

RESOLUTION NO. _____

A RESOLUTION AUTHORIZING A LICENSE AGREEMENT BETWEEN THE VILLAGE OF DOWNERS GROVE AND DENALI SPECTRUM OPERATIONS, LLC TO INSTALL, MAINTAIN AND OPERATE AN ANTENNA ON VILLAGE PROPERTY (71st STREET & CAMDEN ROAD)

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 (the “Agreement”) and accompanying Memorandum of License, between the Village of Downers Grove (the “Village”) and Denali Spectrum Operations, LLC (the “Licensee”), for the installation, maintenance and operation of an antenna on Village property located at 71st Street & Camden Road, as set forth in the form of the Agreement submitted to this meeting with the recommendation of the Village Manager, is hereby approved.

2. That the Mayor 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 That all resolutions or parts of resolutions in conflict with the provisions of this Resolution are hereby repealed.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 name: 71st & Camden Water Tank

**LICENSE AGREEMENT BETWEEN THE VILLAGE OF DOWNERS
GROVE AND DENALI SPECTRUM OPERATIONS LLC TO INSTALL,
MAINTAIN AND OPERATE AN ANTENNA ON VILLAGE PROPERTY**

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 lessor of certain real estate located at 71st Street and Camden Road, Downers Grove, Illinois, upon which is located a Water Tower (hereinafter referred to as the "Tower"); and

WHEREAS, Denali Spectrum Operations, LLC (hereinafter referred to as the "Licensee") has requested permission to install an antenna on the top of the Tower and its related equipment on ground space near the Tower (hereinafter referred to as the "Antenna"); and

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 of the Property dated, _____, 2008, and approved by the Village on _____, 2008, showing the Tower Space and 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 dated _____, 2008, and approved by the Village on _____, 2008, for the Antenna and any cables or utility lines to be installed on the Licensed Premises and used or housing of the related Antenna equipment (collectively "Licensee's Improvements").

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. In the event that the tower is removed, this contract shall cease and neither the Village nor the Licensee will not be responsible or liable for replacement or rent.

3. SPECIFICATIONS: The Licensee shall comply with the following specifications:

Site name: 71st & Camden Water Tank

a. *In general:* During the term of this Agreement, there shall be no substantial variations, modifications, or upgrades from the plans and specifications of Exhibits 1 and 2 without the prior written approval of the Village, which approval shall not be unreasonably withheld or delayed.

b. *Antenna:* The Antenna shall be for the operation of radio frequency: receive 1740 MHz; transmit 2135-2140 MHz. 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 on which it is located.

f. Except for emergency situations, the Village shall provide reasonable advance notice to Licensee when it conducts any Tower repair or maintenance work that affects the Antenna or function of the Antenna. Except for emergency situations, the Village shall not physically disturb Licensee's equipment without Licensee's permission. Licensee shall be entitled to access the equipment located on the Ground Space near the Tower twenty-four (24) hours a day, seven days a week. Licensee shall provide the Village reasonable advance notice when access to the antenna on top of the Tower is needed. Access to the Tower can only be obtained between the hours of 8:00 a.m. and 4:00 p.m. by calling the Water Manager at 630/434-5462, or in the event of an emergency after hours, by calling Village Operations Center at (630) 434-5706 or (630) 434-5707.

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

Site name: 71st & Camden Water Tank
and sightly 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 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 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:

a. This Agreement shall have an Initial Term beginning June 1, 2008 or upon the issuance of a building permit, (whichever occurs later), and ending December 31, 2012, and two (2) five-year Extension Terms beginning January 1, 2013, and January 1, 2018, respectively. The first extension term beginning January 1, 2013, shall automatically commence. The second extension term beginning January 1, 2018, shall automatically commence unless either party provides the Village with written notice 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, 2022.

b. After February 1, 2018, 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:

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Beginning in 2008, upon the issuance of a building permit, Licensee shall pay to the Village a license fee of \$3200.00 per month in 2008. Thereafter, effective on the first day of January in the subsequent years of the agreement, the monthly license fee shall increase in an amount equal to the fee for the preceding year multiplied by 4%. The fee shall be paid to the Village of Downers Grove, Village Hall, 801 Burlington Avenue, Downers Grove, IL 60515.

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 site 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 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 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 effect 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 understands that its Antenna shall be removed from the Tower upon notice from the Village and that the Antenna shall not be reinstalled 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

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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 site. 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 consumes 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 is solely responsible for payment of taxes on the leasehold. Licensee is solely responsible to determine the taxes owed and to comply with the County payment procedures. Licensee shall reimburse the Village for any personal or real property taxes which are assessed as a result of Licensee's Improvements and directly attributable to its use of the Property under the terms of this Agreement. 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 any 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, the Village shall have the right to remove any of Licensee's equipment and terminate the 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

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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.

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 the agreement (i) worker's compensation insurance as required by law and which insures Village 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, including broad form property damage insurance, for bodily injuries and property damage, in amounts not less than One Million Dollars (\$1,000,000.00) per occurrence and One Million Dollars (\$1,000,000.00) in the aggregate covering bodily injuries or property damage occurring on the Tower.

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 Village as an additional insured and shall be delivered to the Village, together with evidence of the payment of the premiums, prior to the commencement of the term of this Agreement. Licensee or, where applicable, Licensee's contractors shall furnish Village with a written notice of any cancellation, reduction or modification of insurance required under this Section.

15. LIENS:

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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 Agreement may be assigned or transferred to Licensee's parent or an 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 30 days thereof. The Village must approve any sublease and shall be entitled to 50% of any sublease in addition to the rental fee as described in Section 7, 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

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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.

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 Manager
Village of Downers Grove
801 Burlington Avenue
Downers Grove, IL 60515-4776

And: Denali Spectrum Operations, LLC
10307 Pacific Center Court
San Diego, CA 92121
Attn: Legal Department

In the event the Licensee moves, consolidates, merges, splits or otherwise reorganizes or moves its offices, it is the duty and obligation of the Licensee to provide written notification to the Village within thirty (30) days of any change.

22. GOVERNING LAW:

This Agreement shall be governed by the laws of the State of Illinois.

Site name: 71st & Camden Water Tank

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the ____ day of _____, 2008.

LICENSEE:

Denali Spectrum Operations, LLC
a Delaware Limited Liability Company

Denali Spectrum License, LLC

Its Sole Member

Denali Spectrum, LLC

Its Sole Member

Denali Spectrum Manager, LLC

Its Manager

Doyson, Limited

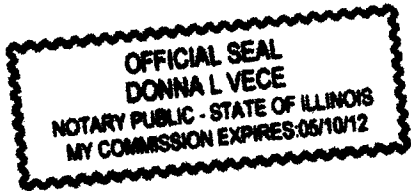
Its Manager

By: *R. Runt*

Title: *Operations Manager*

Subscribed and sworn to
this 15 day of May, 2008.

Donna L. Vece
Notary Public

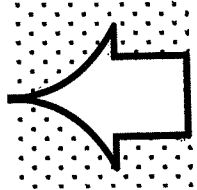


VILLAGE OF DOWNERS GROVE

By: _____
Mayor

ATTEST:

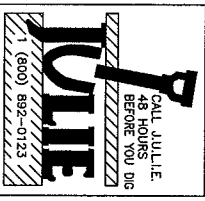
Village Clerk



WIT

PROJECT INFORMATION

SCOPE OF WORK: (SEE THIS SHEET) TELEPHONE COMPANY: AT&T
 E-911 ADDRESS: TBD TELEPHONE: 1-887-708-7800
 LATITUDE: 41° 45' 28.908" N POWER COMPANY: COMED
 LONGITUDE: -88° 1' 33.188" W TELEPHONE: 1-800-334-7881
 JURISDICTION: DU PAGE
 CURRENT USE: TELECOMMUNICATIONS FACILITY
 PROPOSED USE: TELECOMMUNICATIONS FACILITY
 TOWER OWNER: DAVE BIRGVILLAGE OF DOWNERS GROVE
 PHONE: (630) 434-5462



DRAWING INDEX

REV	DESCRIPTION
3	ORD-311-A-01 TITLE SHEET
1	ORD-311-A-02 SHEET NOT USED
1	ORD-311-A-03 SITE PLAN & TOWER ELEVATION
1	ORD-311-A-04 ANTENNA DETAILS & SCHEDULES
1	ORD-311-A-05 SITE WORK DETAILS
1	ORD-311-A-06 UTILITY SITE ELEVATION & ONE LINE DIAGRAM
1	ORD-311-A-07 GROUNDING PLAN & GROUNDING SCHEDULES
1	ORD-311-A-08 CONSTRUCTION NOTES
1	ORD-311-A-09 ELECTRICAL NOTES
1	ORD-311-A-10 PLATFORM ELEVATIONS
1	ORD-311-A-11 MISC. DETAILS
1	ORD-311-A-12 MISC. DETAILS
1	ORD-311-A-13 STEALTH ANTENNA NOTES
1	ORD-311-A-14 STEALTH ANTENNA NOTES
1	ORD-311-A-15 STEALTH ANTENNA NOTES
1	ORD-311-A-16 STEALTH ANTENNA NOTES
0	PLATFORM ASSEMBLY DRAWING

NOTE: CONSTRUCTION ON THIS SITE CAN NOT COMMENCE UNTIL THE RESPECTIVE DEPARTMENTS HAVE APPROVED AND SIGNED THE DRAWINGS.
 REAL ESTATE: KRISTYNA RYAN
 RF: JOHNATHON BECKLEY
 OPS/CONSTRUCTION: D. BAGSDALE / TONY VITELLO
 LEGAL/COMPLIANCE: _____
 NET DESIGN: _____

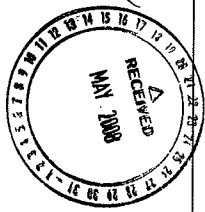
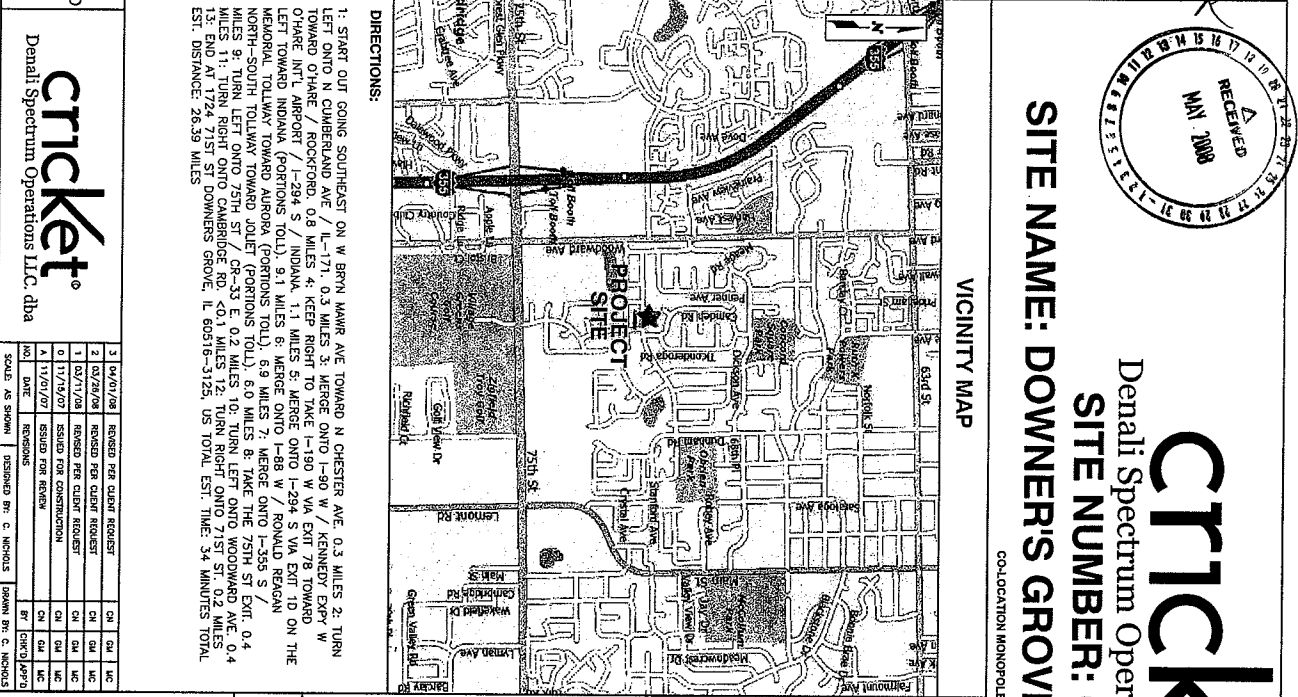
STRUCTURAL REVIEW

CONTRACTOR SHALL OBTAIN AND VERIFY STRUCTURAL EVALUATION REPORT OF EXISTING TOWER AND EXACT PLACEMENT OF ANTENNAS AND COAX CABLES AND NOTIFY CRICKET TELECOMMUNICATIONS IN CASE OF DISCREPANCY. ANY STRUCTURAL MODIFICATIONS, IF REQUIRED, SHALL BE DONE PRIOR TO INSTALLATION OF ANTENNAS. REFER TO CORRESPONDING SHOP DRAWINGS.

SCOPE OF WORK
 (INCLUDING BUT NOT LIMITED TO)

1. FURNISH AND INSTALL NEW CONCRETE PAD FOR TELECOMMUNICATION EQUIPMENT.
2. FURNISH AND INSTALL NEW COAX SUPPORT STRUCTURE.
3. FURNISH AND INSTALL NEW ELECTRICAL SERVICES WITH METER AND DISCONNECT.
4. FURNISH AND INSTALL ALL UNDERGROUND UTILITIES
5. INSTALL NEW MOUNTS, ANTENNAS, CABLES, ETC.
6. INSTALL TELECOMMUNICATION EQUIPMENT.

ClearLinx DESIGN, INC.
 100 CORPORATE PARK, SUITE G-1
 PHOENIX, AZ 85042
 PHONE: (602) 406-7877
 FAX: (602) 406-7877



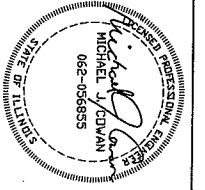
Denali Spectrum Operations LLC, dba
cricket
 SITE NUMBER: ORD-311-A
 SITE NAME: DOWNERS GROVE WT 71ST & CAMDEN RD
 COLLOCATION MONOPOLE TOWER

APPLICABLE BUILDING CODES AND STANDARDS

CONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION. (A.H.) FOR THE LOCATION. THE EDITION OF THE A.H. ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.
 BUILDING CODE: INTERNATIONAL BUILDING CODE (IBC), 2003
 ELECTRICAL CODE: NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 70 - 2002, NATIONAL ELECTRICAL CODE. (NFPA 700 - 2000, LIGHTNING PROTECTION CODE)
 AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
 AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION, ASD, NINTH EDITION
 TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-F, STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES:
 TIA 607, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS
 INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE), B1, GUIDE FOR MEASURING EARTH RESISTIVITY, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM
 IEEE 1100 (1999), RECOMMENDED PRACTICE FOR POWERING AND GROUNDING OF ELECTRONIC EQUIPMENT

CONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:
 AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
 AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION, ASD, NINTH EDITION
 TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-F, STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES:
 TIA 607, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS
 INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE), B1, GUIDE FOR MEASURING EARTH RESISTIVITY, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM
 IEEE 1100 (1999), RECOMMENDED PRACTICE FOR POWERING AND GROUNDING OF ELECTRONIC EQUIPMENT
 IEEE 682-41, RECOMMENDED PRACTICES ON SURGE VOLTAGES IN LOW VOLTAGE AC POWER CIRCUITS (FOR LOCATION CATEGORY 'C3' AND 'HIGH SYSTEM EXPOSURE')
 TELCORDIA GR-1275, GENERAL INSTALLATION REQUIREMENTS
 TELCORDIA GR-1503, COAXIAL CABLE CONNECTIONS
 ANSI T1.311, FOR TELECOM - DC POWER SYSTEMS - TELECOM, ENVIRONMENTAL PROTECTION

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE MATERIAL SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL GOVERNMENT REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.
 THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MICHAEL J. COWAN, P.E. 082-058855 ON 11/15/07.



