the Structure, T-Mobile shall have the right to use ground space reasonably necessary for placement and operation of T-Mobile's equipment, as described in the detailed plans of such equipment and ground space (and survey) attached hereto and incorporated herein as Exhibit B.

**ANNUAL FEE:** Twenty Thousand Six Hundred and No/100 Dollars (\$20,600.00) per year, subject to the following conditions: (1) the Annual Fee shall escalate at three percent (3%) annually on each anniversary of the Effective Date of this Agreement, and (2) notwithstanding the above, Licensee shall also pay JCPS the Initial Payment of Three Thousand Seven Hundred Fifty Dollars (\$3,750.00) payable within thirty (30) days from the Effective Date of this Agreement, and a Two Thousand Five Hundred Dollar (\$2,500.00) Renewal Payment upon the first day of each five (5) year Renewal Term. These payments will be passed on to Ballard High School as a donation to be spent on educational activities.

**EXHIBIT B**

**EQUIPMENT AND GROUND SPACE PLAN AND SURVEY**

[attached hereto]



The UTILITIES as shown on this drawing were developed from the information available. This is not implied nor intended to be the complete inventory of UTILITIES in this area. It is the client/contractor's responsibility to verify the location of all UTILITIES (whether shown or not) and protect said UTILITIES from any damage.

## PROJECT DESCRIPTION

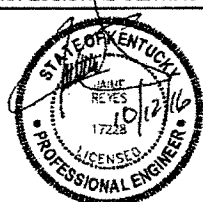
### T-MOBILE

1. PROPOSED T-MOBILE CONCRETE PAD INSTALLED WITHIN A PROPOSED LEASE AREA & PROPOSED ANTENNA EQUIPMENT INSTALLED ON EXISTING SELF-SUPPORT TOWER.
  2. PROPOSED T-MOBILE LEASE RIGHTS:
    - (12) ANTENNAS
    - (12) 1-5/8" COAX CABLES
    - (2) HYBRID CABLES
    - (9) RRHs
    - (2) COVP
    - (2) MW DISHES
    - (2) ODU
    - (2) MW COAX CABLES
  3. PROPOSED T-MOBILE TOWER LOADING:
    - (3) ANTENNAS
    - (1) HYBRID CABLE
    - (3) RRHs
    - (1) COVP
  4. (1) PROPOSED T-MOBILE COVP INSTALLED ON NEW STEEL POST.
  5. PROPOSED ICE BRIDGE & SUPPORT FRAME w/ GPS ANTENNA & COAX SUPPORT FRAME.
  6. PROPOSED POWER / COMMUNICATIONS SERVICES AND GROUNDING.
- PROPOSED T-MOBILE LEASE AREA= ±77.00 SQ.FT.

### NOTE:

1. PROJECT DESCRIPTION DOES NOT INCLUDE ALL EQUIPMENT & MATERIALS FOR A COMPLETE INSTALLATION.
2. DRAWINGS BASED ON T-MOBILE RF INFO SHEET DATED: 09/15/16 GC TO COORDINATE WITH T-MOBILE PM FOR FINAL EQUIPMENT BASED ON MOST RECENT RFDS.

## PROFESSIONAL CERTIFICATION



EXP 6/30/2018

# T-Mobile

SITE NAME & ADDRESS

9LV1709A  
6000 BROWNSBORO RD  
LOUISVILLE, KY 40222

## COLOCATION ON EXISTING SELF-SUPPORT TOWER

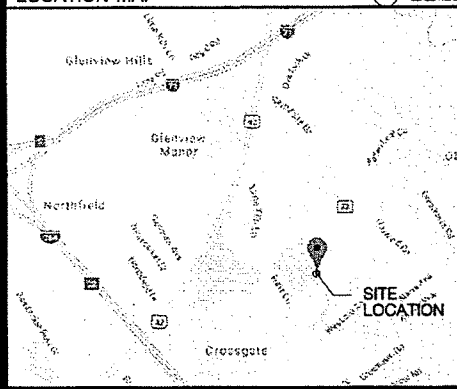
### GPS COORDINATES

LATITUDE: N35° 17' 0.11"  
LONGITUDE: W85° 37' 27.80"  
ELEVATION AT GRADE: 596'

### JURISDICTION INFO

JURISDICTION: LOUISVILLE, KY  
ZONING: RESIDENTIAL  
EXISTING BUILDING ☒ EXISTING TOWER  
EXISTING WATER TOWER ☐ CRAWLAND  
COTHER: ☐

### LOCATION MAP



### DRIVING DIRECTIONS

FROM WASHINGTON INTERNATIONAL AIRPORT: TAKE TERMINAL DRIVE TO GET ONTO I-40 W. TAKE I-40 W TO EXIT 215B TO MERGE ONTO TN-155 N/SHIRLEY PKWY. CONTINUE ONTO TN-155 W/US-31E S/SHIRLEY PKWY. USE THE RIGHT 2 LANES TO TAKE EXIT 15 FOR I-65 N TOWARD LOUISVILLE. KEEP LEFT AT THE FORK TO CONTINUE ON EXIT 15C. FOLLOW SIGNS FOR I-65 N/LOUISVILLE AND MERGE ONTO I-65 N. KEEP LEFT AT THE FORK TO STAY ON I-65 N. USE THE RIGHT 2 LANES TO TAKE EXIT 131A TO MERGE ONTO I-264 E. USE THE RIGHT LANE TO TAKE EXIT 22 FOR BROWNSBORO RD. CONTINUE ONTO BROWNSBORO RD. TURN RIGHT ONTO HERK LN. DESTINATION WILL BE ON YOUR LEFT. TRAVEL TIME ESTIMATE: 2 HOURS 44 MINUTES, 185 MILES.

CONTRACTOR SHALL VERIFY PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

### PROJECT SUMMARY

SITE NUMBER: 9LV1709A  
SITE NAME: T.B.D.  
SITE ADDRESS: 6000 BROWNSBORO RD  
LOUISVILLE, KY 40222  
JEFFERSON COUNTY  
CURRENT ZONING: RESIDENTIAL  
PARCEL NUMBER: M00100010000  
PROPERTY OWNER: JEFFERSON COUNTY SCHOOL DISTRICT  
PROPERTY CONTACT: T.B.D.  
LANDLORD (LICENSOR): BOARD OF EDUCATION OF JEFFERSON COUNTY, KENTUCKY  
LANDLORD CONTACT: FRANKLIN JONES (502) 485-3452  
3001 CRITTENDEN DRIVE  
LOUISVILLE, KY 40209  
COLOCATION APPLICANT: T-MOBILE  
5209 LINBAR DR. SUITE 625  
NASHVILLE, TN 37211  
KENNETH BLACKBURN  
DESIGN FIRM: PBM WIRELESS SERVICES  
3620 DEVELOPERS ROAD  
INDIANAPOLIS, IN 45227  
(847) 274-8456  
JAMIE DOWNEY

### UTILITIES

ELECTRICAL UTILITY LEASE  
CONTACT: (502) 589-1444  
COMMUNICATIONS  
UTILITY CONTACT: (502) 519-3156

### CODE COMPLIANCE

WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY CITY OF LOUISVILLE/STATE OF KENTUCKY & OTHER COVERING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

2012 INTERNATIONAL BUILDING CODE  
2013 KENTUCKY RESIDENTIAL CODE  
NFPA 70C: NATIONAL ELECTRICAL CODE  
(NEC) 2017 OR LATEST ADOPTED EDITION  
ANSI/TIA/EIA-222C  
OR LATEST  
ADOPTED EDITION

### DRAWING INDEX

SHT. NO.	DESCRIPTION	REV. NO.
T-1	TITLE SHEET	0
N-1	T-MOBILE GENERAL NOTES	0
N-2	T-MOBILE GENERAL NOTES	0
N-3	T-MOBILE GENERAL NOTES	0
N-4	T-MOBILE GENERAL NOTES	0
N-5	T-MOBILE GENERAL NOTES	0
N-6	T-MOBILE GENERAL NOTES	0
N-7	SYMBOLS & ABBREVIATIONS	0
C-1	SITE PLAN	0
C-1.1	COMPOUND PLAN	0
C-2	EQUIPMENT PLAN	0
C-2.1	EQUIPMENT ELEVATION	0
C-2.2	CONCRETE PAD DETAILS	0
C-3	TOWER ELEVATION & ANTENNA DETAILS	0
C-3.1	RF PLUMBING DIAGRAM	0
C-4	CABINET DETAILS	0
C-5	DETAILS	0
C-6	COVP DETAILS	0
E-1.0	RACK DETAILS	0
E-1	RACK DETAILS	0
E-1.1	AAV DETAILS	0
E-2	ONE-LINE RISER DIAGRAM	0
E-2.1	GROUNDING DETAILS	0
E-3	GROUNDING PLAN & NOTES	0
E-4	GROUNDING DETAILS	0
E-5	GROUNDING DETAILS	0

### APPROVALS

OPERATIONS	DATE
RF ENGINEER	DATE
ZONING ADMINISTRATOR	DATE
SITE ACQUISITION	DATE
T-MOBILE CONSTRUCTION MANAGER	DATE
PROPERTY OWNER	DATE
POWER APPROVAL	DATE
TELECOM APPROVAL	DATE

T-Mobile

5209 LINBAR DR. SUITE 625  
NASHVILLE, TN 37211



PROJECT NO: 16-10-24

DRAWN BY: JFB

CHECKED BY: JMD

A. 08/18/16 2005 BY: JFB

B. 10/17/16 2005 BY: JFB

C. 10/17/16 2005 BY: JFB

D. 10/17/16 2005 BY: JFB

E. 10/17/16 2005 BY: JFB

F. 10/17/16 2005 BY: JFB

G. 10/17/16 2005 BY: JFB

H. 10/17/16 2005 BY: JFB

I. 10/17/16 2005 BY: JFB

J. 10/17/16 2005 BY: JFB

K. 10/17/16 2005 BY: JFB

L. 10/17/16 2005 BY: JFB

M. 10/17/16 2005 BY: JFB

N. 10/17/16 2005 BY: JFB

O. 10/17/16 2005 BY: JFB

P. 10/17/16 2005 BY: JFB

Q. 10/17/16 2005 BY: JFB

R. 10/17/16 2005 BY: JFB

S. 10/17/16 2005 BY: JFB

T. 10/17/16 2005 BY: JFB

U. 10/17/16 2005 BY: JFB

V. 10/17/16 2005 BY: JFB

W. 10/17/16 2005 BY: JFB

X. 10/17/16 2005 BY: JFB

Y. 10/17/16 2005 BY: JFB

Z. 10/17/16 2005 BY: JFB

AA. 10/17/16 2005 BY: JFB

AB. 10/17/16 2005 BY: JFB

AC. 10/17/16 2005 BY: JFB

AD. 10/17/16 2005 BY: JFB

AE. 10/17/16 2005 BY: JFB

AF. 10/17/16 2005 BY: JFB

AG. 10/17/16 2005 BY: JFB

# DIVISION 1 GENERAL REQUIREMENTS:

## PART 1 - GENERAL

### 1.1 INTENT

- A. THESE SPECIFICATIONS AND CONSTRUCTION DRAWINGS ACCOMPANYING THEM DESCRIBE THE WORK TO BE DONE AND THE MATERIALS TO BE FURNISHED FOR THE CONSTRUCTION OF THIS PROJECT.
- B. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO BE FULLY EXPLANATORY AND SUPPLEMENTARY. HOWEVER, SHOULD ANYTHING BE SHOWN, INDICATED OR SPECIFIED ON ONE AND NOT THE OTHER, IT SHALL BE DONE THE SAME AS IF SHOWN, INDICATED OR SPECIFIED IN BOTH.
- C. THE INTENTION OF THE DOCUMENTS IS TO INCLUDE LABOR AND MATERIALS REASONABLY NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK AS STIPULATED IN THE CONTRACT.
- D. THE PURPOSE OF THE SPECIFICATIONS IS TO INTERPRET THE INTENT OF THE DRAWINGS AND TO DESIGNATE THE METHOD OF THE PROCEDURE, TYPE AND QUALITY OF MATERIALS REQUIRED TO COMPLETE THE WORK.
- E. MINOR DEVIATIONS FROM THE DESIGN LAYOUT ARE ANTICIPATED AND SHALL BE CONSIDERED AS PART OF THE WORK. NO CHANGES THAT ALTER THE CHARACTER OF THE WORK WILL BE MADE OR PERMITTED BY THE OWNER WITHOUT ISSUING A CHANGE ORDER.

### 1.2 CONFLICTS

- A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF MEASUREMENTS AT THE SITE BEFORE ORDERING MATERIALS OR DOING WORK. NO EXTRA CHARGE OR COMPENSATION SHALL BE ALLOWED DUE TO DIFFERENCE BETWEEN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE CONSTRUCTION DRAWINGS. SUCH DISCREPANCY IN DIMENSION WHICH MAY BE FOUND SHALL BE SUBMITTED TO OWNER FOR CONSIDERATION BEFORE THE CONTRACTOR PROCEEDS WITH THE WORK IN THE AFFECTED AREAS.
- B. THE BIDDER, IF AWARDED THE CONTRACT, WILL NOT BE ALLOWED EXTRA COMPENSATION BY REASON OF MATTER OR THING CONCERNING THE WORK WHICH THE BIDDER MIGHT HAVE FULLY DISCOVERED PRIOR TO THE BIDDING.
- C. NO PLEA OF IGNORANCE OF CONDITIONS THAT EXIST, OR OF DIFFICULTIES OR CONDITIONS THAT MAY BE ENCOUNTERED OR OF OTHER RELATED MATTER CONCERNING THE WORK TO BE PERFORMED IN THE EXECUTION OF THE WORK WILL BE ACCEPTED AS AN EXCUSE FOR FAILURE OR OMISSION ON THE PART OF THE CONTRACTOR TO FULFILL EVERY DETAIL OF THE REQUIREMENTS.

### 1.3 CONTRACTS AND WARRANTIES

- A. EACH CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE BUILDING PERMIT AT THE LOCAL JURISDICTION AS THE CONTRACTOR OF RECORD, AND PROVIDE LOCAL JURISDICTION WITH PROOF REQUIRED TO OPERATE. AS A CONTRACTOR IN THAT JURISDICTION, THE CONTRACTOR SHALL BE REIMBURSED ONLY THE AMOUNT OF ANY FEE PAID AS FOLLOWS:
  1. PLAN REVIEW FEE.
  2. BUILDING PERMIT FEE.
  3. CONNECTIONS AND INSPECTIONS FEE.
  4. DEVELOPMENT FEE.

- B. CONTRACTOR IS RESPONSIBLE FOR APPLICATION AND PAYMENT OF CONTRACTOR LICENSE AND BONDS.

### 1.4 STORAGE

MATERIALS MUST BE STORED IN A LEVEL AND DRY FASHION AND IN A MANNER THAT DOES NOT NECESSARILY OBSTRUCT THE FLOW OF OTHER WORK. STORAGE METHOD MUST MEET RECOMMENDATIONS OF THE ASSOCIATED MANUFACTURER.

### 1.5 CLEANUP

THE CONTRACTOR SHALL KEEP THE SITE FREE FROM ACCUMULATION OF WASTE MATERIALS OR RUBBISH AT THE WORK SITE AND AT THE COMPLETION OF THE WORK, SHALL REMOVE RUBBISH FROM AND ABOUT THE BUILDING AREA, INCLUDING HIS TOOLS, EQUIPMENT, AND SURPLUS MATERIALS AND SHALL LEAVE THE WORK AREA CLEAN AND READY FOR USE.

### 1.6 CHANGE ORDER PROCEDURE

CHANGE ORDER MAY BE INITIATED BY THE OWNER AND/OR THE CONTRACTOR INVOLVED. THE CONTRACTOR, UPON VERBAL REQUEST FROM THE OWNER SHALL PREPARE A WRITTEN PROPOSAL DESCRIBING THE CHANGE IN WORK OR MATERIALS AND CHANGES IN THE CONTRACT AMOUNT AND PRESENT TO THE OWNER FOR APPROVAL. SUBMIT REQUESTS FOR SUBSTITUTIONS IN THE FORM AND IN ACCORDANCE WITH PROCEDURES REQUIRED FOR CHANGE ORDER PROPOSALS. CHANGES IN SCOPE OF WORK OR MATERIALS WHICH ARE PERFORMED BY THE CONTRACTOR WITHOUT A WRITTEN CHANGE ORDER AS DESCRIBED AND APPROVED BY THE OWNER SHALL PLACE FULL RESPONSIBILITY OF THESE ACTIONS ON THE CONTRACTOR.

### 1.7 RELATED DOCUMENTS AND COORDINATION

GENERAL CARPENTRY, ELECTRICAL, AND ANTENNA DRAWINGS ARE INTERRELATED. IN PERFORMANCE OF THE WORK, THE CONTRACTOR MUST REFER TO DRAWINGS. COORDINATION TO BE THE RESPONSIBILITY OF THE CONTRACTOR.

## 1.8 PRODUCTS AND SUBSTITUTIONS

- A. SUBMIT 3 COPIES OF EACH REQUEST FOR SUBSTITUTION. IN EACH REQUEST IDENTIFY THE PRODUCT OR FABRICATION OR INSTALLATION METHOD TO BE REPLACED BY THE SUBSTITUTION. INCLUDE RELATED SPECIFICATION SECTION AND DRAWING NUMBERS AND COMPLETE DOCUMENTATION SHOWING COMPLIANCE WITH THE REQUIREMENTS FOR SUBSTITUTIONS.
- B. SUBMIT NECESSARY PRODUCT DATA AND CUT SHEETS WHICH PROPERLY INDICATE AND DESCRIBE THE ITEMS, PRODUCTS AND MATERIALS BEING INSTALLED. THE CONTRACTOR SHALL, IF DEEMED NECESSARY BY THE OWNER, SUBMIT ACTUAL SAMPLES TO THE OWNER FOR APPROVAL IN LIEU OF CUT SHEETS.

## 1.9 QUALITY ASSURANCE

WORK SHALL BE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. THESE SHALL INCLUDE BUT NOT BE LIMITED TO THE LATEST VERSION OF THE FOLLOWING:

ANSI/EIA - 222 - E  
INTERNATIONAL BUILDING CODE (IBC)  
UNIFORM BUILDING CODE (UBC)  
BUILDING OFFICIALS AND CODE ADMINISTRATORS (BOCA)  
NATIONAL ELECTRICAL CODE (NEC) WITH LOCAL AMENDMENTS  
UNDERWRITER LABORATORIES APPROVED ELECTRICAL PRODUCTS  
AMERICAN INSTITUTE OF STEEL CONSTRUCTION SPECIFICATIONS (AISC)  
LIFE SAFETY CODE NFPA - 101  
MINIMUM DESIGN CRITERIA FOR STEEL ANTENNA TOWERS AND SUPPORTING STRUCTURES WILL BE TIA/EIA-222-G

## 1.10 ADMINISTRATION

- A. PRIOR TO THE COMMENCEMENT OF WORK, THE CONTRACTOR WILL ASSIGN A PROJECT MANAGER WHO WILL ACT AS A SINGLE POINT OF CONTACT FOR PERSONNEL INVOLVED IN THIS PROJECT. THIS PROJECT MANAGER WILL DEVELOP A MASTER SCHEDULE FOR THE PROJECT WHICH WILL BE SUBMITTED TO THE OWNER PRIOR TO THE COMMENCEMENT OF WORK.
- B. SUBMIT A BAR CHART TYPE PROGRESS NOT MORE THAN 3 DAYS AFTER THE DATE ESTABLISHED FOR COMMENCEMENT OF THE WORK ON SCHEDULE. INDICATE A TIME BAR FOR EACH MAJOR CATEGORY OR UNIT OF WORK TO BE PERFORMED AT SITE. PROPERLY SEQUENCED AND COORDINATED WITH OTHER ELEMENTS OF WORK. SHOW COMPLETION OF THE WORK SUFFICIENTLY IN ADVANCE OF THE DATE ESTABLISHED FOR SUBSTANTIAL COMPLETION OF THE WORK.
- C. PRIOR TO COMMENCING CONSTRUCTION, THE OWNER SHALL SCHEDULE AN "ON-SITE" MEETING WITH MAJOR PARTIES. THIS WOULD INCLUDE (THOUGH NOT LIMITED TO) THE OWNER, LOCAL TELEPHONE COMPANY, TOWER ERECTION FOREMAN (IF SUBCONTRACTED).
- D. CONTRACTOR SHALL BE EQUIPPED WITH SOME MEANS OF CONSTANT COMMUNICATIONS SUCH AS A MOBILE PHONE OR A PAGER. THIS EQUIPMENT WILL NOT BE SUPPLIED BY OR PAID FOR BY THE OWNER NOR WILL CELLULAR SERVICE BE ARRANGED.
- E. DURING CONSTRUCTION, CONTRACTOR MUST ENSURE THAT EMPLOYEES AND SUBCONTRACTORS WEAR OSHA LEVEL D PERSONAL PROTECTIVE EQUIPMENT AT ALL TIMES.
- F. THE CONTRACTOR SHALL PROVIDE DAILY UPDATES ON SITE PROGRESS, EITHER VERBAL OR WRITTEN.

## 1.11 INSURANCE AND BONDS

- A. CONTRACTOR SHALL AT HIS OWN EXPENSE CARRY AND MAINTAIN FOR THE DURATION OF THE PROJECT ALL INSURANCE AS REQUIRED AND SHALL NOT COMMENCE WITH HIS WORK UNTIL HE HAS PRESENTED A CERTIFICATE OF INSURANCE STATING ALL COVERAGE TO THE CONTRACTOR WHO SHALL, IN TURN, FORWARD A COPY OF ALL CERTIFICATES TO THE OWNER.

## DIVISION 2 - SITE WORK

### PART 1 GENERAL

#### 1.1 WORK INCLUDED

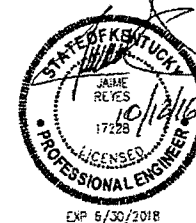
REFER TO SURVEY AND ARCHITECTURAL SITE PLAN FOR WORK INCLUDED.

#### 1.2 RELATED WORK

- A. INSTALLATION OF EQUIPMENT & ANTENNA SYSTEM

#### 1.3 DESCRIPTIONS

ACCESS ROAD, TURNAROUND AREAS, AND SITES ARE CONSTRUCTED TO PROVIDE A WELL DRAINED, EASILY MAINTAINED, EVEN SURFACE FOR MATERIAL AND EQUIPMENT DELIVERIES AND MAINTENANCE PERSONNEL ACCESS.



EXP 5/30/2018

T-Mobile®

5209 LINBAR DR, SUITE 625  
NASHVILLE, TN 37211



WIRELESS SERVICES

PROJECT NO. 16-15-24

DRAWN BY: JPB

CHECKED BY: JPB

1. 10/14/16 FOR REVIEW

2. 10/14/16 FOR REVIEW

3. 10/14/16 FOR REVIEW

4. 10/14/16 FOR REVIEW

5. 10/14/16 FOR REVIEW

6. 10/14/16 FOR REVIEW

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36. 10/14/16 FOR REVIEW

37. 10/14/16 FOR REVIEW

38. 10/14/16 FOR REVIEW

39. 10/14/16 FOR REVIEW

40. 10/14/16 FOR REVIEW

T-MOBILE SITE ID:  
6LYR38A

6000 BROWNSBORO RD  
LOUISVILLE, KY 40222  
JEFFERSON COUNTY  
COLLOCATION

SHEET TITLE  
T-MOBILE  
GENERAL  
NOTES

SHEET NUMBER

N-1

#### 1.4 REFERENCES

- A. DOT - DEPARTMENT OF TRANSPORTATION, "STANDARD SPECIFICATIONS FOR CONSTRUCTION," 2014 EDITION.
- B. ASTM - AMERICAN SOCIETY OF TESTING MATERIALS, LATEST EDITION.

