

VILLAGE OF DOWNERS GROVE
Report for the Village Council Meeting
11/14/2017

SUBJECT:	SUBMITTED BY:
License Agreement for Antenna on Village Property - Verizon (801 Burlington)	Enza Petrarca Village Attorney

SYNOPSIS

A resolution has been prepared authorizing execution of a License Agreement with Chicago SMA Limited Partnership d/b/a Verizon Wireless for the continued operation of antenna on Village owned property located at 801 Burlington Avenue.

STRATEGIC PLAN ALIGNMENT

The goals for 2017-19 include *Steward of Financial, Environmental and Neighborhood Sustainability*.

FISCAL IMPACT

Approval of the proposed agreement would result in the Village collecting \$5,542.03 effective January 1, 2019 in monthly license fees with a 4% increase each year thereafter.

RECOMMENDATION

Approval on the November 14, 2017 consent agenda.

BACKGROUND

Chicago SMA Limited Partnership d/b/a Verizon Wireless is a provider of cellular communications in the Chicagoland area. Verizon contacted the Village concerning its desire to renew its license agreement with the Village and continue their operation of cellular antennas and related equipment on the Village's tower located at 801 Burlington Avenue. Verizon has had a license agreement with the Village on the 801 Burlington site since May 17, 1993. There will be no changes to the equipment that currently exists on the property.

Approval of the proposed agreement would result in the Village collecting \$5,542.03 in monthly license fees, effective January 1, 2019, with a 4% increase in each year thereafter. The contract shall run until December 31, 2038.

ATTACHMENTS

Resolution
Agreement

RESOLUTION NO. _____

**A RESOLUTION AUTHORIZING EXECUTION OF A LICENSE AGREEMENT
BETWEEN THE VILLAGE OF DOWNERS GROVE AND
CHICAGO SMSA LIMITED PARTNERSHIP D/B/A VERIZON WIRELESS
TO INSTALL, MAINTAIN AND OPERATE ANTENNA EQUIPMENT
ON VILLAGE PROPERTY LOCATED AT 801 BURLINGTON AVENUE**

BE IT RESOLVED by the Village Council of the Village of Downers Grove, DuPage County, Illinois as follows:

1. That the form and substance of a certain License Agreement ("Agreement"), between the Village of Downers Grove ("Village") and Chicago SMSA Limited Partnership d/b/a Verizon Wireless ("Licensee") for the maintenance and operation of antenna equipment on Village property located at 801 Burlington Avenue, Downers Grove, IL, as set forth in the Agreement submitted to this meeting with the recommendation of the Village Manager, is hereby approved.

2. That the Village Manager and Village Clerk are hereby respectively authorized and directed for and on behalf of the Village to execute, attest, seal and deliver the Agreement, substantially in the form approved in the foregoing paragraph of this Resolution, together with such changes as the Manager shall deem necessary.

3. That the proper officials, agents and employees of the Village are hereby authorized and directed to take such further action as they may deem necessary or appropriate to perform all obligations and commitments of the Village in accordance with the provisions of the Agreement.

4. That all resolutions or parts of resolutions in conflict with the provision of this Resolution are hereby repealed.

5. That this Resolution shall be in full force and effect from and after its passage as provided by law.

Mayor

Passed:

Attest: _____
Village Clerk

Site: 801 Burlington

**LICENSE AGREEMENT BETWEEN
THE VILLAGE OF DOWNERS
GROVE AND CHICAGO SMA LIMITED PARTNERSHIP
D/B/A VERIZON WIRELESS TO MAINTAIN AND OPERATE ANTENNA
EQUIPMENT ON VILLAGE PROPERTY**

WITNESSETH

WHEREAS, the Village of Downers Grove (hereinafter referred to as the "Village") is an Illinois municipal corporation and a home rule unit, pursuant to the laws of the State of Illinois; and

WHEREAS, the Village is the owner and lessor of certain real estate located at 801 Burlington Avenue, Downers Grove, Illinois (the "Property"), upon which is located a Village Water Tower (hereinafter referred to as the "Tower"); and

WHEREAS, Chicago SMA Limited Partnership d/b/a Verizon Wireless (hereinafter referred to as the "Licensee") has communications antenna (hereinafter referred to as the "Antenna") installed on the top of the Tower (the "Tower Space") and certain related equipment installed on the ground (the "Ground Space"); and

WHEREAS, the Licensee entered into a license agreement dated May 17, 1993, an addendum to license agreement on January 15, 2002 and a first amendment to license agreement dated January 20, 2009 for the installation, maintenance and operation of antenna equipment on the Property, which expire on December 31, 2018; and

WHEREAS, the Licensee wishes to extend the term of the original agreement and the Licensee and Village hereby agree to enter into this new Agreement for the continued operation of the Antenna on the Property.

NOW, THEREFORE, in consideration of the mutual promises, covenants and conditions, the Village and the Licensee agree as follows:

1. CONTRACT DOCUMENTS: The provisions set forth in the preamble and the following exhibits are incorporated into and made a part of this Agreement:

- a. Exhibit 1 - Site map(s) of the Property (or upgrades thereto), as amended from time to time and approved by the Village, showing the Tower Space and the Ground Space, together with the areas on the Property licensed to Licensee to provide access and utility service to the Ground Space (collectively the "Licensed Premises") which includes location of any proposed underground utilities necessary for operation of the Antenna.
- b. Exhibit 2 - Plans and specifications (or upgrades thereto), as amended from time to time and approved by the Village, for the Antenna and any cables, utility lines or equipment cabinets to be installed on the Licensed Premises and used for housing of the related Antenna equipment (collectively the "Licensee Improvements").

Site: 801 Burlington

- c. Exhibit 3 - Plans and specifications (or upgrades thereto), as amended from time to time and approved by the Village, for the Antenna and any cables or utility lines installed on the Licensed Premises for any sublicensee.
2. **GRANT OF LICENSE:** The Village hereby grants to the Licensee the right, permission and authority to install, operate and maintain Licensee's Improvements upon the terms and conditions hereinafter specified. This Agreement shall not terminate upon the sale, assignment or transfer of the Property, but shall run with the land, unless the Tower is relocated or destroyed in accordance with Paragraph 22.
 3. **SPECIFICATIONS:** The Licensee shall comply with the following specifications:
 - a. During the term of this Agreement, there shall be no substantial variations, modifications, or upgrades from the plans and specifications contained in the attached Exhibits without the prior written approval of the Village, which approval shall not be unreasonably withheld or delayed.
 - b. The Antenna shall be installed, attached to the Tower, and maintained in conformance with Exhibit 2 and any applicable State and federal requirements. The Antenna shall be located more than ten (10) feet from any existing antenna equipment and shall not exceed seventy-two (72) inches in height.
 4. **CONSTRUCTION, INSTALLATION AND MAINTENANCE:** The Licensee may install, repair, maintain, or replace the Antenna, subject to the following conditions:
 - a. Licensee shall obtain all required permits and authorizations from the Village, in accordance with the applicable ordinances, prior to commencing any work under this Agreement. Such work shall comply with applicable codes and regulations and shall be conducted in a workmanlike manner.
 - b. Licensee shall obtain all necessary approvals from any regulatory authorities for the operation of the Antenna. Further, the Licensee shall comply with all applicable laws and regulations of such regulatory authorities including, but not limited to the Federal Communications Commission.
 - c. All costs connected with the installation, maintenance, repair, use and removal of Licensee's Improvements and any related equipment shall be the responsibility of the Licensee.
 - d. Licensee shall not take any action or allow any action to be done which may impair the use of or damage the Tower.
 - e. The Licensee may not interfere with the use by the Village, its officers, agents and employees, of the Tower or the Property.

Site: 801 Burlington

f. Licensee shall be entitled to access its equipment Monday through Friday, 7:00am to 3:30pm CST, by contacting the Village Building Services Department at 630/434-5551 (801 Burlington Tower) or the Public Works Department at 630/434-5460 (for all other Towers). If access is required after business hours, on weekends, on a holiday or in the event of an emergency, Licensee shall contact the Village at 630/434-5600.

Licensee shall be required to pay Licensor no more than \$100.00/hour for Tower access after business hours or on weekends, such payment to be made within thirty (30) days after receipt of an invoice from Licensor. An appointment for access to the Tower must be scheduled at least seventy-two (72) hours prior to access. No work shall be permitted during holidays, unless emergency work is necessary. In some instances, building permits may be required.

g. The Licensee shall maintain Licensee's Improvements in good repair, and in a clean and slightly condition.

h. Upon termination of this Agreement by either party, the Licensee shall, within thirty (30) days and at its expense, remove the Licensee Improvements and restore the Licensed Premises to substantially its original condition, reasonable wear and tear excepted.

i. If Licensee abandons its use of Licensee's Improvements, Licensee shall, within thirty (30) days of receipt of written notice from the Village notifying the Licensee of such abandonment and at its expense, remove the Licensee's Improvements and restore the Tower to substantially its original condition. Licensee's Improvements will be presumed abandoned if it is not operated for a period of one month or more. If Licensee's Improvements are not removed within thirty (30) days, the Village may remove Licensee's Improvements and the Licensee shall reimburse the Village for the costs of such removal.

5. **NON-INTERFERENCE WITH VILLAGE OPERATIONS:** Neither this Agreement nor Licensee's Improvements shall interfere with or obstruct the functioning of the Village's operations and services. Licensee warrants that Licensee's Improvements shall be constructed, installed, maintained and operated in such a manner as to not interfere with or obstruct any radio or electronic equipment or signals of the Village's radio and data systems. In the event such interference occurs, and the interference cannot be eliminated by Licensee after reasonable efforts, the Village may terminate this Agreement, in accordance with Paragraph 8(b) of this Agreement. Provided, after notice to Licensee, the Village may immediately terminate this Agreement, or require that operation of the Antenna or any of Licensee's Improvements be immediately ceased where it determines that the Antenna or Licensee's Improvements present an immediate and serious danger to the public health, welfare or safety due to interference with the operation of the Village's radio and data systems.

6. **TERM:**

Site: 801 Burlington

a. This Agreement shall have an Initial Term beginning January 1, 2019 and ending on December 31, 2028, and two (2) five-year Extension Terms beginning January 1, 2029, and January 1, 2034, respectively. Each extension term shall automatically commence unless either party provides written notice to the other party of its election not to renew the License at least one hundred and twenty (120) days prior to the expiration of the current term. The final date of the agreement shall be December 31, 2038.

b. After January 1, 2036, Licensee may request the Village to enter into negotiations towards renewing or extending this Agreement. Any renewal or extension shall be according to terms that are mutually agreeable and the Village shall not be bound to accept any particular terms or to renew any or all of the rights granted by this Agreement.

7. **COMPENSATION:**

Commencing January 1, 2019, Licensee shall pay to the Village a license fee of \$5,542.03 per month each month of 2019. **Thereafter, effective on the first day of January in each subsequent year during the term of the Agreement, the monthly license fee shall increase in an amount equal to the fee for the preceding year multiplied by 4%.** The monthly fee shall be paid to the Village of Downers Grove, Village Hall, 801 Burlington Avenue, Downers Grove, IL 60515 each month by the 10th of the month.

8. **TERMINATION:** This Agreement may be terminated as follows:

a. Licensee may terminate this Agreement at any time upon sixty (60) days written notice to the Village without further liability if Licensee does not obtain all permits or other approvals required from any governmental authority or any easements required from any third party to operate the PCS system, or if any such approval is canceled, expires or is withdrawn or terminated, or if the Village fails to have proper ownership of the Tower or Property or authority to enter into this Agreement, or if Licensee, for any other reason, in its sole discretion, determines that it will be unable to use the Tower or the Property; however, if Licensee terminates this Agreement without cause, it shall pay the Village a termination penalty equal to three months of the current rental amount.

b. In the event either party fails to comply with the terms of this Agreement such party shall be considered in default and the non-defaulting party may serve written notice of its intent to terminate this Agreement. Except where the public health or safety is threatened, the notice shall give the defaulting party not less than thirty (30) days to correct such non-compliance. In the event the default is not corrected within thirty (30) days of such notice, the non-defaulting party may terminate this Agreement by serving a written notice of termination. Notwithstanding the preceding, if any default cannot be cured within thirty (30) days and the defaulting party has diligently commenced and

Site: 801 Burlington

continues to take reasonable action necessary to cure the default, the defaulting party shall be entitled to a reasonable extended period of time in order to cure the default.

c. In the event the Tower is destroyed or substantially damaged so as to substantially affect Licensee's use of the Property, this Agreement shall be considered terminated.

9. **TOWER REPAIR/MAINTENANCE**: Upon receiving ninety (90) days notice from the Village that it intends to repair or perform maintenance to the Tower, Licensee shall, at its own expense and in such manner as the Village shall reasonably request, immediately remove, relocate, change or alter the position of Licensee's Improvements. During the term of this Agreement, the Tower may be refurbished and/or painted. Refurbishment and/or painting will take several months to complete (approximately five to eight months). Prior to beginning refurbishment and/or painting, Licensee shall remove its Antenna from the Tower upon notice from the Village and shall not reinstall the Antenna until the refurbishment and/or painting is completed and the Village has approved such reinstallation, which approval shall not be unreasonably withheld, conditioned or delayed. During such period, Licensee may, at its sole cost and expense, install the Antenna on a temporary telephone pole or bring a cell on wheels outside the shrouded area of the tower in a location approved by the Village. However, such temporary arrangement shall not interfere with the refurbishment and/or painting of the Tower or with other Village operations on the Property. The Village shall not be responsible for any costs of removal, relocation, and reinstallation of the Antenna as a result of the refurbishment and/or painting.

10. **RESTORATION**: When the Licensee does any work on or affecting the Licensed Premises, it shall, at its own expense, restore the Licensed Premises to as good a condition as existed before the work was undertaken, unless otherwise directed by the Village. If the Licensee fails to restore the Licensed Premises, the Village may, after communications with the Licensee and after affording the Licensee a reasonable opportunity to correct the situation, restore the Licensed Premises, or remove the obstruction therefrom. No such prior written notice shall be required in the event that the Village determines that an emergency situation exists. The Licensee shall pay the Village for any reasonable costs of such restoration within fourteen (14) days after receiving a bill from the Village for such work.

11. **UTILITIES**: Licensee shall be responsible for obtaining adequate utilities for operation of Licensee's Improvements, including electricity from any source available on the Property as long as the electricity for Licensee's Improvements are separately metered. Any utilities to be installed must be underground and at a location approved by the Village. Licensee shall pay for the electricity or any other utility it uses in its operations at the rate charged by the servicing utility company and the Village shall not be liable for such charges.