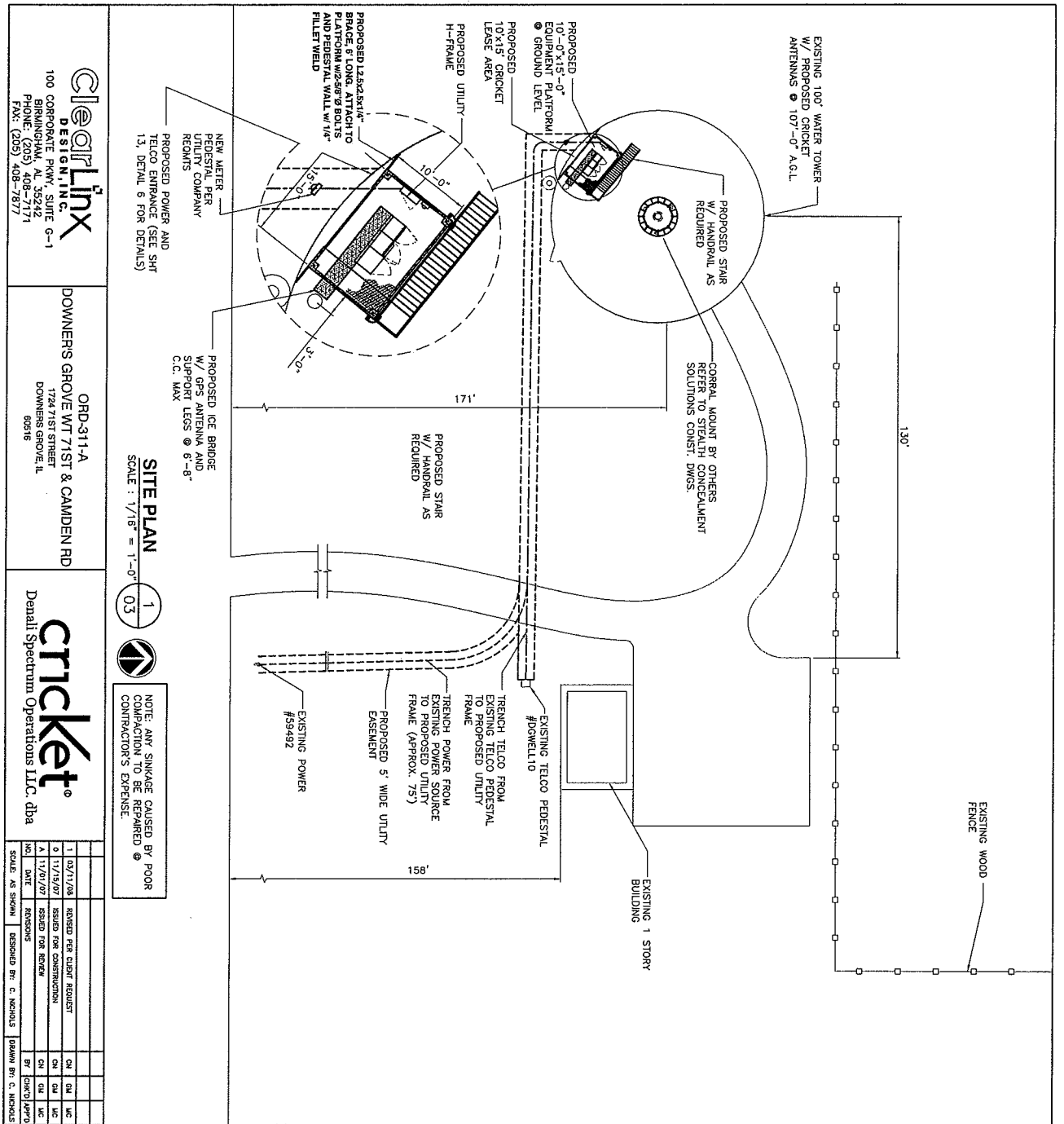
IMPORTANT NOTICE
 CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AS REQUIRED FOR PROPER EXECUTION OF PROJECT. REPORT ANY CONFLICTS OR DISCREPANCIES TO THE CONSULTANT PRIOR TO CONSTRUCTION.

CRICKET COMMUNICATIONS
 TITLE SHEET

PROJECT NUMBER	ORD-311-A-01
DATE	11/15/07
SCALE AS SHOWN	DESIGNED BY: C. NICHOLS DRAWN BY: C. NICHOLS

cricket
 Denali Spectrum Operations LLC, dba

NO.	DATE	REVISIONS	BY	CHKD	APP'D
1	04/01/08	ISSUED PER CLIENT REQUEST	CM	CM	MC
2	05/26/08	ISSUED PER CLIENT REQUEST	CM	CM	MC
3	06/17/08	ISSUED PER CLIENT REQUEST	CM	CM	MC
4	11/15/07	ISSUED FOR CONSTRUCTION	CM	CM	MC
5	11/15/07	ISSUED FOR REVIEW	CM	CM	MC



SITE PLAN
 SCALE: 1/16" = 1'-0"

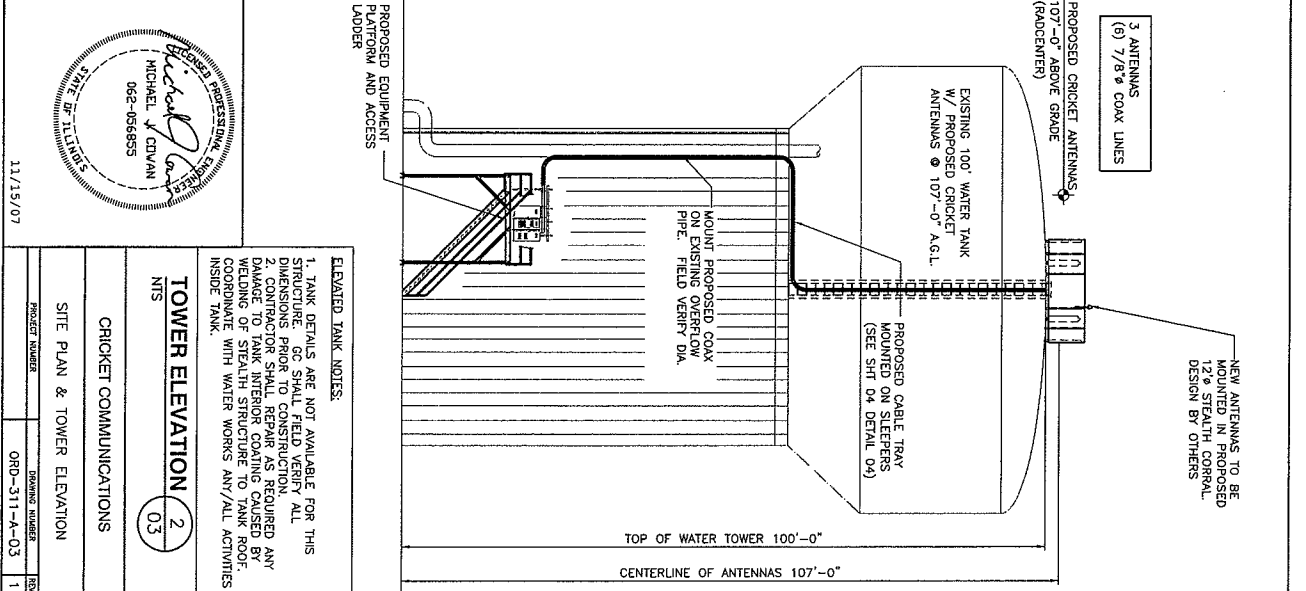
NOTE: ANY SINKAGE CAUSED BY POOR COMPACTION TO BE REPAIRED @ CONTRACTOR'S EXPENSE.

ClearLinx DESIGN, INC.
 100 CORPORATE PKWY, SUITE G-1
 BIRMINGHAM, AL 35242
 PHONE: (205) 408-7171
 FAX: (205) 408-7817

ORD-311-A
 DOWNMERS GROVE W/ 71ST & CAMDEN RD
 1724 71ST STREET
 DOWNMERS GROVE, AL
 35218

cricket
 Denali Spectrum Operations LLC, dba

NO.	DATE	REVISIONS	DESIGNED BY: C. MICHOLS	DRAWN BY: C. MICHOLS
1	02/11/08	ISSUED FOR CLIENT REVIEW		
2	01/12/07	ISSUED FOR CONSTRUCTION		
3	11/20/07	ISSUED FOR REVIEW		
4	11/20/07	REVISIONS		



TOWER ELEVATION
 SCALE: 1/8" = 1'-0"

ELEVATED TANK NOTES:
 1. TANK DETAILS ARE NOT AVAILABLE FOR THIS STRUCTURE. GC SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
 2. CONTRACTOR SHALL REPAIR AS REQUIRED ANY DAMAGE TO TANK INTERIOR COATING CAUSED BY SHEDDING OF STEEL STRUCTURE TO TANK ROOF. COORDINATE WITH WATER WORKS ANY/ALL ACTIVITIES INSIDE TANK.

PROJECT NUMBER	DRAWING NUMBER
ORD-311-A-03	102

Professional Engineer Seal:
 MICHAEL J. DIVANI
 962-956855
 STATE OF ALABAMA
 LICENSE NO. 11155
 EXPIRES 11/15/07

ANTENNA INFORMATION

QUANTITY	SECTOR 1	SECTOR 2	SECTOR 3
MFR	KAW	KAW	KAW
MODEL	HB-X-AW-17-6S-00T	HB-X-AW-17-6S-00T	HB-X-AW-17-6S-00T
WEIGHT (LBS)	28.7	28.7	28.7
DNM (N-HAWD)	66.14'x78.23" H	66.14'x78.23" H	66.14'x78.23" H
ANTENNA GAIN (dB)	18.3/18.6/18.8	18.3/18.6/18.8	18.3/18.6/18.8
AZIMUTH BEAMWIDTH	67/65/63	67/65/63	67/65/63
ELEVATION BEAMWIDTH	4.7/4.5/4.3	4.7/4.5/4.3	4.7/4.5/4.3
RAD CENTER (FT)	107	107	107
AZIMUTH (DEG)	0	120	240
ELEC DOWN TILT (DEG)	3	2	4

CABLE INFORMATION

COAX CABLE MFR	ANDREW	ANDREW	ANDREW
COAX CABLE MODEL	AL7-50	AL7-50	AL7-50
COAX CABLE DIA. (IN)	1 5/8"	1 5/8"	1 5/8"
COAX LENGTH (FT)	137	137	137
COAX CODE (TX)	YELLOW/ORANGE	RED/ORANGE	GREEN/ORANGE
COAX CODE (RX)	YELLOW/WHITE	RED/WHITE	GREEN/WHITE
JUMPER MFR	ANDREW	ANDREW	ANDREW
JUMPER MODEL	L44-PDMDM-6	L44-PDMDM-6	L44-PDMDM-6
JUMPER LENGTH (FT)	6	6	6
CONNECTOR MFR	ANDREW	ANDREW	ANDREW
CONNECTOR MODEL	AL7-DF-PS	AL7-DF-PS	AL7-DF-PS

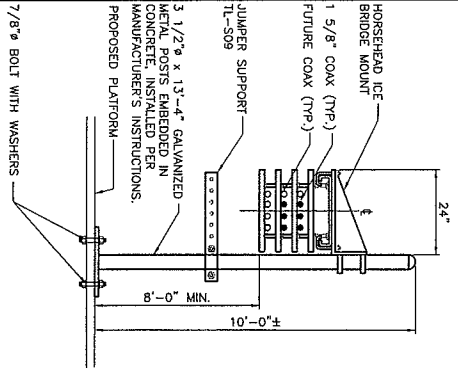
- EACH LINE OF COAX SHALL BE LABELED PURSUANT TO THE COLOR CODING SCHEDULED 12" BEFORE ANY CONNECTOR. COLOR CODING METHOD IS BY HEANS OF 1" WIDE COLORED SUPER 88 ELECTRICAL-ALL WEATHER, HEAVY DUTY, ABRASION RESISTANT, FAST BUILD UP, UV RESISTANT TAPE-3/4" WIDE.
- ALL MAIN COAX LINES WILL BE GROUNDED AT SPECIFIED LOCATIONS AND ACCORDING TO MANUFACTURER SPECIFICATIONS.
- ALL INSTANCES WHERE THE COAX HAS BEEN CUT, MODIFIED, SPLICED, OR STRIPPED SHALL BE PROPERLY SEALED ACCORDING TO MANUFACTURER SPECIFICATIONS.
- ALL COAX IS TO BE PROPERLY INSPECTED UPON RECEIPT AND SHALL BE HANDLED ACCORDING TO MANUFACTURER SPECIFICATIONS. IT SHALL NOT BE BENT BEYOND SPECIFICATIONS.
- COAX SHALL BE FASHIONED TO SHED WATER IMMEDIATELY BEFORE ENTRY INTO INTERIOR AREAS OF EQUIPMENT.
- ANTENNA AZIMUTH ARE DEGREES OFF OF TRUE NORTH, BEARING CLOCKWISE, IN WHICH THE ANTENNA FACE IS DIRECTED. ALL ANTENNAS (AND SUPPORTING STRUCTURES AS PRACTICAL) SHALL BE ACCURATELY ORIENTATED IN THE SPECIFIED DIRECTION.
- SWEEP TEST SHALL BE PERFORMED BY A GENERAL CONTRACTOR AND SUBMITTED TO LTV REPRESENTATIVE. TEST SHALL BE PERFORMED PER LCV STANDARDS.

ANTENNA SCHEDULE



ClearLinx
DESIGN, INC.
100 CORPORATE PKWY, SUITE G-1
BIRMINGHAM, AL 35242
PHONE: (205) 408-1171
FAX: (205) 408-1817

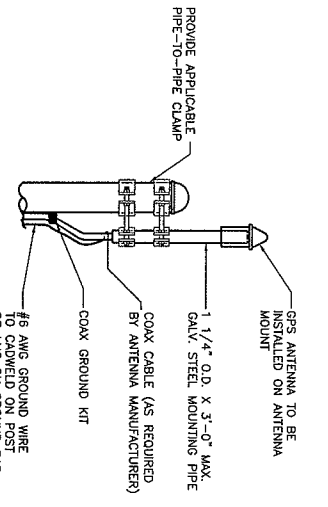
ORD-311-A
DOWNERS GROVE W/71ST & CAMDEN RD
1724 71ST STREET
DOWNERS GROVE, IL
60518



WAVEGUIDE BRIDGE



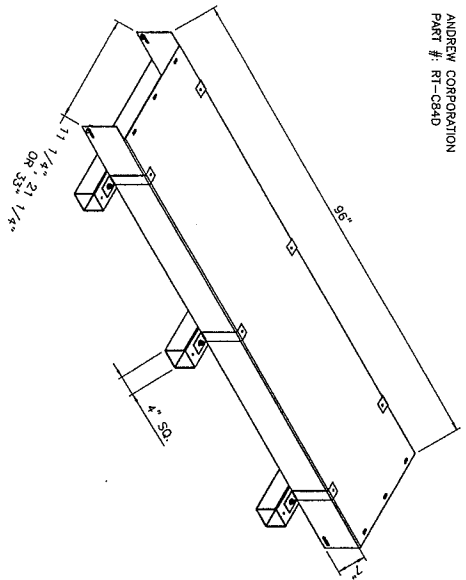
ANDREW CORPORATION
PART #: RT-084D



GPS MOUNT DETAIL



- NOTES:
- LOCATION OF ANTENNA MUST HAVE CLEAR VIEW OF SOUTHERN SKY AND CANNOT HAVE ANY BLOCKAGES EXCEEDING 25% OF THE SURFACE AREA OF A HEMISPHERE AROUND THE GPS ANTENNA.
 - ALL GPS ANTENNA LOCATIONS MUST BE ABLE TO RECEIVE CLEAR SIGNALS FROM A MINIMUM OF FOUR (4) SATELLITES. VERIFY WITH HANDHELD GPS BEFORE FINAL LOCATION OF GPS ANTENNA.