#### 1.5 QUALITY ASSURANCES

- A. CONTRACTOR SHALL APPLY SOIL STERILIZER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, AS NEEDED.
- B. VEGETATION AND LANDSCAPING, IF REQUIRED WITHIN THE CONTRACT, SHALL BE PLACED AND MAINTAINED AS RECOMMENDED BY NURSERY INDUSTRY STANDARDS.

#### 1.6 SEQUENCING

- A. CONTRACTOR SHALL CONFIRM SURVEY STAKES AND SET ELEVATION STAKES PRIOR TO ANY CONSTRUCTION.
- B. THE COMPLETE ROAD AND SITE AREA SHALL BE CLEARED OF HEAVY GROWTH OF GRASS, TREES, SHRUB AND TOPSOIL PRIOR TO FOUNDATION CONSTRUCTION OR PLACEMENT OF BACKFILL OR SUBBASE MATERIAL.
- C. CONSTRUCT TEMPORARY CONSTRUCTION ZONE ALONG ACCESS DRIVE.
- D. THE SITE AREA SHALL BE BROUGHT TO SUBBASE COURSE ELEVATION AND THE ACCESS ROAD TO BASE COURSE ELEVATION PRIOR TO FORMING FOUNDATIONS.
- E. CONTRACTOR SHALL APPLY SOIL HERBICIDE PRIOR TO PLACING BASE MATERIALS.
- F. IF REQUIRED, GRADE, SEED, FERTILIZE AND MULCH DISTURBED AREA IMMEDIATELY AFTER BRINGING THE SITE AND ACCESS ROAD TO BASE COURSE ELEVATION. WATER TO ENSURE GROWTH.
- G. REMOVE GRAVEL FROM TEMPORARY CONSTRUCTION ZONE. H. AFTER APPLICATIONS OF FINAL SURFACES, SOIL HERBICIDE SHALL BE APPLIED TO THE STONE SURFACES.

#### 1.7 SUBMITTALS

- A. PRIOR TO CONSTRUCTION
  - 1. IF LANDSCAPING IS APPLICABLE TO THE CONTRACT, SUBMIT TWO COPIES OF THE LANDSCAPING PLAN UNDER NURSERY LETTERHEAD. IF A LANDSCAPE ALLOWANCE WAS INCLUDED IN THE CONTRACT, SUBMIT AN ITEMIZED LISTING OF PROPOSED COSTS UNDER NURSERY LETTERHEAD (REFER TO SITE PLAN FOR LANDSCAPING REQUIREMENT).
  - 2. SUBMIT FOR APPROVAL 1/2 CUBIC FEET OF THE PROPOSED SURFACE COURSE MATERIAL.
- B. FOLLOWING CONSTRUCTION
  - 1. MANUFACTURER'S DESCRIPTION OF PRODUCT AND WARRANTY STATEMENT ON SOIL HERBICIDE TREATMENT.
  - 2. MANUFACTURER'S DESCRIPTION OF PRODUCT ON GRASS SEED AND FERTILIZER, IF NEEDED.
  - 3. LANDSCAPING WARRANTY STATEMENT, IF REQUIRED.

#### 1.8 WARRANTY

- A. IN ADDITION TO THE WARRANTY ON ALL CONSTRUCTION COVERED IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL REPAIR ALL DAMAGE OF SURROUNDING PROPERTY CAUSED BY CONSTRUCTION.
- B. SOIL HERBICIDE APPLICATION WILL GUARANTEE VEGETATION FREE ROAD AND SITE AREA FOR ONE YEAR FROM THE DATE OF FINAL INSPECTION.
- C. DISTURBED AREAS SHALL REFLECT GROWTH OF NEW GRASS COVER PRIOR TO FINAL INSPECTION.
- D. LANDSCAPING, IF INCLUDED WITHIN THE SCOPE OF THE CONTRACT, SHALL BE GUARANTEED FOR ONE YEAR FROM DATE OF FINAL INSPECTION.

#### PART 2 - PRODUCTS

##### 2.1 MATERIAL

NOT USED.

#### 2.2 EQUIPMENT

- A. COMPACTION SHALL BE ACCOMPLISHED BY MECHANICAL MEANS.
  - 1. LARGER AREAS SHALL BE COMPACTED BY SHEEPS FOOT, VIBRATORY OR RUBBER TRED ROLLERS WEIGHING AT LEAST FIVE TONS.
  - 2. SMALLER AREAS SHALL BE COMPACTED BY POWER-DRIVER, HAND HELD TAMPERS.

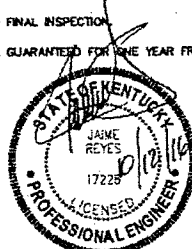
#### PART 3 - EXECUTION

##### 3.1 PREPARATION

- A. CLEAR TREES, BRUSH AND DEBRIS FROM SITE AREA AND ACCESS ROAD RIGHT OF WAY (IF REQUIRED).
- B. PRIOR TO OTHER EXCAVATION AND CONSTRUCTION EFFORTS CLEAR SITE OF ORGANIC MATERIAL TO A MINIMUM OF SIX INCHES BELOW ORIGINAL GROUND LEVEL.
- C. UNLESS OTHERWISE INSTRUCTED BY THE OWNER, REMOVE TREES, BRUSH, AND DEBRIS FROM THE PROPERTY TO AN AUTHORIZED LANDFILL.
- D. PRIOR TO PLACEMENT OF FILL OR BASE MATERIALS, PROOF ROLL THE SOIL.
- E. WHERE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, COVER CLEARED AREAS WITH STABILIZER MAT PRIOR TO PLACEMENT OF FILL OR BASE MATERIAL. ALL MATERIALS MUST BE STORED IN A LEVEL AND DRY FASHION AND IN A MANNER THAT DOES NOT NECESSARILY OBSTRUCT THE FLOW OF OTHER WORK. ANY STORAGE METHOD MUST MEET ALL RECOMMENDATIONS OF THE ASSOCIATED MANUFACTURER.
- G. A COMPLETE INVENTORY OF CONSTRUCTION MATERIALS AND EQUIPMENT IS REQUIRED PRIOR TO START OF CONSTRUCTION.

##### 3.2 INSTALLATION

- A. THE SITE AND TURNAROUND AREA SHALL BE AT THE SUBBASE COURSE ELEVATION PRIOR TO FORMING FOUNDATIONS. GRADE OR FILL THE SITE AND ACCESS ROAD AS REQUIRED SUCH THAT THERE IS AN EVEN DISTRIBUTION OF SPOILS RESULTING FROM FOUNDATION EXCAVATIONS. THE RESULTING GRADE SHALL CORRESPOND WITH SAID SUBBASE COURSE; ELEVATIONS SHALL BE CALCULATED FROM FINISHED GRADES OR SLOPES INDICATED.
- B. EXCESS SPOILS, IF ANY, SHALL BE CLEARED FROM JOB SITE AND NOT SPREAD BEYOND THE LIMITS OF OWNER/LEASED PROPERTY UNLESS AUTHORIZED BY PROJECT MANAGER.
- C. THE ACCESS ROAD SHALL BE BROUGHT TO BASE COURSE ELEVATION PRIOR TO FOUNDATION CONSTRUCTION TO PERMIT USE. COMPACTION SHALL BE PERFORMED DURING CONSTRUCTION OF THE SITE.
- D. AVOID CREATING DEPRESSIONS WHERE WATER MAY POND.
- E. THE CONTRACT SHALL BE ASSUMED TO INCLUDE GRADING, BANKING, DITCHING AND UNLESS OTHERWISE INDICATED, COVERING WITH TWO INCHES OF SURFACE COURSE ALL ROADS OR ROUTES UTILIZED FOR ACCESS TO THE OWNER SITE, COMMENCING AT THE POINT OF INTERSECTION WITH THE NEAREST PUBLIC THOROUGHFARE.
- F. WHEN IMPROVING AN EXISTING ACCESS ROAD, THE EXISTING ROAD SHALL BE GRADED TO REMOVE ANY ORGANIC MATTER AND SMOOTH THE SURFACE BEFORE PLACING FILL OR STONE.
- G. FILL MATERIAL OR STONE SHALL BE PLACED IN SIX-INCH MAXIMUM LIFTS AND COMPACTED.
- H. THE FINISH GRADE, INCLUDING TOP SURFACE COURSE, SHALL EXTEND A MINIMUM OF THREE FEET BEYOND THE SITE FENCE AND SHALL COVER THE AREA AS INDICATED.
- I. SUBBASE:
  - 1. THICKNESS: CONFORM TO DESIGN CROSS SECTION.
  - 2. CONSTRUCTION METHOD: PLACE IN LAYERS NOT EXCEEDING 15 INCHES LOOSE MEASURE. SPREAD EVENLY AND COMPACT TO NOT LESS THAN NINETY-FIVE PERCENT (95%) MAXIMUM DENSITY ACCORDING TO DOT SAND CONE TEST. CONFORM CONSTRUCTION TO DOT REQUIREMENTS.
- J. AGGREGATE BASE COURSE:
  - 1. THICKNESS: COMPACTED IN PLACE IN TWO (2) EQUAL COURSES.
  - 2. CONSTRUCTION METHOD: CONFORM THE PLACING OF AGGREGATE BASE COURSE WITH DOT REQUIREMENTS.
- K. AGGREGATE SURFACE COURSE:
  - 1. THICKNESS: COMPACTED IN PLACE IN TWO (2) EQUAL COURSES.
  - 2. CONSTRUCTION METHODS: CONFORM CONSTRUCTION OF AN AGGREGATE SURFACE COURSE TO DOT REQUIREMENTS.



T-Mobile®  
5203 LINBAR DR, SUITE 625  
NASHVILLE, TN 37211



PROJECT NO. 18-10-24
DRAWN BY: JB
CHECKED BY: JO
A. EXISTING SITE PLAN
B. EXISTING SITE PLAN
C. EXISTING SITE PLAN
D. EXISTING SITE PLAN

T-MOBILE SITE ID:  
RLV008A

5203 BROWNSBORO RD  
NASHVILLE, TN 37211  
JEFFERSON COUNTY  
COLLOCATION

SHEET TITLE  
T-MOBILE  
GENERAL  
NOTES

SHEET NUMBER  
N-2

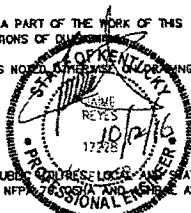




# DIVISION 15 - MECHANICAL

## PART 1 - GENERAL

1. INCLUDED - WORK OF THIS SECTION GENERALLY INCLUDES PROVISIONS OF LABOR, MATERIALS, EQUIPMENT, ACCESSORIES, NECESSARY FOR INSTALLATION OF MECHANICAL SYSTEMS SHOWN ON THE CONTRACT DRAWINGS AND SPECIFIED IN THE GENERAL NOTES. INTENT OF CONSTRUCTION DOCUMENTS IS TO PROVIDE THE OWNER WITH A COMPLETE AND OPERATING FACILITY, AND ANY MINOR ITEMS OMITTED BUT OBVIOUSLY NECESSARY TO ACCOMPLISH INTENT SHALL BE PROVIDED WHETHER OR NOT SHOWN OR SPECIFIED.
2. RELATED - THE GENERAL REQUIREMENTS DIVISION OF THE GENERAL NOTES IS HEREBY MADE A PART OF THE WORK OF THIS SPECIFICATION. THE REQUIREMENTS OF THIS SPECIFICATION APPLY TO THE WORK OF ALL SECTIONS OF DIVISION 15.
- A. WORK PERFORMED BY OTHERS INCLUDES INSTALLATION OF ELECTRICAL EQUIPMENT, EXCEPT AS NOTED OTHERWISE IN THE DRAWINGS OR IN SPECIFICATION.
- B. ELECTRICAL DIVISION 16
3. ORDINANCES AND CODES
- A. ALL WORK SHALL BE EXECUTED AND INSPECTED IN ACCORDANCE WITH ALL UNDERWRITER'S, PUBLIC WORKS, LOCAL AND STATE CODES AND REGULATIONS APPLICABLE TO THE TRADE AFFECTED. RECOMMENDATIONS OF AFA, NFPA, NFPA 70, NFPA 72, NFPA 73, NFPA 74, NFPA 75, NFPA 76, NFPA 77, NFPA 78, NFPA 79, NFPA 80, NFPA 81, NFPA 82, NFPA 83, NFPA 84, NFPA 85, NFPA 86, NFPA 87, NFPA 88, NFPA 89, NFPA 90, NFPA 91, NFPA 92, NFPA 93, NFPA 94, NFPA 95, NFPA 96, NFPA 97, NFPA 98, NFPA 99, NFPA 100, NFPA 101, NFPA 102, NFPA 103, NFPA 104, NFPA 105, NFPA 106, NFPA 107, NFPA 108, NFPA 109, NFPA 110, NFPA 111, NFPA 112, NFPA 113, NFPA 114, NFPA 115, NFPA 116, NFPA 117, NFPA 118, NFPA 119, NFPA 120, NFPA 121, NFPA 122, NFPA 123, NFPA 124, NFPA 125, NFPA 126, NFPA 127, NFPA 128, NFPA 129, NFPA 130, NFPA 131, NFPA 132, NFPA 133, NFPA 134, NFPA 135, NFPA 136, NFPA 137, NFPA 138, NFPA 139, NFPA 140, NFPA 141, NFPA 142, NFPA 143, NFPA 144, NFPA 145, NFPA 146, NFPA 147, NFPA 148, NFPA 149, NFPA 150, NFPA 151, NFPA 152, NFPA 153, NFPA 154, NFPA 155, NFPA 156, NFPA 157, NFPA 158, NFPA 159, NFPA 160, NFPA 161, NFPA 162, NFPA 163, NFPA 164, NFPA 165, NFPA 166, NFPA 167, NFPA 168, NFPA 169, NFPA 170, 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NFPA 671, NFPA 672, NFPA 673, NFPA 674, NFPA 675, NFPA 676, NFPA 677, NFPA 678, NFPA 679, NFPA 680, NFPA 681, NFPA 682, NFPA 683, NFPA 684, NFPA 685, NFPA 686, NFPA 687, NFPA 688, NFPA 689, NFPA 690, NFPA 691, NFPA 692, NFPA 693, NFPA 694, NFPA 695, NFPA 696, NFPA 697, NFPA 698, NFPA 699, NFPA 700, NFPA 701, NFPA 702, NFPA 703, NFPA 704, NFPA 705, NFPA 706, NFPA 707, NFPA 708, NFPA 709, NFPA 710, NFPA 711, NFPA 712, NFPA 713, NFPA 714, NFPA 715, NFPA 716, NFPA 717, NFPA 718, NFPA 719, NFPA 720, NFPA 721, NFPA 722, NFPA 723, NFPA 724, NFPA 725, NFPA 726, NFPA 727, NFPA 728, NFPA 729, NFPA 730, NFPA 731, NFPA 732, NFPA 733, NFPA 734, NFPA 735, NFPA 736, NFPA 737, NFPA 738, NFPA 739, NFPA 740, NFPA 741, NFPA 742, NFPA 743, NFPA 744, NFPA 745, NFPA 746, NFPA 747, NFPA 748, NFPA 749, NFPA 750, NFPA 751, NFPA 752, NFPA 753, NFPA 754, NFPA 755, NFPA 756, NFPA 757, NFPA 758, NFPA 759, NFPA 760, NFPA 761, NFPA 762, NFPA 763, NFPA 764, NFPA 765, NFPA 766, NFPA 767, NFPA 768, NFPA 769, NFPA 770, NFPA 771, NFPA 772, NFPA 773, NFPA 774, NFPA 775, NFPA 776, NFPA 777, NFPA 778, NFPA 779, NFPA 780, NFPA 781, NFPA 782, NFPA 783, NFPA 784, NFPA 785, NFPA 786, NFPA 787, NFPA 788, NFPA 789, NFPA 790, NFPA 791, NFPA 792, NFPA 793, NFPA 794, NFPA 795, NFPA 796, NFPA 797, NFPA 798, NFPA 799, NFPA 800, NFPA 801, NFPA 802, NFPA 803, NFPA 804, NFPA 805, NFPA 806, NFPA 807, NFPA 808, NFPA 809, NFPA 810, NFPA 811, NFPA 812, NFPA 813, NFPA 814, NFPA 815, NFPA 816, NFPA 817, NFPA 818, NFPA 819, NFPA 820, NFPA 821, NFPA 822, NFPA 823, NFPA 824, NFPA 825, NFPA 826, NFPA 827, NFPA 828, NFPA 829, NFPA 830, NFPA 831, NFPA 832, NFPA 833, NFPA 834, NFPA 835, NFPA 836, NFPA 837, NFPA 838, NFPA 839, NFPA 840, NFPA 841, NFPA 842, NFPA 843, NFPA 844, NFPA 845, NFPA 846, NFPA 847, NFPA 848, NFPA 849, NFPA 850, NFPA 851, NFPA 852, NFPA 853, NFPA 854, NFPA 855, NFPA 856, NFPA 857, NFPA 858, NFPA 859, NFPA 860, NFPA 861, NFPA 862, NFPA 863, NFPA 864, NFPA 865, NFPA 866, NFPA 867, NFPA 868, NFPA 869, NFPA 870, NFPA 871, NFPA 872, NFPA 873, NFPA 874, NFPA 875, NFPA 876, NFPA 877, NFPA 878, NFPA 879, NFPA 880, NFPA 881, NFPA 882, NFPA 883, NFPA 884, NFPA 885, NFPA 886, NFPA 887, NFPA 888, NFPA 889, NFPA 890, NFPA 891, NFPA 892, NFPA 893, NFPA 894, NFPA 895, NFPA 896, NFPA 897, NFPA 898, NFPA 899, NFPA 900, NFPA 901, NFPA 902, NFPA 903, NFPA 904, NFPA 905, NFPA 906, NFPA 907, NFPA 908, NFPA 909, NFPA 910, NFPA 911, NFPA 912, NFPA 913, NFPA 914, NFPA 915, NFPA 916, NFPA 917, NFPA 918, NFPA 919, NFPA 920, NFPA 921, NFPA 922, NFPA 923, NFPA 924, NFPA 925, NFPA 926, NFPA 927, NFPA 928, NFPA 929, NFPA 930, NFPA 931, NFPA 932, NFPA 933, NFPA 934, NFPA 935, NFPA 936, NFPA 937, NFPA 938, NFPA 939, NFPA 940, NFPA 941, NFPA 942, NFPA 943, NFPA 944, NFPA 945, NFPA 946, NFPA 947, NFPA 948, NFPA 949, NFPA 950, NFPA 951, NFPA 952, NFPA 953, NFPA 954, NFPA 955, NFPA 956, NFPA 957, NFPA 958, NFPA 959, NFPA 960, NFPA 961, NFPA 962, NFPA 963, NFPA 964, NFPA 965, NFPA 966, NFPA 967, NFPA 968, NFPA 969, NFPA 970, NFPA 971, NFPA 972, NFPA 973, NFPA 974, NFPA 975, NFPA 976, NFPA 977, NFPA 978, NFPA 979, NFPA 980, NFPA 981, NFPA 982, NFPA 983, NFPA 984, NFPA 985, NFPA 986, NFPA 987, NFPA 988, NFPA 989, NFPA 990, NFPA 991, NFPA 992, NFPA 993, NFPA 994, NFPA 995, NFPA 996, NFPA 997, NFPA 998, NFPA 999.
- B. SHOULD ANY CHANGE IN THE PLANS AND SPECIFICATIONS BE REQUIRED TO COMPLY WITH THESE REGULATIONS, THE CONTRACTOR SHALL NOTIFY THE OWNER BEFORE SUBMITTING HIS BID. AFTER ENTERING INTO CONTRACT WITH THE OWNER, THE CONTRACTOR WILL BE HELD ACCOUNTABLE TO COMPLETE ALL WORK NECESSARY TO MEET THESE REQUIREMENTS AT HIS OWN EXPENSE.
- C. WHERE THE WORK REQUIRED BY THE DRAWINGS AND SPECIFICATIONS IS ABOVE THE STANDARD REQUIRED, IT SHALL BE DONE AS SHOWN OR SPECIFIED.
4. PERMITS - THE CONTRACTOR SHALL ARRANGE AND PAY FOR ALL PERMITS IN CONNECTION WITH THE WORK HEREINAFTER SPECIFIED AND AT COMPLETION OF THE WORK FURNISH THE OWNER WITH THE FINAL CERTIFICATE OF INSPECTION.
5. DRAWINGS - THE DRAWINGS INDICATE THE GENERAL ARRANGEMENT OF THE PROPOSED WORK. DETAILS OF PROPOSED DEPARTURES DUE TO ACTUAL FIELD CONDITIONS OR OTHER CAUSES SHALL BE PROVIDED FOR. NO EXTRAS WILL BE PAID FOR CORRECTING FAULTY, POORLY ARRANGED, OR POORLY COORDINATED WORK.
6. SITE EXAMINATION - THE CONTRACTOR SHALL VISIT THE PREMISES SO AS TO ASCERTAIN THE EXISTING CONDITIONS BEFORE SUBMITTING HIS BID. NO EXTRAS WILL BE ALLOWED FOR HIS LACK OF KNOWLEDGE OF THESE CONDITIONS.
7. COMPLETE INSTALLATION - THE CONTRACTOR SHALL FURNISH AND INSTALL ALL INCIDENTAL PARTS, VALVES, FITTINGS, PUMPS, CONTROL VALVES AND CONTROL WIRING REQUIRED FOR THE PROPER FUNCTION OF ALL COMPONENT PARTS. THE COMPLETE INSTALLATION SHALL FUNCTION SMOOTHLY AND NOISELESSLY TO THE FULL EXTENT OF THE PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL COMPLETE HIS INSTALLATION AS RAPIDLY AS GENERAL CONSTRUCTION PERMITS. ALL FILTERS, STRAINERS, AND SAFETY DEVICES SHALL BE PROPERLY INSTALLED BEFORE STARTING EQUIPMENT. THE OWNER SHALL BE LEFT WITH A NEW SET OF FILTERS AT FINAL ACCEPTANCE.
8. COORDINATION - BEFORE ANY EQUIPMENT IS PURCHASED OR FABRICATED AND BEFORE RUNNING AND/OR FABRICATING ANY LINES OF PIPING OR DUCTWORK, THE MECHANICAL CONTRACTOR AND HIS SUBCONTRACTORS SHALL ASSURE THEMSELVES THAT THEY CAN BE RUN AS CONTINGENTED. BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS AND ACCESSORIES THAT MAY BE REQUIRED. THE MECHANICAL CONTRACTOR AND HIS SUBCONTRACTORS SHALL CAREFULLY INVESTIGATE ALL OTHER MECHANICAL, AND ELECTRICAL AND STRUCTURAL DRAWINGS AND FINISH CONDITIONS AFFECTING ALL OF THEIR WORK ACCORDINGLY, FURNISHING SUCH FITTINGS, VALVES, DUCT TRANSITIONS, OFFSETS AND ACCESSORIES AS MAY BE REQUIRED TO MEET SUCH CONDITIONS, AT NO ADDITIONAL COST.
9. TEMPORARY HEAT - ARRANGEMENTS FOR USAGE OF SYSTEM FOR TEMPORARY HEAT SHALL BE COORDINATED WITH GENERAL CONTRACTOR. SYSTEM SHALL NOT BE USED FOR TEMPORARY HEAT UNLESS ALL TEMPORARY FILTERS ARE INSTALLED. TEMPORARY FILTERS AND OPERATION OF UNITS SHALL BE PROVIDED BY THE GENERAL CONTRACTOR.
10. SUBMITTALS - WITHIN 5 DAYS AFTER PROPOSAL ACCEPTANCE THE CONTRACTOR SHALL SUBMIT TO THE OWNER FOR APPROVAL TWO (2) COPIES OF SHOP DRAWINGS ON EACH ITEM OF EQUIPMENT WHETHER AS SPECIFIED OR SUBSTITUTED. SHOP DRAWINGS SHALL GIVE OVERALL DIMENSIONS, WEIGHTS, METAL GAUGES, MATERIALS, CERTIFIED CAPACITIES, BRAZE HP, MOTOR HP, TUBE DIAMETERS, FRICTION DROP AND NAMEPLATE DATA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING SHOP DRAWINGS BEFORE SUBMITTING FOR APPROVAL. THE OWNER'S CHECK SHALL BE GENERAL AND DOES NOT RELIEVE THE CONTRACTOR OF FINAL RESPONSIBILITY FOR A COMPLETE JOB TO THE INTENT OF PLANS AND SPECIFICATIONS. ALL CONTROL DIAGRAMS AND EQUIPMENT SHOULD BE ASSEMBLED IN ONE SUBMITTAL.
11. SUBSTITUTION OF EQUIPMENT
- A. BIDS SHALL BE BASED ON PROVIDING ALL EQUIPMENT MENTIONED BY BRAND NAME IN PLANS AND SPECIFICATIONS. NO SUBSTITUTIONS SHALL BE CONSIDERED BEFORE BIDDING.



