



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

www.ct.gov/csc

November 6, 2012

Jennifer Palumbo
Real Estate Consultant
48 Spruce Street
Oakland, NJ 07436

RE: **EM-SPRINT-002-121015** – Sprint Spectrum notice of intent to modify an existing telecommunications facility located at 401 Wakelee Avenue, Ansonia, Connecticut.

Dear Ms. Palumbo:

The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies with the following conditions:

- Any deviation from the proposed modification as specified in this notice and supporting materials with Council shall render this acknowledgement invalid;
- Any material changes to this modification as proposed shall require the filing of a new notice with the Council;
- Not less than 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
- The validity of this action shall expire one year from the date of this letter; and
- The applicant may file a request for an extension of time beyond the one year deadline provided that such request is submitted to the Council not less than 60 days prior to the expiration;

The proposed modifications including the placement of all necessary equipment and shelters within the tower compound are to be implemented as specified here and in your notice dated September 19, 2012. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Thank you for your attention and cooperation.

Very truly yours,

Linda Roberts
Executive Director

LR/CDM/jbw

c: The Honorable James T. DellaVolpe, Mayor, City of Ansonia
James Tanner, Zoning Enforcement Officer, City of Ansonia
American Tower



EM-SPRINT-002-121015



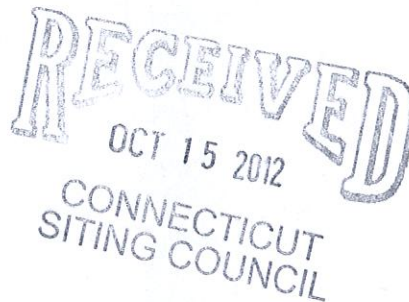
Together with Nextel

48 Spruce Street
Oakland, NJ 07436
Phone: (845) 499-4712
Jennifer Palumbo

September 19, 2012

Hand Delivered

Ms. Linda Roberts
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051



RE: Sprint Spectrum L.P. notice of intent to modify an existing telecommunications facility located at Nolan Field-401 Wakelee Avenue, Ansonia, CT 06401. Known to Sprint Spectrum L.P. as site CT03XC005.

Dear Ms. Roberts:

In order to accommodate technological changes, implement Code Division Multiple Access ("CDMA") and/or Long Term Evolution ("LTE") capabilities, and enhance system performance in the state of Connecticut, Sprint Spectrum L.P. plans to modify the equipment configurations at many of its existing cell sites. Please accept this letter and attachments as notification, pursuant to R.C.S.A. Section 16-50j-73, of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2). In compliance with R.C.S.A. Section 16-50j-73, a copy of this letter and its attachments is being sent to the chief elected official of the municipality in which affected cell site is located.

CDMA employs Spread-Spectrum technology and special coding scheme to allow multiple users to be multiplexed over the same physical channel. LTE is a new high-performance air interface for cellular mobile communications. It is designed to increase the capacity and speed of mobile telephone networks.

As part of the project the new multi-mode 800/1900 antenna will replace existing antennas. These antennas will provide more flexibility for optimization by allowing fast and easy electrical tilt adjustment from remote location and will enable the transmission of multiple technologies from a single antenna. As Sprint Nextel's network evolves to meet the demands of its customers, it is essential for Sprint Nextel to install modern equipment and antennas in order to provide reliable wireless voice and data services. The

proposed equipment will include multi-mode radios that will allow Sprint Nextel to transmit at different frequencies using different technologies, including LTE technology. Likewise, the proposed antennas are quad-pole multi-band high gain antennas that will allow Sprint to operate using its multiple frequency bands and technologies, including LTE technology. The proposed equipment and antennas will improve the reliability, coverage and capacity of Sprint Nextel's voice and data networks across Sprint Nextel's various FCC licensed frequency bands and significantly increase the data speeds of Sprint Nextel's network by utilizing the latest LTE technology. Without the proposed modifications Sprint Nextel will be unable to provide reliable wireless voice and data service using the latest technologies.