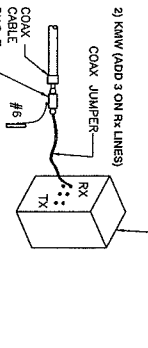
COVERED CABLE TRAY



cricket
Denali Spectrum Operations LLC, dba

NO.	DATE	REVISIONS	DESIGNED BY: C. NICHOLS	DRAWN BY: C. NICHOLS
2	03/26/08	REVISED PER CLIENT REQUEST		
1	03/17/08	ISSUED FOR CLIENT REQUEST		
0	11/15/07	ISSUED FOR CONSTRUCTION		
4	11/09/07	ISSUED FOR REVIEW		
NO.	DATE	REVISIONS	DESIGNED BY: C. NICHOLS	DRAWN BY: C. NICHOLS

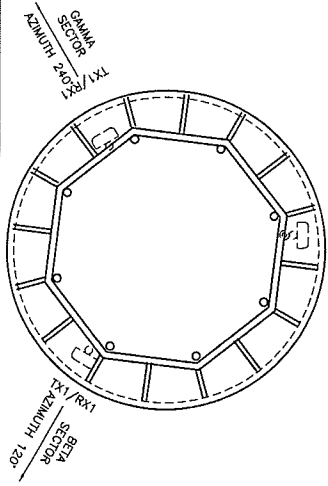
1) CMA (NO CHANGE)



BIAS TEE FOR ANTENNAS



- 2) KAW (ADD 3 ON RX LINES)
- COAX JUMPER-
COAX CABLE
BIAS TEE
- 3) JAYBEAM
ANTENNA (TYP.)
- ICE BRIDGE
- 12"x12" BOX @ ICE BRIDGE POST
- RAIN CONTROL CABLE DOWN W/COAX ALONG ICE BRIDGE POST
- TERMINATE AT 12"x12" BOX ON ICE BRIDGE POST, EITHER BOX @ BOTTOM W/ GROUND, EXTRA COILED INSIDE.
- NOTE: RX LINE MUST CONNECT TO CONTROL PORT ON ANTENNA
- DASY CHAIN ANTENNA W/CONTROL CABLE ON ANT-1



ANTENNA PLAN

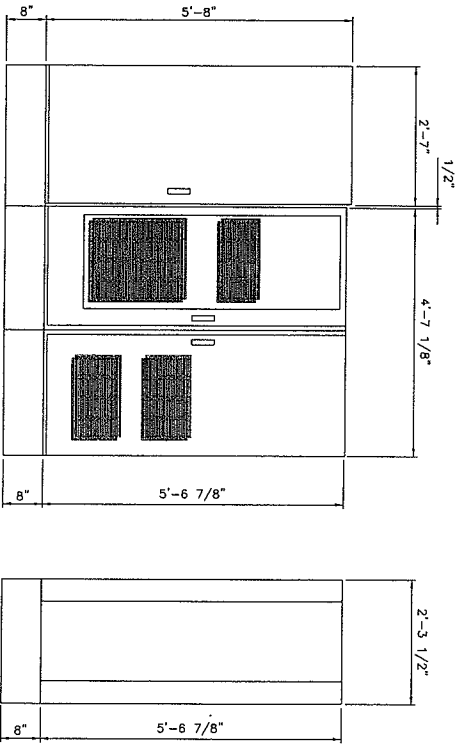
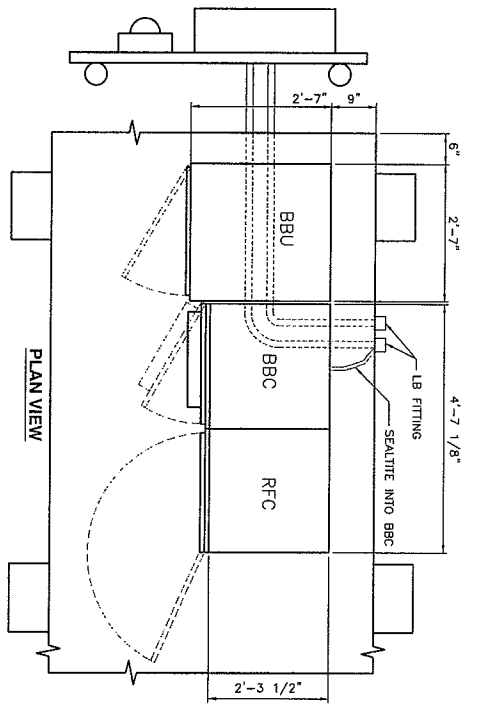


REGISTERED PROFESSIONAL ENGINEER
MICHAEL J. COVANN
STATE OF ALABAMA
062-056855
11/15/07

CRICKET COMMUNICATIONS

ANTENNA DETAILS & SCHEDULES

PROJECT NUMBER	DRAWING NUMBER	REV
ORD-311-A-04		1



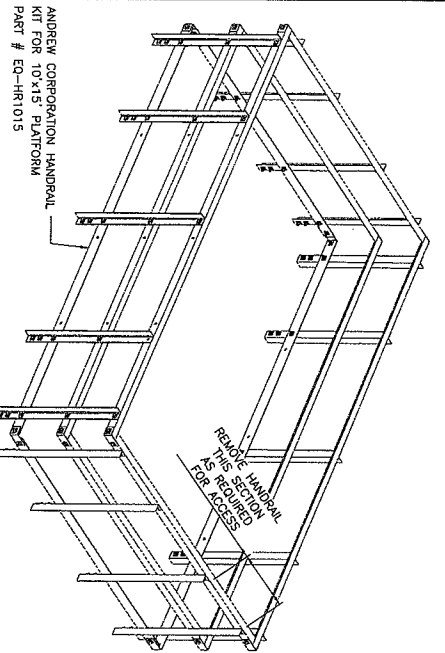
HUAWEI TECHNOLOGIES CABINET

1
05

ClearLine
DESIGN, INC.
100 CORPORATE PKWY, SUITE G-1
BIRMINGHAM, AL 35242
PHONE: (205) 408-7171
FAX: (205) 408-7877

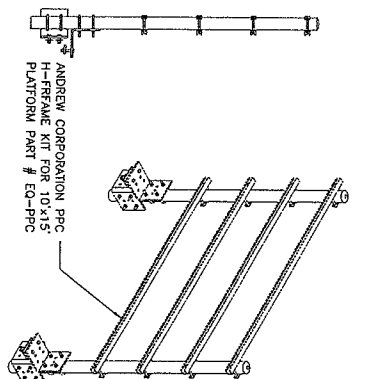
ORD-311-A
DOWNERS GROVE W/ 71ST & CAMDEN RD
1724 71ST STREET
DOWNERS GROVE, IL
60516

cricket
Detai Spectrum Operations LLC, dba



HANDRAIL

2
05



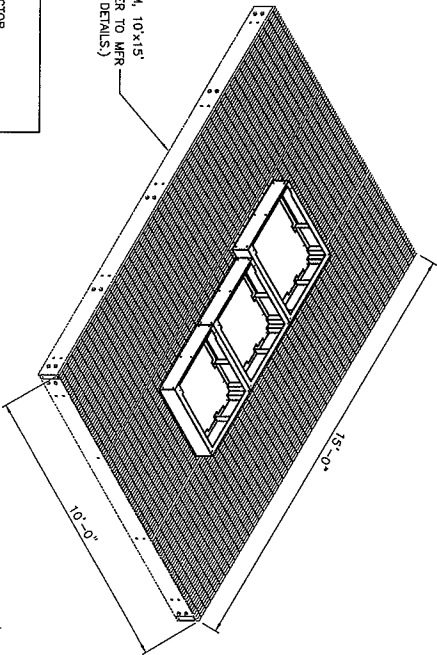
SIDE VIEW

PPC FRAME

3
05

- NOTES:**
1. PLINTHS TO BE INSTALLED BY CONTRACTOR.
 2. SEE SHEET 13 FOR ADDITIONAL STRUCTURAL DETAILS.
 3. ALL STRUCTURAL STEEL AND PLATFORM ELEMENTS SHALL BE HOT-DIP GALVANIZED.
 4. THIS DETAIL DENOTES THE PURCHASED ASSEMBLY ONLY. FOR FINAL ASSEMBLY AND DETAILS SEE SHEET 13.

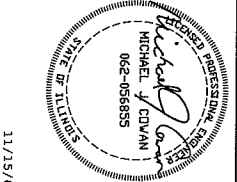
ANDREW CORPORATION NON-PENETRATING ROOF PLATFORM, 10x15' PART # EQ-P1015-DF (REFER TO MFR PROVIDED DOCUMENTS FOR DETAILS.)



PLATFORM PLAN

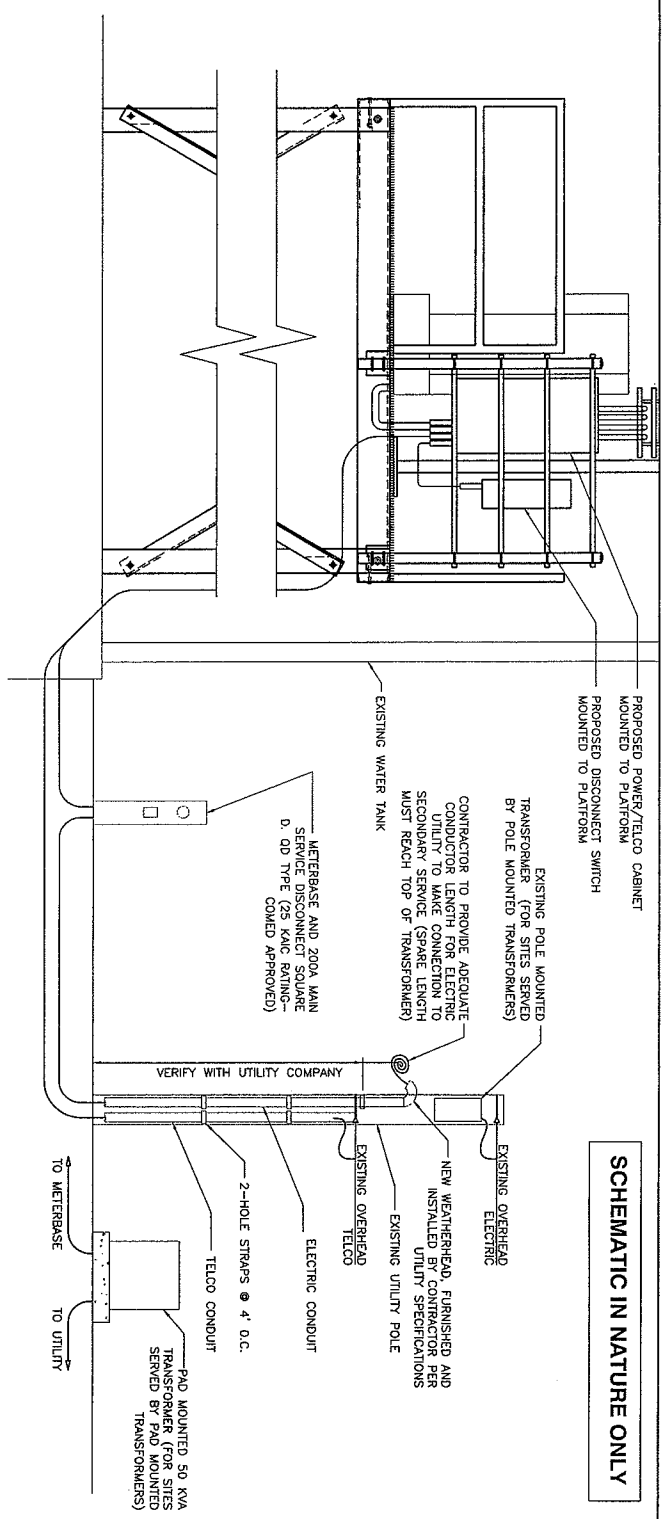
4
05

NO.	DATE	REVISIONS	DESIGNED BY: C. MOHOLA	DRAWN BY: C. MOHOLA	APPROVED
1	10/21/08	ISSUED FOR CLIENT REQUEST	CM	CM	MC
2	11/15/07	ISSUED FOR CONSTRUCTION	CM	CM	MC
3	11/15/07	ISSUED FOR REVIEW	CM	CM	MC



CRICKET COMMUNICATIONS	PROJECT NUMBER	ORD-311-A-05
SITE WORK DETAILS	DRAWING NUMBER	1

SCHEMATIC IN NATURE ONLY



GENERAL NOTES

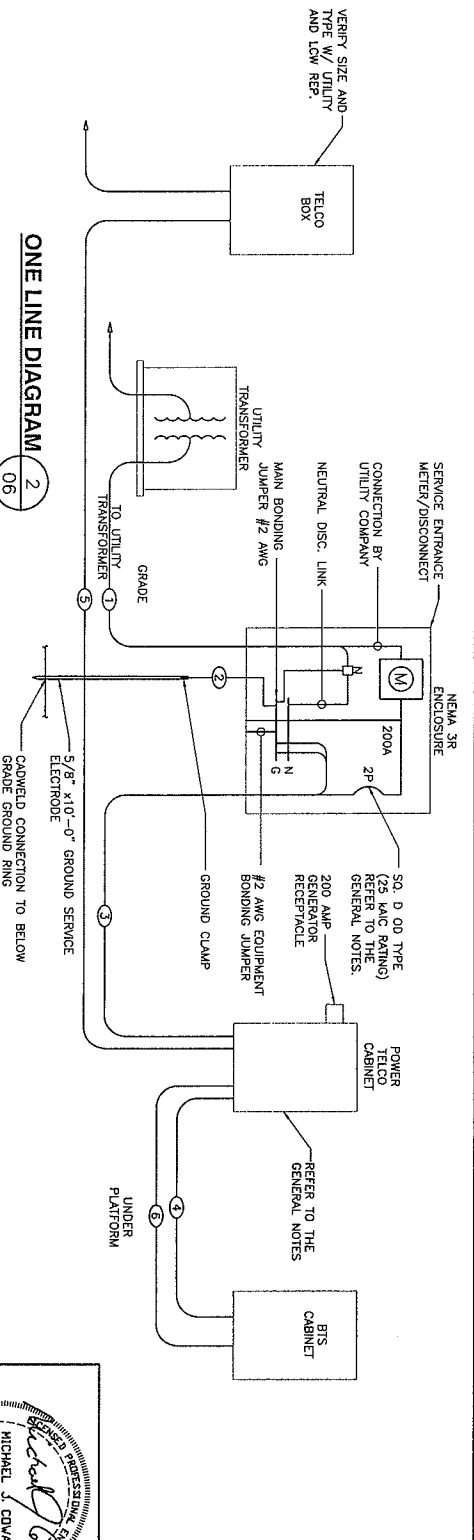
1. WHEN SERVICE OVERCURRENT DISCONNECT IS FIELD INSTALLED AND HAS A NEEDLE TO MOVE MECHANISM, THE AVAILABLE FAULT CURRENT DOES NOT EXCEED 25 KAC. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF THIS REQUIREMENT IS NOT MET FOR ADDITIONAL ENGINEERING REVIEW AND DESIGN.
2. PRIOR TO INSTALLATION OF FINAL ELECTRICAL CONNECTION TO UTILITY SERVICE THE CONTRACTOR SHALL VERIFY THE UTILITY SERVICE THAT THE AVAILABLE FAULT CURRENT DOES NOT EXCEED 25 KAC. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF THIS REQUIREMENT IS NOT MET FOR ADDITIONAL ENGINEERING REVIEW AND DESIGN.