- B. THE CONTRACTOR SHALL ATTACH A LIST OF PROPOSED SUBSTITUTIONS, GIVING THE AMOUNT TO BE ADDED OR DEDUCTED TO CONTRACT PRICE FOR EACH ITEM. COMPLETE ENGINEERING DATA SHALL BE SUBMITTED ON EACH REQUEST FOR SUBSTITUTION ITEM. SUBSTITUTE ITEMS SHALL BE EQUAL OR BETTER THAN ITEMS MENTIONED IN REGARD TO ALL ACCESSORIES, CAPACITIES, DURABILITY AND APPEARANCE. CONTRACTOR SHALL PAY ALL COSTS INCURRED TO MAKE SUBSTITUTE ITEMS FIT REQUIRED SPACE WITH MAINTENANCE CLEARANCES - PIPING, SHEET METAL, ELECTRICAL OR BUILDING ALTERATION SHALL BE INCLUDED IN SAID COSTS.
- C. ALL STANDARD ACCESSORIES AS WELL AS SPECIFIED EXTRAS SHALL BE PROVIDED WITH EQUIPMENT.
12. GUARANTEE - ALL MATERIAL AND WORKMANSHIP INSTALLED AND/OR FURNISHED UNDER THIS SECTION OF WORK SHALL BE GUARANTEED AGAINST DEFECTS FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE BY OWNER. ANY DEFECTS OR FAULTY WORKMANSHIP SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE CORRECTED ENTIRELY AT HIS EXPENSE.

## PART 2 - PRODUCTS

1. APPROVED MANUFACTURERS - APPROVAL BY NAME LISTED IN THIS SPECIFICATION DOES NOT IMPLY THAT THE MANUFACTURER STANDARD PRODUCT MEETS THE INTENT OF THE DRAWINGS AND SPECIFICATION. IT IS THE CONTRACTORS RESPONSIBILITY TO PROVIDE ALL NECESSARY ALTERATIONS, MATERIALS, LABOR, ETC., AS APPROVED BY THE OWNER TO MEET THE FULL INTENT OF THE DRAWINGS AND SPECIFICATIONS. THIS IS TO INCLUDE, BUT NOT NECESSARILY BE LIMITED TO ELECTRICAL, STRUCTURAL, MECHANICAL, AND ARCHITECTURAL ALTERATIONS AND REVISIONS NECESSARY TO PROVIDE A COMPLETE AND OPERATING FACILITY AT NO ADDITIONAL COSTS TO THE OWNER.
2. MATERIALS - MATERIALS THROUGHOUT SHALL BE NEW AND OF THE BEST GRADES SPECIFIED. THEY SHALL BE STANDARD CATALOG ITEMS AND MANUFACTURED BY NATIONALLY KNOWN MANUFACTURERS OF THE ITEMS SPECIFIED. CONTRACTOR SHALL RECEIVE AND BE RESPONSIBLE FOR ALL OWNER FURNISHED EQUIPMENT AND PROVIDE ROUGH-IN AND FINAL CONNECTIONS FOR ALL MECHANICAL EQUIPMENT FURNISHED UNDER THIS CONTRACT OR BY OTHERS. THE CONTRACTORS SHALL PROVIDE A SUITABLE SHED FOR THE STORAGE OF ALL MATERIALS DURING PROGRESS OF THE JOB.
3. SOLDER - ALL SOLDER USED ON SWEAT FITTINGS SHALL BE 95-5 HARD SOLDER UNLESS BRAZING OR SILVER SOLDER IS SPECIFIED. ALL BURIED COPPER PIPING SHALL BE SILVER SOLDERED.
4. FLOOR, CEILING PLATES, FLANGES - PROVIDE TIGHT FITTING FLOOR AND CEILING PLATES ON PIPES PASSING THROUGH WALLS, CEILINGS, FLOORS, NICKEL OR CHROME PLATE IN FINISHED AREAS. PROVIDE WALL AND CEILING FLANGES FOR DUCTS IN FINISHED AREAS.
5. PIPE HANGERS, SUPPORTS - PROVIDE HANGERS, SUPPORTS, BRACES BY GRINNELL, FEE AND MASON, CRABLER, ELCEN, UNISTRUT, BASIN ENGINEERS, INC. TO PREVENT UNIDUE STRAIN, STRESSES, NOISE, VIBRATION

## PART 3 - EXECUTION

1. WORKMANSHIP
- A. WORK THROUGHOUT SHALL BE PERFORMED BY MEN SKILLED IN THE INSTALLATION OF THE VARIOUS TRADES OF THE WORK HEREIN SPECIFIED.
- B. ALL PIPING AND DUCTWORK SHALL BE RUN CONCEALED IN FINISHED AREAS EXCEPT WHERE NOTED OTHERWISE OR AS CHROME PLATED PLUMBING FIXTURE CONNECTIONS.
2. CURBS, BASES, SUPPORTS - MAJOR CURBS, OPENINGS, AND EQUIPMENT SUPPORTS WILL BE PROVIDED UNDER THE GENERAL SECTION OF THIS CONTRACT ONLY WHERE SHOWN ON ENGINEERING OR STRUCTURAL PLANS. ALL OTHER SUPPORTS, ANCHORS, AND BASES SHALL BE PROVIDED BY MECHANICAL CONTRACTOR FOR ALL MECHANICAL EQUIPMENT. EQUIPMENT SHALL BE SUPPORTED PER MANUFACTURER'S WRITTEN RECOMMENDATIONS FOR NOISE-FREE INSTALLATION.
3. REMOVAL OF EXISTING WORK - ALL EXISTING MECHANICAL EQUIPMENT, PIPING, ETC., REMOVED BY THE CONTRACTOR SHALL BE THE PROPERTY OF THE BUILDING. SUCH ITEMS WILL BE DISPOSED OF AT THE BUILDING OWNER'S DIRECTION.
4. REMOVAL OF RUBBISH - ON COMPLETION OF HIS WORK, THE CONTRACTOR SHALL REMOVE ALL OF HIS TOOLS, SCAFFOLDING, DEBRIS, ETC., FROM THE GROUNDS AND LEAVE THE PREMISES PERFECTLY CLEAN.
5. OPERATING AND MAINTENANCE INSTRUCTIONS - UPON COMPLETION, THE CONTRACTORS SHALL MAKE UP A SET OF OPERATING AND MAINTENANCE INSTRUCTIONS COVERING ALL MECHANICAL EQUIPMENT WITH MOVING OR MOVEABLE PARTS INCLUDING GENERAL OPERATING OR HEATING, PLUMBING AND COOLING SYSTEMS AND SHALL GIVE THE OWNER FOUR (4) COPIES OF THESE INSTRUCTIONS. MANUFACTURER'S PRINTED OPERATIONS AND MAINTENANCE INSTRUCTIONS SHALL ALSO BE PROVIDED FOR EACH PIECE OF EQUIPMENT.
- A. NAME, ADDRESS, AND TELEPHONE NUMBER OF PARTY TO BE CONTACTED FOR 24 HOUR SERVICE FOR EACH ITEM OF EQUIPMENT.
- B. STARTING, STOPPING, LUBRICATION, AND ADJUSTMENT SHALL BE CLEARLY INDICATED FOR EACH PIECE OF EQUIPMENT.
- C. PREPARE 8-1/2"x11" BLUEPRINTS WITH BINDING EDGE OF APPROPRIATE SCALE TO INDICATE ALL EQUIPMENT, RESPECTIVE SWITCHES, AND VALVE LOCATIONS. BIND IN INSTRUCTION BOOK.

T-Mobile®  
5209 LINBAR DR, SUITE 605  
NASHVILLE, TN 37211



PROJECT NO. 15-10-24	
DRAWN BY: JTB	
CHECKED BY: JMD	
1. DATE: 10/14/16	BY: JTB
2. DATE: 10/14/16	BY: JMD
3. DATE: 10/14/16	BY: JTB
4. DATE: 10/14/16	BY: JMD
5. DATE: 10/14/16	BY: JTB
6. DATE: 10/14/16	BY: JMD
7. DATE: 10/14/16	BY: JTB
8. DATE: 10/14/16	BY: JMD
9. DATE: 10/14/16	BY: JTB
10. DATE: 10/14/16	BY: JMD

T-MOBILE SITE ID:  
SLV700BA

6000 BROWNSBORO RD  
LOUISVILLE, KY 40222  
JEFFERSON COUNTY  
COLOCATION

SHEET TITLE  
T-MOBILE  
GENERAL  
NOTES

SHEET NUMBER  
N-4

## DIVISION 5 - FENCE

### PART 1 - GENERAL

#### 3.1 WORK INCLUDED

- A. REFER TO THE SITE PLANS FOR SIZE AND LOCATION OF FENCE AND GATES TO BE INSTALLED

#### 3.2 RELATED WORK

- A. COORDINATE FENCE GROUNDING WITH ELECTRICAL CONTRACTOR.  
B. REFER TO FENCE DETAIL PLAN - CONCRETE FOR SPECIFICATION OF CONCRETE AND GROUT.  
C. REFER TO FENCE DETAIL PLAN FOR APPLICABLE LOCATIONS OF ACCESS ROAD GATES.

#### 3.3 DESCRIPTION

- A. A SECURITY FENCE IS PROVIDED IN ORDER TO INHIBIT UNAUTHORIZED ACCESS TO THE SITE AREA.

#### 3.4 QUALITY ASSURANCE

REFER TO FENCE DETAIL PLAN.

#### 3.5 SEQUENCING

- A. IF THE SITE AREA HAS BEEN BROUGHT UP TO SURFACE COURSE ELEVATION PRIOR TO FENCE CONSTRUCTION, FENCE POST EXCAVATION SPOILS MUST BE CONTROLLED TO PRECLUDE CONTAMINATION OF SURFACE COURSE.

#### 3.6 SUBMITTALS

- A. MANUFACTURER'S DESCRIPTIVE LITERATURE.  
B. CERTIFICATE OF COMPLIANCE THAT SPECIFICATIONS HAVE BEEN MET.  
3.7 FENCE MATERIAL REFER TO FENCE DETAIL PLAN.

## DIVISION 7 - ANTENNA SYSTEM

### PART 1 - GENERAL

#### 1.1 WORK INCLUDED

- A. ERECT FURNISHED TOWER AS INDICATED IN THE DRAWINGS.  
B. INSTALL ANTENNAS AS INDICATED ON DRAWINGS AND OWNER SPECIFICATIONS.  
C. INSTALL ANTENNA PLATFORM AS INDICATED ON DRAWINGS.  
D. INSTALL FURNISHED GALVANIZED STEEL WAVEGUIDE LADDER.  
E. INSTALL WAVEGUIDE BRIDGE AS INDICATED ON DRAWINGS.  
F. INSTALL COAX CABLE, CONNECTORS, JUMPERS, GROUNDING KITS AS INDICATED IN DRAWINGS.  
G. SWEEP TEST RESULT.

#### 1.2 REQUIREMENTS OF REGULATORY AGENCIES

- A. FURNISH U.L. LISTED EQUIPMENT WHERE SUCH LABEL IS AVAILABLE, INSTALL IN CONFORMANCE WITH U.L. STANDARDS WHERE APPLICABLE.  
B. INSTALL ANTENNA, ANTENNA CABLES, GROUNDING SYSTEM IN ACCORDANCE WITH DRAWINGS AND SPECIFICATION IN EFFECT AT PROJECT LOCATION AND RECOMMENDATIONS OF STATE AND LOCAL BUILDING CODES, SPECIAL CODES HAVING JURISDICTION OVER SPECIFIC PORTIONS OF WORK. THIS INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING:  
1. EL A - ELECTRICAL INDUSTRIES ASSOCIATION RE - 222, STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES.  
2. FAA - FEDERAL AVIATION ADMINISTRATION ADVISORY CIRCULAR AC 70/7460-H, OBSTRUCTION MARKING AND LIGHTING.  
3. FCC - FEDERAL COMMUNICATIONS COMMISSION RULES AND REGULATIONS FORM 715 "OBSTRUCTION MARKING AND LIGHTING SPECIFICATIONS FOR ANTENNA STRUCTURES", AND FORM 715A, "HIGH INTENSITY OBSTRUCTION LIGHTING SPECIFICATION FOR ANTENNA STRUCTURES".  
4. AISC - AMERICAN INSTITUTE OF STEEL CONSTRUCTION SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASST. A325 OR A490 BOLTS.



5. NEC - NATIONAL ELECTRICAL CODE - ON TOWER LIGHTING KITS.

6. UL - UNDERWRITER'S LABORATORIES APPROVED.

7. IN ALL CASES PART 77 OR THE FAA RULES AND PARTS 17 AND 22 OF THE FCC RULES ARE APPLICABLE AND IN THE EVENT OF CONFLICT, SUPERSEDE ANY OTHER STANDARDS OR SPECIFICATIONS, 1990 LIFE SAFETY CODE NFPA - 101.

## DIVISION 16 - GENERAL ELECTRIC

### PART 1 - GENERAL ELECTRICAL PROVISION

1. SUBMITTAL OF BID INDICATES CONTRACTOR IS COGNIZANT OF ALL JOB SITE CONDITIONS AND WORK TO BE PERFORMED UNDER THIS CONTRACT.  
2. CONTRACTOR SHALL PERFORM ALL VERIFICATION, OBSERVATIONS, TESTS, AND EXAMINATION WORK PRIOR TO THE ORDERING OF THE ELECTRICAL EQUIPMENT AND THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ARCHITECT LISTING ALL MALFUNCTIONS, FAULTY EQUIPMENT AND DISCREPANCIES.  
3. HEIGHTS SHALL BE VERIFIED WITH OWNER PRIOR TO INSTALLATION.  
4. THESE PLANS ARE DIAGRAMMATIC ONLY.  
5. ELECTRICAL SERVICE 120/240 V.A.C. SINGLE PHASE 3-WIRE 100 AMP SERVICE.  
6. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, INSURANCE, EQUIPMENT, INSTALLATION, CONSTRUCTION TOOLS, TRANSPORTATION, ETC. FOR A COMPLETE AND PROPERLY OPERATIVE SYSTEM ENERGIZED THROUGHOUT AND AS INDICATED ON DRAWINGS, AS SPECIFIED HEREIN AND/OR AS OTHERWISE REQUIRED.  
7. CONTRACTOR SHALL CARRY OUT ALL WORK IN ACCORDANCE WITH ALL GOVERNING STATE, COUNTY, AND LOCAL CODES AND O.S.H.A.  
8. CONTRACTOR SHALL SECURE ALL NECESSARY BUILDING PERMITS AND PAY ALL REQUIRED FEES.  
9. COMPLETE JOB SHALL BE GUARANTEED BY THE CONTRACTOR FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF JOB ACCEPTANCE BY OWNER. ANY WORK, MATERIAL OR EQUIPMENT FOUND TO BE FAULTY DURING THAT PERIOD SHALL BE CORRECTED AT ONCE, UPON WRITTEN NOTIFICATION, AT THE EXPENSE OF THE CONTRACTOR.  
10. PROVIDE PROJECT MANAGER WITH ONE SET OF COMPLETE ELECTRICAL "AS INSTALLED" DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL DIMENSIONS, ROUTINGS AND CIRCUITS.  
11. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY ALL APPLICABLE CODES.  
12. UPON COMPLETION OF WORK, CONDUCT CONTINUITY, SHORT CIRCUIT AND FALL POTENTIAL GROUND TESTS FOR APPROVAL. SUBMIT TEST REPORTS TO PROJECT MANAGER. CLEAN PREMISES OR ALL DEBRIS RESULTING FROM WORK AND LEAVE WORK IN A COMPLETE AND UNDAMAGED CONDITION.

### PART 2 - PRODUCTS

- A. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN PERFECT CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. MATERIAL SHALL BE LISTED "J" WHERE SUBJECT TO SUCH APPROVAL. MATERIALS SHALL MEET WITH APPROVAL OF THE DIVISION OF INDUSTRIAL SAFETY AND ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA AND NFPA.  
B. ALL CONDUIT ONLY (C.O.) SHALL HAVE A PULL WIRE OR ROPE.  
C. ALL CONDUCTORS SHALL BE COPPER.  
D. ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING SHORT CIRCUIT TO WHICH THEY MAY BE SUBJECTED, AND A MINIMUM OF 10,000 A.I.C.  
E. WIRE AND CABLE CONDUCTORS SHALL BE COPPER 12 AWG MINIMUM UNLESS SPECIFICALLY NOTED OTHERWISE ON DRAWINGS.  
F. GROUNDING CONDUCTORS SHALL BE SOLID TINNED COPPER AND ANNEALED +2.  
G. METER SOCKET AMPERES, VOLTAGE, NUMBER OF PHASES SHALL BE AS NOTED ON THE DRAWINGS, MANUFACTURED BY SQUARE D COMPANY OR APPROVED EQUAL.  
H. ALL MATERIAL SHALL BE U.L. LISTED.  
I. ALL UNDERGROUND CONDUIT SHALL BE PVC SCHEDULE 40 (UNLESS NOTED OTHERWISE) AT A MINIMUM DEPTH OF 24" BELOW GRADE.  
J. CABLES  
1. ALL GROUND CABLE SHALL BE STANDARD TWO SOLID BARE COPPER PLATE AND OF SIZE INDICATED ON DRAWINGS. WHEN THE DIRECTION OF THE CONDUCTOR MUST CHANGE IT SHALL BE DONE GRADUALLY. THE CURVATURE OF THE TURN SHALL BE DONE IN ACCORDANCE WITH THE FOLLOWING TABLE:

T-Mobile®

5209 UNBAR DR, SUITE 625  
NASHVILLE, TN 37211



PROJECT NO. 18-10-24

DRAWN BY: JTB

CHECKED BY: JTB

DATE: 10/18/2018

DATE: 10/18/2018

DATE: 10/18/2018

DATE: 10/18/2018

DATE: 10/18/2018

DATE: 10/18/2018

DATE: 10/18/2018

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NO. 6 AWG. TO NO. 4 AWG 3"  
NO. 6 AWG TO NO. 1/0 AWG 8"  
NO. 2/0 AWG. TO 750 MCRN 1"

NO RESTRICTIONS

A. COORDINATE THE ELECTRICAL SERVICE WITH THE UTILITY COMPANY.

- B. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY CONNECTION OF TEMPORARY AND PERMANENT POWER TO THE SITE. THE TEMPORARY POWER AND ALL HOOKUP COSTS TO BE PAID BY CONTRACTOR.
- C. THE SERVICE SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE CODES AND STANDARDS TO BE ACCEPTABLE TO THE GOVERNING AUTHORITIES EXERCISING LEGAL JURISDICTION OVER ELECTRICAL INSTALLATIONS.

A. EXTERNAL CONNECTIONS:

3. ALL EXTERNAL GROUNDING CONNECTIONS SHALL BE MADE BY THE "CADWELD" PROCESS. CONNECTIONS SHALL INCLUDE ALL CABLE TO CABLE SPICES, TEES, XS, ETC. ALL CABLE TO GROUND RODS, GROUND ROD SPICES AND LIGHTNING PROTECTION SYSTEM AS INDICATED. ALL MATERIALS USED (MOLDS, WELDING, METAL, TOOLS, ETC.) SHALL BE BY "CADWELD" AND INSTALLED PER MANUFACTURER'S RECOMMENDATION AND PROCEDURES. 2. ALL INTERIOR GROUNDING AND BONDING CONDUCTORS SHALL BE CONNECTED BY TWO HOLES CRIMP TYPE (COMPRESSION) CONNECTIONS (EXCEPT FOR THE ACEG AND GROUND ROD) MECHANICAL CONNECTIONS, FITTING OR CONNECTIONS THAT DEPEND SOLELY ON SOLDER SHALL NOT BE USED.
- B. GROUND RODS:  
ALL GROUND RODS SHALL BE 5/8" DIAMETER X 10'-0" LONG "COPPERWELD" OR APPROVED EQUAL OF THE NUMBER AND AT LOCATIONS INDICATED. GROUND RODS SHALL BE DRIVEN FULL LENGTH VERTICAL IN UNDISTURBED EARTH. ALL GROUND RODS TO BE 10' APART UNLESS OTHERWISE
- C. GROUND BARS:  
ALL GROUND BARS SHALL BE 1/4" THICK BARE COPPER PLATE AND OF SIZE INDICATED ON DRAWINGS.
- D. GROUND RING:  
1. THE GROUND RING ENCIRCLING THE BUILDING SHALL BE MINIMUM SIZE OF NO. 2 AWG BARE COPPER CONDUCTOR IN DIRECT CONTACT WITH THE EARTH AT A DEPTH OF NOT LESS THAN 42 INCHES (MIN) CONDUCTOR BENDS SHALL HAVE A MINIMUM RADIUS OF 8 INCHES.
2. ALL EXTERNAL GROUND RINGS SHALL BE JOINED TOGETHER AND ALL CONNECTIONS SHALL BE "CADWELD". NO LUGS OR CLAMPS WILL BE ACCEPTED.
- E. FENCE/GATE ALL SECTIONS OF FENCE AND GATE SHALL BE GROUND AS INDICATED ON DRAWINGS. GROUND EACH GATE POST AND CORNER POST. ALL OTHER CONNECTIONS FOR THE GROUND GRID SYSTEM SHALL BE MADE BY THE "CADWELD" PROCESS, AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND PROCEDURES.
- F. GROUND TEST PIT A GROUND TEST PIT SHALL CONSIST OF 6" DIAMETER SCH 40 PVC WITH 6" CLEANOUT PLUG & CLEANOUT ADAPTER FITTING. PLUG THREADS SHALL BE COATED WITH ANTI-SEIZE LUBRICANT PRIOR TO INSTALLATION. 6" PVC WILL BE 18" LONG, BURIED 12" UNDERGROUND WITH 6" ABOVE FINISHED GRADE. TOP OF GROUND ROD CADWELDED TO GROUND RING WILL BE 12" FROM TOP OF CLEANOUT ADAPTER.