12. **TAXES**: Licensee shall obtain a leasehold PIN and shall be solely responsible for payment of taxes on the leasehold on the Property (PIN # 08-13-200-015) which are assessed as a result of Licensee's Improvements and directly attributable to its use of the Property under the

Site: 801 Burlington

terms of this Agreement. **Licensee shall provide a copy of this Agreement to the DuPage County Supervisor of Assessments and shall request and insure that the tax bill for the leasehold is sent directly to Licensee.** Licensee shall then pay the taxes owed directly to the County Assessor's Office by the due date indicated on the tax bill. Licensee shall be solely responsible to pay any late fees, interest or penalties if not paid by the due date. Licensee shall have the right, at its own expense and without expense to the Village, to contest by appropriate proceedings, conducted with due diligence and in good faith, the validity of the amount of taxes or reassessment as applicable to the Licensed Premises or the Licensee Improvements. In the event that the Village becomes aware of any tax delinquency and that delinquency is not cured by the Licensee within thirty (30) days from the date the Village sends written notice, the Village shall have the right to remove any of Licensee's equipment and terminate this Agreement.

13. INDEMNIFICATION: Licensee shall indemnify, become responsible for and hold harmless the Village, its boards, committees, commissions, officers, agents and employees from any and all liability arising out of the existence of this Agreement; the installation, existence, maintenance or repair of Licensee's Improvements; or any act or omission of Licensee, its officers, agents and employees, except for liability which arises from the Village's or its employees' or agents' negligence or intentional misconduct.

For purposes of this Agreement, the term "liability" includes, but is not limited to: actual or claimed loss or damage to property or injury to or death of persons; actual or claimed responsibility for such loss, damage, injury or death; and any and all judgments, decrees, costs and expenses of every sort and kind of incident to such loss, damage, injury, death or responsibility, including, but not limited to, court costs, fines and attorney's fees. Notwithstanding the foregoing, neither Party shall be liable to the other, or any of their respective agents, representatives, employees for any lost revenue, lost profits, loss of technology, rights or services, incidental, punitive, indirect, special or consequential damages, loss of data, or interruption or loss of use of service, even if advised of the possibility of such damages, whether under theory of contract, tort (including negligence), strict liability or otherwise.

14. INSURANCE: At all times while this Agreement remains in effect, and in recognition of the indemnification provided in the foregoing Paragraph 13, the Licensee shall, at its own cost and expense, maintain a program of third party liability insurance and/or self-insurance to protect the Village, its officers, employees and agents from any liability for bodily injury, death, and property damage occasioned by the activities of the Licensee under this Agreement.

a. During the Term of the Agreement. Licensee shall procure, pay for and maintain in full force and effect during the entire term of this Agreement (i) worker's compensation insurance as required by law and which insures Licensee against worker's compensation claims arising out of Licensee's activities on the Tower; (ii) fire and casualty insurance covering Licensee's Improvements in an amount not less than one hundred percent (100%) of their actual replacement cost; and (iii) commercial general liability insurance,

Site: 801 Burlington

including broad form property damage insurance for bodily injuries and property damage. Such General Liability Insurance shall include coverage for the premises, operations, underground, collapse, explosion, products and the loss of use, and shall name as Additional Insureds the Village, and its officers, boards, commissions, elected and appointed officials, agents and employees. Such insurance shall be in the amount of One Million Dollars (\$1,000,000.00) per occurrence and Two Million Dollars (\$2,000,000.00) in the aggregate.

b. **During Construction/Installation.** During construction/installation, Licensee's contractor shall also maintain and provide Village with evidence of each of the insurance coverages specified in subparagraph (a) and in the amounts so specified. In addition, the contractor shall provide builder's risk insurance on an "all risks" basis for one hundred percent (100%) of the insurable value of all construction work in place or in progress from time to time, insuring the project, including materials in storage and while in transit, against loss or damage by fire or other casualty, with extended coverage, vandalism and malicious mischief coverage, bearing a replacement cost agreed amount endorsement.

c. **Policies.** The policy or policies of insurance required by subparagraphs (a) and (b) shall be underwritten by a company or companies authorized to do business in the State of Illinois, shall be reasonably satisfactory to Village, shall name the Village as an additional insured and a certificate of insurance shall be delivered to the Village prior to the commencement of the term of this Agreement. Licensee or, where applicable, Licensee's contractors shall furnish the Village with a written notice of any cancellation, reduction or modification of insurance required under this Section.

15. **LIENS:** Licensee agrees that it will not permit or suffer any lien to be put upon or arise or accrue against the Property in favor of any person or persons, individual or corporate, furnishing either labor or material in any work herein proposed, and the Licensee further covenants and agrees to hold the Village and its property free from any and all liens, or rights or claim of lien, which may or might arise or accrue under or be based upon any mechanic's lien law of the State of Illinois. If any such lien or claim for lien is filed or recorded against the Property, the Village shall give Licensee notice thereof and demand that Licensee remove the same, or post adequate security to insure the removal of the same following the resolution of any dispute between Licensee and the lienholder, within thirty (30) days after such notice. Nothing in this provision shall restrict Licensee from granting a security interest in all or any part of Licensee's Improvements and to file of record UCC financing statements and/or fixture filings to perfect the same.

16. **ASSIGNMENT AND SUBLEASING:** This Agreement may not be assigned or transferred without the express written consent of the Village, which shall not be unreasonably withheld, conditioned or delayed. The Village agrees to respond to any such request within thirty (30) days from receipt of the request. Any assignment or transfer without such written consent shall, at the option of the Village, be deemed to be void and of no effect. Provided, however, this

Site: 801 Burlington

Agreement may be assigned or transferred to Licensee's parent or subsidiary, successor legal entity or other affiliate of Licensee without the Village's written consent as long as the Village is given written notice of the assignment or transfer within thirty (30) days thereof.

The Village must approve any sublease to any entity that is not Licensee's parent or subsidiary, successor legal entity or other affiliate of Licensee and the Village shall be entitled to fifty percent (50%) of any such sublease in addition to the rental fee as described in Section 7. COMPENSATION, above.

17. HAZARDOUS SUBSTANCES:

a. The Village represents and warrants that it has no knowledge of any hazardous substance existing on the Property in violation of any applicable federal, State or local law, regulation or ordinance. The Village further agrees to hold Licensee harmless from and indemnify Licensee against any damage, loss or expense or liability resulting from the existence on the Property of any such hazardous substance, including all attorney's fees and consultant fees, costs and penalties, incurred as a result thereof, unless caused by Licensee or any of its employees or agents.

b. Licensee represents and warrants that its use of the Licensed Premises will not generate any hazardous substance, and that it will not store or dispose on the Licensed Premises, nor transport to or over the Licensed Premises, any hazardous substance in violation of any applicable federal, State or local law, regulation or ordinance. Licensee further agrees to hold the Village harmless from and against and indemnify the Village against any release of such hazardous substance and any damage, loss, or expense or liability resulting from such release, including attorney's fees and consultant fees, costs and penalties, incurred as a result thereof, which was caused by Licensee or any of its employees or agents.

c. "Hazardous Substance" as used herein shall mean any substance or material defined or designated as hazardous or toxic waste, hazardous or toxic materials, hazardous or toxic radioactive substance, or other similar term by any federal, State or local environmental law, regulation or ordinance presently in effect or promulgated in the future.

18. COST OF ENFORCEMENT: The prevailing party in any action or proceeding in court or mutually agreed upon arbitration proceeding to enforce the terms of this Agreement shall be entitled to receive its reasonable attorney's fees and other reasonable enforcement costs and expenses from the non-prevailing party.

19. INVALIDITY: If any section, paragraph, clause or provision of this Agreement shall be held invalid, the invalidity of such section, paragraph, clause or provision shall not affect any of the other provisions of this Agreement.

Site: 801 Burlington

20. FORCE MAJEURE: Neither party shall be deemed in violation of this Agreement for the delay in performance or failure to perform in whole or in part its obligations under this Agreement due to strike, war or act of war (whether an actual declaration is made or not), insurrection, riot, act of public enemy, fire, flood or other act of God or by other events to the extent that such events are caused by circumstances beyond such party's control.

21. NOTICES: Unless otherwise specified herein, all notices under this Agreement shall be made in writing and delivered to:

Village:

Village Manager
Village of Downers Grove
801 Burlington Avenue
Downers Grove, IL 60515
630.434-5500

With Copy to:

Village Attorney
Village of Downers Grove
801 Burlington Avenue
Downers Grove, IL 60515
630.434-5541

Licensee:

Chicago SMA Limited Partnership
d/b/a Verizon Wireless
180 Washington Valley Road
Bedminster, New Jersey 07921
Attn: Network Real Estate

22. RELOCATION:

a. During the term of this License Agreement the Village shall have the absolute right to redevelop the site whereupon the Tower is located which may result in the destruction and/or relocation of the Tower. If the Tower is not replaced the Village shall have the right to terminate this Agreement upon a one (1) year written notice. If the Tower is relocated or replaced with a similar structure ("New Premises"), the Village shall have the right to require Licensee to relocate Licensee's Improvements to the New Premises at Licensee's sole cost and expense, subject to the following terms and conditions:

i. The Village shall not exercise its relocation option unless the Village intends to replace the Tower;

Site: 801 Burlington

- ii. The New Premises is similar to Licensee's existing location and is fully compatible for Licensee's use, in Licensee's sole and absolute discretion;
 - iii. The Village shall give Licensee at least one (1) year prior notice of the date by which the Licensee shall have its improvements relocated;
 - iv. The Village's relocation notice shall include a description of the proposed location and configuration of the New Premises; and
 - v. Licensee's use at the existing Licensed Premises shall not be interrupted or diminished during the relocation, and Licensee is allowed, if necessary, in Licensee's reasonable determination, subject to the Village's consent, which shall not be unreasonably withheld, to place a temporary installation on the Property during any such relocation at Licensee's sole cost and expense.
- b. If Licensee accepts the Village's relocation notice, then within one (1) year of receipt of the notice, Licensee shall relocate Licensee's Improvements to the New Premises, at its sole cost and expense. Following Licensee's relocation of Licensee's Improvements to the New Premises, the Village and Licensee shall promptly execute an amendment to this Agreement reciting the relocation of Licensee's Improvements and any other changes to this Agreement related thereto.
- c. If Licensee determines in its sole and absolute discretion that the New Premises is not similar to the existing Licensed Premises, or that the New Premises is not fully-compatible for Licensee's use, then Licensee shall deliver notice thereof to the Village ("Termination Notice"), such Termination Notice to be delivered within ninety (90) days after Licensee's receipt of the Village's relocation notice. If Licensee delivers a Termination Notice, the term of this Agreement shall end on the date which is one (1) year after the Village's relocation notice, and from and after such date, the Village and Licensee shall have no further obligation or liability under this Agreement except those that expressly survive termination.

23. **GOVERNING LAW:** This Agreement shall be governed by the laws of the State of Illinois.

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Site: 801 Burlington

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the ____ day of _____, 20__.

**LICENSEE:
CHICAGO SMA
LIMITED PARTNERSHIP**

VILLAGE OF DOWNERS GROVE

By: *Larry W. Rick*
Title: Larry W. Rick
Director Network Field Engineering

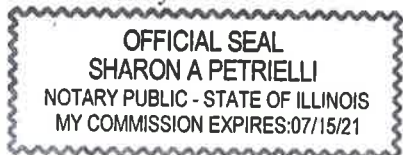
By: _____
Village Manager

ATTEST:

Village Clerk

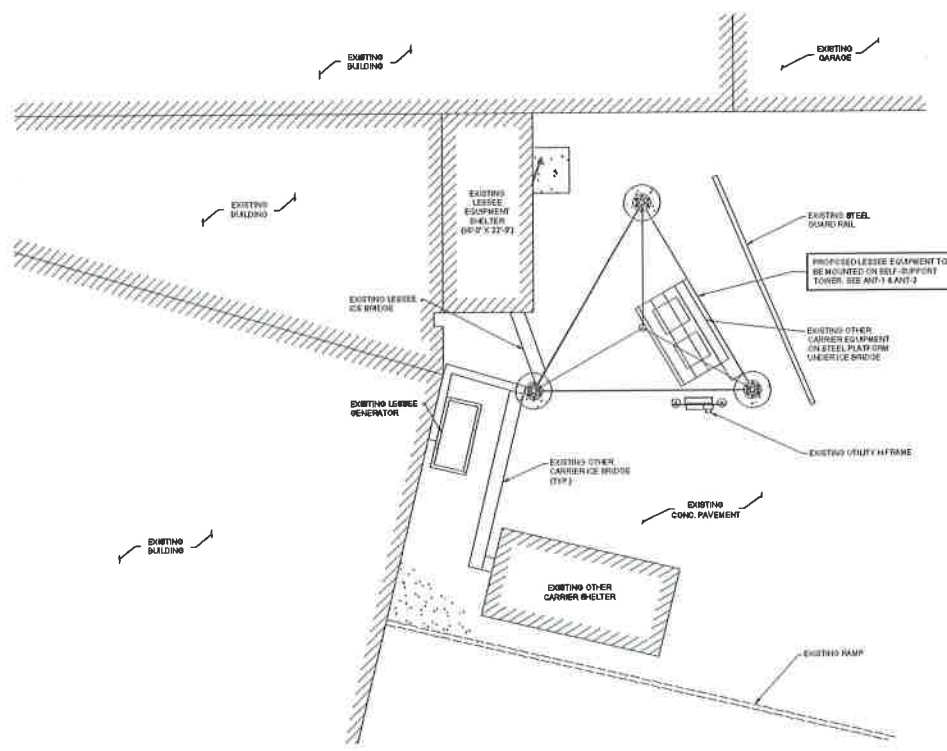
Subscribed and sworn to
this 1 day of November, 20 17.

Sharon A. Petrielli
Notary Public



1\mw\Agr.17\Antenna\Verizon-801-Burlington-2019-2038-final

As-Builts



THIS SITE PLAN WAS CREATED OFF OF FIELD MEASUREMENTS BY THE DESIGNER. AS SOME KEY DIMENSIONS WERE NOT SUPPLIED FOR PURPOSES OF SITE LAYOUT.