POWER/TELECO CABINET (PTC) DATA

- PROVIDED W/ CABINET:
- GENERATOR AND MAIN BREAKERS: SQUARE 00 FRAME 200A, MECHANICAL TRANSFER MECHANISM AR20044RS
 - GENERATOR RECEPTACLE: 200A APPLETON
 - LOAD CENTER: SQUARE D, 200A 24 POSITION, 00 STYLE
 - BRANCH BREAKERS: SQUARE D, 00 STYLE
 - (1) 20A, 2P FOR TVSS
 - (1) 15A, 1P FOR GFCI RECEPTACLE
 - (1) 10A, 1P FOR TELCO VENTILATION FAN
 - PROVIDED BY CONTRACTOR:
 - BRANCH BREAKERS: SQUARE D, 00 STYLE
 - (1) 50A, 2P FOR BTS CABINET
 - (1) 15A, 1P FOR WORK LIGHT
 - (1) 20A, 1P FOR CELL EXTENDER CABINET

UTILITY SITE ELEVATION

1
06



ONE LINE DIAGRAM

2
06

ELECTRODE FEEDER SCHEDULE

①	(3) #3/0 & #4 GND - 2" CONDUIT
②	(1) #4 GND - 1 1/2" CONDUIT
③	(1) #3/0 & (1) #4 GND - 2" CONDUIT
④	(3) #3 STRANDED, COLORED + 1 #6 STRANDED AND ONE #1 GND TO LB + 3' SEALTITE TO TERMINATE AT PLINTH.
TELECOM FEEDER SCHEDULE	
⑤	(2) 12 PR. CAT. 5 (PHONE COMPANY CABLES), 4" CONDUIT TYPICAL (2" CONDUIT IF APPROVED).
⑥	1 1/2" CONDUIT TO LB + SEALTITE + APPROPRIATE FITTING FOR TERMINATION TO PLINTH. (3) 4 PR. CAT. 5 CABLES BY OTHERS.

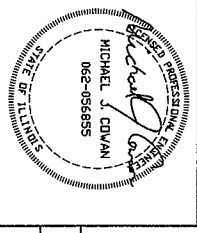
ClearLink
DESIGN, INC.
100 CORPORATE PKWY, SUITE 6-1
BIRMINGHAM, AL 35242
PHONE: (205) 408-1771
FAX: (205) 408-1877

ORD-311-A
DOWNERS GROVE WT 71ST & CAMDEN RD
1784 P31 STREET
DOWNERS GROVE, IL
60518

cricket
Denali Spectrum Operations LLC, dba

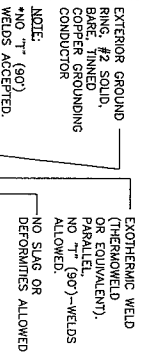
NO.	DATE	REVISION	DESIGNED BY: C. NEBOIS	DRAWN BY: C. NEBOIS	BY: (initials)	DATE
1	02/11/08	ISSUED FOR CLIENT REQUEST			CN	02/11/08
0	11/15/07	ISSUED FOR CONSTRUCTION			CN	02/11/08
1	11/01/07	ISSUED FOR REVIEW			CN	02/11/08
0						

SCALE: AS SHOWN

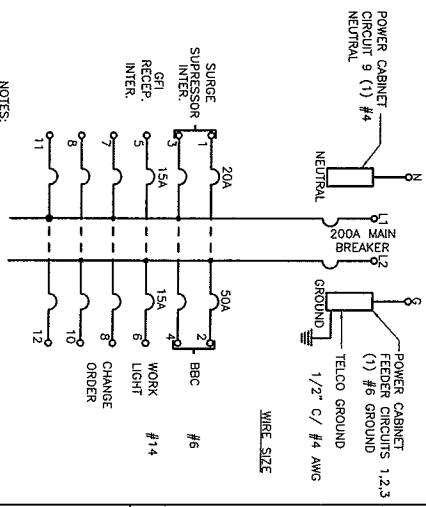


11/15/07

CRICKET COMMUNICATIONS
UTILITY SITE ELEVATION
& ONE LINE DIAGRAM
PROJECT NUMBER: ORG-311-A-06
DRAWING NUMBER: 1



TYPICAL GROUNDING CONNECTION (1) (07)



- NOTES:
1. WHEN SERVICE OVER CURRENT DISCONNECT IS FIELD INSTALLED, ALL NEUTRAL TO GROUND CONNECTIONS ESTABLISHED BEFORE FIELDING NEUTRAL TO GROUND BONDING JUMPER IN PTC CABINET.
 2. PRIOR TO INSTALLATION OF FINAL ELECTRICAL CONNECTION TO UTILITY SERVICE, THE ELECTRICAL CONTRACTOR SHALL KEEP THE AVAILABLE FAULT CURRENT DOES NOT EXCEED 75 AMP. THE AVAILABLE FAULT CURRENT SHALL BE IMMEDIATELY IF THIS REQUIREMENT IS NOT MET FOR ADDITIONAL ENGINEERING REVIEW AND DESIGN.

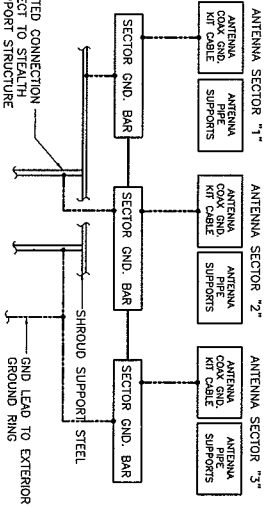
PANEL SCHEDULE (5) (07)

ClearLinx
DESIGN, INC.
100 CORPORATE PKWY, SUITE G-1
PHOENIX, AZ 85024
PHONE: (602) 408-7172
FAX: (602) 408-7877

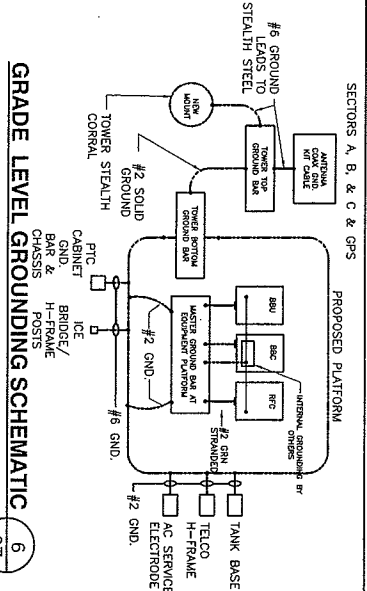
ORD-311-A
DOWNIERS GROVE/WT 71ST & CAMDEN RD
1744 11ST STREET
DOWNIERS GROVE, IL
60516

cricket
Denali Spectrum Operations LLC, dba

NO.	DATE	REVISIONS	DESIGNED BY: C. MICHOS	DRAWN BY: C. MICHOS
0	11/15/07	SOLID FOR CONSTRUCTION		
1	11/09/07	SOLID FOR REVIEW		



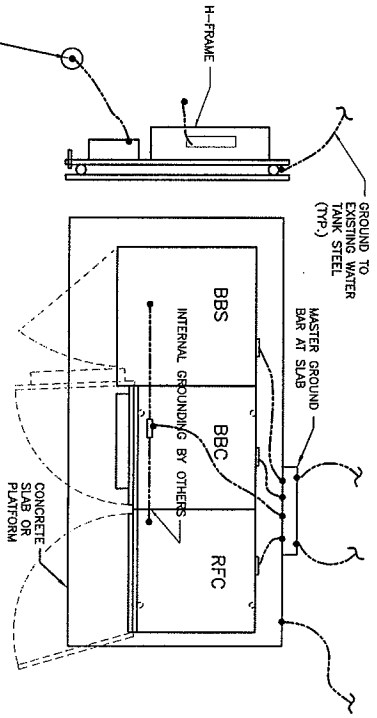
TOP OF TOWER GROUNDING SCHEMATIC (4) (07)



GRADE LEVEL GROUNDING SCHEMATIC (6) (07)

THE CONTRACTOR SHALL PERFORM IEEE FALL-OR-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR NEW GROUND ELECTRODE SYSTEMS. THE CONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.

SCHEMATIC IN NATURE ONLY

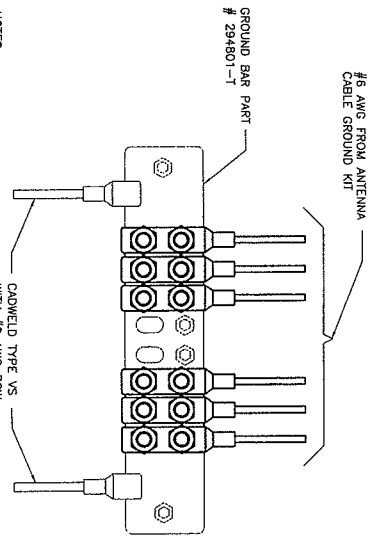


- NOTES:
1. INSTALL GROUND RODS AND CONNECTING GROUND WIRE AROUND THE NEW EQUIPMENT PLATFORM, SEPARATION BETWEEN THE LENGTH OF THE RODS SHOULD NOT BE LESS THAN THE LENGTH OF THE RODS NOR BE MORE THAN TWO SEPARATE PLACES.
 2. ONE SEPARATE GROUND LEAD SHALL BE INSTALLED FOR EACH CABINET. THE GROUND LEADS SHALL BE ABLE TO EXTEND A MINIMUM OF 10'-0" ABOVE GRADE AND SHALL BE COILED AND READY FOR CONNECTION TO THE INTERNAL EQUIPMENT GROUND BAR. EACH GROUND LEAD SHALL BE EXOTHERMICALLY GROUNDING WIRE.
 3. REFER TO DETAIL 114 FOR GROUND ROD DETAILS.

TYPICAL CABINET & PLATFORM GROUNDING (7) (07)

Professional Engineer
MICHAEL A. COWAN
062-065655
STATE OF ARIZONA

CRICKET COMMUNICATIONS
GROUNDING PLAN &
GROUNDING SCHEMATICS
PROJECT NUMBER: ORD-311-A-07
DRAWING NUMBER: 100
0

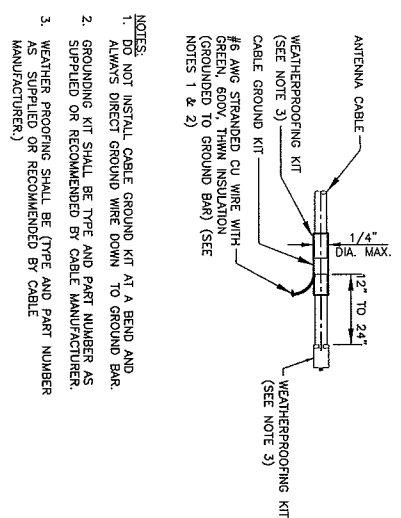


- NOTES:
1. SECTOR BARS TO BE 1/4"x2"x10"
 2. UPPER & LOWER MAIN GROUND BARS TO BE 1/4"x2"x10"
 3. ALL BOLTS TO BE W/ 3/8"x1 S.S. & BETS) ON ALL LUG CONNECTIONS

CONTRACTOR TO UTILIZE KOPR-SHIELD (THOMAS & BETTS) ON ALL LUG CONNECTIONS

INSTALLATION OF GROUND WIRE TO GROUND BAR

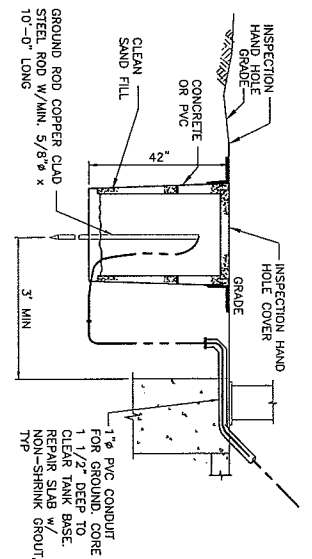
1 08



- NOTES:
1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
 2. GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
 3. WEATHER PROOFING SHALL BE (TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.)

CONNECTION OF CABLE GROUND KIT TO ANTENNA CABLE

2 08

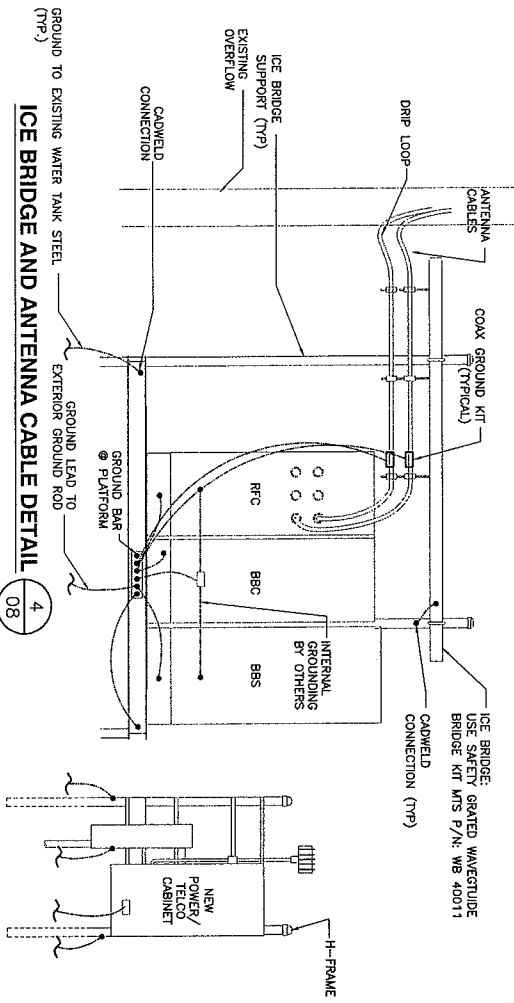


1. 42" MINIMUM BELOW GRADE
2. GROUND ROD SHALL BE DRIVEN VERTICALLY, NOT TO EXCEED 45 DEGREES FROM THE VERTICAL.