A. GROUND TESTS SHALL BE PERFORMED AS INDICATED ON DRAWINGS. A BIDDLE GROUND OHM METER OR THE METHOD OF USING TWO AUXILIARY GROUND RODS (AS DESCRIBED IN L.E.E. STANDARD NO. 81-1983, PART 1) MAY BE USED. THE L.E.E. METHOD REQUIRES THE USE OF AN TEST CURRENT. THE AUXILIARY TEST RODS MUST BE SUFFICIENTLY FAR AWAY FROM THE ROD UNDER TEST SO THAT THE REGIONS IN WHICH THEIR RESISTANCE IS LOCALIZED DO NOT OVERLAP.

- B. CONTRACTOR TO CONDUCT GROUND RESISTANCE TEST IN THE FORMAT AS FOLLOWS:

- ## 1. EQUIPMENT BUILDING

- A. FIRST TEST - SHALL BE WITH FOUR GROUND RODS INSTALLED, ONE AT EACH CORNER OF THE BUILDING BUT NOT CONNECTED TO THE MAIN GROUNDING BUS. FURNISH WIRE TO CONNECT (TEMPORARY CLAMP) ALL FOUR GROUND RODS TOGETHER TO MAKE A SYSTEM TEST AT EACH ROD IS INDIVIDUALLY TESTED. IF ANY INDIVIDUAL ROD TESTS 25 OHMS OR MORE, THE ELECTRICAL CONTRACTOR AND OWNER'S REPRESENTATIVE SHOULD BE NOTIFIED SO THAT THE ROD CAN BE DRIVEN DEEPER UNTIL ALL FOUR RODS HAVE A RESISTANCE OF 10 OHMS OR LESS ON A DRY DAY. SECOND TEST - SHALL BE WITH THE GROUND RODS CONNECTED WITH DRY SOIL AND WHEN NO STANDING WATER HAS BEEN PRESENT FOR THE PAST TEN DAYS. THE MAXIMUM ALLOWABLE READING IS 5 OHMS TO GROUND. IF THE RESISTANCE OF THE ENTIRE SYSTEM EXCEEDS 5 OHMS, THE ELECTRICAL CONTRACTOR AND OWNER'S REPRESENTATIVE SHOULD BE NOTIFIED SO THAT EITHER ADDITIONAL AND/OR DEEPER RODS CAN BE INSTALLED.

A. FIRST TEST - SHALL BE WITH NINE (9) GROUND RODS INSTALLED [WHICH] EQUALLY SPACED AROUND THE TOWER FOUNDATION, BUT NOT CONNECTED TO THE EQUIPMENT. FOR EXTENSIVE GROUND ROD FURNISH WIRE TO CONNECT (TEMPORARY CLAMP) ALL THREE GROUND RODS TOGETHER AND MAKE A SYSTEM TEST AFTER EACH ROD IS OHMS OR MORE. THE ELECTRICAL ENGINEER AND THE OWNER'S REPRESENTATIVE SHOULD BE NOTIFIED SO THAT THE ROD CAN BE DRIVEN DEEPER UNTIL ALL THREE RODS HAVE A RESISTANCE OF 10 OHMS OR LESS ON A DRY DAY. SECOND TEST - SHALL BE WITH THE GROUNDS CONNECTED, WITH DRY SOIL AND WHEN NO STANDING WATER HAS BEEN PRESENT FOR THE PAST TEN DAYS, THE MAXIMUM ALLOWABLE READING IS 5 OHMS TO GROUND. IF THE RESISTANCE OF THE ENTIRE SYSTEM EXCEEDS 5 OHMS THE ELECTRICAL CONTRACTOR AND OWNER'S REPRESENTATIVE SHOULD BE NOTIFIED SO THAT EITHER ADDITIONAL AND/OR DEEPER RODS CAN BE INSTALLED.

A. AFTER THE EQUIPMENT BUILDING AND TOWER GROUND RESISTANCE TEST IS COMPLETED, ELECTRICAL CONTRACTOR SHALL TIE EQUIPMENT BUILDING EXTERNAL GROUND RING TOGETHER. AFTER FIRST AND SECOND TEST, ALL CONNECTIONS SHALL BE "GALVANIZED", NO LUGS OR CLAMPS WILL BE ACCEPTED.

B. AFTER ALL THE EXTERNAL GROUND RINGS ARE TIED TOGETHER BUT BEFORE THE EQUIPMENT BUILDING IS TIED DOWN, A MEGGER CHECK OF THE GROUND SYSTEM SHOULD BE DONE. THE MAXIMUM ALLOWABLE READING IS 5 OHMS TO GROUND.

C. GROUND RESISTANCE TEST REPORT  
UPON COMPLETION OF THE TESTING FOR EACH SITE, CONTRACTOR SHALL SUBMIT A TEST REPORT SHOWING RESISTANCE IN OHMS WITH AUXILIARY POTENTIAL ELECTRODES AT 5-FOOT AND 10-FOOT INTERVALS UNTIL THE AVERAGE RESISTANCE STARTS INCREASING. 10-15 PHOTOS MUST BE TAKEN TO PROOF EXTERNAL GROUND RING SYSTEM BEFORE BACKFILL. PROJECT MANAGER MUST BE PRESENT AND LESS THAN 48 HOURS IN ADVANCE OF BACKFILL. TESTING SHALL BE COMPLETED BY GENERAL CONTRACTOR AND TWO (2) SETS OF TEST DOCUMENTS ARE TO BE BOUND AND SUBMITTED WITHIN ONE WEEK OF WORK OF COMPLETION.



EXP 6/30/2015



2209 LINBAR DR. SUITE 625  
NASHVILLE, TN 37211



If, for instance, the following

PROCT. 40: 15-12-2

DRAM 15 68

SECRET

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23

**TELEPHONE RATE**

OF VICTIMS

11

**11**

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LOUISVILLE KY 40202

JEFFERSON COUNTY

**COLLOCATION**

SHEET TITLE



GENERAL

**NOTES**

SHEET NUMBER

11 N-6

10

PLAN SYMBOLS	UTILITY PLAN SYMBOLS	GROUNDING PLAN SYMBOLS	ABBREVIATIONS				
NEW ANTENNA EXISTING ANTENNA NEW PARKING BOLLARD EXISTING PARKING BOLLARD BENCH MARK TOWER CENTER FOUND MONUMENT SPOT ELEVATION REVISION GRID REFERENCE DETAIL REFERENCE ELEVATION SECTIONS & DETAILS ELEVATION TAG CENTER LINE PROPERTY LINE GROUND WIRE COAXIAL CABLE EXISTING CONTOUR LINE NEW CONTOUR LINE EXISTING FENCE NEW FENCE EXISTING FENCE WOOD/VINYL NEW FENCE WOOD/VINYL NEW SILT FENCE NEW RIGHT OF WAY PROPOSED LEASE AREA PROPOSED ACCESS/UTILITY EASEMENTS EXISTING LEASE AREA EXISTING ACCESS/UTILITY EASEMENTS	TELEPHONE PEDESTAL ELECTRIC BOX PAD MOUNTED TRANSFORMER EXISTING UTILITY POLE NEW UTILITY POLE GUY ANCHOR LIGHT POLE EXISTING OVERHEAD TELEPHONE NEW OVERHEAD TELEPHONE EXISTING UNDERGROUND TELEPHONE NEW UNDERGROUND TELEPHONE EXISTING OVERHEAD POWER NEW OVERHEAD POWER NEW OVERHEAD POWER & TELEPHONE EXISTING UNDERGROUND POWER NEW UNDERGROUND POWER NEW UNDERGROUND POWER & TELEPHONE NEW UNDERGROUND FIBER HORIZONTAL BORE NEW UNDERGROUND FIBER DIRECT BURY NEW OVERHEAD FIBER NEW UNDERGROUND GAS LINE	EXOTHERMIC WELD BOLTED CONNECTION EXOTHERMIC OR BOLTED CONNECTION GROUND BAR GROUND ROD GROUND ACCESS PORT GROUND RING/GROUND CONDUCTOR COILED GROUND CONNECTION	ADJ ADJUSTABLE APPROX APPROXIMATE BCW BARE COPPER WIRE CAB CABINET CLG CEILING CONC CONCRETE CONT CONTINUOUS CJ CONSTRUCTION JOINT DIA DIAMETER DWG DRAWING EGB EXTERNAL GROUND BAR EA EACH ELEC ELECTRICAL EL ELEVATION EQ EQUAL EQUIP EQUIPMENT (E) EXISTING EXT EXTERIOR FF FINISHED FLOOR GA GAUGE GALV GALVANIZED GC GENERAL CONTRACTOR GRND GROUND LG LONG MAX MAXIMUM MECH MECHANICAL MFR MANUFACTURER MGB MASTER GROUND BAR MIN MINIMUM MTL METAL	N.I.C. NOT IN CONTRACT NTS NOT TO SCALE O.C. ON CENTER OPP OPPOSITE RMC RIGID METAL CONDUIT SF SQUARE FOOT SHT SHEET SIM SIMILAR SS STAINLESS STEEL STL STEEL T/C TOP OF CONCRETE T/M TOP OF MASONRY T/S TOP OF STEEL (TYP.) TYPICAL F.V. FIELD VERIFY UNO UNLESS NOTED OTHERWISE WMF WELDED WIRE FABRIC w/ WITH XMFR TRANSFORMER BTS BASE TRANSMISSION STATION PCS PERSONAL COMMUNICATIONS SERVICES CL CENTERLINE PL PLATE & AND AT AT	<div></div> <div></div> <div><div><div>PROJECT NO. 16-10-24</div><div>DRAWN BY: JPB</div><div>CHECKED BY: JMD</div><div><div>1. DATE: 10/12/16</div><div>2. DATE: 10/12/16</div><div>3. DATE: 10/12/16</div><div>4. DATE: 10/12/16</div></div></div><div><div>T-MOBILE SITE ID: 947090A</div><div>6009 BROWNSBORO RD LOUISVILLE, KY 40222 JEFFERSON COUNTY COLOCATION</div><div><div>SHEET TITLE SYMBOLS &amp; ABBREVIATIONS</div><div>SHEET NUMBER N-7</div></div></div></div>		
MATERIALS		GROUT OR PLASTER (E) BRICK (E) MASONRY CONCRETE EARTH GRAVEL PLYWOOD SAND WOOD CONT. WOOD BLOCKING STEEL					

T-Mobile®  
5209 LINBAR DR. SUITE 625  
NASHVILLE, TN 37211

PROJECT NO. 16-10-24

DRAWN BY: JPB

CHECKED BY: JMD

1. DATE: 10/12/16

2. DATE: 10/12/16

3. DATE: 10/12/16

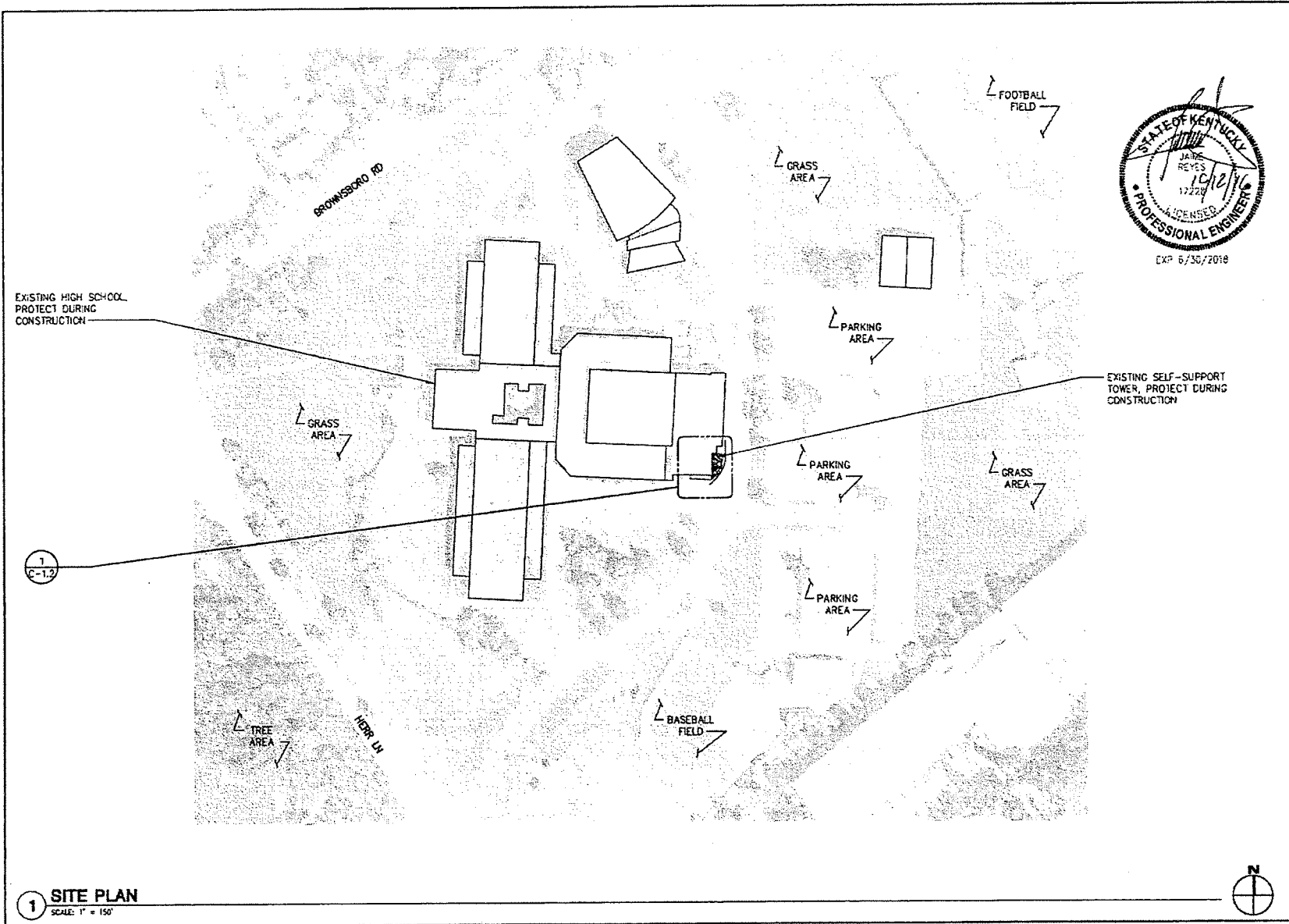
4. DATE: 10/12/16

T-MOBILE SITE ID: 947090A

6009 BROWNSBORO RD  
LOUISVILLE, KY 40222  
JEFFERSON COUNTY  
COLOCATION

SHEET TITLE  
SYMBOLS & ABBREVIATIONS

SHEET NUMBER  
N-7



**T-Mobile**

5209 LINBAR DR, SUITE 605  
NASHVILLE, TN 37211



Project No. 16-10-24
Drawn By: JFB
Checked By: JAO
1. 08/21/16 JAO REVIEW
2. 10/12/16 JAO REVIEW
3. 10/12/16 JAO REVIEW
4. 10/12/16 JAO REVIEW
5. 10/12/16 JAO REVIEW
6. 10/12/16 JAO REVIEW
7. 10/12/16 JAO REVIEW
8. 10/12/16 JAO REVIEW
9. 10/12/16 JAO REVIEW
10. 10/12/16 JAO REVIEW

T-MOBILE SITE ID:  
BLV705A

6000 BROWNSSBORO RD  
LOUISVILLE, KY 40222  
JEFFERSON COUNTY  
COLOCATION

SHEET TITLE  
SITE PLAN

SHEET NUMBER  
C-1

**1 SITE PLAN**  
SCALE: 1" = 150'

EXISTING COMMUNICATION  
BOXES/PANELS TO BE UTILIZED  
BY T-MOBILE FOR  
COMMUNICATION DEMARCATION;  
GC SHALL VERIFY W/LOCAL  
UTILITY COMPANY PRIOR TO  
START OF CONSTRUCTION

EXISTING CONDENSING UNIT ON  
CONCRETE PAD, PROTECT  
DURING CONSTRUCTION

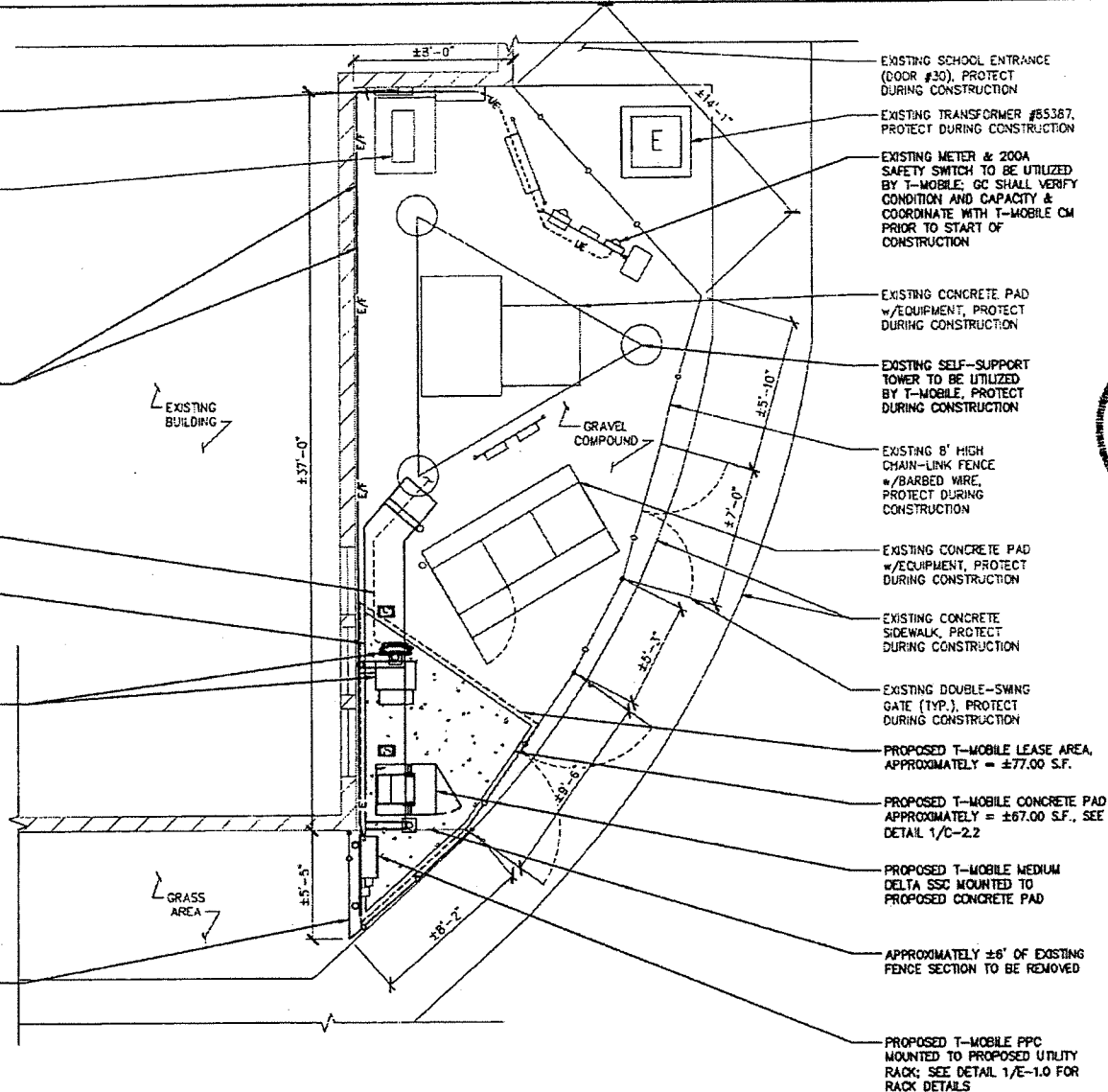
PROPOSED T-MOBILE 2" RMC  
CONDUITS FOR  
POWER/COMMUNICATIONS TO  
BE ROUTED ALONG EXTERIOR  
BUILDING WALL; GC SHALL  
ROUTE CONDUIT USING  
APPROVED BRACKETS &  
HARDWARE, (1) CONDUIT FOR  
POWER & (1) CONDUIT FOR  
COMMUNICATION

PROPOSED T-MOBILE HYBRID  
CABLE

PROPOSED T-MOBILE ICE  
BRIDGE, SEE DETAIL 1/C-5

PROPOSED T-MOBILE RAYCAP  
AND AAV BOX MOUNTED TO  
PROPOSED STEEL POST, SEE  
DETAIL 1/C-6 & 1/E1.1

PROPOSED FENCE TO BE  
EXTENDED AS REQUIRED; GC TO  
MATCH MATERIAL &  
INSTALLATION OF EXISTING  
FENCE



# NOTES:

TYPE OF TOWER: EXISTING SST  
T-MOBILE RAD CENTER: 125'  
ICE BRIDGE LENGTH: ±17'-0"  
HYBRID CABLE LENGTH: 140'



**T-Mobile**  
5208 LINBAR DR, SUITE 625  
NASHVILLE, TN 37211



PROJECT NO: 16-10-24  
DRAWN BY: J.B.  
CHECKED BY: J.B.  
1. SPECIAL SITE REVIEW  
2. SITE VISIT (last completed)  
3. T-MOBILE SITE VISIT  
4. T-MOBILE SITE VISIT

T-MOBILE SITE ID:  
BLV008A

6000 BROWNSBORO RD  
LOUISVILLE, KY 40222  
JEFFERSON COUNTY  
COLLOCATION

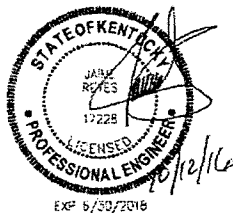
SHEET TITLE  
COMPOUND  
PLAN

SHEET NUMBER  
C-11

1 COMPOUND PLAN  
SCALE: 3/16" = 1'-0"

PROPOSED ICE BRIDGE TO TOWER,  
SEE DETAIL 1/C-5

PROPOSED COMP (TYP. 1), SEE  
SHEET C-6



PROPOSED ±15' OF 1-1/2" RIGID GALVANIZED CONDUIT FOR TELCO FROM PROPOSED SSC TO PROPOSED AAV BOX

PROPOSED ±15' OF 1" RIGID GALVANIZED CONDUIT FOR POWER FROM PROPOSED SSC TO PROPOSED AAV BOX

PROPOSED OUTDOOR RATED FIBER JUMPERS BETWEEN SSC & COVP

PROPOSED OVERHEAD WORK LIGHT (TYP. 2)

PROPOSED (1) 2" LFMC W/AIRLIE TAPE FROM PPC TO SSC FOR POWER, MOUNT LFMC TO CONCRETE PAD WITH APPROVED BRACKETS

EXISTING FENCE POST TO BE RELOCATED & UTILIZED, GC SHALL COORDINATE & VERIFY EXACT LOCATION W/OWNER PRIOR TO START CONSTRUCTION

PROPOSED (1) 1" RIGID CONDUIT FROM PPC TO GFCI/SWITCH

PROPOSED OUTDOOR RATED 20A GFCI COMBO OULET/SWITCH (FOR OVERHEAD WORK LIGHT)

PROPOSED EQUIPMENT CONCRETE PAD

**1 EQUIPMENT PLAN**  
SCALE: 1/2"=1'-0"

PROPOSED ±80' OF 2" RMC FOR POWER FROM EXISTING UTILITY RACK TO PPC AT CONCRETE PAD; GC SHALL ROUTE CONDUIT ALONG EXTERIOR BUILDING WALL USING APPROVED HARDWARE; GC SHALL CAULK PENETRATIONS WITH WEATHERTITE CAULK

PROPOSED ±60' OF 2" RMC FOR FIBER FROM EXISTING PANELS TO AAV AT CONCRETE PAD; GC SHALL ROUTE CONDUIT ALONG EXTERIOR BUILDING WALL USING APPROVED HARDWARE; GC SHALL CAULK PENETRATIONS WITH WEATHERTITE CAULK

PROPOSED (1) 1" RIGID CONDUIT FROM OVERHEAD WORK LIGHT TO GFCI/SWITCH

PROPOSED AAV BOX MOUNTED TO STEEL POST, SEE DETAIL 1/E-1.1 & 3/C-5

PROPOSED OUTDOOR RATED DC POWER CABLE AND FIBER JUMPERS BETWEEN SSC & SYSTEM MODULES

PROPOSED MEDIUM DELTA SSC

PROPOSED SYSTEM MODULES ON UNISTRUT FRAME ON TOP OF SSC

EXISTING FENCE POST SHALL BE REUSED & RELOCATED TO EASTERLY EDGE OF EXISTING CURB; PROTECT EXISTING POST AND EXISTING CURB DURING CONSTRUCTION; GC SHALL RE-ADJUST EXISTING FENCE AND GATES TO NEW LOCATION; COORDINATE WITH T-MOBILE CM AND OWNER PRIOR TO START OF CONSTRUCTION

APPROXIMATELY ±6' OF EXISTING FENCE TO BE REMOVED

PROPOSED PPC W/GENERATOR PLUG, SEE DETAIL 2/C-6

PROPOSED 1-5/8" UNISTRUT AS REQUIRED

**T-Mobile**  
5209 LINBAR DR, SUITE 205  
NASHVILLE, TN 37211



Small text below PBM logo.