1 SITE LAYOUT

CHICAGO SMSA
limited partnership
with MEMORANDUM AGREEMENT

TERRA
ENGINEERING & ARCHITECTURE
INCORPORATED
1000 N. LAKE ST. SUITE 1000
CHICAGO, IL 60611

NO.	DATE	BY	DESCRIPTION
1	08/14/17	JK	ISSUED FOR PERMIT
2	08/14/17	JK	ISSUED FOR PERMIT
3	08/14/17	JK	ISSUED FOR PERMIT
4	08/14/17	JK	ISSUED FOR PERMIT

LOC. # 128705
DOWNGRV2

801 BURLINGTON AVE
DOWNS GROVE, IL 60511

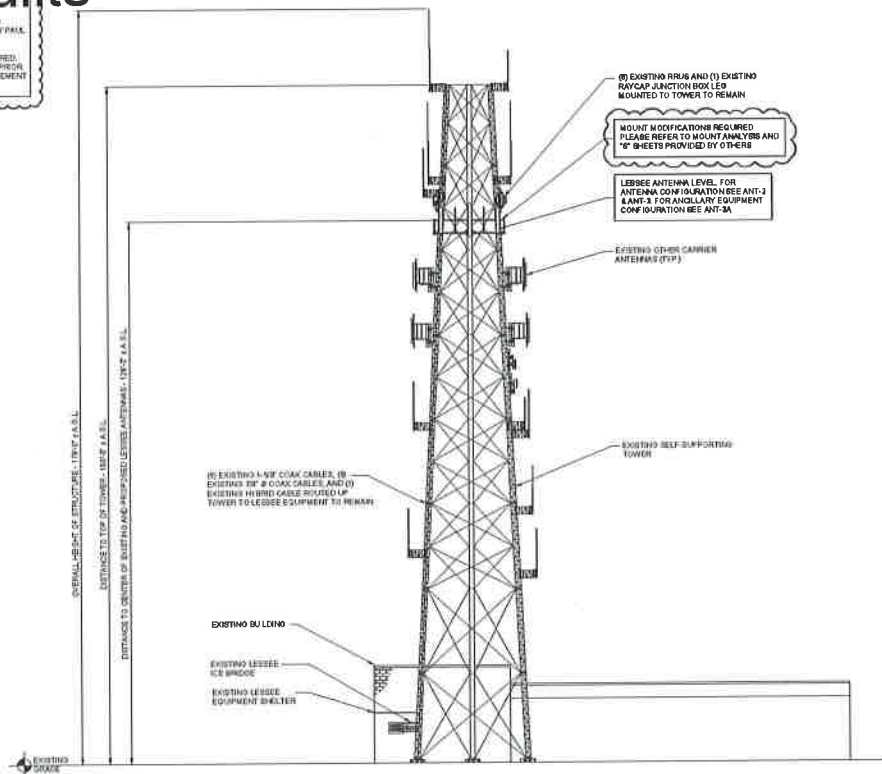
DESIGNED BY: JJK
CHECKED BY: JJK
DATE: 08/08/17
PROJECT: PG 174

SHEET TITLE:
SITELAYOUT

SHEET NUMBER:
C-1

As-Builts

PLEASE REFER TO TOWER AND MOUNT ANALYSIS PROVIDED BY PHIL J. FORD & COMPANY.
 MAINTENANCE REQUIRED. NO ANTENNA WORK TO BEGIN PRIOR TO COMPLETION OF REINFORCEMENT INSTALLATION.



1 SOUTH ELEVATION
 SCALE: 3/32" = 1'-0"

NOTE:
 D.C. TO PAINT NEW CABLES AND/OR HARDWARE TO MATCH ADJACENT TOWER STEEL.
 FULL SCALE PRINT IS ON 22"x34" MEDIA
 HALF SCALE PRINT IS ON 11"x17" MEDIA

CHICAGO SMSA
 limited partnership
 www.chicagosmsa.com

FERRA
 FERRA CONSULTING
 1000 N. LAKE ST. SUITE 200
 CHICAGO, IL 60610
 TEL: 312.467.1000

REV	DATE	BY	CHKD	DESCRIPTION
1				ISSUED FOR PERMITS
2				ISSUED FOR PERMITS
3				ISSUED FOR PERMITS
4				ISSUED FOR PERMITS
5				ISSUED FOR PERMITS
6				ISSUED FOR PERMITS
7				ISSUED FOR PERMITS
8				ISSUED FOR PERMITS
9				ISSUED FOR PERMITS
10				ISSUED FOR PERMITS

LOC. # 126705
 DOWNGRV2

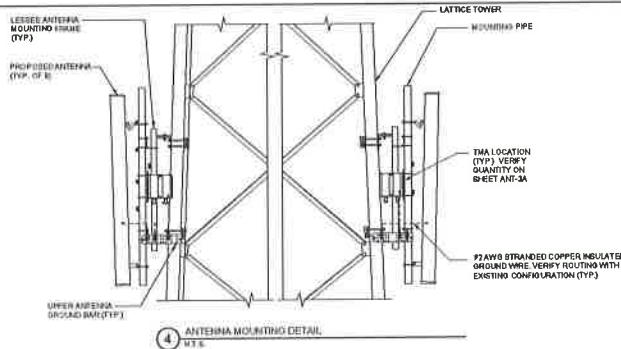
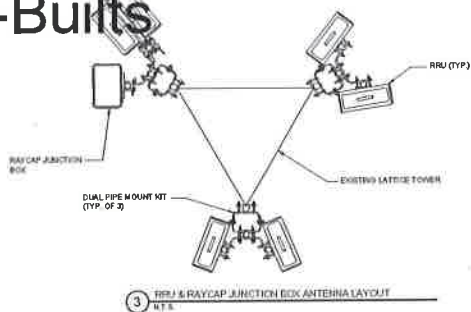
881 BURLINGTON AVE
 DOWNERS GROVE, IL 60515

DESIGNED BY: BJK
 CHECKED BY: JG
 DATE: 07/20/18
 PROJECT#: 28-018

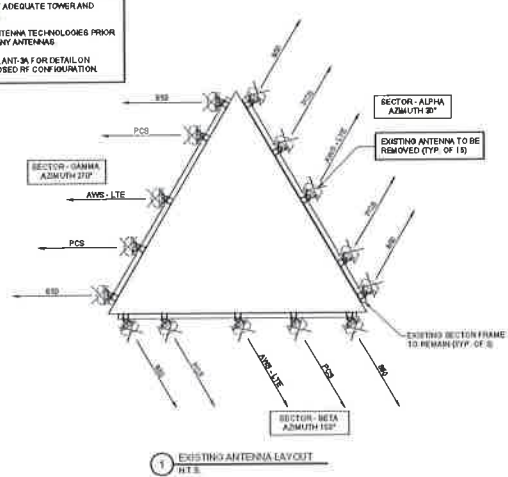
SHEET TITLE
 SITE ELEVATION

SHEET NUMBER
ANT-1

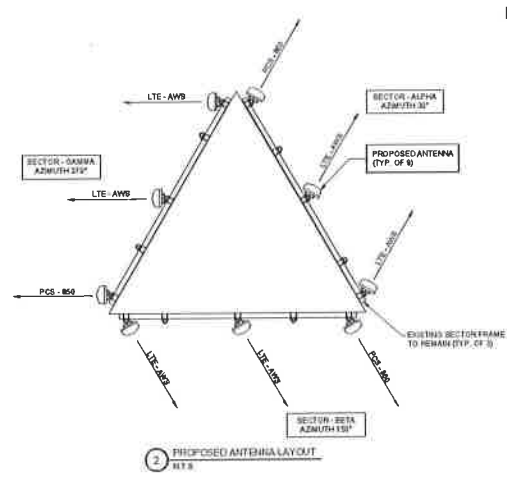
As-Builts



- NOTES:**
1. THIS DRAWING IS FOR EXHIBIT AND LAYOUT PURPOSES ONLY.
 2. NO ANTENNA OR LINE WORK TO BE DONE PRIOR TO CONFIRMATION OF ADEQUATE TOWER AND MOUNT CAPACITY.
 3. O.C. TO VERIFY ANTENNA TECHNOLOGIES PRIOR TO REMOVAL OF ANY ANTENNAS.
 4. REFER TO ANT-2 & ANT-2A FOR DETAIL ON EXISTING & PROPOSED RF CONFIGURATION.



ALL TOWER AND EXHIBIT FRAMEWORKS TO BE REMOVED DIRECTLY BEHIND ANTENNAS. REFER TO MOUNT ANALYSIS FOR ADDITIONAL REQUIREMENTS.



CHICAGO SIMSA
limited partnership
www.verizonwireless.com

VERIZON
WIRELESS COMMUNICATIONS
1000 VERIZON DRIVE
ANN ARBOR MI 48106

NO.	DATE	BY	DESCRIPTION
1	08/14/17	MM	ISSUED FOR PERMIT
2	08/14/17	MM	ISSUED FOR PERMIT
3	08/14/17	MM	ISSUED FOR PERMIT
4	08/14/17	MM	ISSUED FOR PERMIT
5	08/14/17	MM	ISSUED FOR PERMIT
6	08/14/17	MM	ISSUED FOR PERMIT
7	08/14/17	MM	ISSUED FOR PERMIT
8	08/14/17	MM	ISSUED FOR PERMIT
9	08/14/17	MM	ISSUED FOR PERMIT
10	08/14/17	MM	ISSUED FOR PERMIT

LOC. # 126705
DOWNGRV2

801 BURLINGTON AVE
DOWNS GROVE, IL 60515

DRAWN BY: BTM
CHECKED BY: JH
DATE: 02/28/17
PROJECT: PG 172

SHEET TITLE
ANTENNA LAYOUT

SHEET NUMBER
ANT-2

As-Builts

EQUIPMENT CHANGE REQUEST FORM - ECR									
Request Number	Request Date	Request Type	Request Status	Request Category	Request Priority	Request Description	Request Location	Request Status	Request Date
11	11/11/11	AS-BUILT	COMPLETED	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	AS-BUILT	11/11/11
12	11/11/11	AS-BUILT	COMPLETED	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	AS-BUILT	11/11/11
13	11/11/11	AS-BUILT	COMPLETED	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	AS-BUILT	11/11/11
14	11/11/11	AS-BUILT	COMPLETED	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	AS-BUILT	11/11/11
15	11/11/11	AS-BUILT	COMPLETED	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	AS-BUILT	11/11/11
16	11/11/11	AS-BUILT	COMPLETED	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	AS-BUILT	11/11/11
17	11/11/11	AS-BUILT	COMPLETED	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	AS-BUILT	11/11/11
18	11/11/11	AS-BUILT	COMPLETED	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	AS-BUILT	11/11/11
19	11/11/11	AS-BUILT	COMPLETED	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	AS-BUILT	11/11/11
20	11/11/11	AS-BUILT	COMPLETED	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	AS-BUILT	11/11/11
21	11/11/11	AS-BUILT	COMPLETED	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	AS-BUILT	11/11/11
22	11/11/11	AS-BUILT	COMPLETED	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	AS-BUILT	11/11/11
23	11/11/11	AS-BUILT	COMPLETED	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	AS-BUILT	11/11/11
24	11/11/11	AS-BUILT	COMPLETED	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	AS-BUILT	11/11/11
25	11/11/11	AS-BUILT	COMPLETED	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	AS-BUILT	11/11/11
26	11/11/11	AS-BUILT	COMPLETED	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	AS-BUILT	11/11/11
27	11/11/11	AS-BUILT	COMPLETED	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	AS-BUILT	11/11/11
28	11/11/11	AS-BUILT	COMPLETED	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	AS-BUILT	11/11/11
29	11/11/11	AS-BUILT	COMPLETED	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	AS-BUILT	11/11/11
30	11/11/11	AS-BUILT	COMPLETED	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	AS-BUILT	11/11/11

1 EXISTING ANTENNA CONFIGURATION

EQUIPMENT CHANGE REQUEST FORM - ECR									
Request Number	Request Date	Request Type	Request Status	Request Category	Request Priority	Request Description	Request Location	Request Status	Request Date
31	11/11/11	PROPOSED	PENDING	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	PENDING	11/11/11
32	11/11/11	PROPOSED	PENDING	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	PENDING	11/11/11
33	11/11/11	PROPOSED	PENDING	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	PENDING	11/11/11
34	11/11/11	PROPOSED	PENDING	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	PENDING	11/11/11
35	11/11/11	PROPOSED	PENDING	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	PENDING	11/11/11
36	11/11/11	PROPOSED	PENDING	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	PENDING	11/11/11
37	11/11/11	PROPOSED	PENDING	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	PENDING	11/11/11
38	11/11/11	PROPOSED	PENDING	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	PENDING	11/11/11
39	11/11/11	PROPOSED	PENDING	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	PENDING	11/11/11
40	11/11/11	PROPOSED	PENDING	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	PENDING	11/11/11
41	11/11/11	PROPOSED	PENDING	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	PENDING	11/11/11
42	11/11/11	PROPOSED	PENDING	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	PENDING	11/11/11
43	11/11/11	PROPOSED	PENDING	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	PENDING	11/11/11
44	11/11/11	PROPOSED	PENDING	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	PENDING	11/11/11
45	11/11/11	PROPOSED	PENDING	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	PENDING	11/11/11
46	11/11/11	PROPOSED	PENDING	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	PENDING	11/11/11
47	11/11/11	PROPOSED	PENDING	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	PENDING	11/11/11
48	11/11/11	PROPOSED	PENDING	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	PENDING	11/11/11
49	11/11/11	PROPOSED	PENDING	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	PENDING	11/11/11
50	11/11/11	PROPOSED	PENDING	ANTENNA	LOW	REPLACE EXISTING ANTENNA WITH NEW ANTENNA	11111	PENDING	11/11/11

2 PROPOSED ANTENNA CONFIGURATION

CHICAGO SMSA
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www.vencor-inc.com

TERRA
CONSTRUCTION
1111 N. LAKE ST.
CHICAGO, IL 60610

DATE	TIME	BY

LOC. # 128705
DOWNGRV2

801 BURLINGTON AVE
SICOMERS DRIVE, IL 60515

DESIGNED BY: JH
CHECKED BY: JH
DATE: 1/20/11
PROJECT: 128705

SHEET TITLE
ANT-3
ANTENNA INFORMATION
SHEET NUMBER

As-Builts

Combiner - Cable Data

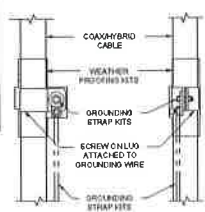
		Existing			
Location	Manufacturer	Component Model	Count	Action	
Top (Platform)	Arcon	CCO-PRMSP (Prepacer)	5	Existing	
Top (Platform)					
Top (Platform)	Black&Veatch	AWG19-AWG	4	Existing	
Top (Platform)					
Top (Platform)	Arcon	400-CC-31-1-8-F-48	-	Existing	
Bottom (Dishier)	Arcon	400-CC-31-1-8-F-48	-	Existing	
Bottom (Dishier)	Arcon	CCO-PRMSP (Prepacer)	8	Existing	
Coax	Coax Manufacturer	Type	Size	Count	Action
Alpine	ARCON	30-100-1-3300	3/8"	5	Existing
Black	ARCON	30-100-1-3300	3/8"	5	Existing
Canon	ARCON	30-100-1-3300	3/8"	5	Existing
AWG	Arcon	300	1.50"	3	Existing