NOTE: INSPECTION HAND HOLE MAY BE CONCRETE OR PVC AND SHALL BE A MINIMUM OF 8" IN WIDTH/DIAMETER

GROUND ROD WITH ACCESS AREA

3 07



ICE BRIDGE AND ANTENNA CABLE DETAIL

4 08

ClearLinx DESIGN, INC.
100 CORPORATE PKWY, SUITE G-1
BIRMINGHAM, AL 35242
PHONE: (205) 408-7171
FAX: (205) 408-7877

ORD-311A
DOWNERS GROVE W/ 71ST & CAMDEN RD
1724 71ST STREET
DOWNERS GROVE, IL 60518

cricket
Detail Spectrum Operators LLC, dba

NO.	DATE	REVISIONS	DESIGNED BY: C. NICHOLS	DRAWN BY: C. NICHOLS
2	04/26/04	REVISION PER CLIENT REQUEST		
1	03/17/03	REVISION PER CLIENT REQUEST		
0	11/15/02	ISSUED FOR CONSTRUCTION		
A	11/07/02	ISSUED FOR REVIEW		

Richard Cowan
PROFESSIONAL ENGINEER
MICHAEL J. COWAN
062-0564855
STATE OF ALABAMA
EXPIRES 12/31/07

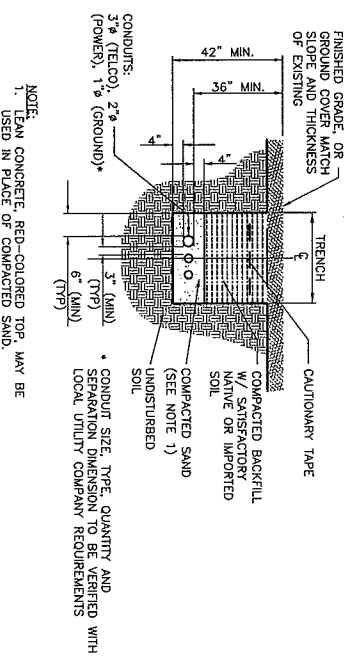
CRICKET COMMUNICATIONS

GROUNDING DETAILS

PROJECT NUMBER	DRAWING NUMBER	REV
	ORD-311-A-08	1

DIRECT BURIED CONDUIT

5 08



SITE WORK GENERAL NOTES:

1. THE SUBCONTRACTOR SHALL CONDUCT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
2. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE PROTECTED BY THE CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PILES AROUND OR NEAR UTILITIES. SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION & EXCAVATION. B) ELECTRICAL SAFETY C) TRENCHING & EXCAVATION.
3. ALL PROJECT SHALL BE AS INDICATED ON THE DRAWINGS AND PROTECT SPECIFICATIONS.
4. IF NECESSARY, RUBBER, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
5. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF CONTRACTOR, OWNER AND/OR LOCAL UTILITIES.
6. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION.
7. THE CONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE.
8. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BITS EQUIPMENT AND TOWER AREAS.
9. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
10. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
11. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE REGRADED TO ORIGINAL GRADE AND STABILIZED TO PREVENT EROSION AS DESCRIBED IN THE PROJECT SPECIFICATIONS.
12. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
13. ANY SINKAGE CAUSED BY POOR COMPACTION TO BE REPAIRED @ CONTRACTOR'S EXPENSE.

STRUCTURAL STEEL NOTES:

1. ALL STEEL WORK SHALL BE PAINTED IN ACCORDANCE WITH THE PROTECTIVE SPECIFICATIONS AND IN ACCORDANCE WITH ASTM A53 UNLESS OTHERWISE NOTED.
2. ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND ALL WELDING SHALL CONFORM TO AISC. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE 2 OF THE AISC MANUAL OF STEEL CONSTRUCTION. SURFACES SHALL BE TOUCHED UP.
3. BOLTED CONNECTIONS SHALL BE ASTM A325 BEARING TYPE UNLESS NOTED OTHERWISE.
4. (3/4") CONNECTIONS AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
5. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIA. ASTM A 307 BOLTS UNLESS NOTED OTHERWISE.
6. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL, OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE. ALL REBAR CUT SECTIONS REQUIRED BY MAINFRAME CODES SHALL BE REBAR SPECIFICATIONS REQUIRED BY MAINFRAME MANUFACTURER'S MAXIMUM ALLOWABLE LOADS.

CONCRETE AND REINFORCING STEEL NOTES:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 308, ACI 309, ACI 310, ACI 311, ACI 312, ACI 313, ACI 314, ACI 315, ACI 316, ACI 317, ACI 318, ACI 319, ACI 320, ACI 321, ACI 322, ACI 323, ACI 324, ACI 325, ACI 326, ACI 327, ACI 328, ACI 329, ACI 330, ACI 331, ACI 332, ACI 333, ACI 334, ACI 335, ACI 336, ACI 337, ACI 338, ACI 339, ACI 340, ACI 341, ACI 342, ACI 343, ACI 344, ACI 345, ACI 346, ACI 347, ACI 348, ACI 349, ACI 350, ACI 351, ACI 352, ACI 353, ACI 354, ACI 355, ACI 356, ACI 357, ACI 358, ACI 359, ACI 360, ACI 361, ACI 362, ACI 363, ACI 364, ACI 365, ACI 366, ACI 367, ACI 368, ACI 369, ACI 370, ACI 371, ACI 372, ACI 373, ACI 374, ACI 375, ACI 376, ACI 377, ACI 378, ACI 379, ACI 380, ACI 381, ACI 382, ACI 383, ACI 384, ACI 385, ACI 386, ACI 387, ACI 388, ACI 389, ACI 390, ACI 391, ACI 392, ACI 393, ACI 394, ACI 395, ACI 396, ACI 397, ACI 398, ACI 399, ACI 400.
2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE.
3. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, PERMANENTLY BENT, UNLESS OTHERWISE NOTED. WIRE FABRIC UNLESS NOTED OTHERWISE. SPICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD. UNO.
4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:
 - CONCRETE CAST AGAINST EARTH.....3 IN.
 - CONCRETE EXPOSED TO EARTH OR WEATHER:
 - #6 AND LARGER2 IN.
 - #5 AND SMALLER & WWF.....1 1/2 IN.
 - CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:
 - SLAB AND WALL3/4 IN.
 - BEAMS AND COLUMNS.....1 1/2 IN.
5. A CHAIRER 3/4" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
6. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL, OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE. ALL REBAR CUT SECTIONS REQUIRED BY MAINFRAME CODES SHALL BE REBAR SPECIFICATIONS REQUIRED BY MAINFRAME MANUFACTURER'S MAXIMUM ALLOWABLE LOADS.

GENERAL NOTES

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
 - CONTRACTOR - GENERAL CONTRACTOR (CONSTRUCTION)
 - OWNER - POCKET COMMUNICATIONS
 - DETAILED - ORIGINAL EQUIPMENT MANUFACTURER
2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING CONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.
3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH THE LATEST EDITIONS OF THE FOLLOWING CODES: CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES TO THE OWNER. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE ORDINANCES, REGULATIONS, AND LAWS OF ANY PUBLIC AUTHORITY REGARDING ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
4. DRAWINGS PROVIDED HERE ARE NOT TO SCALE AND ARE INTENDED TO SHOW OUTLINE ONLY.
5. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED EQUIPMENT, ON THE DRAWINGS.
6. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
7. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL.
8. CONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND T1 PLAN DRAWING.
9. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, GROUNDING CABLES AS SHOWN ON THE ELECTRICAL PLAN.
10. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
11. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
12. CONTRACTOR TO OBTAIN REQUIRED NOTICE TO PROCEED DOCUMENTS FROM THE TOWER OWNER BEFORE COMMENCING CONSTRUCTION.

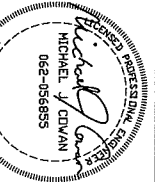
ABBREVIATIONS

AGL	ABOVE GRADE LEVEL
AWG	AMERICAN WIRE GAUGE
BCW	BASE COPPER WIRE
BTS	BASE TRANSMISSION STATION
DWG	DRAWING
ENT	ELECTRICAL METALLIC TUBING
GEN	GENERATOR
IGR	INTERIOR GROUND RING (YALLO)
IMC	INTERMEDIATE METALLIC CONDUIT
MCB	MASTER GROUND BAR
MIN	MINIMUM
NIS	NOT TO SCALE
PCS	PERSONAL COMMUNICATION SYSTEM
REF	REFERENCE
RBS	RAID BASE STATION
REQ	REQUIRED
RF	RADIO FREQUENCY
RSS	RIGID GALVANIZED STEEL
RWY	RAILWAY
SCS	SELF CONTAINED CELL SITE
TBD	TO BE DETERMINED
TYP	TYPICAL

ELECTRICAL SYMBOLS

⊗	GROUND ROD WITH ACCESS
⊙	CHEMICAL GROUND ROD
⊚	GROUND ROD
⊛	DISCONNECT SWITCH
⊜	METER
⊝	CIRCUIT BREAKER
⊞	CABLED TYPE CONNECTION
⊟	COMPRESSION TYPE CONNECTION
⊠	GROUNDING WIRE

--- REPRESENTS DETAIL NUMBER
--- REF. DRAWING NUMBER



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cricket
Denali Spectrum Operations LLC, dba

6	11/15/07	ISSUED FOR CONSTRUCTION	CM	CM	CM	CM	CM	CM	CM
4	11/20/07	ISSUED FOR REVIEW	CM	CM	CM	CM	CM	CM	CM
NO	DATE	RESPONSE	BY	BY	BY	BY	BY	BY	BY
SCALE AS SHOWN			DESIGNED BY: C. MCKENZIE			DRAWN BY: C. MCKENZIE			

11/15/07

PROJECT NUMBER	DRAWING NUMBER	REV
CONSTRUCTION NOTES	ORD-311-A-09	0

GROUNDING NOTES

1. THE CONTRACTOR SHALL REVIEW AND INSPECT THE EXISTING FACILITY GROUNDING SYSTEM AND LIGHTNING PROTECTION SYSTEM (AS DESIGNED AND INSTALLED) FOR STRICT COMPLIANCE WITH THE NEC (AS ADOPTED BY THE STATE) AND THE STATE ELECTRICAL CODE (AS ADOPTED BY THE STATE). THE CONTRACTOR SHALL REPORT ANY VIOLATIONS OR ADVERSE FINDINGS.
2. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND AC POWER GESS) SHALL BE BONDED TOGETHER AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
3. THE CONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR NEW GROUND ELECTRODE SYSTEMS. THE CONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
4. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO ITS EQUIPMENT.
5. EACH BITS CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, 6 AWG STRANDED COPPER OR LARGER FOR INDOOR BITS; 2 AWG STRANDED COPPER FOR OUTDOOR BITS.
6. EXPOSING WEIRD SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
7. APPROVED ANTI-OXIDANT COMINGS (I.E., CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
8. ICE BONDING CONDUCTORS SHALL BE EXTERNALLY BOND OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.
9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
10. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
11. METAL CONDUIT AND TRAY SHALL BE GROUND AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH 6 AWG COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
12. GROUND CONDUCTORS USED IN THE FACILITY GROUND AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR STEELS THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE ROUTED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL, SUCH AS PVC PLASTIC CONDUIT SHALL BE USED. THERE USE OF METAL CONDUIT IS UNDESIRABLE (E.G., NON-METALLIC CONDUIT PROHIBITED BY LOCAL CODE). THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.
13. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND AC POWER GESS) SHALL BE BONDED TOGETHER, AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
14. THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT.
15. CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED. BACK TO BACK CONNECTIONS ON OPPOSITE SIDES OF THE GROUND BUS ARE PERMITTED.
16. ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING, SHALL BE #2 AWG SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
17. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.
18. ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR & EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.
19. COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.
20. ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
21. BOND ALL METALLIC OBJECTS WITHIN 6 FT OF MAIN GROUND WIRES WITH 1-#2 AWG TIN-PLATED COPPER GROUND CONDUCTOR.

ELECTRICAL INSTALLATION NOTES

1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES.
2. CONDUIT ROUTINGS ARE SCHEMATIC. CONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.
3. WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC AND TELCORDIA.
4. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC AND TELCORDIA.
5. CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.
6. EACH END OF EVERY POWER, POWER PHASE CONDUCTOR (I.E., HOT), GROUNDING, AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (GM BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC & OSHA.
7. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS. CONDUIT IDENTIFICATION, POWER OR AMPACITY RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING, AND BRANCH CIRCUIT ID NUMBERS (I.E., PANELBOARD AND CIRCUIT ID'S).
8. PANELBOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS.
9. ALL THE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
10. POWER, CONTROL, AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTORS (#14 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION, LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
11. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#6 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2 GREEN INSULATION, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION, LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
12. POWER AND CONTROL WIRING NOT IN TUBING OR CONDUIT SHALL BE MULTI-CONDUCTOR TYPE TC CABLE (#14 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION, WITH OUTER JACKET, LISTED OR LABELED FOR THE LOCATION USED, UNLESS OTHERWISE SPECIFIED.
13. ALL POWER AND GROUNDING CONNECTIONS SHALL BE GRIMP-STYLE, COMPRESSION WIRE LUSS AND WIRENUTS BY THOMAS AND BETTS (OR EQUAL). LUSS AND WIRENUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75°C (90°C IF AVAILABLE).
14. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.
15. ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40, OR RIGID PVC SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
16. ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENR), OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
17. GALVANIZED STEEL INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE.
18. RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80) SHALL BE USED UNDERGROUND, DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY VEHICLE TRAFFIC.
19. LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
20. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SETSCREW FITTINGS ARE NOT ACCEPTABLE.
21. CABINETS, BOXES, AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.
22. WIREWAYS SHALL BE EPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARD, SHALL BE PENDANT TYPE E (OR EQUAL), AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.
23. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES, AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL. SHALL MEET OR EXCEED UL 514 AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.
24. METAL RECEPTACLE SWITCH, AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED, OR NON-CORRODING, SHALL MEET OR EXCEED UL 514 AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
25. NONMETALLIC RECEPTACLE SWITCH, AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
26. THE AC POWER DISTRIBUTION PANELS.
27. THE CONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD AGAINST LIFE AND PROPERTY.

TRANSIENT VOLTAGE SURGE SUPPRESSION (TVSS)

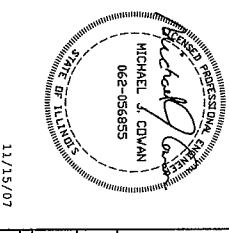
1. RF TVSS DEVICES SHALL BE INSTALLED IN ALL NEW ANTENNA & NEW COAXIAL INSTALLATION OR REPLACEMENTS.
2. SEE DETAIL 116 AND 122 FOR ADDITIONAL RF COAXIAL TVSS REQUIREMENTS.
3. AC TVSS DEVICES FOR AC POWER SHALL BE INSTALLED FOR ALL NEW AC PANEL INSTALLATION OR REPLACEMENTS.
4. THE AC TVSS SHALL BE COMMON MODE TYPE, MINIMUM RATED 1200A SURGE CURRENT, AND HAVE MONITORING LIGHTS WITH FORM C ALARM CONTACTS. THE AC TVSS SHALL BE INNOVATIVE TECHNOLOGIES PRTX20 OR OWNER APPROVED EQUAL. THE TVSS SHALL BE CONNECTED TO THE AC SYSTEM THROUGH A CIRCUIT BREAKER IN THE AC PANELBOARD AND SHALL BE MOUNTED INTEGRAL WITH THE PANELBOARD OR DIRECTLY ADJACENT.
5. T1 TVSS DEVICES SHALL BE INSTALLED IN ALL NEW T1 INSTALLATIONS.
6. THE CONTRACTOR SHALL INSPECT THE EXISTING TELCO SYSTEM FOR TVSS PRESENCE AND REPORT FINDINGS.
7. SURGE SUPPRESSION AND PROTECTION DEVICES SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC) ARTICLE 250, 280, 285, AND CHAPTER 8, AS APPLICABLE.