PROJECT NO. 16-10-24

DRAWN BY: JFB

CHECKED BY: JMD

DATE: 10/25/24

DATE: 10/25/24

DATE: 10/25/24

DATE: 10/25/24

DATE: 10/25/24

DATE: 10/25/24

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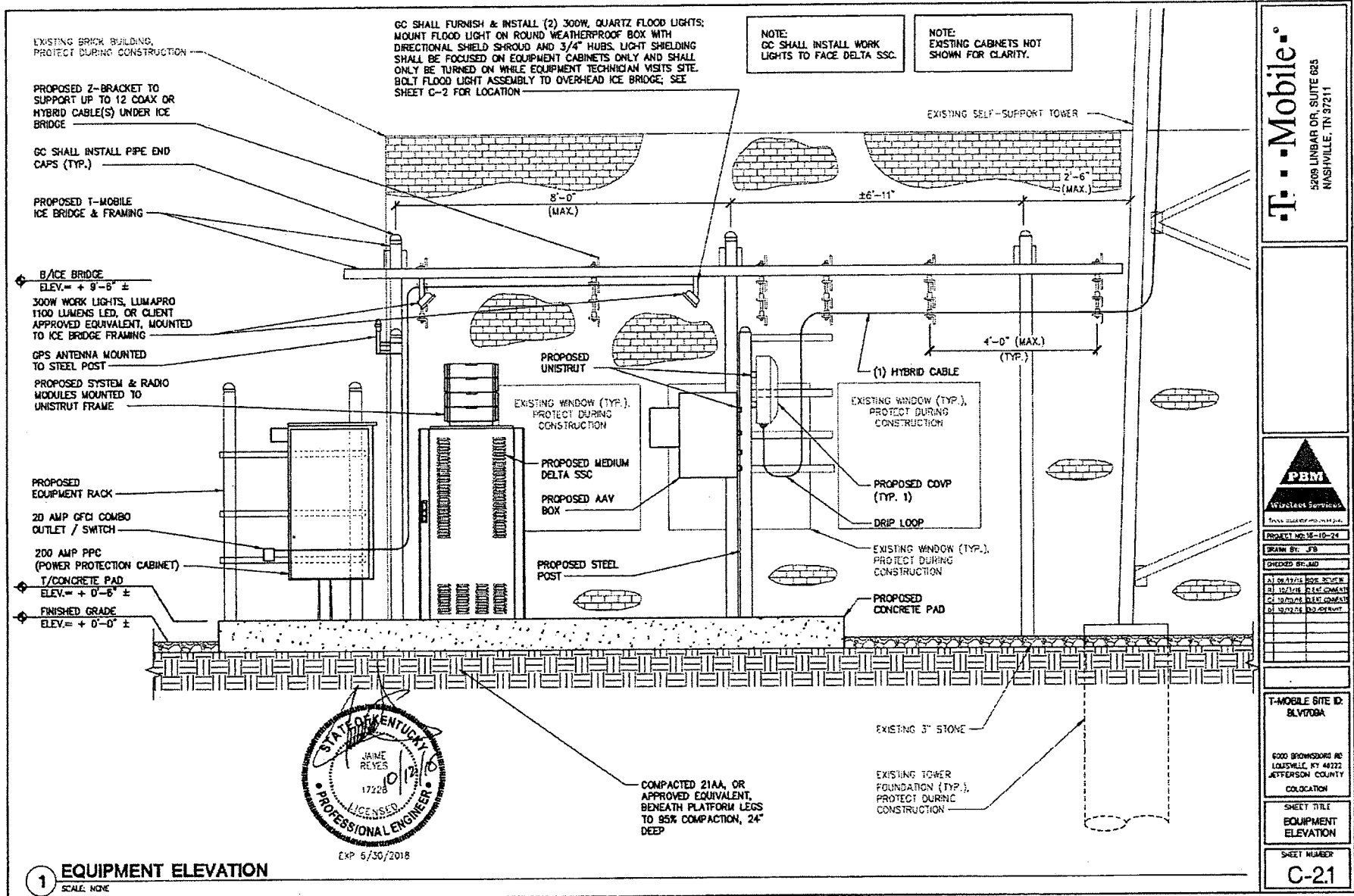
DATE: 10/25/24

DATE: 10/25/24

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DATE: 10/25/24

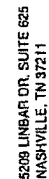






SCALE: 1/2" = 1' - 0"

## SECTION A-A



SHEET NUMBER  
C-2.2

1. ELEVATION IS FOR REFERENCE PURPOSE ONLY.
2. CONTRACTOR SHALL PERFORM WORK DONE TO OR ON STRUCTURE IN ACCORDANCE WITH PROVIDED STRUCTURAL ANALYSIS SEPARATE FROM PBM WIRELESS DRAWINGS.



## T-MOBILE TOWER LEASE RIGHTS

- (12) ANTENNAS
- (12) 1-5/8" COAX CABLES
- (2) HYBRID CABLE
- (9) RHH'S
- (2) COVP
- (2) MW DISHES
- (2) ODU's
- (2) MW CABLES

### PROPOSED T-MOBILE TOWER LOADING

- (3) ANTENNAS
- (1) HYBRID CABLE
- (3) RRH'S
- (1) COVP
- (12) ANTENNA MOUNTING PIPES



**T-Mobile®**  
5208 LINBAR DR, SUITE 625  
NASHVILLE, TN 37211



7013 5415 24 7040

PROJECT NO: 15-10-2

PROJECT NO: 15-10-2

BRANN ST. E2

**EXHIBIT 91**

**செய்தியை எழுதினவர்:**

2	19.09.03	5078	5034
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9	152055	248	500
0	152004	248	500

21 58/72 56 88/100 82

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**T-MOBILE SITE**

**GLYFOSIA**

11

11

NOG BROWNSBORO

:OLDSVILLE NY 487

JEFFERSON COUN

COLLOCATION

**SHEET TITLE**

**TOWER**

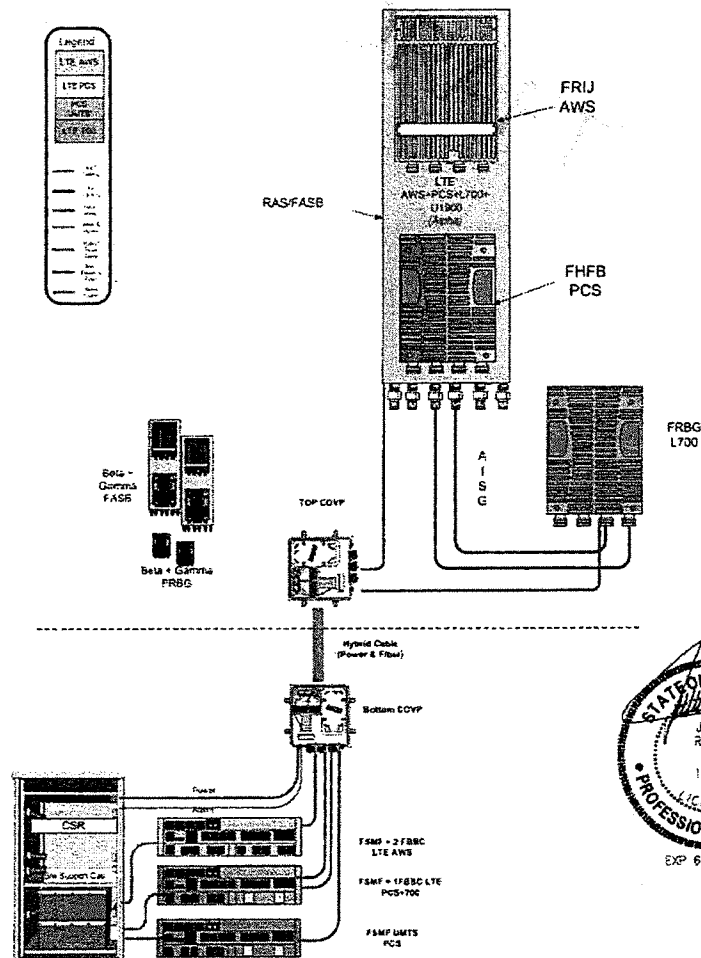
ELEVATION 8

ANTENNA DETAIL

SHEET NUMBER

100

C-3

[illegible]

**1 RF PLUMBING DIAGRAM**  
SCALE: NONE

SCALE: NONE

Scenario 1 (Proposed) view from front (North: The images show view from behind)					
Domestic Type	A - Custom Made				
Reference	1				
Reference Model	Hera FASB RCL (Pump)				
Domest	1				
W.T. 10	1				
Weight	120				
Power	P1	P2	P3	P4	P5
Power Type	1700	1700	1700	1700	1700
Start Type	1700	1700	1700	1700	1700
Domestic Type	1				
Domestic Type	1				
W.T. 10	1				
Weight	120				
Power	P1	P2	P3	P4	P5
Power Type	1700	1700	1700	1700	1700
Start Type	1700	1700	1700	1700	1700
Domestic Type	1				
Domestic Type	1				
W.T. 10	1				
Weight	120				
Power	P1	P2	P3	P4	P5
Power Type	1700	1700	1700	1700	1700
Start Type	1700	1700	1700	1700	1700
Domestic Type	1				
Domestic Type	1				
W.T. 10	1				
Weight	120				
Power	P1	P2	P3	P4	P5
Power Type	1700	1700	1700	1700	1700
Start Type	1700	1700	1700	1700	1700
Domestic Type	1				
Domestic Type	1				
W.T. 10	1				
Weight	120				
Power	P1	P2	P3	P4	P5
Power Type	1700	1700	1700	1700	1700
Start Type	1700	1700	1700	1700	1700
Domestic Type	1				
Domestic Type	1				
W.T. 10	1				
Weight	120				
Power	P1	P2	P3	P4	P5
Power Type	1700	1700	1700	1700	1700
Start Type	1700	1700	1700	1700	1700
Domestic Type	1				
Domestic Type	1				
W.T. 10	1				
Weight	120				
Power	P1	P2	P3	P4	P5
Power Type	1700	1700	1700	1700	1700
Start Type	1700	1700	1700	1700	1700
Domestic Type	1				
Domestic Type	1				
W.T. 10	1				
Weight	120				
Power	P1	P2	P3	P4	P5
Power Type	1700	1700	1700	1700	1700
Start Type	1700	1700	1700	1700	1700
Domestic Type	1				
Domestic Type	1				
W.T. 10	1				
Weight	120				
Power	P1	P2	P3	P4	P5
Power Type	1700	1700	1700	1700	1700
Start Type	1700	1700	1700	1700	1700
Domestic Type	1				
Domestic Type	1				
W.T. 10	1				
Weight	120				
Power	P1	P2	P3	P4	P5
Power Type	1700	1700	1700	1700	1700
Start Type	1700	1700	1700	1700	1700
Domestic Type	1				
Domestic Type	1				
W.T. 10	1				
Weight	120				
Power	P1	P2	P3	P4	P5
Power Type	1700	1700	1700	1700	1700
Start Type	1700	1700	1700	1700	1700
Domestic Type	1				
Domestic Type	1				
W.T. 10	1				
Weight	120				
Power	P1	P2	P3	P4	P5
Power Type	1700	1700	1700	1700	1700
Start Type	1700	1700	1700	1700	1700
Domestic Type	1				
Domestic Type	1				
W.T. 10	1				
Weight	120				
Power	P1	P2	P3	P4	P5
Power Type	1700	1700	1700	1700	1700
Start Type	1700	1700	1700	1700	1700
Domestic Type	1				
Domestic Type	1				
W.T. 10	1				
Weight	120				
Power	P1	P2	P3	P4	P5
Power Type	1700	1700	1700	1700	1700
Start Type	1700				



5209 LINBAR DR, SUITE 625  
NASHVILLE, TN 37211



PROJECT NO. 16-10-24

DRAWN BY: JF

CHECKED BY: AO

4-39-79/78 828 55V4 W

81 100/100	100/100
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01/16/06	DEPT CHAIRS
01/17/06	INDIVIDUAL




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11/11/2016

T-MOBILE SITE ID:

SLYTUSA

11

11

GOOD BROWNSBORO 10

LOUISVILLE KY 40222

JEFFERSON COUNTY

#### DECLARATION

**SHEET TITLE**

RF PLUMBING

**DIAGRAM**

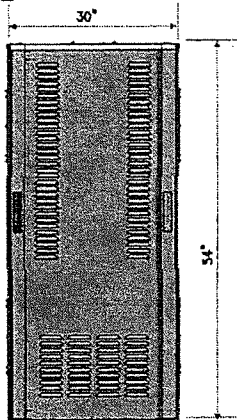
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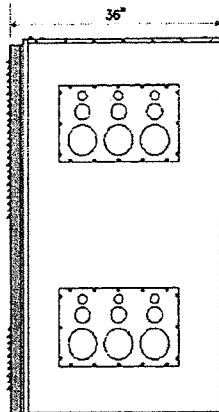
C-3.

Outline Dimension 30"W x 54"H x 36"D

Configuration shown below is for 400W & 1100W in zone 2



FRONT VIEW

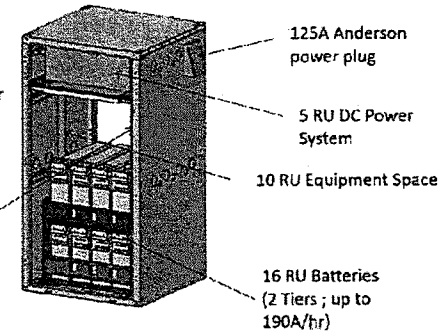


SIDE VIEW

## SiteFlex 31

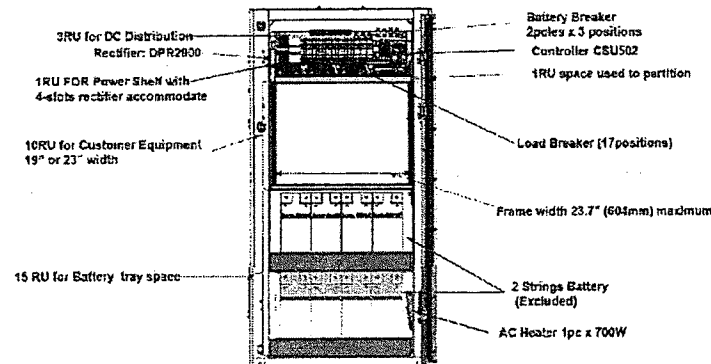
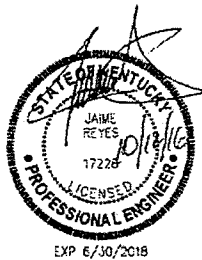
Thermals door options:

- Same as SFX42 (see previous slide)
- DAC & 585W Air Conditioner
- DAC & 1200W Air Conditioner
- DAC & 2 x 200W TEC



Overall Dimensions: 30"W x 31"D x 58"H

## MEDIUM SITE SUPPORT CABINET



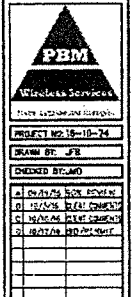
Front View

## DELTA MEDIUM SSC - FRONT LAYOUT

GC NOTE:  
GC SHALL MOUNT SSC TO CONCRETE PAD  
USING MANUFACTURER RECOMMENDED  
BOLTS AND MOUNTING HARDWARE.

1 DELTA MEDIUM SSC DETAILS  
SCALE: NONE

T-Mobile  
5209 LINBAR DR, SUITE 605  
NASHVILLE, TN 37211



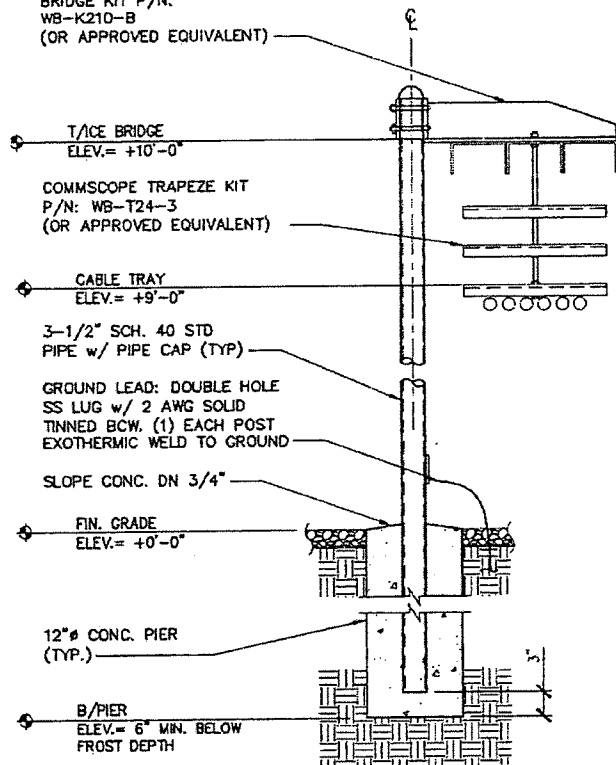
T-MOBILE SITE ID:  
BLVD00A

1400 BROWNSBORO RD  
LOUISVILLE, KY 40222  
JEFFERSON COUNTY

LOCATION:  
SHEET TITLE:  
CABINET  
DETAILS

SHEET NUMBER:  
C-4

COMMSCOPE WAVEGUIDE  
BRIDGE KIT P/N:  
WB-K210-B  
(OR APPROVED EQUIVALENT)



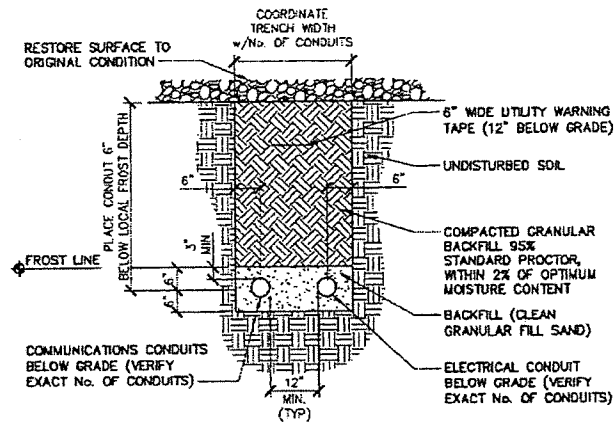
#### NOTES:

1. USE SITE PRO 1 STRAIGHT AND HINGED SPLICE, & ADJUSTABLE 0°- 45° SPLICE AS REQUIRED w/ GRIP STRUT.
2. \*- COORDINATE ELEVATIONS WITH EQUIPMENT HEIGHT.
3. DO NOT ATTACH ICE BRIDGE TO EQUIPMENT.
4. ICE BRIDGE TO TERMINATE WITHIN 6" OF TOWER.
5. PROTECTIVE COAX PIECE TO BE INSTALLED AT TOWER END OF ICE BRIDGE TO PROVIDE RADIUS PROTECTION FOR COAX RUNS.
6. STEEL HOT DIP GALVANIZED.

### 1 COAX SUPPORT / ICE BRIDGE DETAIL

SCALE: NONE

CDS-01-CX-01-003



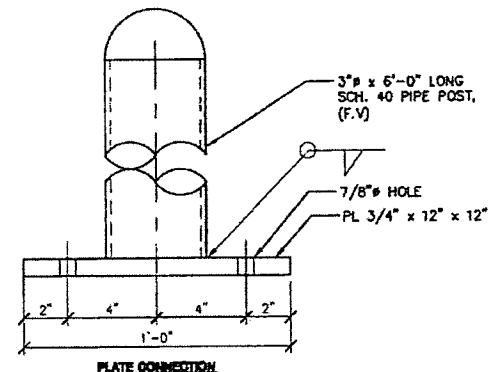
#### NOTE:

1. SEPARATION DIMENSION TO BE VERIFIED WITH LOCAL UTILITY COMPANY REQUIREMENTS

### 2 JOINT TRENCH ELECTRIC/COMMUNICATIONS

SCALE: NONE

CDS-01-EL-02-001



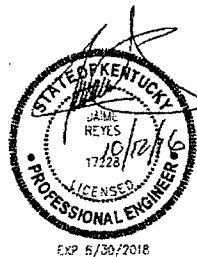
#### NOTE:

1. STEEL SHALL BE HOT DIPPED GALVANIZED.
2. CONNECT TO SLAB w/ (4) 1/2" HILTI KWIK BOLT 3 w/ 3 1/2" MIN EMBEDMENT PER PLATE

### 3 ALTERNATE ICE BRIDGE POST CONN.

SCALE: NONE

CDS-01-CX-01-004



T-Mobile®  
5208 LINBAR DR, SUITE 605  
NASHVILLE, TN 37211



Take action on the mobile.