		Proposed			
Location	Manufacturer	Component Model	Count	Action	
Top (Platform)	Arcon	CCO-PRMSP (Prepacer)	8	Existing	
Top (Platform)	Arcon	CCO-PRMSP (Prepacer)	8	Existing	
Top (Platform)	Black&Veatch	AWG19-AWG	8	Existing	
Top (Platform)					
Top (Platform)					
Top (Platform)					
Top (Platform)					
Bottom (Dishier)	Arcon	400-CC-31-1-8-F-48	8	Existing	
Bottom (Dishier)	Arcon	CCO-PRMSP (Prepacer)	8	Existing	
Coax	Coax Manufacturer	Type	Size	Count	Action
Alpine	ARCON	30-100-1-3300	3/8"	5	Peak Load
Black	ARCON	30-100-1-3300	3/8"	5	Peak Load
Canon	ARCON	30-100-1-3300	3/8"	5	Peak Load
AWG	Arcon	300	1.50"	3	Peak Load

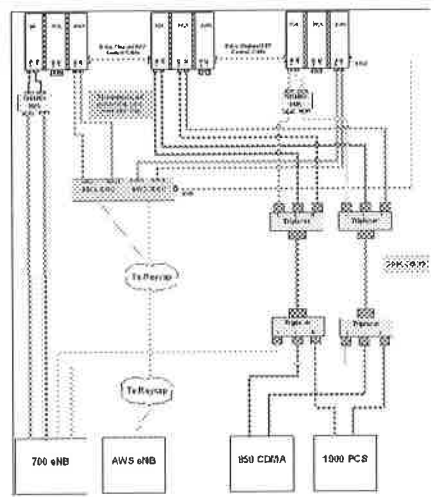
Comments
 Please use the new model **CCO-PRMSP (Prepacer)** for triplexer, DO NOT use the existing triplexer/diapters. Remove unused triplexer/diapters. Remove Tx
 BSW-Tx

1 COMBINER CABLE DATA INFORMATION
 RTE

- NOTES**
- DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR
 - THIS DETAIL IS TYPICAL FOR EACH COAX CABLE WHERE IT IS SPECIFIED TO BE GROUNDED
 - CABLE TO BE GROUNDED AT ANTENNA LEVEL AND PRIOR TO ENTERING SHIELDING PANEL
 - CABLE ALSO TO BE GROUNDED TO GROUND BAR AT TOWER BASE IF APPLICABLE
 - USE ONLY IMPLANTED GROUNDING KITS



3 COAX/HYBRID CABLE GROUND KIT DETAIL
 SCALE: RTE



2 CABLE DIAGRAM
 RTE

CHICAGO SIMSA
 limited partnership
 with VENTURA BROSSELO

VERNA
 CONSULTING
 100 W. JACKSON
 CHICAGO, IL 60604

DATE	BY	CHKD	APPV

LOC. # 126705
 DOWNGRV2

801 DURLINGTON AVE
 DOWNERS GROVE, IL 60515

EXAM BY	DATE

SHEET TITLE
COMBINER CABLE DATA & CABLE DIAGRAM

SHEET NUMBER
ANT-3A

As-Built PAUL J. FORD & COMPANY

September 7, 2015

Terra Consulting Group
600 Busse Highway
Park Ridge, IL 60068

Attn: Rusty Utomo

Re: Modified Antenna Mount Structural Analysis
Structure Type: Self-Support Tower
Structure Height: 160-ft
Site Number: 125706
Site Name: DOWNGRV2
Site Location: Downers Grove, IL
PJF Project Number: 48715-0109.002.8191

Dear Rusty Utomo,

Paul J. Ford and Company (PJF) has been asked to review a modified antenna mount that is located at the aforementioned self-support tower. The purpose of this review is to evaluate the structural feasibility of the antenna mount for the proposed and existing antenna loading as specified in the following table. This review is consistent with the TIA-222-G for the following design wind velocities:

*90 mph 3-Second Gust of Wind without ice
40 mph 3-Second Gust of Wind with 0.75" radial ice
Structure Class II (Importance Factor = 1.00)
Topographic Category 1 Exposure Category "C"*

TABLE 1 – EXISTING AND PROPOSED ANTENNA INFORMATION

MOUNT CENTERLINE ELEVATION	ANTENNA CENTERLINE ELEVATION	STATUS	QUANTITY	ANTENNA MODEL
125'-0"	128'-0"	PROPOSED	9	COMMSCOPE SBNHH-1D65B
			6	ANDREW CBC7821-821DCB
			6	WESTELL BWC-TTMA-700C-VG
	128'-0"	EXISTING	6	* ERICSSON RRUS 12 - AWS
			1	* RAYCAP RCMDC-3315-PF-48

* Equipment not installed on mount and not considered in this analysis.

Columbus
250 E Broad St, Suite 600
Columbus, OH 43215
Phone 614.221.6679



www.PaulJFord.com

Orlando
3670 Maguire Blvd, Suite 250
Orlando, FL 32803
Phone 407.898.9039

Founded in 1965

100% Employee Owned



Page 2 of 3
 September 7, 2015
 PJF #: 48715-0109.002.8191
 Site Number: 125706
 Site Name: DOWNGRV2
 Site Location: Downers Grove, IL

Assumptions:

- All pipe members are grade A53 Gr. B (35 ksi)
- All other steel members are grade A36 (36 ksi)

We have determined that the modified antenna mounts **will be** adequate to support the antennas indicated in Table 1 once the modifications have been properly installed. The analysis of the existing self-support tower or the effect of the mount attachment to the self-support tower is not within the current scope of work. We assumed that the mount was installed as per manufacturer's requirements and all bolts were tightened as specified by the manufacturer and AISC requirements.

The existing antenna and mount information was acquired through field measurements provided by Hightower Solutions Inc. dated 7/16/2015. The proposed antenna information was provided to us by Terra Consulting Group. If the existing conditions in the field differ from those shown on the above referenced documents or the antenna loading is modified to be other than that shown on Table 1, this review letter will be required to be revised.

The analysis of these mounts assumes that the modifications specified in the attached drawings by Paul J. Ford and Company date September 7, 2015 have been properly installed.

We at Paul J. Ford and Company appreciate the opportunity of providing our continuing professional services to you and Terra Consulting Group. If you have any questions or need further assistance on this or any other projects, please give us a call.

Respectfully submitted,

PAUL J. FORD AND COMPANY

Kyle Thorpe, E.I. *ST*
 Structural Designer



SEP 09 2015

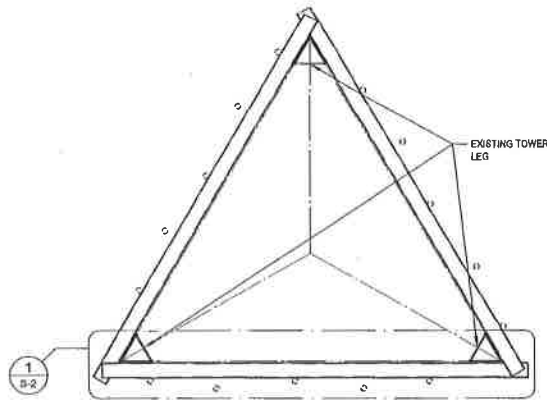
48715-0109.002.B191

As-Builts

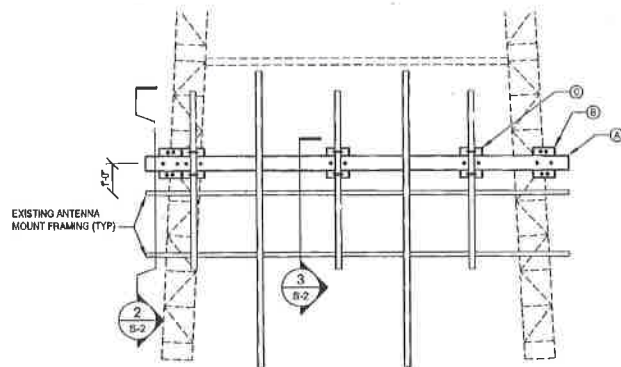
1. THESE MOUNT MODIFICATION DRAWINGS ARE TO BE INSTALLED PER STRUCTURAL MODIFICATION REPORT BY PAUL J. FORD AND COMPANY DATED SEPTEMBER 7, 2015.
2. FIELD MEASUREMENTS WERE PERFORMED BY HIGHTOWER SOLUTIONS DATED JULY 16, 2015. IF THE CONTRACTOR DISCOVERS ANY EXISTING CONDITIONS THAT ARE NOT AS REPRESENTED ON THESE DRAWINGS, PAUL J. FORD AND COMPANY SHALL BE CONTACTED IMMEDIATELY TO EVALUATE THE STRUCTURAL SIGNIFICANCE OF THE DEVIATION.
3. PAUL J. FORD AND COMPANY WAS NOT PROVIDED WITH THE EXACT LOCATION OF EVERY EXISTING ANTENNA MOUNT CONNECTION, CABLE CLIP, ETC THAT COULD POTENTIALLY INTERFERE WITH THE MODIFICATIONS AS INDICATED ON THESE DRAWINGS. THE CONTRACTOR SHALL FIELD VERIFY THAT THE MATERIAL CAN BE INSTALLED AS SHOWN ON THESE DRAWINGS BEFORE FABRICATING ANY MATERIAL. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE PROPER FIT AND CLEARANCE OF THE REINFORCING MATERIAL IN THE FIELD.
4. BOLTS SHALL BE TORQUED TO THE SNUG-TIGHT CONDITION AS DEFINED BY AISC.
5. ALL HOLES, EITHER PUNCHED OR DRILLED, IN THE EXISTING STEEL MEMBERS SHALL BE 1/16 INCH LARGER THAN THE BOLT DIAMETER, UNLESS NOTED OTHERWISE. SLOTTED HOLES ARE NOT PERMITTED. THE MINIMUM BOLT SPACING SHALL BE 3 TIMES THE BOLT DIAMETER AND THE MINIMUM EDGE DISTANCE SHALL BE 1.6 TIMES THE BOLT DIAMETER UNLESS NOTED OTHERWISE. ALL BOLT HOLES SHALL BE PLACED AT AISC STANDARD GAGE DIMENSIONS, UNLESS NOTED OTHERWISE.
6. IF ANY EXISTING ASTM A325 BOLTS ARE REMOVED, THEY MUST BE REPLACED WITH NEW A325 BOLTS.
7. WELDED CONNECTIONS SHALL CONFORM TO THE LATEST REVISED CODE OF THE AMERICAN WELDING SOCIETY AWS D1.1 USING E7018 ELECTRODES. PRIOR TO WELDING, CONTRACTOR SHALL WIRE BRUSH ALL STEEL SURFACES TO BARE METAL AND PREHEAT ALL JOINTS. AFTER WELDING ALL WELDED SURFACES SHALL BE WIRE BRUSHED AND COATED WITH COLD GALVANIZING COMPOUND.
8. ANY GALVANIZED SURFACE THAT IS SCRATCHED OR DAMAGED DUE TO THE CONTRACTORS EFFORTS, SHALL BE REPAIRED WITH A COLD GALVANIZING COMPOUND CONFORMING TO ASTM A780.
9. WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES AND SAFETY REGULATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE LOCAL BUILDING OFFICIALS FOR ANY INSPECTIONS THAT MAY BE REQUIRED.
10. THE CONTRACTOR MUST BE EXPERIENCED IN THE PERFORMANCE OF WORK SIMILAR TO THAT DESCRIBED ON THESE DRAWINGS. BY ACCEPTANCE OF THIS PROJECT, THE CONTRACTOR IS ATTESTING THAT HE DOES HAVE SUFFICIENT EXPERIENCE AND ABILITY, THAT HE IS KNOWLEDGEABLE OF THE WORK TO BE PERFORMED AND THAT HE IS PROPERLY LICENSED TO DO THIS WORK IN THE JURISDICTION IN WHICH THE WORK IS TO BE PERFORMED.
11. THIS DRAWING DOES NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION METHODS, MEANS, TECHNIQUES, SEQUENCES AND PROCEDURES.
12. ALL STRUCTURES ARE DESIGNED TO BE STABLE AND SELF-SUPPORTING AT THE COMPLETION OF CONSTRUCTION. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE THE ERECTION PROCEDURE AND SEQUENCE TO ENSURE THE STABILITY AND SAFETY OF THE STRUCTURE AND ITS COMPONENT PARTS, AND THE ADEQUACY OF TEMPORARY OR INCOMPLETE CONNECTIONS DURING CONSTRUCTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF WHATEVER TEMPORARY BRACING THAT MAY BE NECESSARY. SUCH MATERIAL IS NOT INDICATED ON THE DRAWINGS AND, IF PROVIDED, SHALL BE REMOVED, AS CONDITIONS PERMIT AND REMAIN THE PROPERTY OF THE CONTRACTOR.
13. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PROGRAMS AND PRECAUTIONS IN CONNECTION WITH THE WORK.

MATERIAL NOTES:

1. ALL STEEL FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH "AISC SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" LATEST EDITION.
2. NEW STEEL (UNLESS NOTED OTHERWISE) SHALL CONFORM TO THE REQUIREMENTS OF THE ASTM STANDARD SPECIFICATION FOR STRUCTURAL STEEL NOTED BELOW:
 W - ASTM A992 (50 KSI YIELD POINT MATERIAL)
 HSS RECTANGULAR - ASTM A500 GR. B (46 KSI YIELD POINT MATERIAL)
 HSS ROUND - ASTM A500 GR. B (42 KSI YIELD POINT MATERIAL)
 PIPE - ASTM A53 GR. B (35 KSI YIELD POINT MATERIAL)
 C, MC, L, PLATES, BARS & ALL OTHER STEEL - ASTM A36 (36KSI YIELD POINT MATERIAL)
 BOLTS - ASTM A325
 U-BOLTS - ASTM A36
 THREADED RODS - ASTM A36
3. ALL NEW STEEL SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123.
4. ALL BOLTS, U-BOLTS, AND THREADED RODS SHALL BE PROVIDED WITH LOCK-WASHERS, OR LOCK-NUTS, OR PAL-NUTS AND SHALL BE GALVANIZED ACCORDING TO ASTM A153.