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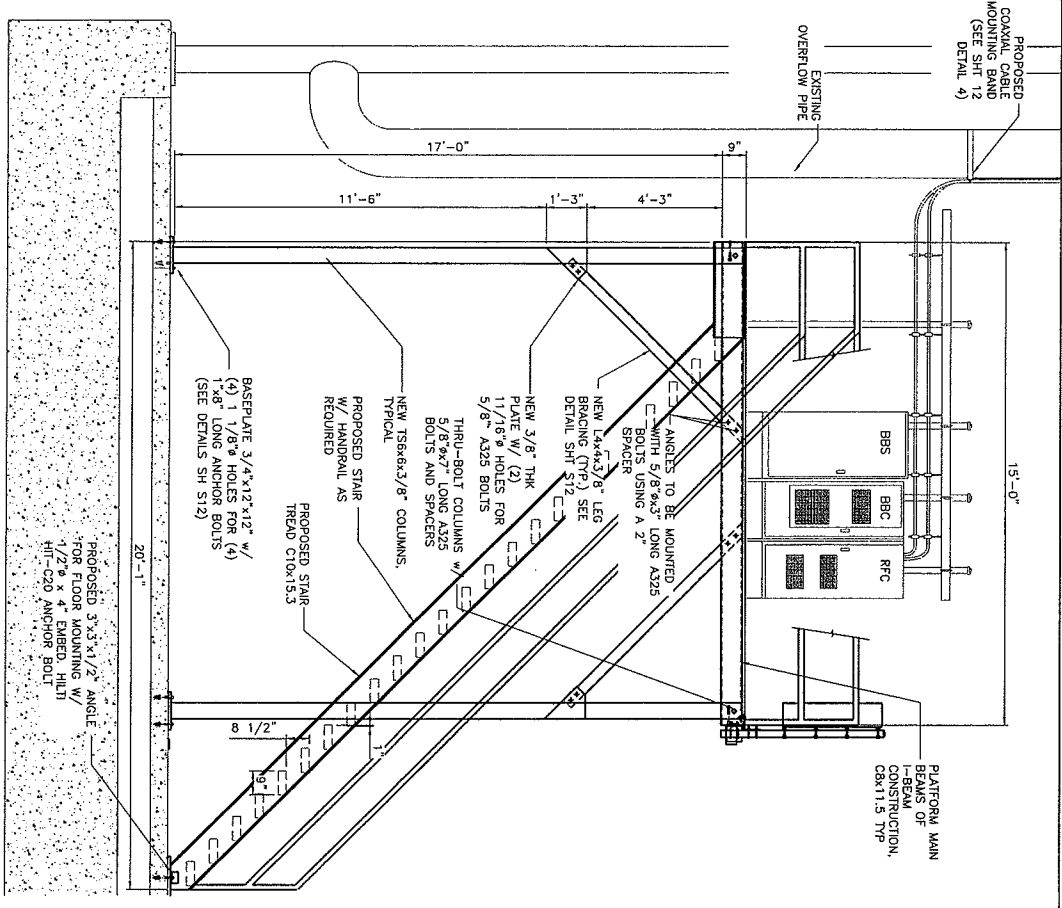
cricket
 Denali Spectrum Operations LLC, dba

NO.	DATE	ISSUED FOR CONSTRUCTION	ISSUED FOR REVIEW	BY	CHANGED BY	DESIGNED BY	DESIGNED BY	REVISIONS
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1	11/01/07	ISSUED FOR REVIEW		CM	CM	CM	CM	

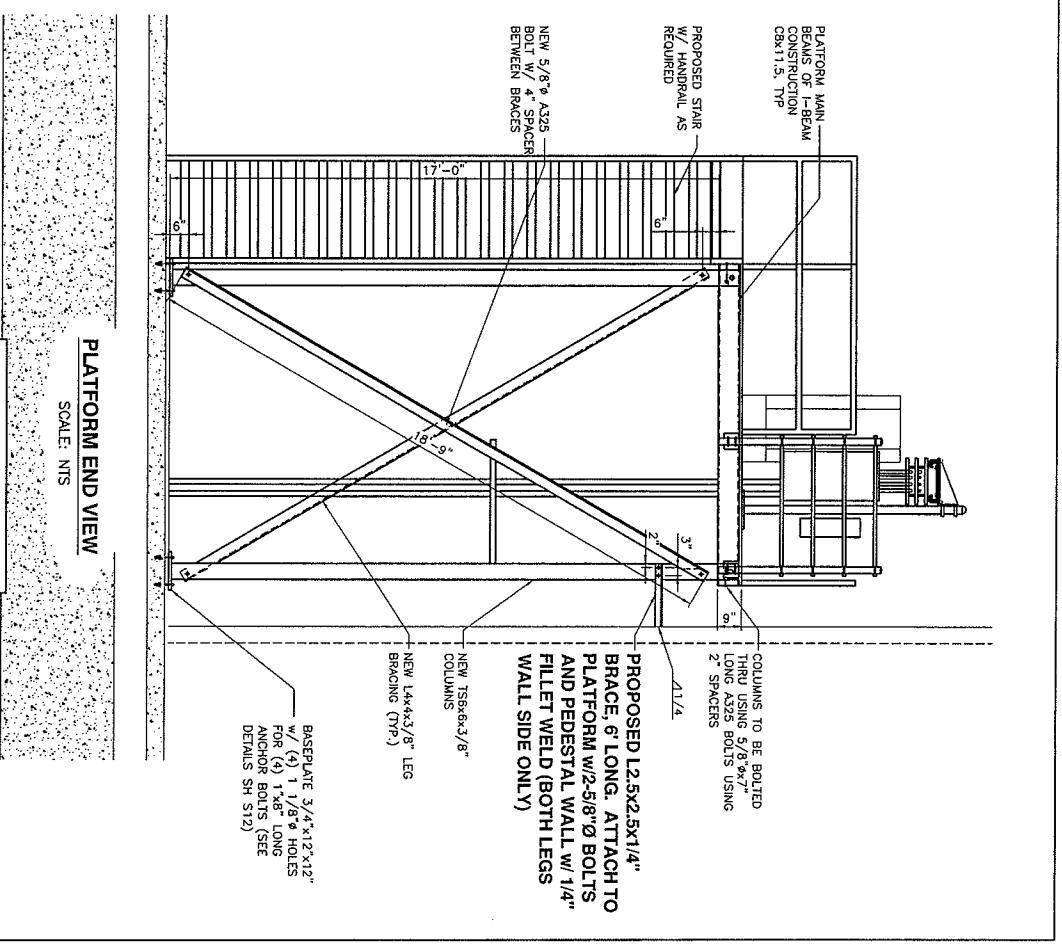


CRICKET COMMUNICATIONS

PROJECT NUMBER	DRAWING NUMBER	REV
ELECTRICAL NOTES	ORND-311-A-10	0



PLATFORM SIDE VIEW
SCALE: NTS



PLATFORM END VIEW
SCALE: NTS

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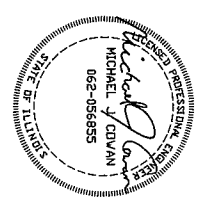
ORD-311-A
DOWNERS GROVE W/ 71ST & CAMDEN RD
1724 71ST STREET
DOWNERS GROVE, IL
60516

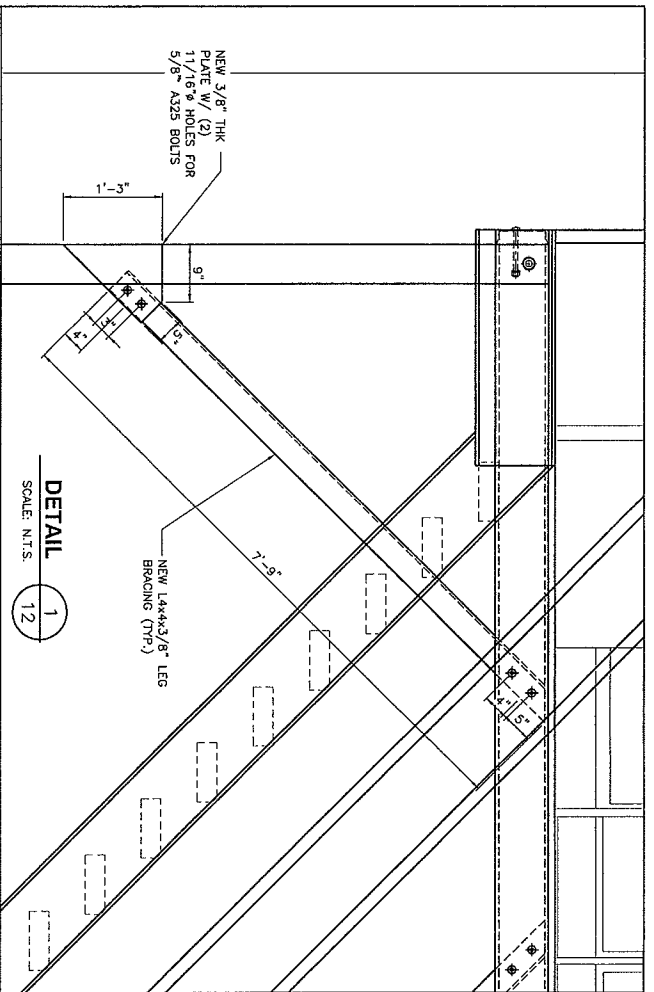
cricket
Dentel Spectrum Operations LLC, dba

1	10/28/06	DESIGNED PER CLIENT REQUEST	CM	CM	MC
0	11/15/07	DESIGN FOR CONSTRUCTION	CM	CM	MC
0	11/01/07	DESIGN FOR REVIEW	CM	CM	MC
NO	DATE	REVISIONS	BY	CHKD	APP'D

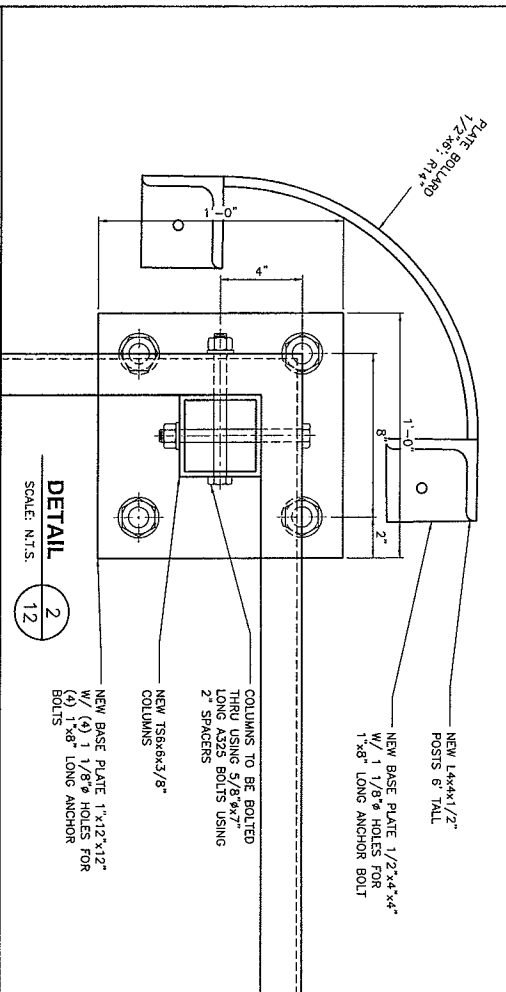
SCALE AS SHOWN | DESIGNED BY: C. MICHOLS | DRAWN BY: C. MICHOLS
11/15/07

CRICKET COMMUNICATIONS
PLATFORM ELEVATIONS
PROJECT NUMBER: ORD-311-A-11
DRAWN/DOUBLER: []
REV: 0

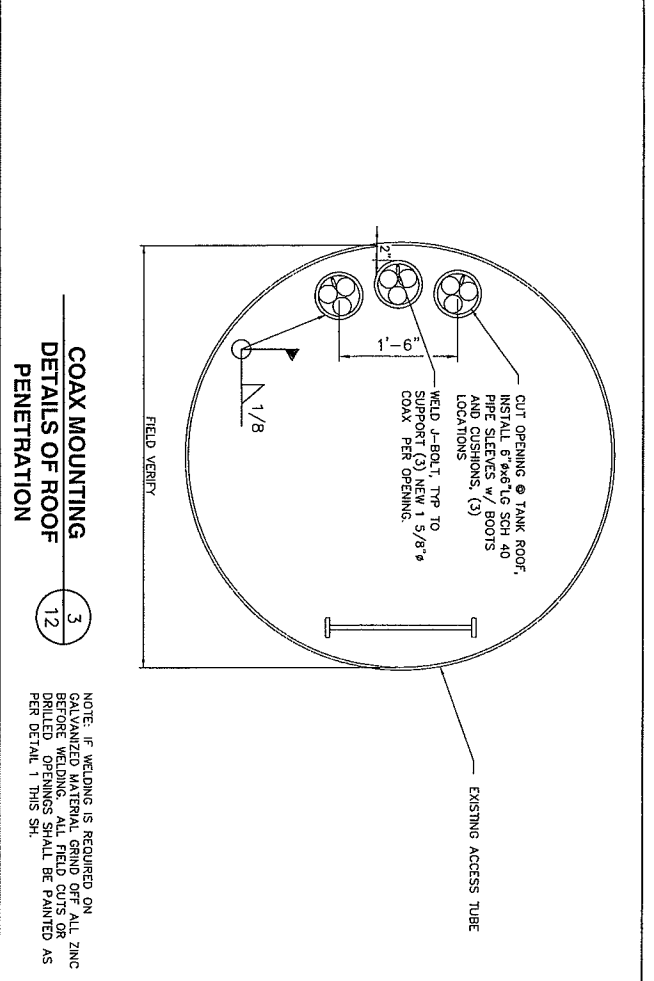




DETAIL 1
SCALE: N.T.S.



DETAIL 2
SCALE: N.T.S.



**COAX MOUNTING
DETAILS OF ROOF
PENETRATION 3**
SCALE: N.T.S.

NOTE: IF WELDING IS REQUIRED ON GALVANIZED MATERIAL, GRIND OFF ALL ZINC BEFORE WELDING. ALL FIELD CUTS OR DRILLED OPENINGS SHALL BE PAINTED AS PER DETAIL 1 THIS SH.