PROJECT NO. 16-10-24

DATE: 07-18

DESIGNED BY: JMD

ALL DETAILS HAVE BEEN REVIEWED

BY: JMD/08/18/2018

DATE: 08/18/2018

DATE: 08/18/2018

DATE: 08/18/2018

DATE: 08/18/2018

DATE: 08/18/2018

DATE: 08/18/2018

DATE: 08/18/2018

DATE: 08/18/2018

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DATE: 08/18/2018

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DATE: 08/18/2018

DATE: 08/18/2018

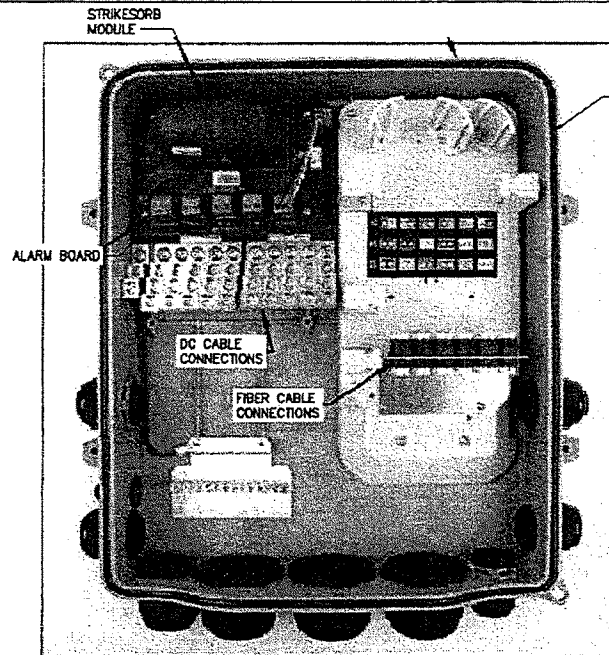
DATE: 08/18/2018

DATE: 08/18/2018

DATE: 08/18/2018

DATE: 08/18/2018

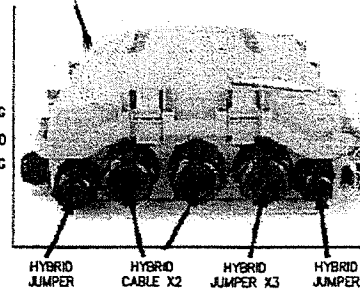
DATE: 08/18/2018



RAYCAP COVP MODEL  
NO. RNSNDC-771-PF-48  
PD SERIES  
(NOKIA MODEL NO.  
ASU93381YP01)

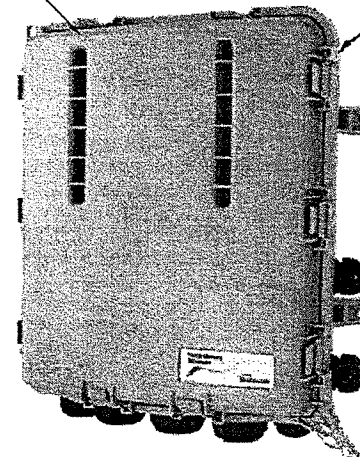
RAYCAP COVP MODEL  
NO. RNSNDC-771-PF-48  
PD SERIES  
(NOKIA MODEL NO.  
ASU93381YP01)

SEALED PLUG  
MAIN GROUND  
SEALED PLUG



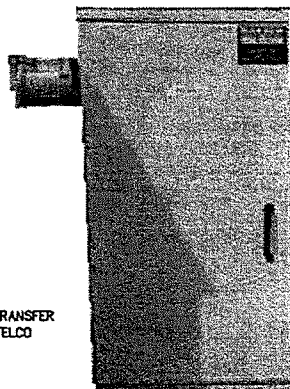
COVP CONDUIT CONNECTION DIAGRAM

SEALED PLUG  
SEALED PLUG



## 1 COVP DETAILS COVP WIRING

SCALE: NONE



200A POWER TRANSFER  
CABINET w/o TELCO

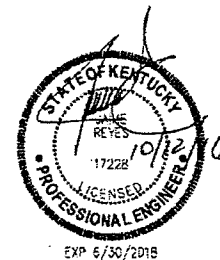


LOAD CENTER

## 2 POWER PEDESTAL CABINET

SCALE: NONE

<b>GENERAL</b>	
CONSTRUCTION	SINGLE LAYER ALUMINUM ENCLOSURE, TYPE 3R
DIMENSIONS (W X H X D)	20 X 40 X 10 INCH (508 X 1016 X 254 MM)
WEIGHT	APPROXIMATELY 75 LBS (WITHOUT PACKAGING)
FINISH	POLYESTER POWDER PAINT
DOOR LATCH	3-POINT LATCHING, PAD LOCKABLE
SAFETY	UL50 (CABINET) UL891 DEAD FRONT SWITCHBOARD LISTED SUITABLE FOR USE AS SERVICE EQUIPMENT (W-G BONDING KIT INCLUDED)
<b>ENVIRONMENT</b>	
OPERATING TEMPERATURE	-40°C TO +46°C (-40°F TO 115°F)
HUMIDITY (RELATIVE)	95%, NON-CONDENSING (MAX)
PROTECTION CLASS	TYPE 3R
AC SECTION	
VOLTAGE	240/120 SINGLE PHASE (3 WIRE + GROUND)
CURRENT	200 A
AC RATING	UTILITY 65,000 AMPS, PAN LOC 10,000 AMPS GENERATOR INTERFACE: PAHLOC™ (LEFT MOUNT) SERVICE DISCONNECT: SQUARED 200AMP MANUAL TRANSFER SWITCH
<b>OTHER FEATURES</b>	
LOAD CENTER: SQUARE D 200 AMP, QO SERIES, 24 POSITION	
SURGE PROTECTION DEVICE (SPD) - 1 EA AC DATA 2080	
SQUARE D 30 AMP, 2-POLE BREAKER FOR SPD	
GROUND BAR	
SILKSCREENED DEAD-FRONT	
CAPTIVE DEAD-FRONT FASTENERS	



**T-Mobile**  
5209 LINBAR DR, SUITE 605  
NASHVILLE, TN 37211



PROJECT NO. 18-10-74

DRAWN BY: JFB

CHECKED BY: AG

DATE: 10/12/16

BY: JFB

DATE: 10/12/16

BY: JFB

DATE: 10/12/16

BY: JFB

DATE: 10/12/16

BY: JFB

DATE: 10/12/16

BY: JFB

DATE: 10/12/16

BY: JFB

DATE: 10/12/16

BY: JFB

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BY: JFB

DATE: 10/12/16

BY: JFB

DATE: 10/12/16

BY: JFB

DATE: 10/12/16

BY: JFB

DATE: 10/12/16

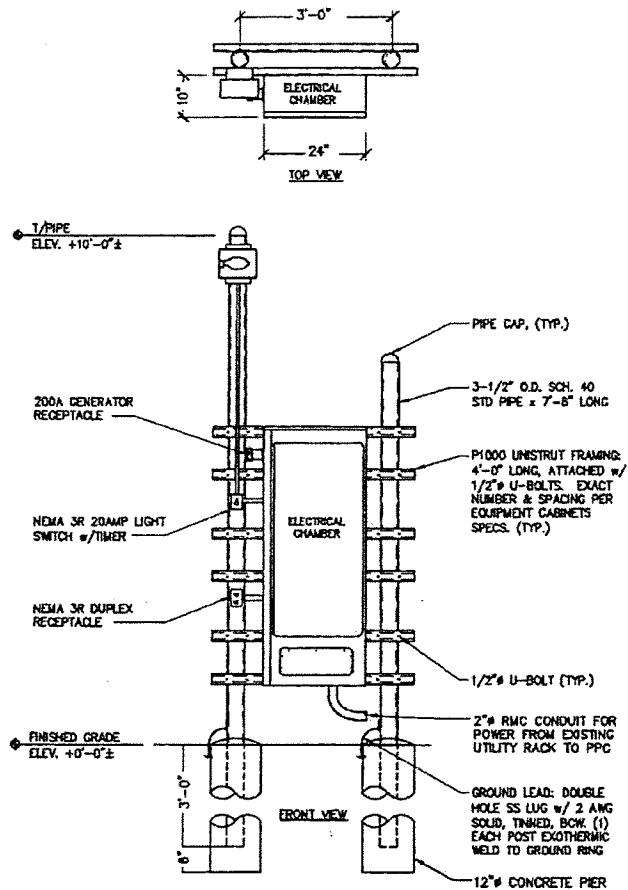
BY: JFB

DATE: 10/12/16

BY: JFB

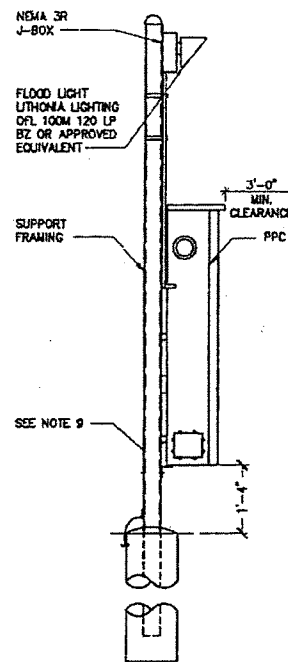
DATE: 10/12/16

BY: JFB

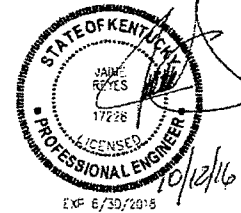


#### NOTES:

1. APPROXIMATE EQUIPMENT DIMENSIONS = 59"H x 24"W
2. COORDINATE MOUNTING POSITION OF CABINET W/ UTILITY RACKS
3. CABINETS SHALL BE MOUNTED WITH STAINLESS STEEL BOLTS



SIDE VIEW



#### UTILITY CABINET NOTES:

1. INSTALL CONDUIT AND WIRE TO THE SSC SITE. COIL WIRES, SEAL CONDUIT AND WIRE ENDS FROM MOISTURE INFILTRATION. LEAVE ENOUGH WIRE TO TERMINATE AT SSC, (MINIMUM OF 10 FEET).
2. COPPER GROUND WIRE SHALL BE BONDED TO THE NEW SITE GROUNDING SYSTEM.
3. CONTRACTOR MAY NEED TO MODIFY KNOCKOUT HOLES IN THE PPC TO ACCOMMODATE THE REQUIRED CONDUIT SIZES. COORDINATE CONDUIT SIZE AND WIRE REQUIREMENTS W/ MANUFACTURER SPECIFICATIONS.
4. UNDERGROUND PVC CONDUITS (WHERE APPLICABLE) SHALL TRANSITION TO RIGID CONDUIT AT THE SNEEP AND REMAIN RIGID INTO BOX. PROVIDE LONG SNEEP FIBERGLASS ELBOWS @ THE TRANSITION.
5. DRAWING IS FOR A SITE WITH A PPC REQUIRING NO TOWER LIGHTS.
6. AN ADDRESS LOT NUMBER OR TRAILER NUMBER MUST BE PERMANENTLY POSTED ON THE OUTSIDE OF THE CABINET.
7. 120 VOLT OUTLET LOCATED ON OR NEAR THE PPC SHALL HAVE GFCI PROTECTION PER NEC SECTION 210-8.
8. COPPER GROUND WIRE SHALL BE BONDED TO THE NEW SITE GROUNDING SYSTEM AT THE SNEEP AND REMAIN RIGID INTO PANELS.
9. INSTALL A 3" ANGLE IRON SUPPORT (MIN.) TO REST THE BOTTOM BACK EDGE OF THE PPC ON.

#### 1 RACK DETAILS

SCALE: NONE

**T-Mobile**

5208 LINBAR DR. SUITE 625  
NASHVILLE, TN 37211



WIRELESS SERVICES

WIRELESS SERVICES

PROJECT NO. 18-10-24

DRAWN BY: JFB

CHECKED BY: JFB

1. GROUNDING SYSTEM

2. WIRELESS SERVICES

3. WIRELESS SERVICES

4. WIRELESS SERVICES

5. WIRELESS SERVICES

6. WIRELESS SERVICES

7. WIRELESS SERVICES

8. WIRELESS SERVICES

9. WIRELESS SERVICES

10. WIRELESS SERVICES

11. WIRELESS SERVICES

12. WIRELESS SERVICES

13. WIRELESS SERVICES

14. WIRELESS SERVICES

15. WIRELESS SERVICES

16. WIRELESS SERVICES

17. WIRELESS SERVICES

18. WIRELESS SERVICES

19. WIRELESS SERVICES

20. WIRELESS SERVICES

21. WIRELESS SERVICES

22. WIRELESS SERVICES

23. WIRELESS SERVICES

24. WIRELESS SERVICES

25. WIRELESS SERVICES

26. WIRELESS SERVICES

27. WIRELESS SERVICES

28. WIRELESS SERVICES

29. WIRELESS SERVICES

30. WIRELESS SERVICES

31. WIRELESS SERVICES

32. WIRELESS SERVICES

33. WIRELESS SERVICES

34. WIRELESS SERVICES

35. WIRELESS SERVICES

36. WIRELESS SERVICES

37. WIRELESS SERVICES

38. WIRELESS SERVICES

39. WIRELESS SERVICES

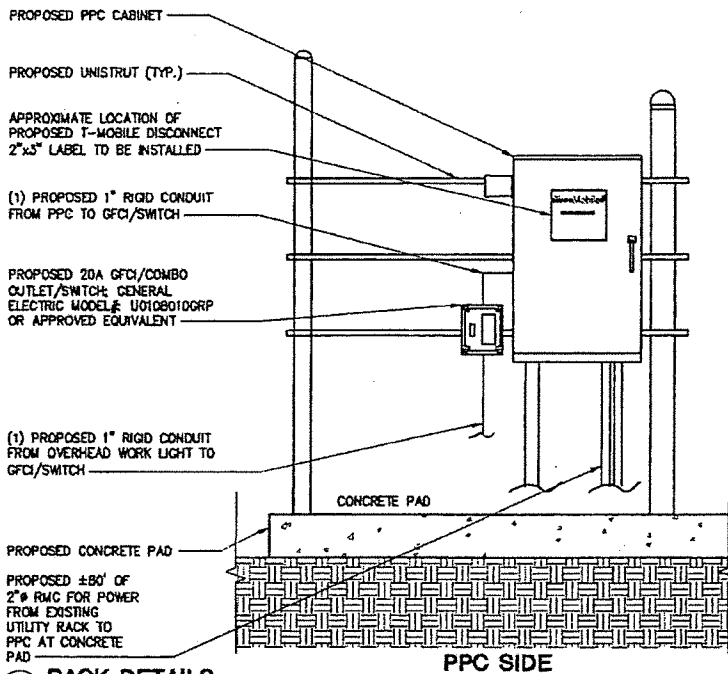
40. WIRELESS SERVICES



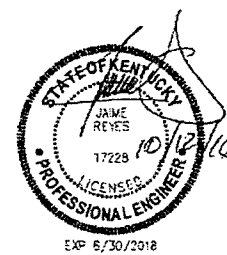
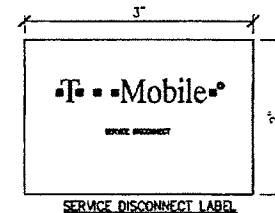
SITE NUMBER: 9LV1709A				PHASE: 1		WIRE: 3				
VOLTAGE: 240V/120				BUS RATING: 200 AMP'S		AIC: 11.5 KA				
MAIN BREAKER: 200 AMP				NEUTRAL BAR: YES		GROUND BAR: TBD				
				SERVICE ENTRANCE: --						
CKT	LOAD DESCRIPTION	BREAKER AMP'S	BREAKER POLES	PHASE A VA	PHASE B VA	BREAKER POLES	BREAKER AMP'S	LOAD DESCRIPTION	CKT	
1	TVSS	60	2	0	--	--	--		2	
3	--	--	--	--	9500	2	15	EMERSON	4	
5	--	--	--	9000	--	2	100	SSC	6	
7	--	--	--	--	9500	--	--	--	8	
9	--	--	--	--	150	1	20	LIGHT	10	
11	GFI RECEPTACLE	20	1	--	180	--	--	--	12	
	--	--	--	--	--	--	--	--		
				9000	15000	TOTAL KVA		25.83	TOTAL CONNECTED LOAD	
						AMPS		120.13		

5209 LINBAR DR, SUITE 605  
NASHVILLE, TN 37211

T-Mobile



1 RACK DETAILS  
SCALE: NONE



**PBM**  
Wireless Services

These labels are for use only on the following equipment:

PROJECT NO. 16-10-24

ISSUED BY: JTB

ISSUED BY: JTB

DATE: 09/28/2016

DATE: 10/27/2016

DATE: 11/27/2016

DATE: 12/27/2016

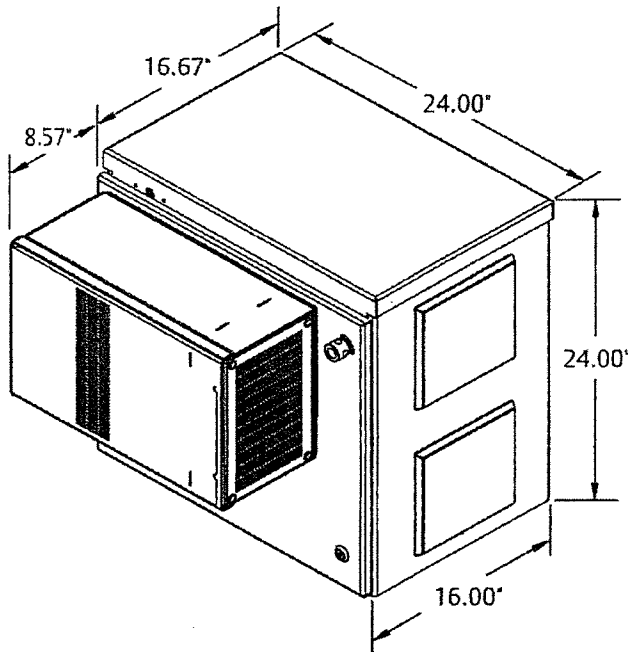
T-MOBILE SITE NO. 9LV1709A

5000 BROWNBO RD  
LOUISVILLE, KY 40222  
JEFFERSON COUNTY

LOCATION

SHEET TITLE  
RACK  
DETAILS

SHEET NUMBER  
E-1



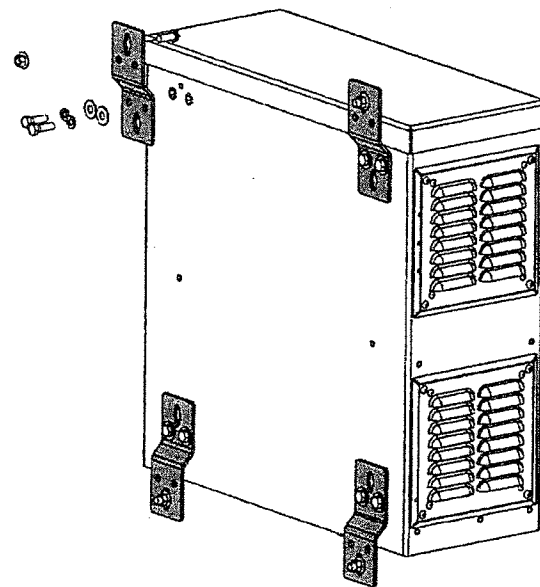
DIMENSIONS

FIBER TECH AAV OPTION



## Ordering Information

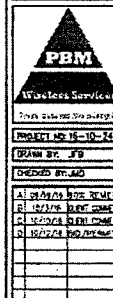
Emerson Number	Description	Emerson Number	Description
F2013074	Outdoor Solution w/DC Power		Outdoor Solution w/DC Power
Equipped with the following:		Equipped with the following:	
1 EA	NetXtend™ Compact with heat exchanger, NXC2416AAV1H058B3	1 EA	NetXtend™ Compact with heat exchanger, NXC2416AAV1H058B3
1 EA	NetSure™ 211 power system	1 EA	NetSure™ 211 power system
2 EA	500 W rectifiers	2 EA	500 W rectifiers
1 EA	19" rack-mount, slide-out tray	1 EA	AC outlet mounting bracket
1 EA	AC outlet mounting bracket	2 EA	20 A, 120 VAC outlets
2 EA	20 A, 120 VAC outlets	1 EA	Wall-mounting kit
1 EA	Wall-mounting kit		
<b>Accessories</b>			
547681	Battery, EnerSys NP12-12, 12 AH bat mod, 4 EA		
	Battery option		



FRAME/UNISTRUT MOUNTING

1 AAV DETAILS  
SCALE: NONE

**T-Mobile**  
5209 LINBAR DR. SUITE 605  
NASHVILLE, TN 37211



T-MOBILE SITE ID:  
SLV709A

6800 BROWNSBORO RD  
LOUISVILLE, KY 40222  
JEFFERSON COUNTY  
COLOCATION

SHEET TITLE  
AAV DETAILS

SHEET NUMBER  
E-11

REFERENCE SITE  
PLAN/COMPOUND PLAN FOR  
EXACT UTILITY ROUTE,  
COORDINATE W/ LOCAL  
ELECTRIC UTILITY COMPANY

EXISTING METER SOCKET  
& 200A SAFETY SWITCH  
TO BE UTILIZED BY  
T-MOBILE; GC SHALL  
VERIFY CONDITION AND  
CAPACITY & COORDINATE  
WITH T-MOBILE CM PRIOR TO  
START OF CONSTRUCTION

EXISTING GROUND WIRE

EXISTING GROUNDING  
ROD FOR UTILITY  
SERVICE GROUND

METER TO AC LOAD CENTER:  
(3) - 3/0 AWG CU  
(1) 6 AWG CU GROUND WIRE  
2" SCH. 40 PVC

(1) 2" SCH. 40 PVC  
CONDUIT FOR (4) 6 AWG CU  
PROPOSED  
OUTDOOR RATED  
DC POWER CABLE  
AND FIBER  
JUMPERS

RRHs

TO  
GROUND  
RING

200 AMP MTS/ATS/DISTRIBUTION  
PANEL

60A BRANCH  
CIRCUITS

SERVICE ENTRANCE  
GROUND ROD,  
5/8"x10' COPPER  
CLAD GROUNDING  
ELECTRODE, (TYP. 2)

1 ONE-LINE DIAGRAM  
SCALE: NONE

EXISTING  
ELECTRICAL  
SERVICE FROM  
DEMARCATION

200A

EXISTING METER & 200A  
SAFETY SWITCH TO BE  
UTILIZED BY T-MOBILE; GC  
SHALL VERIFY CONDITION AND  
CAPACITY & COORDINATE WITH  
T-MOBILE CM PRIOR TO  
START OF CONSTRUCTION

MOUNTED TO PPC

OUTSIDE

INSIDE

OUTSIDE

INSIDE

TO  
GROUND  
RING

TO  
GROUND  
RING

EXP 6/30/2018

FIBER  
SERVICE FROM  
DEMARCATION

REFERENCE SITE  
PLAN/COMPOUND PLAN FOR  
EXACT UTILITY ROUTE (SEE  
SHEET C-1.1), COORDINATE  
W/ LOCAL COMMUNICATION  
PROVIDER

EXISTING COMMUNICATION  
BOX/PANELS

GENERATOR PLUG TO ATS:  
(3) - 3/0 AWG CU (WIRED  
INTERNALLY THRU CABINET)  
(1) 6 AWG CU GROUND WIRE  
2" SCH. 40 PVC

VAPOR TIGHT LIGHT FIXTURE  
300W, (TYP. 2)