ANTENNA MOUNT PLAN 1
 EL. 125'-0"



ANTENNA MOUNT FRONT ELEVATION 2
 3 MOUNTS TOTAL
 (EXISTING DIAGONALS NOT SHOWN FOR CLARITY)



SEP 09 2015

PAUL J. FORD & COMPANY
 250 E Broad St, Ste 400 - Columbus, OH 43215
 Phone 614.221.6679 www.pauljford.com

TERRA CONSULTING
 800 BUSSE HIGHWAY PARK RIDGE, IL 60068
 PH: (847) 998-6400

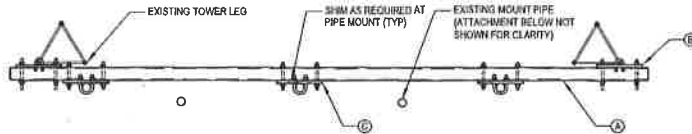
SITE #126705; DOWNGRV2
DOWNERS GROVE, ILLINOIS
 160' SELF SUPPORT TOWER

PROJECT: 48715-0109.002.B191

DRAWN BY: IM	ANTENNA MOUNT PLAN AND GENERAL NOTES
DESIGNED BY: K.A.T.	
REVIEWED BY: JK	S-1
DATE: 9-7-2015	

48715-0109.002.DWG

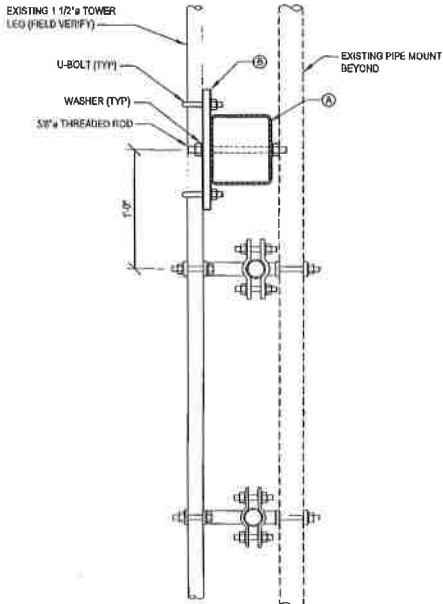
As-Builts



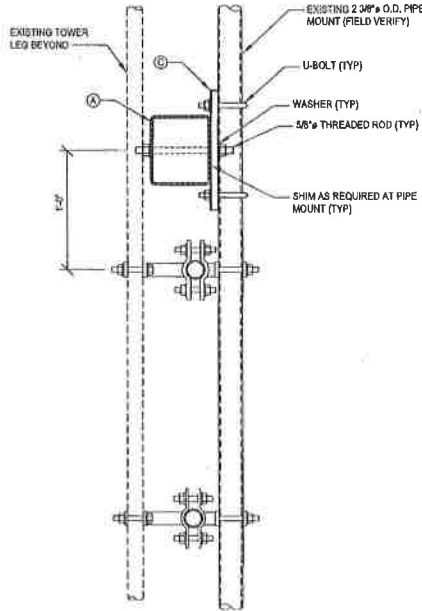
PLAN 1
S-2

MATERIAL LIST				
ELEVATION	ITEM NO.	QTY.	MATERIAL	
125'-0" ±	A	3	HSS 4 x 3 x 3/8	
	B	6	3/4" PLATE	
	C	9	7/8" PLATE	
				SHIMS
				5/8" THREADED ROD
				U-BOLTS (PER CHART)

THE ABOVE MATERIAL LIST IS PROVIDED TO CLEARLY IDENTIFY MEMBER SIZES. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE PROPER FIT AND CLEARANCE OF THE REINFORCING MATERIAL IN THE FIELD. THE CONTRACTOR IS EXPECTED TO PERFORM A SITE VISIT BEFORE FABRICATING ANY MATERIAL.



SECTION 2
S-2



SECTION 3
S-2

U-BOLT SIZE CHART		
STD. PIPE SIZE	PIPE O.D.	U-BOLT DIAMETER
1"	1.315"	3/8"
1 1/8"	1.660"	3/8"
1 1/2"	1.900"	3/8"
2"	2.375"	1/2"
2 1/2"	2.875"	1/2"
3"	3.500"	1/2"
3 1/2"	4.000"	1/2"
4"	4.500"	1/2"
5"	5.562"	1/2"
6"	6.625"	5/8"

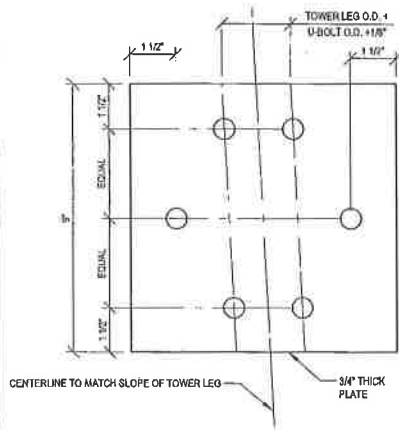


PLATE "B"

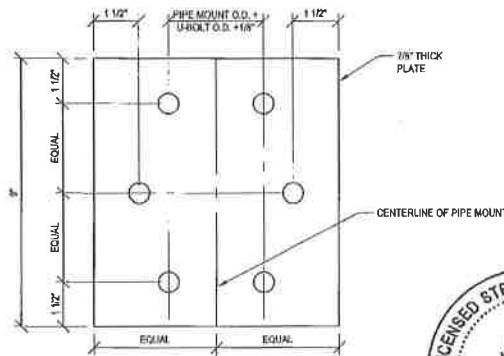


PLATE "C"



SEP 09 2016

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 250 E Broad St, Ste 600 • Columbus, OH 43215
 Phone 614.221.6679 www.pauljford.com

TERRA CONSULTING
 800 BUSSE HIGHWAY PARK RIDGE, IL 60088
 PH: (847) 698-6400

SITE #126705; DOWNGRV2
 DOWNERS GROVE, ILLINOIS
 160' SELF SUPPORT TOWER

PROJECT: 48715-0109.002.8191	
DRAWN BY: IM	ANTENNA MOUNT REINFORCING DETAILS
DESIGNED BY: K.A.T.	
REVIEWED BY: J.R.J.	
DATE: 9-7-2016	S-2



NO.	DATE	BY	DESCRIPTION
1	09/15/15	MM	REVISED FOR CLIENT COMMENTS
2	11/03/15	MM	REVISED FOR CLIENT COMMENTS
3	11/03/15	MM	REVISED FOR CLIENT COMMENTS

LOC. # 126705
DOWNGRV2

801 BURLINGTON AVE
DOWNERS GROVE, IL 60515

DRAWN BY:	BTk
CHECKED BY:	DS
DATE:	07/09/15
PROJECT #:	790-73

SHEET TITLE
T-1
TITLE SHEET
SHEET NUMBER

PROJECT INFORMATION

PROJECT TYPE: PROPOSED ANTENNA MODIFICATION ON AN EXISTING WIRELESS SITE

OCCUPANCY: UNINHABITED

SITE ADDRESS: 801 BURLINGTON AVE
DOWNERS GROVE, IL 60515

LATITUDE: 41° 47' 40.98" N (APPROXIMATE)

LONGITUDE: 88° 00' 14.00" W (APPROXIMATE)

TOWER OWNER: VILLAGE OF DOWNERS GROVE

APPLICANT: CHICAGO SMSA
limited partnership
d/b/a Verizon Wireless
1515 WOODFIELD ROAD
SCHAUMBURG, IL 60173

REAL ESTATE MANAGER: MICHAEL MORGAN (847) 706-1751

CONSULTING TEAM

PROJECT CONSULTANT: TERRA CONSULTING GROUP, LTD.
800 RIDGE HIGHWAY
SCHAUMBURG, IL 60065
(847) 698-6400

STRUCTURAL CONSULTANT: PAUL J. FORD AND COMPANY
350 E. BROAD STREET, SUITE 1500
COLUMBUS, OH 43215
(614) 448-1105 (FAX)

STRUCTURAL CONSULTANT: PAUL J. FORD AND COMPANY
350 E. BROAD STREET, SUITE 1500
COLUMBUS, OH 43215
(614) 221-9879
(614) 448-1105 (FAX)

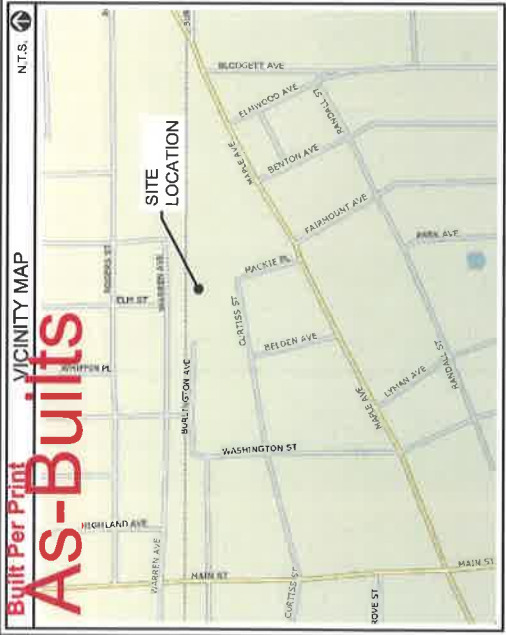
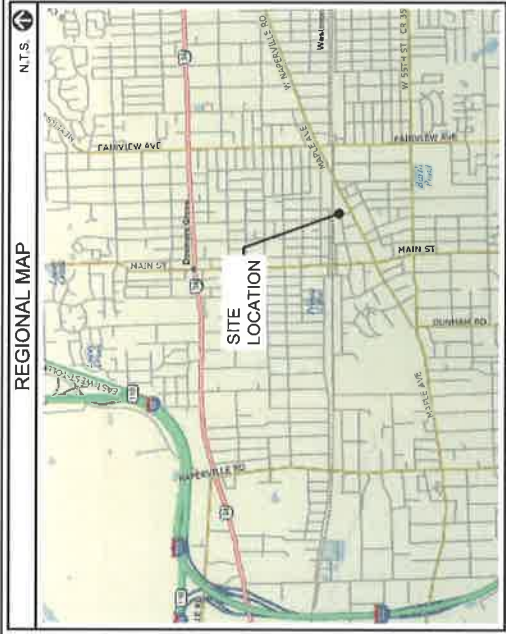
MOUNT ANALYSIS STATUS: COMPLETE

MOUNT ANALYSIS RESULTS: PASS
MODIFICATIONS DESIGNED

SHEET INDEX

SHEET	DESCRIPTION	REVISION
T-1	TITLE SHEET	2
C-1	SITE LAYOUT	2
ANT-1	SITE ELEVATION	2
ANT-2	ANTENNA LAYOUT	2
ANT-3	ANTENNA INFORMATION	2
EX-1	COMBINER CABLE DATA & CABLE DIAGRAM PHOTO EXHIBIT	2

FULL SCALE 22"x34" HALF SCALE 11"x17"



CHICAGO SMSA

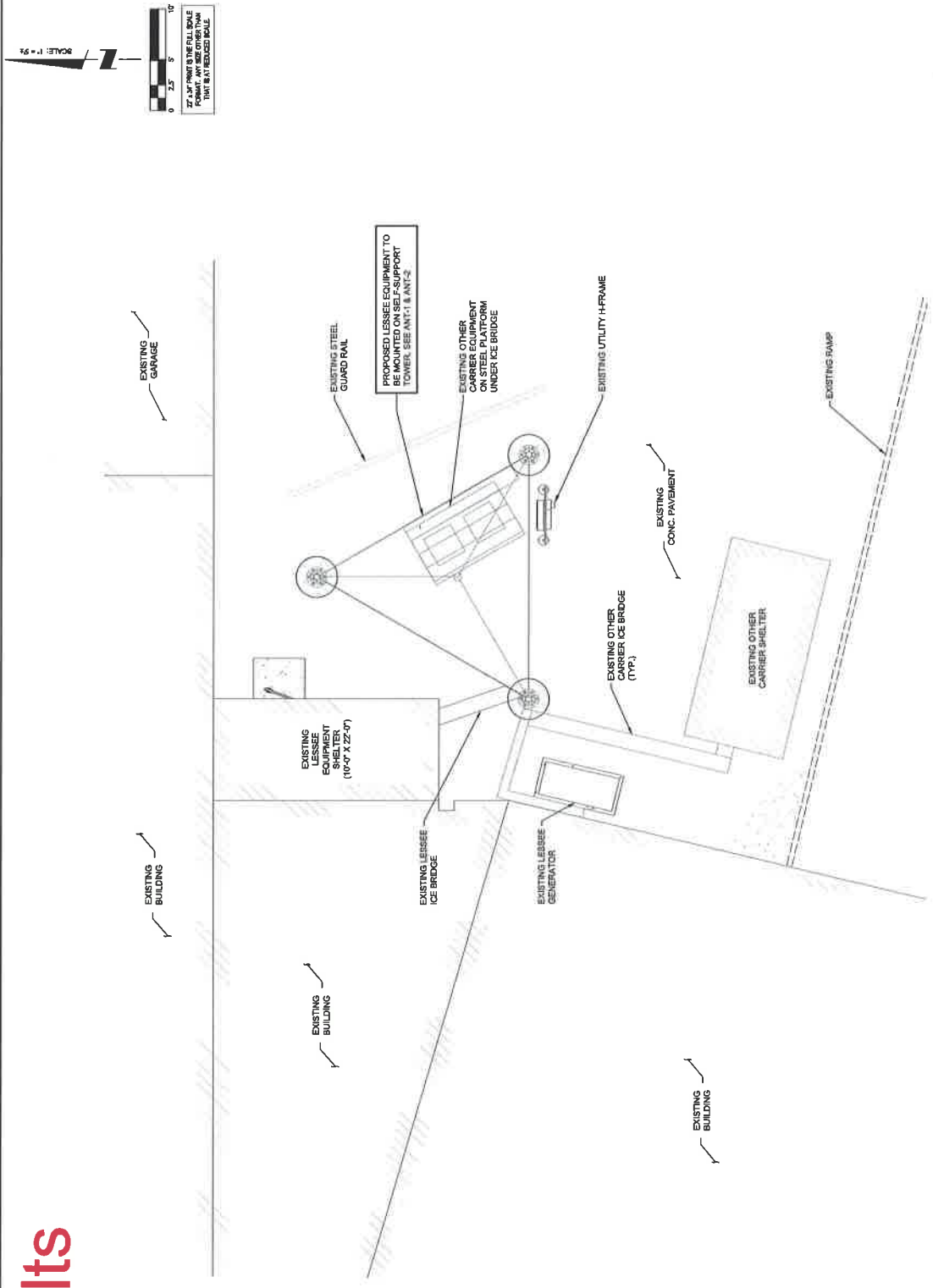
limited partnership

CHICAGO SMSA LIMITED PARTNERSHIP
d/b/a VERIZON WIRELESS
1515 WOODFIELD ROAD, SUITE 1400
SCHAUMBURG, ILLINOIS 60173
PHONE: (847) 619-5397 FAX: (847) 706-7415

LOCATION NUMBER: 126705
SITE NAME: DOWNGRV2
801 BURLINGTON AVE
DOWNERS GROVE, IL 60515



As-Builts



SCALE: 1" = 20'

27.5" PRINT TO THE FULL SCALE
FORMAT. ANY SIZE OTHER THAN
THIS IS A REDUCED SCALE.