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NO.	DATE	ISSUED FOR	BY	CHKD BY
0	11/15/07	ISSUED FOR CONSTRUCTION	CR	GAJ LJC
1	11/20/07	ISSUED FOR RENEW	CR	GAJ LJC

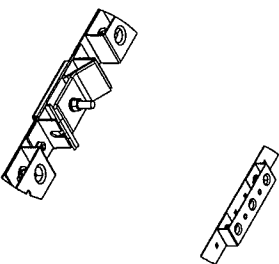
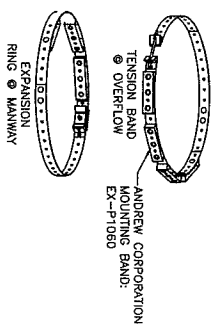
SCALE: AS SHOWN DESIGNED BY: C. MACHOLS DRAWN BY: C. MACHOLS



CRICKET COMMUNICATIONS

PROJECT NUMBER	DRAWING NUMBER	REV
	ORD-311-A-12	0

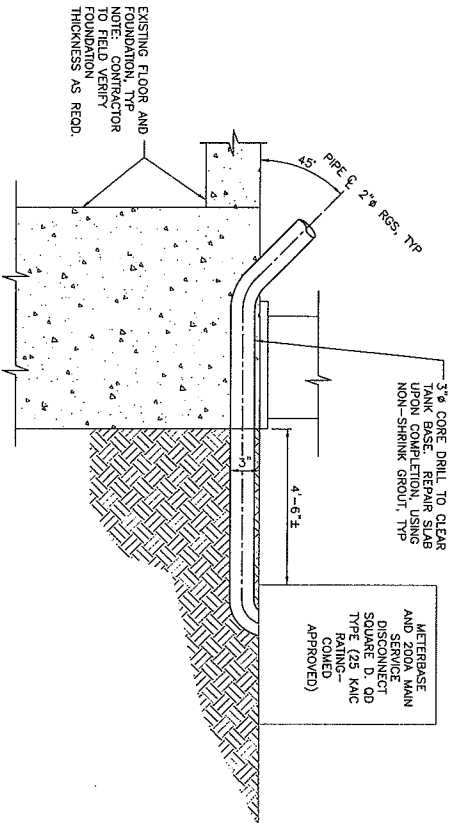
NOTE: TOWER DETAILS NOT AVAILABLE FOR THIS STRUCTURE. CONTRACTOR TO VISIT SITE BEFORE CONSTRUCTION AND VERIFY ALL DIMENSIONS OF MANNWAY AND OVERFLOW PIPE



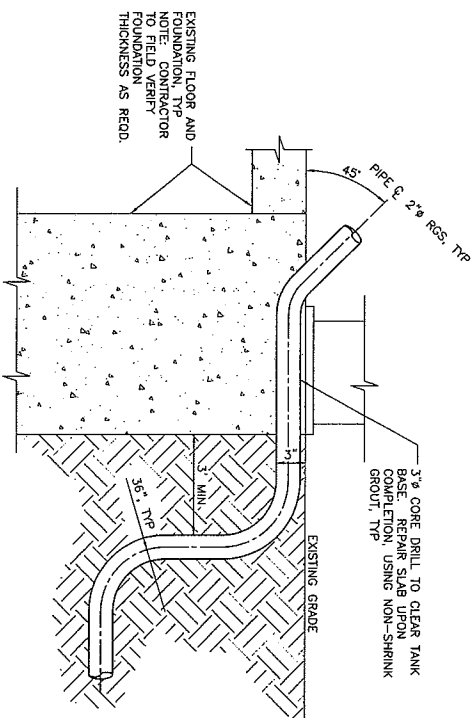
EXPRESS COAXIAL CABLE MOUNTING BAND 4
SCALE: N.T.S.

DETAILS OF ROOF PENETRATION 3
SCALE: N.T.S.

- STRUCTURAL STEEL NOTES:**
1. ALL STRUCTURAL STEEL SHALL BE A-36
 2. ALL BOLTS SHALL BE A539 GRADE B
 3. ALL NUTS SHALL BE A539 GRADE B EXCLUDED FROM THE SHEAR PLANE UNLESS OTHERWISE NOTED.
 4. ALL A-325 BOLTS, NUTS, AND WASHERS SHALL BE AMERICAN MADE. THE MANUFACTURER SHALL PROVIDE CERTIFICATION THAT THEY ARE AMERICAN MADE.
 5. ALL STRUCTURAL STEEL AND PIPE TO BE HOT DIPPED GALVANIZED PER ASTM A123. ALL NUTS AND WASHERS TO BE GALVANIZED PER ASTM A153.
 6. ALL PIPE SHALL BE GALVANIZED INSIDE AND OUTSIDE.
 7. EDGE DISTANCE 1 1/4" UNLESS OTHERWISE NOTED.
 8. HOLES SHALL BE PUNCHED OR DRILLED 1/16" LARGER THAN THE DIAMETER OF THE BOLTS THEY WILL BE USED UNLESS OTHERWISE NOTED.
 9. ALL FIELD DRILLED HOLES SHALL BE CUT ENDS SHALL BE GIVEN TWO (2) COATS OF ZINC GALVANITE GALVANIZING REPAIR COMPOUND OR APPROVED EQUIVALENT. TOUCH UP AND REPAIR OF GALVANIZED SURFACES SHALL BE PERFORMED PER THE REQUIREMENTS OF ASTM A-780.
 10. ALL U-BOLTS SHALL HAVE 2 EA NUTS PER LEG OR ONE ANCO LOCK NUT.



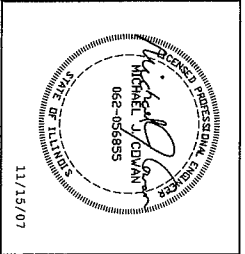
POWER ENTRY DETAIL 3
SCALE: N.T.S.



TELCO ENTRY DETAIL 4
SCALE: N.T.S.

NO.	DATE	REVISIONS	BY	CHK'D	APP'D
1	02/22/06	ISSUED PER CLIENT REQUEST	CH	SH	MC
2	09/11/06	REVISION PER CLIENT REQUEST	CH	SH	MC
3	11/19/07	ISSUED FOR CONSTRUCTION	CH	SH	MC
4	11/19/07	ISSUED FOR REVIEW	CH	SH	MC
5	11/19/07	REVISIONS	CH	SH	MC

SCALE: AS SHOWN
DESIGNED BY: C. NICHOLS
DRAWN BY: C. NICHOLS



CRICKET COMMUNICATIONS
MISC. DETAILS

PROJECT NUMBER: ORD-311-A-13
DRAWING NUMBER: 13
REV: 1

Clearlinx DESIGN, INC.
100 CORPORATE PKWY, SUITE G-1
BIRMINGHAM, AL 35242
PHONE: (205) 408-7171
FAX: (205) 408-7877

ORD-311-A
DOWNERS GROVE WT 71ST & CAMDEN RD
1724 71ST STREET
DOWNERS GROVE, IL
60516

cricket
Denali Spectrum Operations LLC, dba

TECHNICAL SPECIFICATION NOTES

- GENERAL**
- THE TYPICAL NOTES SHALL APPLY FOR ALL CASES UNLESS OTHERWISE SPECIFICALLY DETAIL WITHIN THE DRAWINGS. SOME NOTES MAY NOT BE APPLICABLE IN PART OR IN WHOLE FOR EVERY PRODUCT.
 - ANY ITEMS REFERENCED AS BEING ON "HOLD" ARE TO BE INCLUDED IN THE WORK AS SHOWN, HOWEVER, CONSTRUCTION OR FABRICATION IS NOT TO BEGIN UNTIL THE "HOLD" REFERENCE IS REMOVED.
 - DIMENSIONS CONTAINED WITHIN MUST BE FIELD VERIFIED AND CUSTOMER APPROVED PRIOR TO FABRICATION OF MATERIALS.
 - THE MODIFICATIONS DEPICTED IN THESE DRAWINGS ARE INTENDED TO PROVIDE STRUCTURAL SUPPORT FOR THE ADDITION OF THE ANTENNA SCREENING SYSTEMS OUTLINED WITHIN. THE EXISTING STRUCTURE OR FOUNDATION SHALL BE ANALYZED AND RETROFITTED AS REQUIRED, BY OTHERS, TO MEET THE LOADS AND MOMENTS IMPOSED BY THE NEW STEALTH ENCLOSURE SHOWN ON THE DRAWINGS.
 - ANTENNA SCREEN WALL ENCLOSURE SHALL BE INSTALLED BY A CONTRACTOR EXPERIENCED IN SIMILAR WORK. CARE SHALL BE TAKEN IN THE DESIGN AND CONSTRUCTION OF THE ENCLOSURE TO COMPLY WITH THE RECOGNIZED INDUSTRY STANDARDS AND PROVISIONS OF THE OSHA SAFETY GUIDELINES ARE TO BE FOLLOWED. STEALTH IS NOT PROVIDING FIELD INSTALLATION SUPERVISION.
 - THESE DRAWINGS INDICATE THE MAJOR OPERATIONS TO BE PERFORMED, BUT DO NOT SHOW EXACT DIMENSIONS. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THEREFORE, PRIOR TO BEGINNING OF WORK, THE CONTRACTOR SHOULD SURVEY THE JOB SITE THOROUGHLY TO MINIMIZE FIELD PROBLEMS.
 - CONSTRUCTION OF EXISTING STRUCTURES DURING THE COURSE OF THE CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
 - THE STRUCTURAL INTEGRITY OF THIS STRUCTURE IS DESIGNED TO BE MAINTAINED THROUGHOUT THE CONSTRUCTION. THE CONTRACTOR SHALL MAINTAIN TEMPORARY BRACING OR SHORING WHICH MAY BE REQUIRED TO MAINTAIN STABILITY PRIOR TO COMPLETION SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
 - THE PLANS AND DETAILS WITHIN DO NOT INCLUDE DETAILS OR DESIGN FOR DRAINAGE FROM OR WITHIN THE BUILDING OR INTERIOR SURFACES OF THE EXISTING BUILDING OR STRUCTURE.
- STEALTHSCREEN PANELS**
- FASTENER HOLES IN STEALTHSCREEN FOAM COMPOSITE PANELS ARE NOT FACTORY DRILLED AND MUST BE DRILLED IN THE FIELD.
 - PANEL FASTENERS TO BE SPACED 18" O.C. MAX. AND LOCATED 6" MAX. HORIZONTALLY FROM EACH EDGE AT TOP AND BOTTOM OF PANEL. MAINTAIN 1/2" MIN. EDGE DISTANCE FROM ALL EDGES.
 - 4 WIDE PANELS REQUIRE (3) FASTENERS TOP AND BOTTOM.
 - WIDE PANELS REQUIRE (4) FASTENERS TOP AND BOTTOM. PER SIDE. CORNER PANELS REQUIRE (2) FASTENERS TOP AND BOTTOM PER SIDE.
 - WHEN FASTENER BOLT HEAD OR NUT BEARS DIRECTLY ON SURFACE OF STEALTHSCREEN PANEL, TIGHTEN PANEL BOLTS ONLY 1/2 TURN. PASTE THIN BEAD OF EPOXY TO LOOK THROUGH THE HOLES OF FRP BOLTS. USE WASHER OR FLANGED HEAD BOLT, OR FASTENER WITH LARGE BEARING SURFACE.
 - PANELS WILL EXPAND AND CONTRACT DUE TO TEMPERATURE WHEN INSTALLING PANELS IN COLD WEATHER. THE CONTRACTOR SHALL MAINTAIN LENGTH OF SCREEN WALL WITH EQUAL GAPS BETWEEN PANELS TO ALLOW FOR EXPANSION DURING WARM TEMPERATURES.
 - ADJACENT FLAT PANELS ARE JOINED BY A VERTICAL FOAM SPUNE THAT IS INSERTED INTO GROOVES CUT INTO THE STEALTHSCREEN PANELS. THE PANELS BY GROOVES. PANELS MUST BE LIFTED WITH FORCE DIRECTED ONTO PANEL SURFACE.
- ADJACENT RADIUS PANELS ARE JOINED BY A VERTICAL H-CHANNEL. INSERT PANELS INTO EACH SIDE OF H-CHANNEL.
 - RADIUS PANELS MUST BE EVENLY SPACED ALONG RADIUS SUPPORT.
 - CONTRACTOR TO MEASURE LENGTH OF RADIUS SUPPORT AND DIVIDE BY THE NUMBER OF RADIUS PANELS TO DETERMINE PROPER SPACING. H-CHANNEL CONNECTORS ARE USED TO COVER THE GAP BETWEEN PANELS AND TO ALLOW FOR PANEL EXPANSION AND CONTRACTION.
 - SURFACES OF PANELS SHALL BE COATED WITH SUITABLE PAINT FOR UV PROTECTION. USE SHERWIN WILLIAMS "COROTANE II" OR EQUIVALENT.
 - EXPOSED TOP AND SIDE EDGES OF PANELS MUST BE COVERED OR COATED FOR UV PROTECTION. TOP EDGE OF PANEL MUST BE COVERED TO PREVENT WATER TRAVEL BETWEEN PANELS. STEALTH WILL PROVIDE PANEL EDGE CAPS TO BE FIELD APPLIED FOR THIS PURPOSE FOR MOST APPLICATIONS.
- FRP STRUCTURAL MEMBERS**
- FRP STRUCTURAL SHAPES SHALL BE STEALTH FRP SERIES 1325, MANUFACTURED USING THE PULTRUSION PROCESS.
 - IF PREFABRICATED MEMBERS DO NOT ASSEMBLE PER PLAN, CONTACT STEALTH CONCRETE SOLUTIONS, INC. BEFORE CUTTING OR ALTERING FABRICATED MEMBERS.
 - FRP STRUCTURAL MEMBERS SHALL BE FABRICATED AND ASSEMBLED AS INDICATED ON THE DRAWINGS.
 - THE CONTRACTOR SHALL PROTECT THE FRP STRUCTURAL MEMBERS FROM ABUSE TO PREVENT BRASSAGE, NICKS, GOUGES, ETC. DURING FABRICATION, HANDLING, AND INSTALLATION.
 - COAT ANY CUT OR DRILLED EDGES OF FRP STRUCTURAL MEMBERS WITH HETROGLAC OR EQUIVALENT RESIN OR ACRYLIC SEALER.
- STRUCTURAL STEEL**
- STEEL FABRICATION AND INSTALLATION SHALL BE DONE IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL, AND SPECIFICATIONS.
 - STEEL I-SHAPE, ANGLE, CHANNEL, PLATE AND MISCELLANEOUS MEMBERS SHALL CONFORM TO ASTM A36 (36 KSI MIN. YIELD STRENGTH) STEEL SPECIFICATIONS.
 - STEEL TUBE MEMBERS (HSS) SHALL CONFORM TO ASTM A500 GRADE B (46 KSI MIN. YIELD STRENGTH) STEEL SPECIFICATIONS.
 - STEEL PIPE MEMBERS SHALL CONFORM TO ASTM A53 TYPE E GRADE B (35 KSI MIN. YIELD STRENGTH) STEEL SPECIFICATIONS.
 - BOLTS SHALL BE DOMESTIC, NEW, 4" DIAMETER, HIGH STRENGTH GALVANIZED AND SHALL CONFORM TO ASTM A325 SPECIFICATIONS.
 - BOLTS SHALL BE TIGHTENED USING TURN-OF-THE-NUT METHOD.
 - BOLT HOLE EDGE DISTANCES SHALL BE 1" UNLESS NOTED OTHERWISE.
 - WELDING SHALL BE DONE USING E-70 ELECTRODES AND IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY (AWS.) STANDARDS AND SPECIFICATIONS.
 - STEEL SHALL BE HOT DIP GALVANIZED PER ASTM A123 SPECIFICATIONS AFTER FABRICATION.
 - STEEL HARDWARE SHALL BE HOT DIP GALVANIZED PER ASTM A153.
 - AFTER ANY FIELD HOLE PUNCHING/DRILLING OR CUTTING HAS BEEN COMPLETED, OR FOR ANY DAMAGED STRUCTURAL MEMBERS, TOUCH UP ALL GAPS, MATERIAL, AND WELDED AREAS WITH TWO COATS OF GAL-COAT OR EQUIVALENT MATERIAL TO RESTORE THE GALVANIZED PROTECTION ON THE MEMBERS.