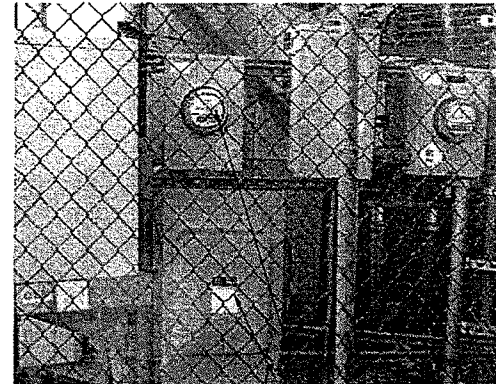
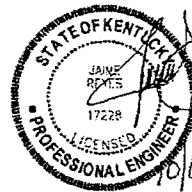
PROPOSED 4" SCH. 40  
PVC CONDUIT W/ MULE  
TAPE & 1-1/2" PULL  
STRUNG,  
SUBCONTRACTOR TO  
COORDINATE  
CONNECTION WITH  
LOCAL UTILITY COMPANY

NEMA 3R LIGHT SWITCH WITH  
TIMER

AAV BOX DIRECT MOUNT  
TO UNISTRUT

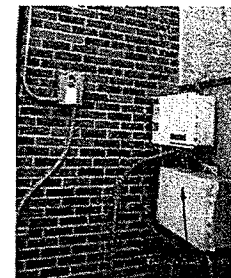
LOAD CENTER TO LIGHTS:  
(2) 12 AWG CU  
(1) 12 AWG CU GND  
(1) 1" RMC

TO  
GROUND  
RING

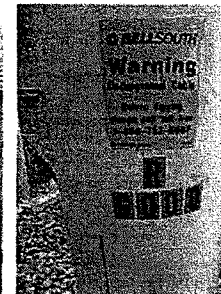


EXISTING METER & 200A  
SAFETY SWITCH TO BE  
UTILIZED BY T-MOBILE; GC  
SHALL VERIFY CONDITION AND  
CAPACITY & COORDINATE  
WITH T-MOBILE CM PRIOR TO  
START OF CONSTRUCTION

EXISTING UTILITY RACK



EXISTING COMMUNICATION  
PANELS



EXISTING COMMUNICATION  
PEDESTAL

EXISTING COMMUNICATION  
PANELS/PEDESTAL

T-Mobile  
5019 LINBAR DR. SUITE 625  
NASHVILLE, TN 37211



PROJECT NO. 16-10-74

DESIGNED BY: JFB

CHECKED BY: JFB

1. CHECK FOR ACC. REVIEW

2. CHECK FOR ACC. REVIEW

3. CHECK FOR ACC. REVIEW

4. CHECK FOR ACC. REVIEW

5. CHECK FOR ACC. REVIEW

6. CHECK FOR ACC. REVIEW

T-MOBILE SITE ID:  
SLV1709A

600 SPANGLER RD  
LOUISVILLE, KY 40222  
JEFFERSON COUNTY

COLLOCATION

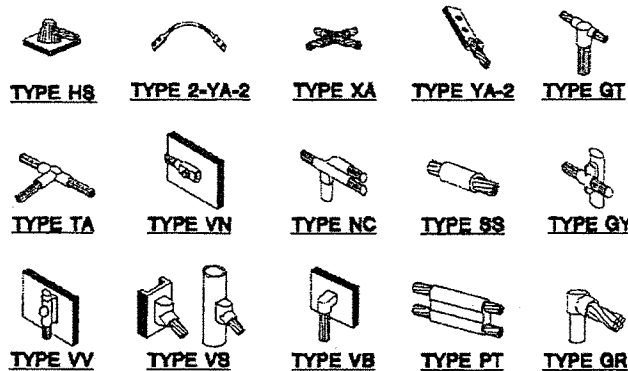
SHEET TITLE

ONE-LINE RISER  
DIAGRAM

SHEET NUMBER

E-2

CDS-01-EL-01-006A

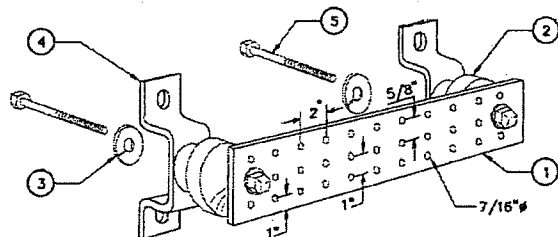


**NOTE:**  
 EXOD EXOTHERMIC "WELD TYPES" SHOWN HERE ARE EXAMPLES. CONSULT WITH PROJECT MANAGER FOR SPECIFIC WELDS TO BE USED FOR THIS PROJECT.

### 3 EXOTHERMIC WELDS

SCALE: NONE

CDS-01-GN-05-037



LEGEND

- 1 TINNED COPPER GROUND BAR, 1/4" x 4" x 20", HOLE CENTERS
- 2 INSULATORS
- 3 3/8" LOCKWASHERS
- 4 WALL MOUNTING BRACKET
- 5 3/8-11 x 2" H.H.G.S. BOLTS

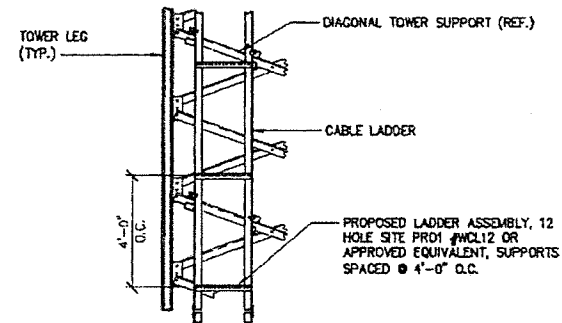
### 1 GROUND BAR DETAIL

SCALE: NONE

CDS-01-GN-05-001



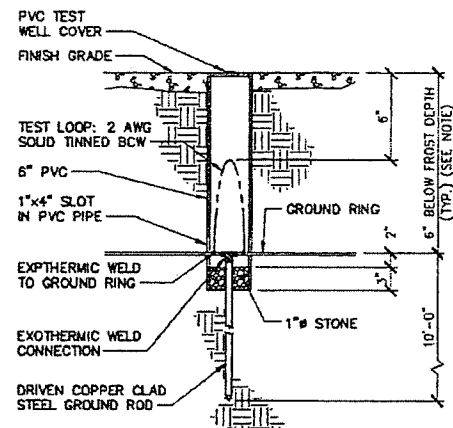
EXP 6/30/2018



### 4 CABLE LADDER DETAIL

SCALE: NONE

CDS-01-CX-04-002



**NOTE:** 6" BELOW FROST DEPTH, DEPTH MAY VARY, WORK SHALL CONFORM TO THE LOCAL BUILDING CODES.

### 2 INSPECTION WELL DETAIL

SCALE: NONE

CDS-01-GN-05-002

**T-Mobile**

5209 LINBAR DR, SUITE 625  
 NASHVILLE, TN 37211



PROJECT NO. 18-10-24

DRAWN BY: JFB

CHECKED BY: JFB

DATE: 10/2/06

DATE: 10/2/06

DATE: 10/2/06

DATE: 10/2/06

DATE: 10/2/06

DATE: 10/2/06

DATE: 10/2/06

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DATE: 10/2/06

DATE: 10/2/06

DATE: 10/2/06

DATE: 10/2/06

T-MOBILE SITE ID: BLV100A

5000 BROWNSBORO RD

LOUISVILLE, KY 40222

JEFFERSON COUNTY

COLORADO

COLORADO

COLORADO

COLORADO

COLORADO

COLORADO

COLORADO

COLORADO

COLORADO

COLORADO

COLORADO

COLORADO

COLORADO

COLORADO

COLORADO

COLORADO

COLORADO

COLORADO

COLORADO

COLORADO

SHEET TITLE

GROUNDING

DETAILS

SHEET NUMBER

E-21

NOTES:

1. GROUND WIRES ARE 2 AWG SOLID TINNED BCW U.N.O.
2. GROUND RING/RODS SHALL BE 6" BELOW FROST DEPTH, DEPTH MAY VARY.
3. METALS WITHIN 6' OF THE GROUND RING SHALL BE BONDED TO THE GROUND RING.

LEGEND

- EXOTHERMIC CONNECTION
- MECHANICAL CONNECTION

EXISTING TOWER GROUND RING, SEE NOTE 2, GC SHALL VERIFY LOCATION & CONDITION

GC SHALL GROUND ICE BRIDGE POSTS TO GROUND RING (TYP.)

GC SHALL GROUND ICE BRIDGE POSTS TO ICE BRIDGE SECTIONS (TYP.)

PROPOSED T-MOBILE ICE BRIDGE (TYP.)

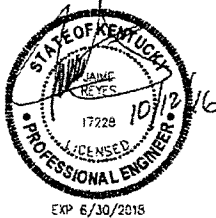
2 AWG BARE TINNED SOLID COPPER WIRE (TO EXISTING GROUND RING, TYP. 2 CONNECTIONS ARE REQUIRED)

5/8"x10'-0" LONG COPPER CLAD STEEL GROUND ROD @ 10' O.C. (TYP.)

INSPECTION WELL (VERIFY LOCATION w/CONSTRUCTION MANAGER)

2 AWG TINNED BCW EQUIPMENT GROUND RING, MIN. 6" BELOW FROST DEPTH, SEE NOTE 2.

EXOTHERMIC WELD CONNECTION (TYP.)



1 GROUNDING PLAN  
SCALE: NONE

T-Mobile  
5209 LINBAR DR, SUITE 605  
NASHVILLE, TN 37211

<b>PBM</b> Professional Building Management	
PROJECT NO. 16-10-24	
DRAWN BY: JFB	
CHECKED BY: JMD	
1. 10/25/16 JFB	2. 10/25/16 JMD
3. 10/25/16 JMD	4. 10/25/16 JMD

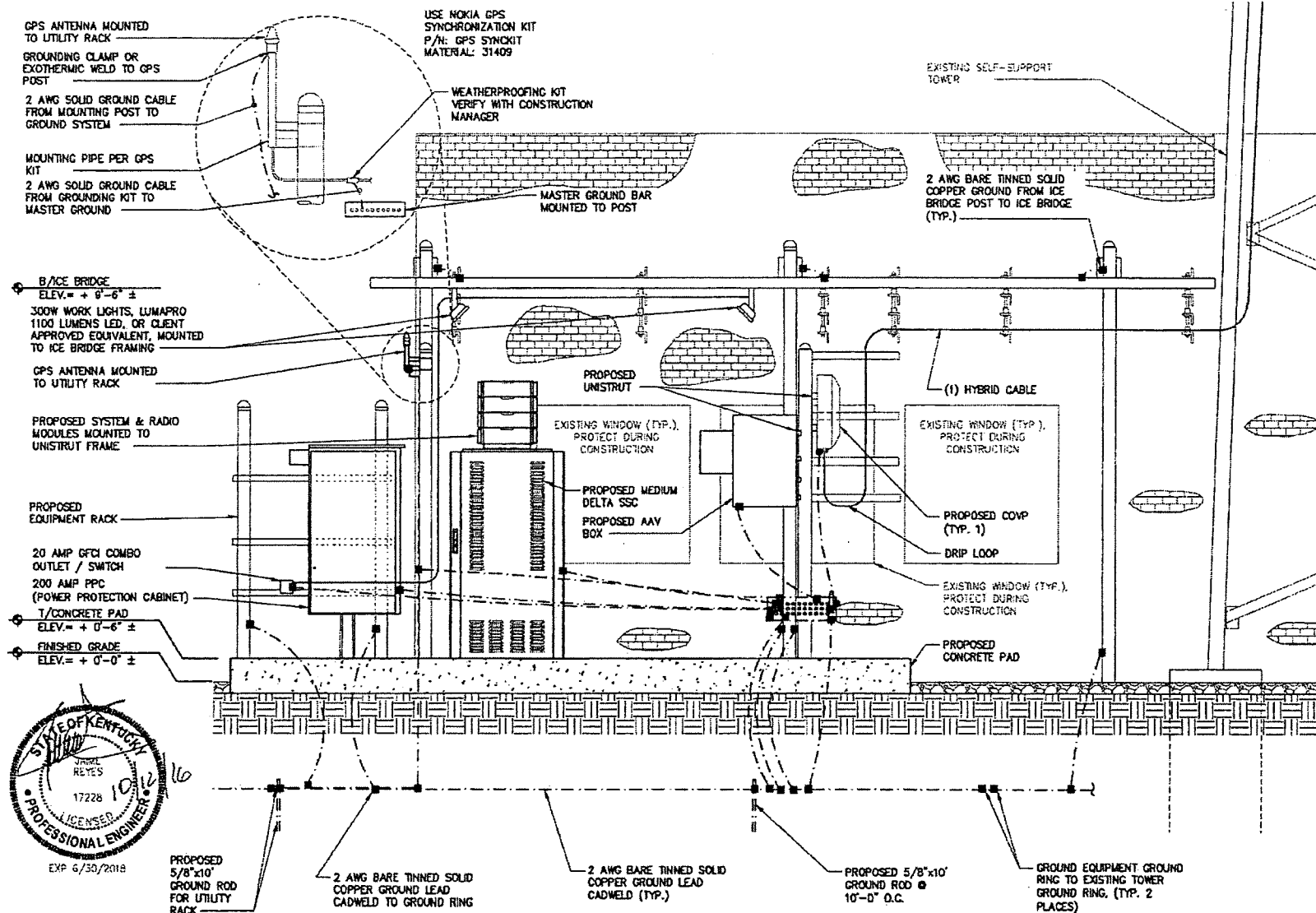
T-MOBILE SITE ID:  
SLV1008A

6400 BROWNSBORO RD  
LOUISVILLE, KY 40222  
JEFFERSON COUNTY  
COLOCATION

SHEET TITLE  
GROUNDING  
PLAN & NOTES

SHEET NUMBER  
E-3





1 EQUIPMENT GROUNDING  
SCALE: NONE

T-Mobile

5209 LINBAR DR, SUITE 525  
NASHVILLE, TN 37211



Project Location and Change

PROJECT NO. 15-10-24

ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

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ISSUED BY: J.B.

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ISSUED BY: J.B.

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ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

ISSUED BY: J.B.

T-MOBILE SITE 12  
BLV109A

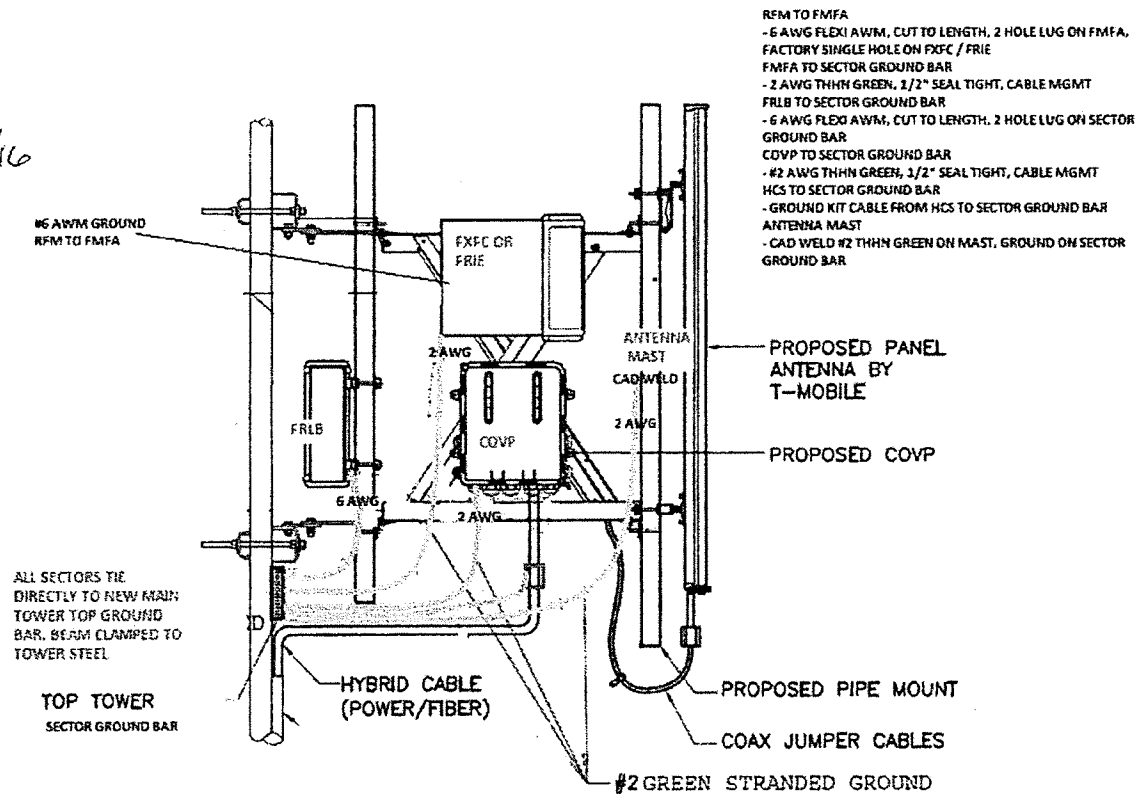
600 BROWNSBORO RD  
LOUISVILLE, KY 40222  
JEFFERSON COUNTY  
COLOCATION

SHEET TITLE  
GROUNDING  
DETAILS

SHEET NUMBER  
E-4



EXP 6/30/2018



- RFM TO FMFA
- 6 AWG FLEXI AWM, CUT TO LENGTH, 2 HOLE LUG ON FMFA, FACTORY SINGLE HOLE ON EXFC / FRIE
  - FMFA TO SECTOR GROUND BAR
  - 2 AWG THHN GREEN, 1/2" SEAL TIGHT, CABLE MGMT FRLB TO SECTOR GROUND BAR
  - 6 AWG FLEXI AWM, CUT TO LENGTH, 2 HOLE LUG ON SECTOR GROUND BAR
  - COVP TO SECTOR GROUND BAR
  - #2 AWG THHN GREEN, 1/2" SEAL TIGHT, CABLE MGMT HCS TO SECTOR GROUND BAR
  - GROUND KIT CABLE FROM HCS TO SECTOR GROUND BAR ANTENNA MAST
  - CAD WELD #2 THHN GREEN ON MAST, GROUND ON SECTOR GROUND BAR

# 1 EQUIPMENT GROUNDING • ANTENNA PLATFORM

SCALE: NONE

T-Mobile

5208 LINBAR DR, SUITE 625  
NASHVILLE, TN 37211



WIRELESS SERVICES

PROJECT NO. 11-10-24

DRAWN BY: JFB

CHECKED BY: JFB

ALL DRAWING WORK SUBJECT TO APPROVAL BY T-MOBILE

ALL DRAWING WORK SUBJECT TO APPROVAL BY T-MOBILE

ALL DRAWING WORK SUBJECT TO APPROVAL BY T-MOBILE

ALL DRAWING WORK SUBJECT TO APPROVAL BY T-MOBILE

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ALL DRAWING WORK SUBJECT TO APPROVAL BY T-MOBILE

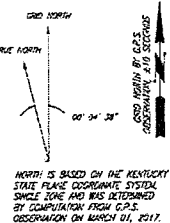
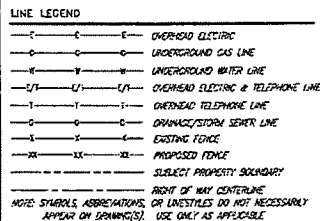
ALL DRAWING WORK SUBJECT TO APPROVAL BY T-MOBILE

T-MOBILE SITE ID: BLV100A

1000 BROWNSBORO RD  
LOUISVILLE, KY 40222  
JEFFERSON COUNTY  
COLLOCATION

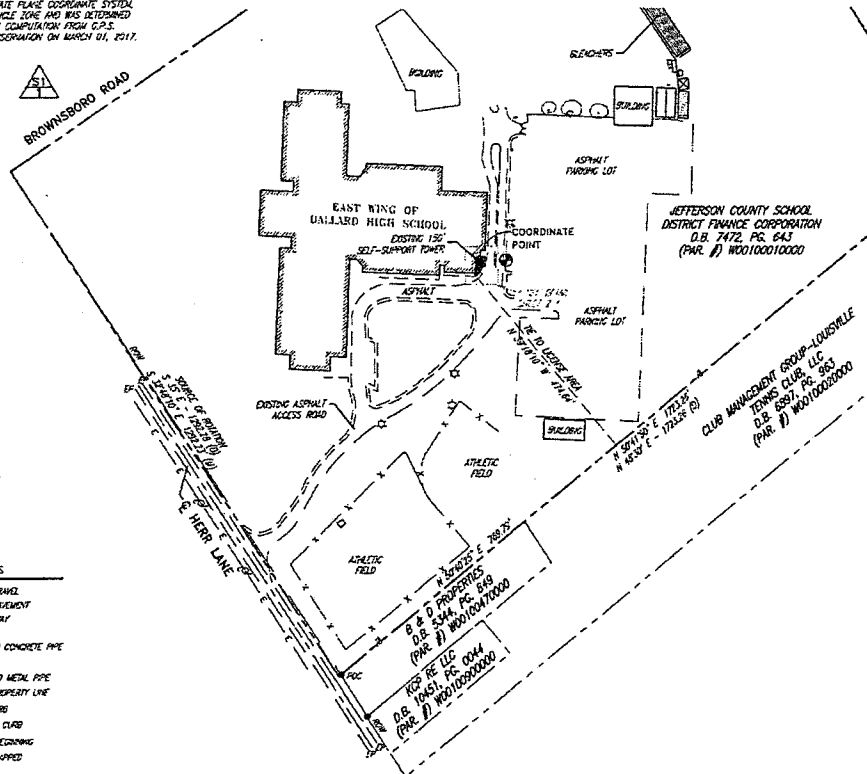
SHEET TITLE  
GROUNDING DETAILS

SHEET NUMBER  
E-5



**UNDERGROUND UTILITIES**  
CALL 2 REMING DOT  
**BEFORE YOU DIG!**  
TOLL FREE 1-800-368-5841  
DETROIT 1-313-224-5841  
CHICAGO 1-800-368-3374  
UNIVERSITY MICROFILMS  
SERIALS ACQUISITION  
300 N. ZEEB RD.  
ANN ARBOR MI 48106

The utility information shown on this card  
prepared by REMING DOT is intended for  
reference purposes only and is not a guarantee.  
It is the customer's responsibility to verify  
their records and location, and to conduct  
the appropriate utility company for full excavation.



**SURVEYORS NOTES**

SOURCE OF BEARING IS A D.L.S. CORRESPONDENT ON MARCH 01, 2017.

THE SHOWN SUBJECT TO RIGHT OF BAYS AND EASEMENTS SHOWN HEREON ON FILE.

SOURCE OF ACQUISITION BASED ON THE SOUTHWEST PROPERTY LINE OF THE ALPHEON DOWNEY SCHOOL DISTRICT FIVE CORPORATION WHICH HAS THE BEARING OF A 137° E PERM BEAR 742.14' HISE BAL, AND THE CALCULATED BEARING OF S 34°48'17" E.

NO SEARCH OF PUBLIC RECORDS WAS BEING PERFORMED OF THIS FROM IN ATTEMPTING ANY EJECTMENT AND/OR ABUSINESS IN THE TITLE OF THE PRESENT TRACT.

THIS DRAWING DOES NOT REPRESENT A BOUNDARY SURVEY.

EXISTING CORNERS ARE AT THE FOOT INTERSECTIONS.