CHICAGO SMSA
limited partnership
with VERIZON WIRELESS

TERRA
DESIGN GROUP, INC.
1000 N. LAKE ST. SUITE 100
CHICAGO, IL 60610
TEL: 312.467.4000
FAX: 312.467.4001

NO.	DATE	DESCRIPTION
1	02/20/15	ISSUED FOR REVIEW
2	03/10/15	REVISIONS
3	03/10/15	ISSUED FOR PERMITS
4	03/10/15	ISSUED FOR PERMITS
5	03/10/15	ISSUED FOR PERMITS
6	03/10/15	ISSUED FOR PERMITS
7	03/10/15	ISSUED FOR PERMITS
8	03/10/15	ISSUED FOR PERMITS
9	03/10/15	ISSUED FOR PERMITS
10	03/10/15	ISSUED FOR PERMITS

LOC. # 126705
DOWNGRV2

801 BURLINGTON AVE
DOWNERS GROVE, IL 60515

DRAWN BY:	BTM
CHECKED BY:	DS
DATE:	07/06/15
PROJECT #:	76-173

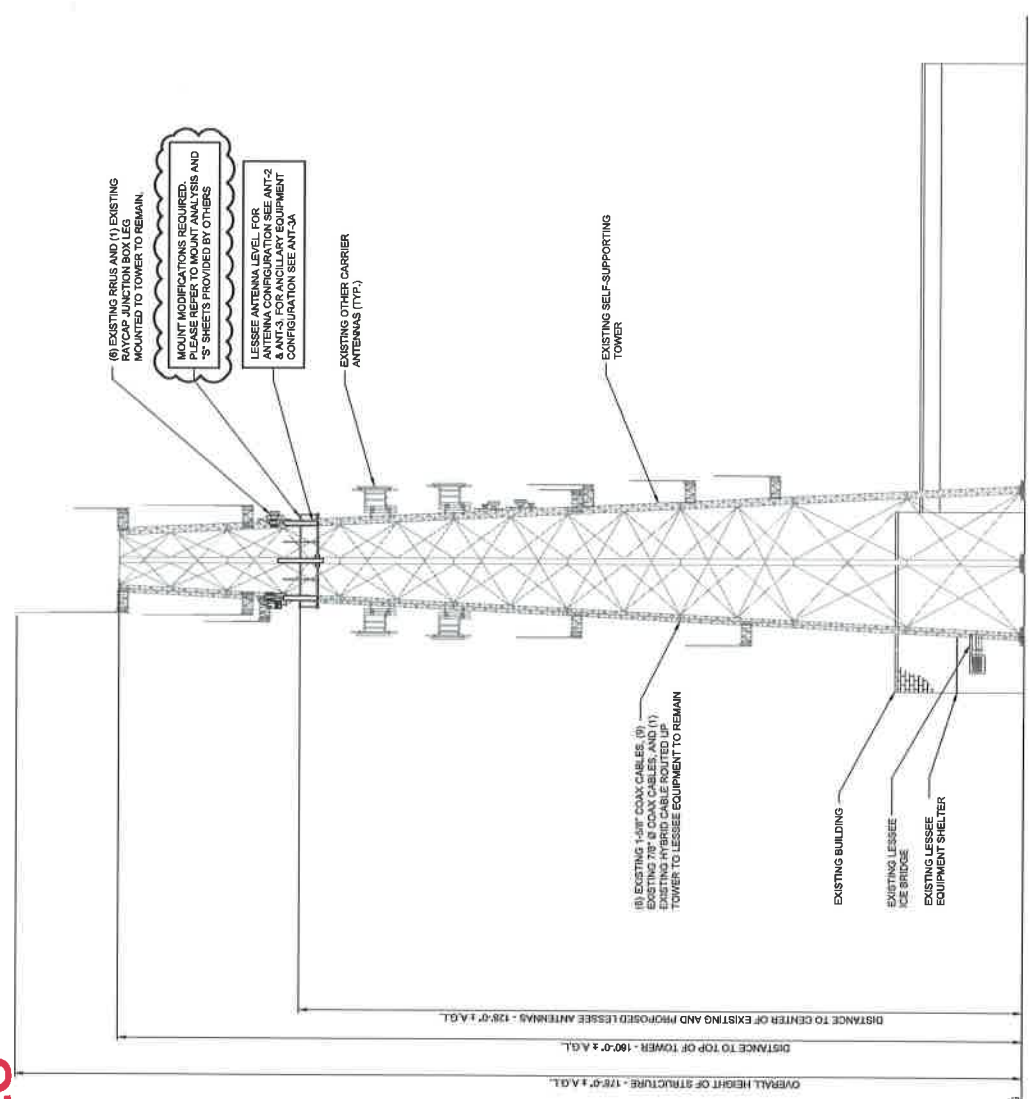
SHEET TITLE
SITE LAYOUT

SHEET NUMBER
C-1

1 SITE LAYOUT

THIS SITE PLAN WAS CREATED OFF OF THE AS-BUILT SURVEY AND DESIGN. AS-BUILT SURVEY WAS NOT SUPPLIED FOR PURPOSES OF SITE LAYOUT.

AS-BUILTS
 THIS DRAWING IS FOR THE AS-BUILT RESPONSE ONLY.
 PLEASE REFER TO TOWER AND MOUNT ANALYSIS PROVIDED BY PAUL J. FORG & COMPANY.
 MOUNT MODIFICATIONS REQUIRED. NO ANTENNA WORK TO BE DONE PRIOR TO COMPLETION OF REINFORCEMENT INSTALLATION.



NOTE:
 G.C. TO PAINT NEW CABLES AND/OR HARDWARE TO MATCH ADJACENT TOWER STEEL.
 FULL SCALE PRINT IS ON 22"x34" MEDIA.
 HALF SCALE PRINT IS ON 11"x17" MEDIA.

1 SOUTH ELEVATION
 SCALE: 3/32" = 1'-0" ±

CHICAGO SMSA
 limited partnership
 with Verizon Wireless

TERRA
 800 N. LAKE STREET, SUITE 1000
 CHICAGO, IL 60611
 TEL: 312.424.4800
 FAX: 312.424.4801

NO.	DATE	DESCRIPTION
1	06/20/15	ISSUED FOR REVIEW
2	06/23/15	REVISION FOR COMMENTS
3	07/01/15	ISSUED FOR PERMIT
4	07/01/15	ISSUED FOR PERMIT

LOC. # 126705
 DOWNNGRV2

801 BURLINGTON AVE
 DOWNERS GROVE, IL 60515

DRAWN BY: BTK
 CHECKED BY: DB
 DATE: 07/06/15
 PROJECT #: 16-173

SHEET TITLE
 SITE ELEVATION

SHEET NUMBER
ANT-1

CHICAGO SMSA
limited partnership
d/b/a VERIZON WIRELESS

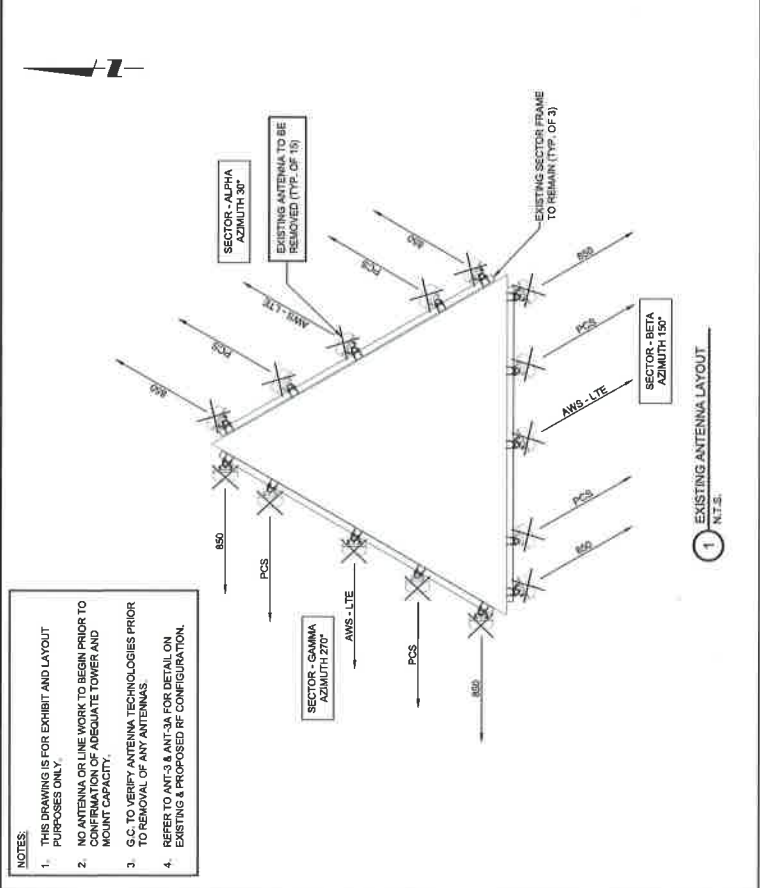
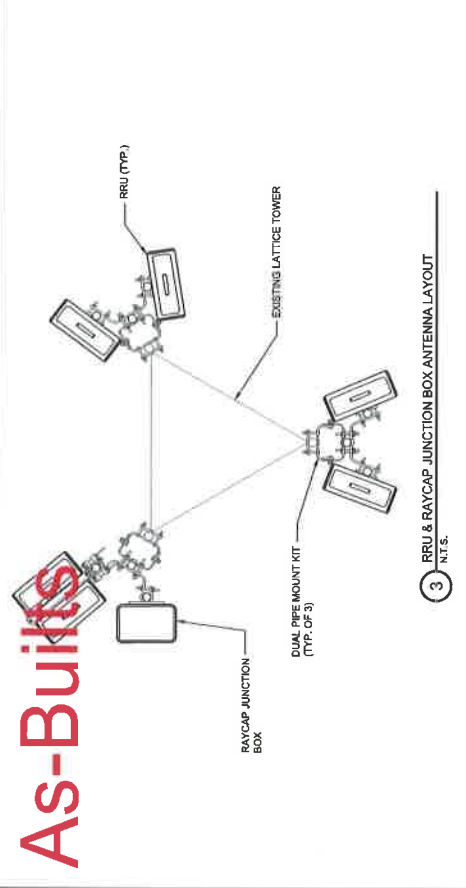
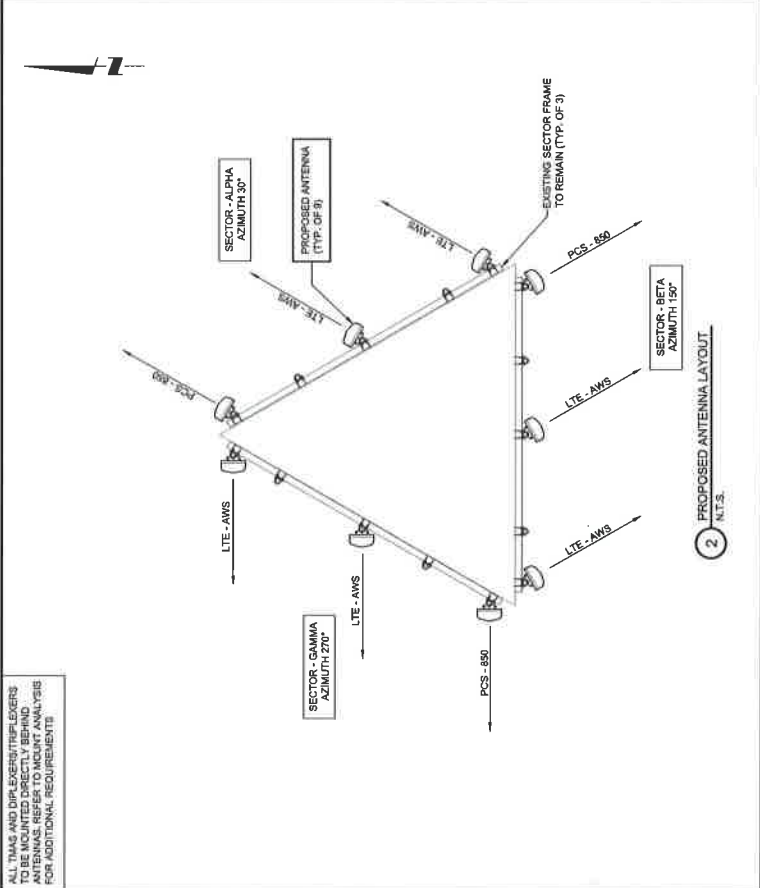
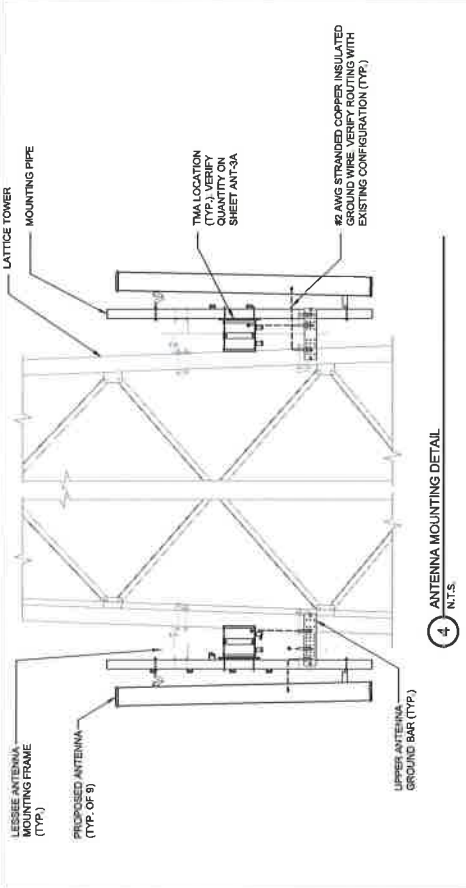
TERRA
800 BRUSH HENRY
1000 N. LAKE ST. SUITE 1000
CHICAGO, IL 60610
TEL: 312.467.4000
FAX: 312.467.4001

NO.	DATE	BY	DESCRIPTION
1			REVISED FOR REVIEW
2			REVISED PER CLIENT COMMENTS
3			REVISED FOR FINAL
4			REVISED FOR FINAL

LOC. # 126705
DOWNGRV2
801 BURLINGTON AVE
DOWNS GROVE, IL 60515

DRAWN BY:	BTX
CHECKED BY:	DB
DATE:	07/06/15
PROJECT #:	TR-173

SHEET TITLE
ANT-2
ANTENNA LAYOUT
SHEET NUMBER



- NOTES:**
- THIS DRAWING IS FOR EXHIBIT AND LAYOUT PURPOSES ONLY.
 - NO ANTENNA OR LINE WORK TO BEGIN PRIOR TO CONFIRMATION OF ADEQUATE TOWER AND MOUNT CAPACITY.
 - G.O. TO VERIFY ANTENNA TECHNOLOGIES PRIOR TO REMOVAL OF ANY ANTENNAS.
 - REFER TO ANT-3 & ANT-2A FOR DETAIL ON EXISTING & PROPOSED RF CONFIGURATION.