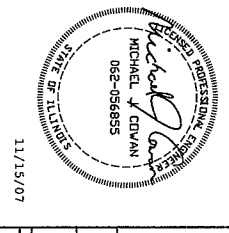
STEALTH ANTENNA NOTES

ClearLinx
DESIGN BUILDING
100 CORPORATE PARK, SUITE G-1
BIRMINGHAM, AL 35242
PHONE: (205) 408-7171
FAX: (205) 408-7877

ORD-311-A
DOWNERS GROVE W/ 71ST & CAMDEN RD
178471ST STREET
DOWNERS GROVE, IL
60516

cricket
Denali Spectrum Operations LLC, dba

NO.	DATE	REVISIONS	DESIGNED BY: C. NICHOLS	DRAWN BY: C. NICHOLS
1	03/17/06	ISSUED PER CLIENT REQUEST	CN	GN
2	11/16/07	ISSUED FOR CONSTRUCTION	CN	GN
3	11/01/07	ISSUED FOR RENEW	CN	GN

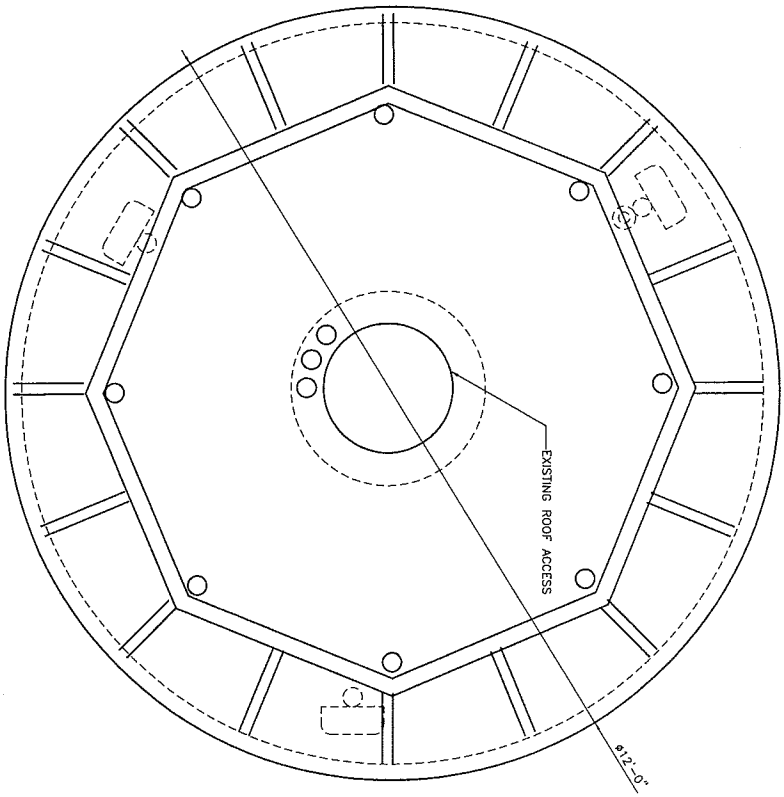


NOTE:
THIS DRAWING IS THE PROPERTY OF
STEALTH CORPORATION. REFER TO
DESIGN BY STEALTH CORP.

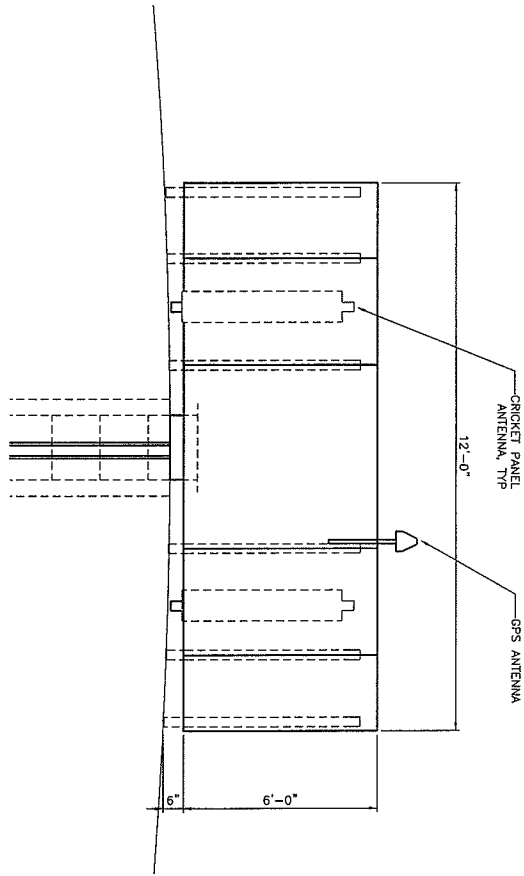
CRICKET COMMUNICATIONS

STEALTH ANTENNA NOTES

PROJECT NUMBER	ORD-311-A-14
DRAWING NUMBER	1



STEALTH SHROUD PLAN



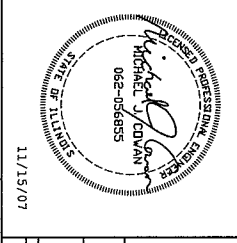
STEALTH SHROUD ELEVATION

NO.	DATE	REVISIONS	DESIGNED BY	CHECKED BY
1	02/11/08	REVISED PER CLIENT REQUEST	CN	GAJ
0	11/15/07	ISSUED FOR CONSTRUCTION	CN	GAJ
A	11/01/07	ISSUED FOR REVIEW	CN	GAJ

ClearLinx
DESIGN, INC.
100 CORPORATE PKWY, SUITE G-1
BIRMINGHAM, AL 35242
PHONE: (205) 408-7871
FAX: (205) 408-7877

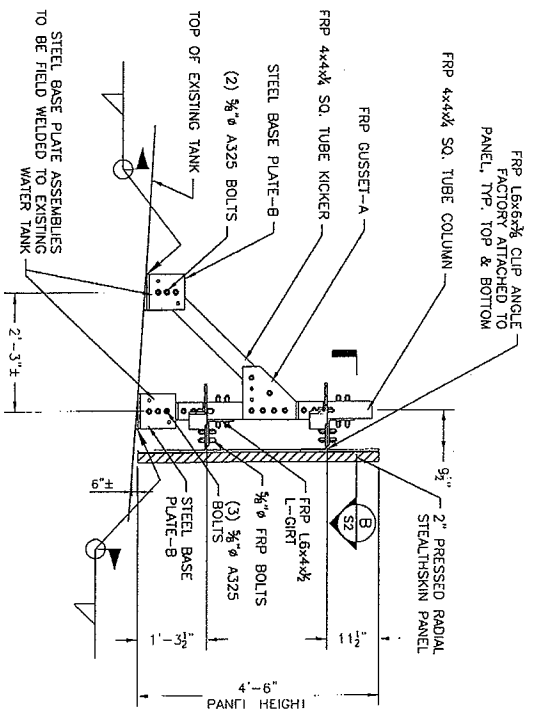
ORD-311-A
DOWNERS GROVE W/ 71ST & CAMDEN RD
1794 71ST STREET
DOWNERS GROVE, IL
60518

cricket
Denali Spectrum Operations LLC, dba

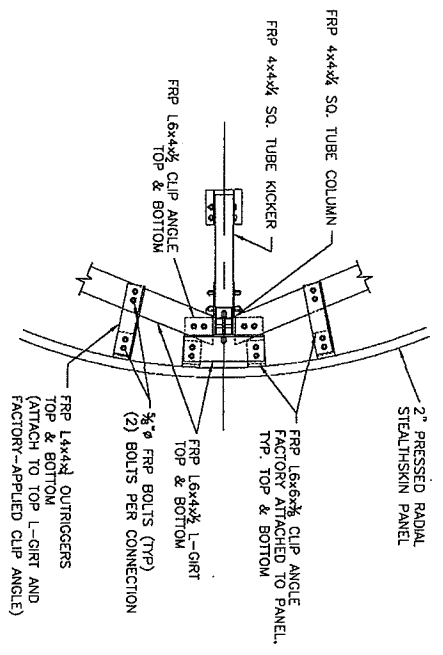


NOTE: TO FINAL DESIGN BY STEALTH CONCEALMENT SOLUTIONS.

CRICKET COMMUNICATIONS	DRAWING NUMBER	REV
STEALTH ANTENNA DETAILS	ORD-311-A-15	1



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



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

MAXIMUM SUPPORT REACTIONS

AT COLUMNS:
 VERTICAL = 400 LBS (GRAVITY ONLY)
 VERTICAL = ±300 LBS (WIND ONLY)
 HORIZONTAL = ±100 LBS (WIND @ 0°)
 HORIZONTAL = ±1500 LBS (WIND @ 90°)
 MOMENT = ±500 FT-LBS (WIND @ 90°)

AT DIAGONAL BRACE:
 VERTICAL = ±300 LBS (WIND ONLY)
 HORIZONTAL = ±500 LBS (WIND ONLY)

NOTE: ANALYSIS OF EXISTING WATER TANK IS BY OTHERS.

NOTE:
 THIS DRAWING IS THE PROPERTY OF
 STEALTH CORPORATION. REFER TO FINAL
 DESIGN BY STEALTH CORP.

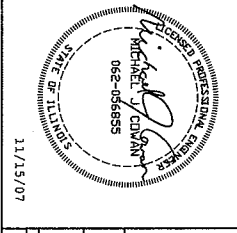
STEALTH ANTENNA DETAILS

ClearLinx
 DESIGN, INC.
 100 CORPORATE PKWY, SUITE G-1
 BIRMINGHAM, AL 35242
 PHONE: (205) 908-7171
 FAX: (205) 908-7877

ORD-311-A
 DOWNERS GROVE/WF 71ST & CAMDEN RD
 1704 71ST STREET
 DOWNERS GROVE, IL
 60518

cricket
 Denali Spectrum Operations LLC, dba

NO.	DATE	REVISIONS	DESIGNED BY: C. MORGAN	DRAWN BY: C. MORGAN
0	11/15/07	ISSUED FOR CONSTRUCTION		
1	11/09/07	ISSUED FOR REVIEW		



PROJECT NUMBER	DRAWING NUMBER	REV
STEALTH ANTENNA DETAILS	ORD-311-A-16	1

AFTER RECORDING, PLEASE RETURN TO:

**Cricket Communications, Inc.
10307 Pacific Center Court
San Diego, CA 92121
Attn: Legal Department**

**Property Tax ID Number: 09-30-101-005
County: DuPage
ORD-311-A**

Memorandum of License

Village of Downers Grove ("Licensor") and Denali Spectrum Operations, LLC, a Delaware corporation ("Licensee") entered into a Site Lease dated _____, 2008 ("Agreement") regarding a portion of the real property located at 1724 71st Street, Downers Grove, IL 60516 as more particularly described in the attached Exhibit A ("Property").

The Agreement is for a term of five (5) years and will commence on the date as set forth in the Agreement ("Commencement Date") and shall terminate at midnight on December 31, 2012. Tenant shall have the right to extend this Agreement for two (2) additional five (5) year terms.

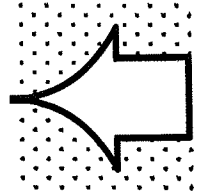
IN WITNESS WHEREOF, the parties hereto have executed this memorandum effective as of the date of the last party to sign.

(SIGNATURES ON FOLLOWING PAGE)

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

LICENSOR: VILLAGE OF DOWNERS GROVE,
a municipal corporation

By: _____
Printed Name: _____
Its: _____



LICENSEE: DENALI SPECTRUM OPERATIONS, LLC
a Delaware limited liability company

By: Denali Spectrum License, LLC
Its sole member
By: Denali Spectrum, LLC
Its sole member
By: Denali Spectrum Manager, LLC
Its manager
By: Doyon, Limited
Its manager

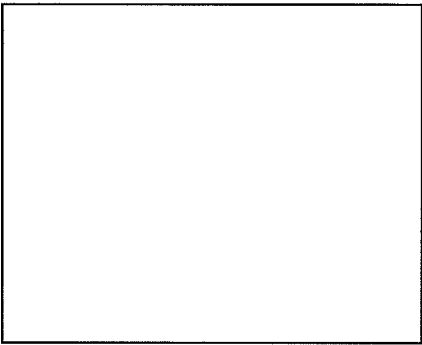
By: 
Brian Root: Brian Root
Title: Operations Manager

LICENSOR:

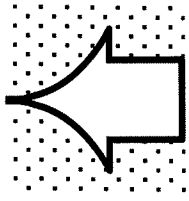
STATE OF _____)
) ss.
COUNTY OF _____)

I certify that I know or have satisfactory evidence that _____ is the person who appeared before me, and said person acknowledged that he signed this instrument, on oath stated that he was authorized to execute the instrument and acknowledged it as the _____ of the Village of Downers Grove to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

Dated: _____.



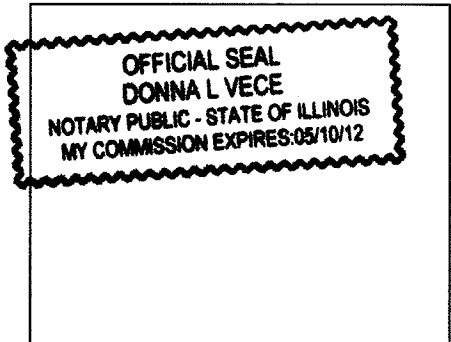
Notary Public
Print Name _____
My commission expires _____



LICENSEE:

STATE OF Illinois _____)
) ss.
COUNTY OF Cook _____)

I certify that I know or have satisfactory evidence that Brian Root is the person who appeared before me, and said person acknowledged that he signed this instrument, on oath stated that he was authorized to execute the instrument and acknowledged it as its Operations Manager of Denali Spectrum Operations, LLC, to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.



Donna L. Vece

Notary Public
Print Name DONNA L. Vece
My commission expires 5-10-12

EXHIBIT A
Legal Description

The Property is legally described as follows:

That part of the fractional southwest quarter of section 19 and the northwest quarter of section 30, all in township 33 north, range 11 east of the third principal meridian, DuPage County, Illinois, described as follows: commencing at the northeast corner of said northwest quarter of section 30; thence north $89^{\circ} 56' 53''$ west along the north line of said northwest quarter of section 30 for a distance of 838.02 feet to a point on a west line of a parcel of land leased by the Young Men's Christian Association of Metropolitan Chicago, to the United States of America, dated October 16, 1967 and recorded November 17, 1967 in the Recorder's office of DuPage County, Illinois as document number R67-45503 being also the point of beginning; thence south $00^{\circ} 03' 07''$ west along a west line of said parcel of land leased to the United States of America by document R67-45503 for a distance of 139.32 feet to the centerline of proposed 71st Street; thence westerly along said centerline of proposed 71st Street, being a curve concave to the north, having a tangent bearing of north $79^{\circ} 01' 23''$ west and having a radius of 1093.95 feet for a distance of 81.79 feet to a point of reverse curve; thence continuing westerly along said centerline of proposed 71st Street, being a curve concave to the south, having a radius of 1478.89 feet for a distance of 239.24 feet to a line which (divides the fractional southwest quarter of said section 19 approximately equally by distance); thence north $00^{\circ} 06' 51''$ east along the last described line for a distance of 165.22 feet; thence south $89^{\circ} 56' 53''$ east along a line parallel with the north line of said section for a distance of 314.39 feet to a said west line of a parcel of land leased to the United States of America by document number R67-45503; thence south $00^{\circ} 03' 07''$ west along a said west line of a parcel of land leased to the United States of America by document number R67-45503 and the southerly prolongation of a said west line of a parcel of land leased to the United States of America by document number R67-45503 for a distance of 228.54 feet to said point of beginning.