STATE OF KENTUCKY  
FRANK L.  
SELLINGER  
3282  
LICENCED  
PROFESSIONAL  
LAND SURVEYOR

LAND SURVEYOR'S CERTIFICATE

TYPE "A" SURVEY: UNCHANGED THINGS CLOSING BETTER THAN 1 IN 10,000

TO ALL PARTIES INTERESTED IN TITLE TO PREMISES SURVEYED

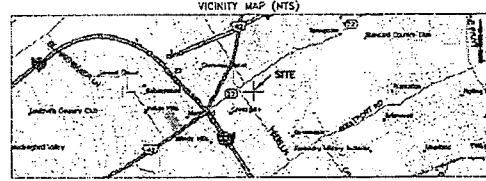
I hereby certify that this plot and survey were made under my supervision, and that the angular and linear measurements, as indicated by measurements shown herein, are true and correct to the best of my knowledge and belief.

This survey and plot meets or exceeds the minimum standards of the American Professional Surveyors Association.

This property is subject to any recorded encumbrances or right of ways plot shown herein.

*John L. Seawright* 3-14-17

John L. Seawright, S. E. No. 1262



**PARENT TRACT DESCRIPTION (PROVIDED BY OTHERS)**  
 Property located in Jefferson #7

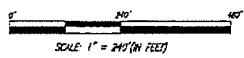
**BEGINNING** of a state in the center of the Greenwood Turnpike Road, corner to L.L. Taylor and running thence with his line passing a stone on the margin of said road, South 35° East, East 118°32'26" feet, or more or less, to a stone in the corner of the County Road, corner to John Wagon; thence with his line passing a stone on the margin of said road North 48°-1/2°-00' East 172'26" feet, or more or less, to a stone in H. Heibach's line; thence with his line North 31°-1/2°-00' West 116°38'36" feet, or more or less, to the corner of the Greenwood Turnpike Road; thence with his line, more or less, to a stone on the margin of said road South 51°-3/4°-00' West 114°3'40" feet, or more or less, to a stone on the margin of said road South 51°-1/2°-00' West 573'40" feet, or more or less, to the beginning.

**LEGAL DESCRIPTIONS:**

This is a description for T-Mobile, a license area to be located on the property of the Jefferson County School District Finance Corporation, which is further described as follows:

**LICENSE AREA**

Commencing at a iron rod found on the north right of way line of Herr Lane, and being on the southeast line of the property conveyed to Jefferson County School District Finance Corporation in Deed Book 7472, Page 643, Parcel number 4 of the Jefferson County Clerk's Office, thence with said southeast line N 50° 40' 25" E - 783.29'; thence following said Jefferson County School District Finance Corporation property N 35° 16' 10" W - 476.64' to a set iron rod with a cap stamped "FSJAN 1382", and being the First Point of Beginning of the License Area; thence N 02° 17' 32" E - 5.27' to a set iron rod with a cap stamped "FSJAN 1382"; thence S 87° 30' 39" E - 0.88' to a set iron rod with a cap stamped "FSJAN 1382"; thence N 02° 29' 16" E - 13.43' to a set iron rod with a cap stamped "FSJAN 1382"; thence S 02° 27' 13" E - 13.06' to a set iron rod with a cap stamped "FSJAN 1382"; thence S 43° 00' 23" W - 13.27' to the point of beginning, containing 82.5 square feet as per survey by Frank L. Seitzinger, M with Fison Land Surveyors dated March 01, 2017.



I HAVE REVIEWED THE FLOOD INSURANCE RATE MAPS (FIRM) MAP NO. 21111000105E & 21111000107E DATED 12-05-2005 AND THE LICENSE AREA DOES NOT APPEAR TO BE IN A FLOOD PRONE AREA. THE LICENSE AREA IS LOCATED IN ZONE X.

T-Mobile

COMPLETE  
DESIGN  
SOLUTIONS

**FS-100**  
Land Surveyors  
300 City Ave., Lancaster, KY 40301  
Phone: (502) 625-5866 (902) 636-3111  
Fax: (502) 636-2763

SITE NUMBER: 92V1709A

SITE NAME: BALLARD HS

SITE ADDRESS:  
6000 BROWNSBORO RD  
LOUISVILLE, KY 40222

LICENSE AREA:  
83.5 SQ. FT.

PROPERTY OWNER:  
JEFFERSON COUNTY SCHOOL  
DISTRICT FINANCE CORPORATION  
3332 NEWSBURG RD  
LOUISVILLE, KY 40218-2574

PARCEL NUMBER:  
#00100010000

SOURCE OF TITLE:  
D.B. 7472, PG. 643

DWG BY: SHS	CHKD BY: P.S	DATE: 03.03.17
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FSTAN PROJECT NO.:  
17-9946

SHEET 1 OF 2

REVISIONS:  
"LICENSE AREA" - 3.14.17  
LABEL DETAIL - 3.14.17

CO--LOCATE

**BALLARD HS**  
**9LV1709A**  
SITE ADDRESS: 6000 BROWNSCO RD  
LOUISVILLE, KY 40222  
OWNER ADDRESS: 3332 NEWBURG RD  
LOUISVILLE, KY 40218



- SHEET 2
- LICENSE AREA
  - LEGAL DESCRIPTIONS
  - FLOOD ZONE DATA
  - VICINITY MAP

- **COORDINATE POINT LOCATION**  
 MAG 1983  
 LATITUDE: 37° 17' 00.00"  
 LONGITUDE: 85° 17' 27.79"  
 NAD 1983  
 ELEVATION: 508.14'  
 STATE PLANE COORDINATE SINGLE ZONE  
 (BLUE MARBLE COORDINATE)  
 CALCULATOR VERSION 3.0  
 NORTHING: 3995971.31  
 EASTING: 457351.75
- ☐ **POWER & TEL SOURCE**  
 UTILITY COMPANY/LEASE  
 IDENTIFICATION #/N/A  
 TELEPHONE COMPANY/ABT  
 IDENTIFICATION #/N/A
- **PROJECT BENCHMARK**  
 NORTH: 3950300.39  
 EAST: 4057361.68  
 ELEVATION: 506.21'  
 LOCATION: BEING A SET MAG 1983  
 EAST OF THE NORTHEAST  
 CORNER OF THE LICENSE AREA

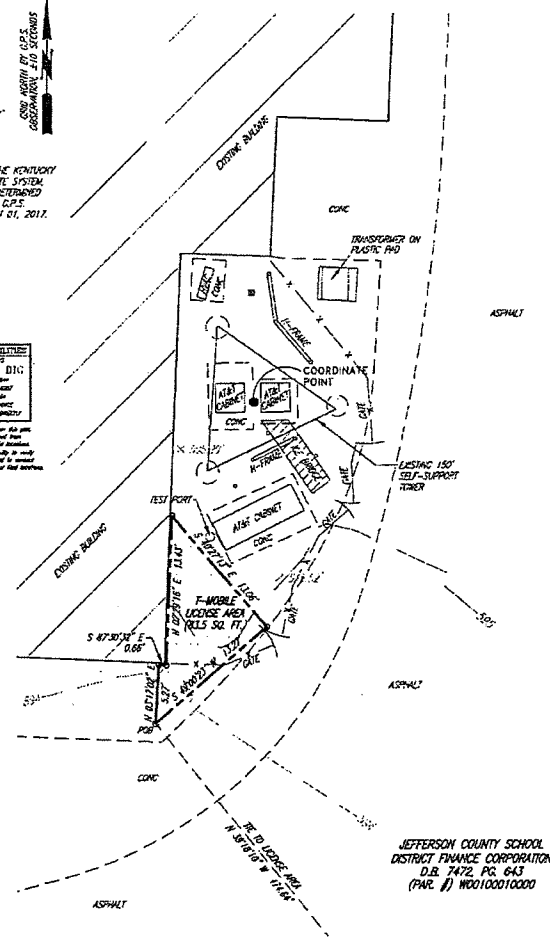
- SYMBOL LEGEND**
- WOOD POWER POLE
  - CONCRETE POWER POLE
  - METAL TRAFFIC POLE
  - LIGHT POLE
  - GUY POLE
  - TELEPHONE POLE
  - CUT ANCHOR
  - MANHOLE
  - WATER VALVE
  - WATER METER
  - FIRE HYDRANT
  - ELECTRIC BOX
  - FENCE POST
  - SPOT ELEVATION
  - SET BACK MARKER
  - EXISTING 1/2" RELAY

- ABBREVIATIONS**
- SE EDGE OF DRIVE
  - EP EDGE OF PAVEMENT
  - RM RIGHT OF WAY
  - E CENTERLINE
  - RCP REINFORCED CONCRETE PIPE
  - CONC CONCRETE
  - CWP CORRUGATED METAL PIPE
  - SLP SURVEY PROPERTY LINE
  - TC TOP OF CURB
  - BC BOTTOM OF CURB
  - POB POINT OF BEGINNING
  - SLP SURVEY PROPERTY LINE

- LINE LEGEND**
- OVERHEAD ELECTRIC
  - UNDERGROUND GAS LINE
  - UNDERGROUND WATER LINE
  - OVERHEAD ELECTRIC & TELEPHONE LINE
  - OVERHEAD TELEPHONE LINE
  - DRAINAGE/STORM SEWER LINE
  - EXISTING FENCE
  - PROPOSED FENCE
  - SURVEY PROPERTY BOUNDARY
  - RIGHT OF WAY CENTERLINE
- NOTE: SYMBOLS, ABBREVIATIONS, OR LINES/STYLES DO NOT NECESSARILY APPEAR ON DRAWING(S). USE ONLY AS APPLICABLE.

NORTH IS BASED ON THE KENTUCKY STATE PLANE COORDINATE SYSTEM SINGLE ZONE AND WAS DETERMINED BY COMPARISON FROM C.P.S. COORDINATION ON MARCH 01, 2017.

**UNDERGROUND UTILITIES**  
 ALL UTILITIES SHOWN ARE BASED ON RECORD DRAWINGS AND FIELD SURVEY. THE SURVEYOR HAS NOT BEEN ADVISED OF ANY CHANGES TO THE UTILITIES SINCE THE DATE OF THE SURVEY.



JEFFERSON COUNTY SCHOOL DISTRICT FINANCE CORPORATION  
 D.B. 7472 PG. 643  
 (P.L. 1) W00100010000

**SURVEYORS NOTES**

SOURCE OF BEARING IS A C.P.S. COORDINATION ON MARCH 01, 2017.

THE SHOWN SUBJECT TO RIGHT OF WAY AND EASEMENTS SHOWN HEREON ARE:

SOURCE OF ELEVATION SHOWN BY THE SURVEYOR PROPERTY LINE OF THE JEFFERSON COUNTY SCHOOL DISTRICT FINANCE CORPORATION WHICH WAS THE BEARING OF 3° 30' E FROM DEED BOOK 7472 PAGE 643 AND THE CALCULATED BEARING OF 3° 30' E.

NO SEARCH OF PUBLIC RECORDS HAS BEEN PERFORMED BY THIS FIRM TO DETERMINE ANY EASEMENTS AND/OR ENCUMBRANCES IN THE TITLE OF THE PROPERTY SHOWN.

THIS DRAWING DOES NOT REPRESENT A GUARANTEED SURVEY.

EXISTING CONTOURS ARE AT ONE FOOT INTERVALS.

STATE OF KENTUCKY

FRANK L. SELLINGER  
 3262

LICENSED  
 PROFESSIONAL  
 LAND SURVEYOR

**LAND SURVEYOR'S CERTIFICATE**

I, THE SURVEYOR, UNDERSIGNED, HEREBY CERTIFY THAT I AM A LICENSED SURVEYOR IN THE STATE OF KENTUCKY.

I HEREBY CERTIFY THAT THIS PLAN AND SURVEY WERE MADE UNDER MY SUPERVISION, AND THAT THE SURVEY AND MEASUREMENTS, AS WELL AS THE CALCULATIONS AND ADJUSTMENTS, ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

THIS SURVEY AND PLAN, MADE BY OR UNDER THE SUPERVISION OF THE SURVEYOR, IS SUBJECT TO ANY RECORDED EASEMENTS OR RIGHT OF WAY SHOWN HEREON.

3-14-17

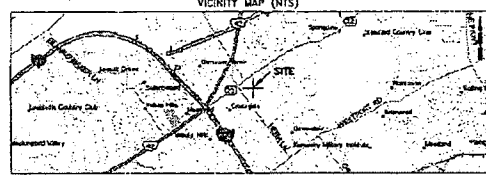
Frank L. Sellinger, Jr. R/L Reg. No. 2282

- LICENSE AREA
- LEGAL DESCRIPTIONS
- FLOOD ZONE DATA
- VICINITY MAP

**SURVEYOR'S REVIEW OF "SPECIAL EXCEPTIONS"**

NOTES CORRESPONDING TO THE FLOOD INSURANCE RATE SURVEY REPORT OF 1982, ORDER NUMBER 2401247, EFFECTIVE DATE: 10/16/2011.

1. Easement  
 In favor of City of Louisville and Louisville Water Company  
 Recorded on: 11/16/1987  
 Recorded in: Deed Book 4157, Page 387  
 (DOES NOT AFFECT THE LICENSE AREA)
2. Easement  
 In favor of Louisville Gas and Electric Company  
 Recorded on: 11/16/1987  
 Recorded in: Deed Book 4157, Page 387  
 (DOES NOT AFFECT THE LICENSE AREA)
3. Easement  
 In favor of Louisville and Jefferson County Metropolitan Sewer District  
 Recorded on: 11/16/1987  
 Recorded in: Deed Book 4157, Page 387  
 (DOES NOT AFFECT THE LICENSE AREA)
4. Easement  
 In favor of Louisville and Jefferson County Metropolitan Sewer District  
 Recorded on: 11/16/1987  
 Recorded in: Deed Book 4157, Page 387  
 (DOES NOT AFFECT THE LICENSE AREA)
5. Easement  
 In favor of Louisville and Jefferson County Metropolitan Sewer District  
 Recorded on: 11/16/1987  
 Recorded in: Deed Book 4157, Page 387  
 (DOES NOT AFFECT THE LICENSE AREA)
6. Easement  
 In favor of Louisville and Jefferson County Metropolitan Sewer District  
 Recorded on: 11/16/1987  
 Recorded in: Deed Book 4157, Page 387  
 (DOES NOT AFFECT THE LICENSE AREA)
7. Easement  
 In favor of Louisville and Jefferson County Metropolitan Sewer District  
 Recorded on: 11/16/1987  
 Recorded in: Deed Book 4157, Page 387  
 (DOES NOT AFFECT THE LICENSE AREA)
8. Easement  
 In favor of Louisville and Jefferson County Metropolitan Sewer District  
 Recorded on: 11/16/1987  
 Recorded in: Deed Book 4157, Page 387  
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 Recorded in: Deed Book 4157, Page 387  
 (DOES NOT AFFECT THE LICENSE AREA)
14. Easement  
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 Recorded on: 11/16/1987  
 Recorded in: Deed Book 4157, Page 387  
 (DOES NOT AFFECT THE LICENSE AREA)
15. Easement  
 In favor of Louisville and Jefferson County Metropolitan Sewer District  
 Recorded on: 11/16/1987  
 Recorded in: Deed Book 4157, Page 387  
 (DOES NOT AFFECT THE LICENSE AREA)



1. Easement  
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 Recorded on: 11/16/1987  
 Recorded in: Deed Book 4157, Page 387  
 (DOES NOT AFFECT THE LICENSE AREA)
15. Easement  
 In favor of Louisville and Jefferson County Metropolitan Sewer District  
 Recorded on: 11/16/1987  
 Recorded in: Deed Book 4157, Page 387  
 (DOES NOT AFFECT THE LICENSE AREA)

SCALE: 1" = 10' (IN FEET)



I HAVE REVIEWED THE FLOOD INSURANCE RATE MAP(S) (FIRM) MAP NO. 21111 (0001) & 21111 (0002) DATED 12-05-2005 AND THE LICENSE AREA DOES NOT APPEAR TO BE IN A FLOOD PRONE AREA. THE LICENSE AREA IS LOCATED IN ZONE 1.

**T-Mobile**

**COMPLETE DESIGN SOLUTIONS**

**FS**

Land Surveyors  
 500 E. Main, Louisville, KY 40202  
 Phone: (502) 438-3000, (502) 438-3111  
 Fax: (502) 438-3000

**SITE NUMBER:**  
 SLV1709A

**SITE NAME:**  
 BALLARD HS

**SITE ADDRESS:**  
 6000 BROWNSBORO RD  
 LOUISVILLE, KY 40222

**LICENSE AREA:**  
 83.5 SQ. FT.

**PROPERTY OWNER:**  
 JEFFERSON COUNTY SCHOOL DISTRICT FINANCE CORPORATION  
 3332 NEWBURG RD  
 LOUISVILLE, KY 40218-2414

**PARCEL NUMBER:**  
 W00100010000

**SOURCE OF TITLE:**  
 D.B. 7472 PG. 643

**DWG BY:** CHD BY: DATE:  
 SJS FLS 03.03.17

**ISTAN PROJECT NO.:**  
 17-5916

**SHEET 2 OF 2**

**REVISIONS:**

"LICENSE AREA" - 3.14.17  
 LABEL DETAIL - 3.14.17

**CO-LOCATE**

**BALLARD HS**  
 SLV1709A  
 SITE ADDRESS: 6000 BROWNSBORO RD  
 LOUISVILLE, KY 40222  
 OWNER ADDRESS: 3332 NEWBURG RD  
 LOUISVILLE, KY 40218

**EXHIBIT C**  
**SPECIFICATIONS**

The Jefferson County Public Schools wish to receive sealed bids for the license of the right to use space on our existing communication towers or similar structures. All towers or structures used by licensee will remain the property of the Jefferson County Public Schools and/or the Jefferson County School District Finance Corporation.

The contracts (s) will be awarded to the highest responsible bidder (s) meeting all specifications and conditions, and subject to all other provisions of this invitation to bid. This bid may be awarded to multiple vendors.

The Jefferson County Public Schools or the successful bidder (s) will provide the other party written notice of intention not to renew not less than One Hundred Eighty (180) days prior to the expiration of the initial term or any renewal term.

There are approximately One Hundred Fifty (150) towers or similar sites located on various properties owned or controlled by the Jefferson County Public Schools. Any strengthening of towers or structures to accommodate licensee's equipment is the responsibility of the licensee. The license agreement shall cover two different license situations; a tower or structure which can be used with no structural modifications and a tower which can be used with modifications including strengthening or adding a center pole.

There shall be no exclusivity of licenses. The Jefferson County Public Schools reserve the right to lease or license space on towers or other structures to other organizations/companies as long as their equipment does not interfere with licensee's or Jefferson County Public Schools equipment. The Jefferson County Public Schools agrees that no FAA transponders or AM radio transmitting equipment will be located on a tower or structure.

The Jefferson County Public Schools will require the successful licensee to file a Site Designation Form stating the location and what modifications will be made to the tower or structure (if any). The Jefferson County Public Schools reserve the right to accept or reject on a per site basis.

Licensee agrees to provide all costs of utilities to their equipment on the tower or structure. Licensee agrees to perform periodic inspection and maintenance of the tower or structure. In the event there is a multiple award on any one site, maintenance costs will be divided among the licensees on a pro rata basis.

Licensee agrees that there will be no interruption of service provided by Jefferson County Public Schools equipment on the tower or structure. Licensee agrees that there will be no interference with Jefferson County Public Schools or other equipment on the tower or structure.

Licensee shall secure all federal, state and local permits including, but not limited to, all special use permits and Kentucky Public Service Commission authorization, etc.

Licensee agrees to release Jefferson County Public Schools from any liability for any injuries suffered by licensee's maintenance personnel working on the tower or structure sites or for any injuries on Jefferson County Public Schools properties.

Licensee agrees to pay the Jefferson County Public Schools an initial fee and an annual license fee. The annual license fee shall be paid annually in advance.

Licensee will indemnify the Jefferson County Public Schools from any and all legal action taken as a result of this agreement. Licensee will have property insurance, Commercial General liability insurance and Workers' Compensation Insurance. Proof of insurance shall be provided by successful bidders (s).

**EXHIBIT D**

**FORM OF MEMORANDUM OF AGREEMENT**

**This Instrument Prepared By:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

After Recording, Mail To:  
T-Mobile USA, Inc.  
12920 SE 38<sup>th</sup> Street  
Bellevue, WA 98006  
Attn: License Compliance  
Site No. 9LV0181A  
1709

APN: W00100010000

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**MEMORANDUM OF LICENSE AGREEMENT**

A JEFFERSON COUNTY PUBLIC SCHOOL SYSTEM COMMUNICATIONS FACILITY SPACE LICENSE AGREEMENT dated \_\_\_\_\_, 2017 (an "Agreement") by and between BOARD OF EDUCATION OF JEFFERSON COUNTY, KENTUCKY ("JCPS"), and POWERTEL/MEMPHIS, INC., a Delaware corporation, successor-in-interest to Powertel/Kentucky, Inc. (together with its successors and permitted assigns, "Licensee"), was made regarding the following property:

*See attached Exhibit A incorporated herein.*

The Agreement is for a term of (5) years, commencing on \_\_\_\_\_, 2017. Licensee shall have the right to extend this Agreement for three (3) additional and successive five-year terms unless Licensee provides written notice of nonrenewal to JCPS at least sixty (60) days before the end of the initial term or before the end of such successive term.

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Site Number: 9LV1709A  
Site Name: Ballard High School



**LICENSEE:**

**POWERTEL/MEMPHIS, INC.**, a Delaware corporation

By: \_\_\_\_\_

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

Title: \_\_\_\_\_

Date: \_\_\_\_\_

STATE OF \_\_\_\_\_ )  
 ) ss.  
COUNTY OF \_\_\_\_\_ )

I certify that I know or have satisfactory evidence that \_\_\_\_\_ is the person who appeared before me, and said person acknowledged that \_\_\_\_\_ signed this instrument, on oath stated that he was authorized to execute the instrument and acknowledged it as the \_\_\_\_\_ 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.

WITNESS my hand and official seal.

Dated: \_\_\_\_\_

My commission expires: \_\_\_\_\_

Notary Public

[AFFIX NOTARIAL SEAL]

**EXHIBIT A**  
**Memorandum of License Agreement**  
**Legal Description**

The property is legally described as follows:

Commencing at an iron rod found on the north right of way line of Herr Lane, and being on the southeast line of the property conveyed to Jefferson County School District Finance Corporation in Deed Book 7472, Page 643, Parcel number 4 of the Jefferson County Clerk's Office, thence with said southeast line N 50°40'25" E – 769.79'; thence traversing said Jefferson County School District Finance Corporation property N 39°18'10" W – 474.64' to a set iron rod with a cap stamped "FSTAN 3282", and being the True Point of Beginning of the License Area; thence N 03°17'02" E – 5.27' to a set iron rod with a cap stamped "FSTAN 3282"; thence S 87°30'32" E – 0.66' to a set iron rod with a cap stamped "FSTAN 3282"; thence N 02°29'16" E – 13.43' to a set iron rod with a cap stamped "FSTAN 3282"; thence S 40°27'13" E – 13.06' to a set iron rod with a cap stamped "FSTAN 3282"; thence S 49°00'23" W – 13.27' to the point of beginning, containing 83.5 square feet as per survey by Frank L Sellinger, II with FStan Land Surveyors dated March 01, 2017.

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