As-Built

As-Builts

EQUIPMENT CHANGE REQUEST FORM - ECR

Client Name: **CHICAGO SMSA** | Action Number: **24795** | Date of Request: **07/25/2012** | Job Number: **801 Burlington Ave** | Address: **801 Burlington Ave, Downers Grove, IL 60515**

RF Engineer: **John Siskul** | Revision: **2**

PROPOSED CONFIGURATION

Model	Part	RF Path	Antenna	Antenna Model	Antenna Height	Antenna Azimuth	Antenna Tilt	Antenna Type	Antenna Class	Antenna Status	Antenna Comment
A1	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010
A2	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010
A3	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010
A4	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010
B1	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010
B2	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010
B3	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010
B4	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010
B5	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010
C1	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010
C2	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010
C3	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010
C4	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010

1 EXISTING ANTENNA CONFIGURATION
N.T.S.

EQUIPMENT CHANGE REQUEST FORM - ECR

Client Name: **CHICAGO SMSA** | Action Number: **24795** | Date of Request: **07/25/2012** | Job Number: **801 Burlington Ave** | Address: **801 Burlington Ave, Downers Grove, IL 60515**

RF Engineer: **John Siskul** | Revision: **2**

PROPOSED CONFIGURATION

Model	Part	RF Path	Antenna	Antenna Model	Antenna Height	Antenna Azimuth	Antenna Tilt	Antenna Type	Antenna Class	Antenna Status	Antenna Comment
A1	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010
A2	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010
A3	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010
A4	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010
B1	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010
B2	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010
B3	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010
B4	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010
B5	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010
C1	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010
C2	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010
C3	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010
C4	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010	101-1010

2 PROPOSED ANTENNA CONFIGURATION
N.T.S.

REVISIONS

NO	DATE	BY	DESCRIPTION
1	08/15/12	JSS	ISSUED FOR REVIEW
2	08/15/12	JSS	REVIEW MOUNT ANALYSIS
3	08/15/12	JSS	REVIEW PER CLIENT COMMENTS
4	08/15/12	JSS	REVIEW FOR FINAL

LOC. # 126705
DOWNGRV2
801 BURLINGTON AVE
DOWNS GROVE, IL 60515

CHICAGO SMSA
limited partnership
d/b/a VERIZON WIRELESS

TERRA
608 BUSSE HIGHWAY
FARMINGTON HILLS, IL 60430
FAX: 630-585-4401

ANT-3
SHEET NUMBER

ANTENNA INFORMATION

SHEET TITLE

PROJECT #

DATE

DESIGNED BY

DRAWN BY

As-Builts

Combiner - Cable Data

Existing		Proposed			
Location	Manufacturer	Component Model	Count	Action	
Top (Platform)	Andrew	CBC-7821DF (Triplexer)	0	Existing	
Top (Platform)	Ericsson	RRUS 12 - AWS	0	Existing	
Top (Platform)	Raycap	ROMDO-3315-PF-48	1	Existing	
Bottom (Shelf)	Raycap	ROMDO-3315-PF-48	1	Existing	
Bottom (Shelf)	Andrew	CBC-7821DF (Triplexer)	0	Existing	
Coax		Coax			
Sector	Manufacturer	Type	Size	Count	Action
Alpha	ANDREW	311-50(1) 317(8)	5	Existing	
Beta	ANDREW	311-50(1) 317(8)	5	Existing	
Gamma	ANDREW	311-50(1) 317(8)	5	Existing	
AWS	Andrew	HFT1205-2492B-XXX	1 5/8	Existing	
Passive Components		Passive Components			
Location	Manufacturer	Component Model	Count	Action	
Top (Platform)	Andrew	CBC-7821DF (Triplexer)	0	Remove	
Top (Platform)	Andrew	CBC7821-5210CB (Triplexer)	0	Install	
Top (Platform)	Wesell	BWQ-TM-AU-700C-VG	0	Install	
Top (Platform)	Andrew	CBC-7821DF (Triplexer)	0	Remove	
Bottom (Shelf)	Andrew	CBC-7821DF (Triplexer)	0	Remove	
Bottom (Shelf)	Andrew	CBC7821-5210CB (Triplexer)	0	Install	
Coax		Coax			
Sector	Manufacturer	Type	Size	Count	Action
Alpha	ANDREW	311-50(1) 317(8)	5	Final Count	
Beta	ANDREW	311-50(1) 317(8)	5	Final Count	
Gamma	ANDREW	311-50(1) 317(8)	5	Final Count	
AWS	Andrew	HFT1205-2492B-XXX	1 5/8	Final Count	

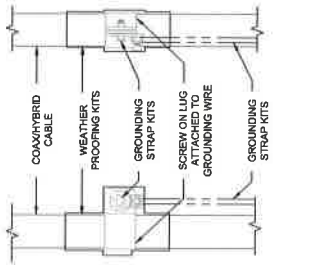
Comments

Please use the new model **CBC7821-821DCB** for triplexer, DO NOT use the existing triplexer/diplexers. Remove unused triplexers/diplexers. Remove Bias-Ts

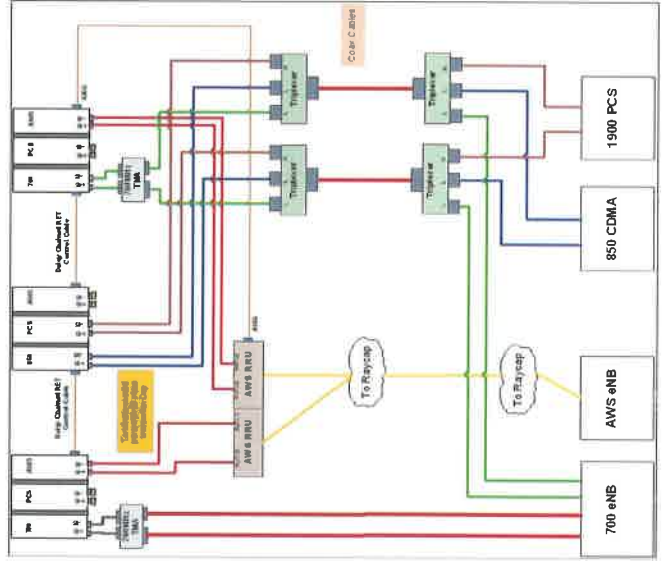
JRG/EL

1 COMBINER CABLE DATA INFORMATION
N.T.S.

- NOTES:
- DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR. THIS DETAIL IS TYPICAL FOR EACH COAX CABLE WHERE IT IS SPECIFIED TO BE GROUNDING.
 - CABLE TO BE GROUNDING AT ANTENNA LEVEL AND PRIOR TO ENTERING SHELF/ENTRY PANEL.
 - CABLE ALSO TO BE GROUNDING TO GROUND BAR AT TOWER BASE IF APPLICABLE.
 - USE ONLY TIN PLATED GROUNDING KITS



3 COAX / HYBRID CABLE GROUND KIT DETAIL
SCALE: N.T.S.



2 CABLE DIAGRAM
N.T.S.

Chicago SMSA
limited partnership
an Verizon Wireless

TERRA
311-50(1) 317(8)
311-50(1) 317(8)
311-50(1) 317(8)

NO.	DATE	DESCRIPTION
1	12/15/17	REVISED FOR FINAL
2	12/15/17	REVISED FOR CLIENT COMMENTS
3	12/15/17	REVISED FOR CLIENT COMMENTS
4	12/15/17	REVISED FOR CLIENT COMMENTS
5	12/15/17	REVISED FOR CLIENT COMMENTS
6	12/15/17	REVISED FOR CLIENT COMMENTS
7	12/15/17	REVISED FOR CLIENT COMMENTS
8	12/15/17	REVISED FOR CLIENT COMMENTS
9	12/15/17	REVISED FOR CLIENT COMMENTS
10	12/15/17	REVISED FOR CLIENT COMMENTS

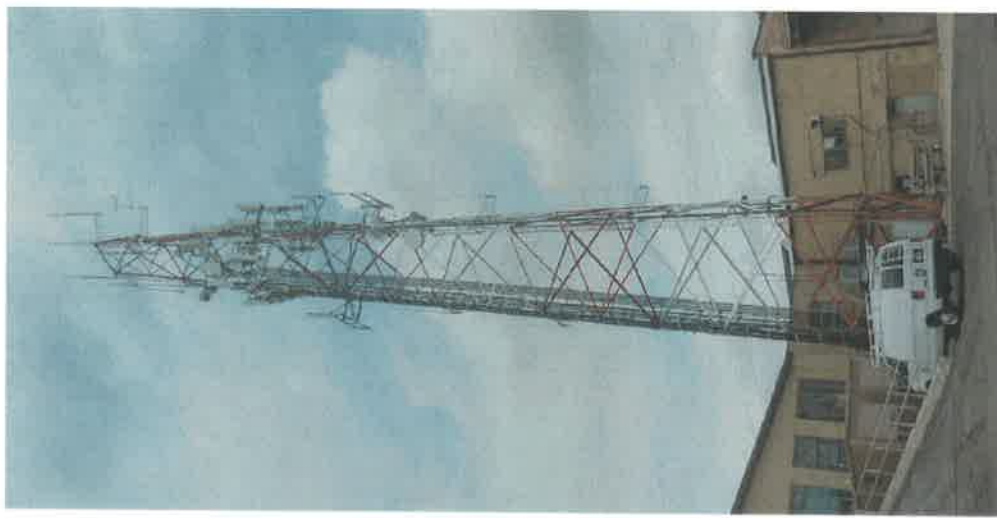
LOC. # 126705
DOWNGR2
801 BURLINGTON AVE
DOWNERS GROVE, IL 60515

DRAWN BY:	ETK
CHECKED BY:	DLB
DATE:	07/20/17
PROJECT #:	79-17D

SHEET TITLE
COMBINER CABLE DATA
& CABLE DIAGRAM

SHEET NUMBER
ANT-3A

As-Builts



1 OVERALL TOWER PHOTO
SCALE: N.T.S.



2 PHOTO OF ANTENNA LEVEL
SCALE: N.T.S.



4 LESSEE ENTRY PANEL
SCALE: N.T.S.



3 EXISTING RAYCAP
JUNCTION BOX IN SHELTER
SCALE: N.T.S.



5 LESSEE COAX ROUTE
SCALE: N.T.S.

 CHICAGO SMSA limited partnership d/b/a VERIZON WIRELESS	 TERRA 800 BURLINGTON AVE DOWNERS GROVE, IL 60515 TEL: 630-409-0000 FAX: 630-409-0001	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th>NO.</th><th>DATE</th><th>BY</th><th>DESCRIPTION</th></tr> <tr><td>1</td><td>07/20/15</td><td>MM</td><td>ISSUED FOR REVIEW</td></tr> <tr><td>2</td><td>07/20/15</td><td>MM</td><td>REVISED PER CLIENT COMMENTS</td></tr> <tr><td>3</td><td>07/20/15</td><td>MM</td><td>ISSUED FOR FINAL</td></tr> </table>	NO.	DATE	BY	DESCRIPTION	1	07/20/15	MM	ISSUED FOR REVIEW	2	07/20/15	MM	REVISED PER CLIENT COMMENTS	3	07/20/15	MM	ISSUED FOR FINAL	<p>LOC. # 126705 DOWNGRV2</p> <p>801 BURLINGTON AVE DOWNERS GROVE, IL 60515</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>DRAWN BY:</td><td>BT/K</td></tr> <tr><td>CHECKED BY:</td><td>DR</td></tr> <tr><td>DATE:</td><td>07/20/15</td></tr> <tr><td>PROJECT #:</td><td>74-173</td></tr> </table> <p style="text-align: center;">SHEET TITLE PHOTO EXHIBIT</p> <p style="text-align: center;">SHEET NUMBER EX-1</p>	DRAWN BY:	BT/K	CHECKED BY:	DR	DATE:	07/20/15	PROJECT #:	74-173
NO.	DATE	BY	DESCRIPTION																								
1	07/20/15	MM	ISSUED FOR REVIEW																								
2	07/20/15	MM	REVISED PER CLIENT COMMENTS																								
3	07/20/15	MM	ISSUED FOR FINAL																								
DRAWN BY:	BT/K																										
CHECKED BY:	DR																										
DATE:	07/20/15																										
PROJECT #:	74-173																										



September 7, 2015

Terra Consulting Group
600 Busse Highway
Park Ridge, IL 60068

Attn: Rusty Utomo

Re: Modified Antenna Mount Structural Analysis
Structure Type: Self-Support Tower
Structure Height: 160-ft
Site Number: 125706
Site Name: DOWNGRV2
Site Location: Downers Grove, IL
PJF Project Number: 48715-0109.002.8191

Dear Rusty Utomo,

Paul J. Ford and Company (PJF) has been asked to review a modified antenna mount that is located at the aforementioned self-support tower. The purpose of this review is to evaluate the structural feasibility of the antenna mount for the proposed and existing antenna loading as specified in the following table. This review is consistent with the TIA-222-G for the following design wind velocities:

*90 mph 3-Second Gust of Wind without ice
40 mph 3-Second Gust of Wind with 0.75" radial ice
Structure Class II (Importance Factor = 1.00)
Topographic Category 1 Exposure Category "C"*

TABLE 1 – EXISTING AND PROPOSED ANTENNA INFORMATION

MOUNT CENTERLINE ELEVATION	ANTENNA CENTERLINE ELEVATION	STATUS	QUANTITY	ANTENNA MODEL
125'-0"	128'-0"	PROPOSED	9	COMMSCOPE SBNHH-1D65B
			6	ANDREW CBC7821-821DCB
			6	WESTELL BWC-TTMA-700C-VG
	128'-0"	EXISTING	6	* ERICSSON RRUS 12 - AWS
			1	* RAYCAP RCMDC-3315-PF-48

* Equipment not installed on mount and not considered in this analysis.

Columbus
250 E Broad St, Suite 600
Columbus, OH 43215
Phone 614.221.6679



www.PaulJFord.com

Orlando
3670 Maguire Blvd, Suite 250
Orlando, FL 32803
Phone 407.898.9039

Founded in 1965

100% Employee Owned



Page 2 of 3
September 7, 2015
PJF #: 48715-0109.002.8191
Site Number: 125706
Site Name: DOWNGRV2
Site Location: Downers Grove, IL

Assumptions:

- All pipe members are grade A53 Gr. B (35 ksi)
- All other steel members are grade A36 (36 ksi)

We have determined that the modified antenna mounts will be adequate to support the antennas indicated in Table 1 once the modifications have been properly installed. The analysis of the existing self-support tower or the effect of the mount attachment to the self-support tower is not within the current scope of work. We assumed that the mount was installed as per manufacturer's requirements and all bolts were tightened as specified by the manufacturer and AISC requirements.

The existing antenna and mount information was acquired through field measurements provided by Hightower Solutions Inc. dated 7/16/2015. The proposed antenna information was provided to us by Terra Consulting Group. If the existing conditions in the field differ from those shown on the above referenced documents or the antenna loading is modified to be other than that shown on Table 1, this review letter will be required to be revised.

The analysis of these mounts assumes that the modifications specified in the attached drawings by Paul J. Ford and Company date September 7, 2015 have been properly installed.

We at Paul J. Ford and Company appreciate the opportunity of providing our continuing professional services to you and Terra Consulting Group. If you have any questions or need further assistance on this or any other projects, please give us a call.

Respectfully submitted,

PAUL J. FORD AND COMPANY


Kyle Thorpe, E.I. *ST*
Structural Designer



SEP 09 2015

48715-0109.002.DWG

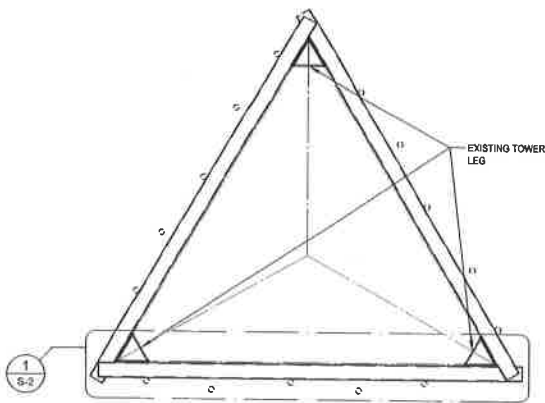
GENERAL NOTES

As Built

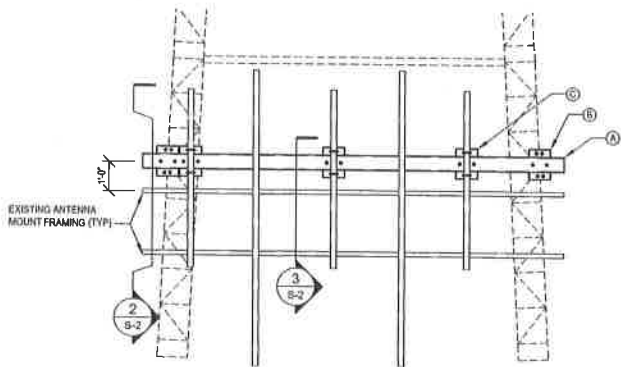
- THESE MOUNT MODIFICATION DRAWINGS ARE TO BE INSTALLED PER STRUCTURAL MODIFICATION REPORT BY PAUL J. FORD AND COMPANY DATED SEPTEMBER 7, 2015.
- FIELD MEASUREMENTS WERE PERFORMED BY HIGHTOWER SOLUTIONS DATED JULY 16, 2015. IF THE CONTRACTOR DISCOVERS ANY EXISTING CONDITIONS THAT ARE NOT AS REPRESENTED ON THESE DRAWINGS, PAUL J. FORD AND COMPANY SHALL BE CONTACTED IMMEDIATELY TO EVALUATE THE STRUCTURAL SIGNIFICANCE OF THE DEVIATION.
- PAUL J. FORD AND COMPANY WAS NOT PROVIDED WITH THE EXACT LOCATION OF EVERY EXISTING ANTENNA MOUNT CONNECTION, CABLE CLIP, ETC THAT COULD POTENTIALLY INTERFERE WITH THE MODIFICATIONS AS INDICATED ON THESE DRAWINGS. THE CONTRACTOR SHALL FIELD VERIFY THAT THE MATERIAL CAN BE INSTALLED AS SHOWN ON THESE DRAWINGS BEFORE FABRICATING ANY MATERIAL. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE PROPER FIT AND CLEARANCE OF THE REINFORCING MATERIAL IN THE FIELD.
- BOLTS SHALL BE TORQUED TO THE SNUG-TIGHT CONDITION AS DEFINED BY AISC.
- ALL HOLES, EITHER PUNCHED OR DRILLED, IN THE EXISTING STEEL MEMBERS SHALL BE 1/16 INCH LARGER THAN THE BOLT DIAMETER, UNLESS NOTED OTHERWISE. SLOTTED HOLES ARE NOT PERMITTED. THE MINIMUM BOLT SPACING SHALL BE 3 TIMES THE BOLT DIAMETER AND THE MINIMUM EDGE DISTANCE SHALL BE 1.5 TIMES THE BOLT DIAMETER UNLESS NOTED OTHERWISE. ALL BOLT HOLES SHALL BE PLACED AT AISC STANDARD GAGE DIMENSIONS, UNLESS NOTED OTHERWISE.
- IF ANY EXISTING ASTM A325 BOLTS ARE REMOVED, THEY MUST BE REPLACED WITH NEW A325 BOLTS.
- WELDED CONNECTIONS SHALL CONFORM TO THE LATEST REVISED CODE OF THE AMERICAN WELDING SOCIETY AWS D1.1 USING E7018 ELECTRODES. PRIOR TO WELDING, CONTRACTOR SHALL WIRE BRUSH ALL STEEL SURFACES TO BARE METAL AND PREHEAT ALL JOINTS. AFTER WELDING ALL WELDED SURFACES SHALL BE WIRE BRUSHED AND COATED WITH COLD GALVANIZING COMPOUND.
- ANY GALVANIZED SURFACE THAT IS SCRATCHED OR DAMAGED DUE TO THE CONTRACTORS EFFORTS, SHALL BE REPAIRED WITH A COLD GALVANIZING COMPOUND CONFORMING TO ASTM A780.
- WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES AND SAFETY REGULATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE LOCAL BUILDING OFFICIALS FOR ANY INSPECTIONS THAT MAY BE REQUIRED.
- THE CONTRACTOR MUST BE EXPERIENCED IN THE PERFORMANCE OF WORK SIMILAR TO THAT DESCRIBED ON THESE DRAWINGS. BY ACCEPTANCE OF THIS PROJECT, THE CONTRACTOR IS ATTESTING THAT HE DOES HAVE SUFFICIENT EXPERIENCE AND ABILITY, THAT HE IS KNOWLEDGEABLE OF THE WORK TO BE PERFORMED AND THAT HE IS PROPERLY LICENSED TO DO THIS WORK IN THE JURISDICTION IN WHICH THE WORK IS TO BE PERFORMED.
- THIS DRAWING DOES NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION METHODS, MEANS, TECHNIQUES, SEQUENCES AND PROCEDURES.
- ALL STRUCTURES ARE DESIGNED TO BE STABLE AND SELF-SUPPORTING AT THE COMPLETION OF CONSTRUCTION. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE THE ERECTION PROCEDURE AND SEQUENCE TO ENSURE THE STABILITY AND SAFETY OF THE STRUCTURE AND ITS COMPONENT PARTS, AND THE ADEQUACY OF TEMPORARY OR INCOMPLETE CONNECTIONS DURING CONSTRUCTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF WHATEVER TEMPORARY BRACING THAT MAY BE NECESSARY. SUCH MATERIAL IS NOT INDICATED ON THE DRAWINGS AND, IF PROVIDED, SHALL BE REMOVED, AS CONDITIONS PERMIT AND REMAIN THE PROPERTY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PROGRAMS AND PRECAUTIONS IN CONNECTION WITH THE WORK.

MATERIAL NOTES:

- ALL STEEL FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH "AISC SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" LATEST EDITION.
- NEW STEEL (UNLESS NOTED OTHERWISE) SHALL CONFORM TO THE REQUIREMENTS OF THE ASTM STANDARD SPECIFICATION FOR STRUCTURAL STEEL NOTED BELOW:
 W - ASTM A992 (50 KSI YIELD POINT MATERIAL)
 HSS RECTANGULAR - ASTM A500 GR. B (46 KSI YIELD POINT MATERIAL)
 HSS ROUND - ASTM A500 GR. B (42 KSI YIELD POINT MATERIAL)
 PIPE - ASTM A53 GR. B (35 KSI YIELD POINT MATERIAL)
 C, MC, L PLATES, BARS & ALL OTHER STEEL - ASTM A36 (36KSI YIELD POINT MATERIAL)
 BOLTS - ASTM A325
 U-BOLTS - ASTM A36
 THREADED RODS - ASTM A36
- ALL NEW STEEL SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123.
- ALL BOLTS, U-BOLTS, AND THREADED RODS SHALL BE PROVIDED WITH LOCK-WASHERS, OR LOCK-NUTS, OR PAL-NUTS AND SHALL BE GALVANIZED ACCORDING TO ASTM A153.



ANTENNA MOUNT PLAN 1
 EL. 129'-0" ± S-1



ANTENNA MOUNT FRONT ELEVATION 2
 3 SQUARES TOTAL (EXISTING DIAGONALS NOT SHOWN FOR CLARITY) S-1



SEP 09 2015

CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL BUILDING OFFICIALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE LOCAL BUILDING OFFICIALS FOR ANY INSPECTIONS THAT MAY BE REQUIRED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PROGRAMS AND PRECAUTIONS IN CONNECTION WITH THE WORK.

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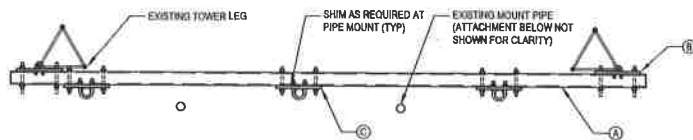
**SITE #126705; DOWNGRV2
 DOWNERS GROVE, ILLINOIS
 160' SELF SUPPORT TOWER**

PROJECT: 48715-0109.002.8191

DRAWN BY: IM	ANTENNA MOUNT PLAN AND GENERAL NOTES
DESIGNED BY: KAT	
REVIEWED BY: SRJ	S-1
DATE: 9-7-2015	

48715-0109.002 DWG

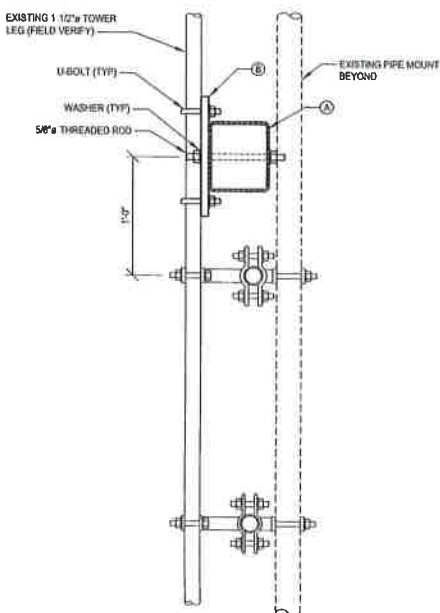
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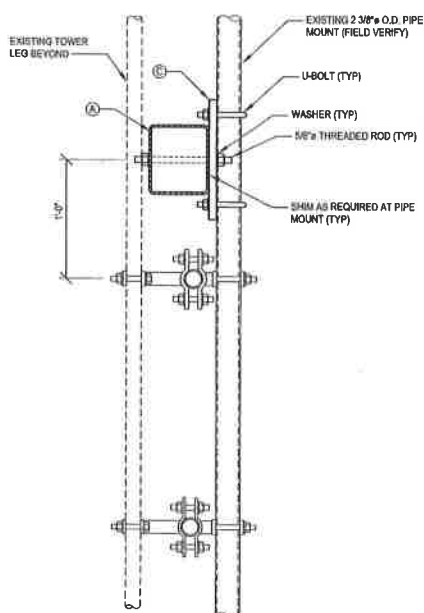
PLAN 1
S-2

MATERIAL LIST				
ELEVATION	ITEM NO.	QTY.	MATERIAL	
125'-0" ±	A	3	HSS 4 x 3 x 3/8	
	B	6	3/4" PLATE	
	C	6	7/8" PLATE	
				SHIMS
				5/8" THREADED ROD
				U-BOLTS (PER CHART)

THE ABOVE MATERIAL LIST IS PROVIDED TO CLEARLY IDENTIFY MEMBER SIZES. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE PROPER FIT AND CLEARANCE OF THE REINFORCING MATERIAL IN THE FIELD. THE CONTRACTOR IS EXPECTED TO PERFORM A SITE VISIT BEFORE FABRICATING ANY MATERIAL.



SECTION 2
S-2



SECTION 3
S-2

U-BOLT SIZE CHART		
STD. PIPE SIZE	PIPE O.D.	U-BOLT DIAMETER
1"	1.31"	3/8"
1 1/4"	1.66"	3/8"
1 1/2"	1.90"	3/8"
2"	2.38"	1/2"
2 1/2"	2.86"	1/2"
3"	3.50"	1/2"
3 1/2"	4.00"	1/2"
4"	4.50"	1/2"
5"	5.56"	1/2"
6"	6.63"	5/8"

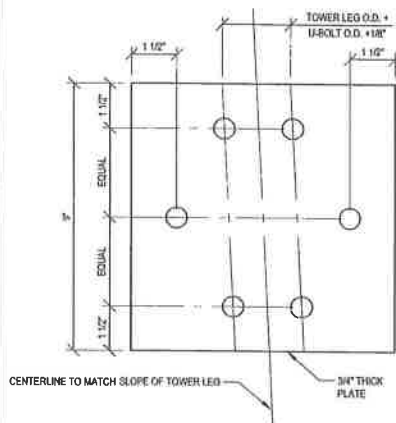


PLATE "B"

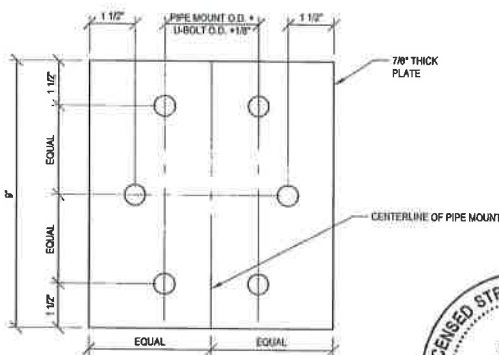


PLATE "C"



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SITE #126705; DOWNGRV2
DOWNERS GROVE, ILLINOIS
160' SELF SUPPORT TOWER

PROJECT: 48715-0109.002.8191	
DRAWN BY: IM	ANTENNA MOUNT REINFORCING DETAILS
DESIGNED BY: K.A.T.	
REVIEWED BY: J.R.J.	S-2
DATE: 9-7-2015	