Sprint Spectrum L.P. will have an interim (testing) period during the modification/installation prior to the final configuration. This antenna configuration is shown on the attached drawings of the planned modifications. Also included is the power density calculation reflecting the change in Sprint's operations at the site and documentation of the structural sufficiency of the tower to accommodate the revised antenna configuration.

The changes to the facility do not constitute modification as defined Connecticut General Statutes ("C.G.S.") Section 16-50i(d) because the general physical characteristics of the facility will not be significantly changed or altered. Rather, the planned changes to the facility fall squarely within those activities explicitly provided for the R.C.S.A. Section 16-50j-72(b)(2).

1. The height of the overall structure will not be affected.
2. The proposed changes will not extend the site boundaries. There will be no effect on the site compound.
3. The proposed changes will not increase the noise level at the existing facility by 6 decibels or more.
4. Radio Frequency power density may increase due to the use of one or more CDMA transmissions. Moreover, LTE will utilize additional radio frequencies newly licensed by the FCC for cellular mobile communications. However, the changes will not increase the calculated "worst case" power density for the combined operations at the site to a level at or above the applicable standard for uncontrolled environments as calculated for a mixed frequency site.

For the foregoing reasons Sprint Spectrum L.P. respectfully submits that the proposed changes at the referenced site constitute exempt modifications under R.C.S.A. Section 16-50j-72(b)(2).

Please feel free to call me at (845)-499-4712 or email JPalumbo@Transcendwireless.com with questions concerning this matter. Thank you for your consideration.

Sincerely,

Jennifer Palumbo
Real Estate Consultant



EBI Consulting

environmental | engineering | due diligence

RADIO FREQUENCY EMISSIONS ANALYSIS REPORT EVALUATION OF HUMAN EXPOSURE POTENTIAL TO NON-IONIZING EMISSIONS

Sprint Existing Facility

Site ID: CT03XC005

Ansonia Nextel
401 Wakelee Avenue
Ansonia, CT 06401

August 13, 2012



August 13, 2012

Sprint

Attn: RF Engineering Manager
1 International Boulevard, Suite 800
Mahwah, NJ 07495

Re: Emissions Values for Site **CT03XC005 – Ansonia Nextel**

EBI Consulting was directed to analyze the proposed upgrades to the existing Sprint facility located at 401 Wakelee Avenue, Ansonia, CT, for the purpose of determining whether the emissions from the proposed Sprint equipment upgrades on this property are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01 and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The number of $\mu\text{W}/\text{cm}^2$ calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

All results were compared to the FCC (Federal Communications Commission) radio frequency exposure rules, 47 CFR 1.1307(b)(1) – (b)(3), to determine compliance with the Maximum Permissible Exposure (MPE) limits for General Population/Uncontrolled environments as defined below.

General population/uncontrolled exposure limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The general population exposure limit for the cellular band is approximately 567 $\mu\text{W}/\text{cm}^2$, and the general population exposure limit for the PCS band is 1000 $\mu\text{W}/\text{cm}^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Additional details can be found in FCC OET 65.

CALCULATIONS

Calculations were done for the proposed upgrades to the existing Sprint Wireless antenna facility located at 401 Wakelee Avenue, Ansonia, CT, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. All calculations were performed assuming the main lobe of the antenna was focused at the base of the tower to present a worst case scenario. Actual values seen from this site will be dramatically less than those shown in this report. For this report the sample point is the top of a 6 foot person standing at the base of the tower.

For all calculations, all emissions were calculated using the following assumptions:

- 1) 4 CDMA Carriers (1900 MHz) were considered for each sector of the proposed installation.
- 2) 1 CDMA Carrier (850 MHz) was considered for each sector of the proposed installation
- 3) All radios at the proposed installation were considered to be running at full power and were uncombined in their RF transmissions paths per carrier prescribed configuration. Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. This is rarely the case, and if so, is never continuous.
- 4) For the following calculations the sample point was the top of a six foot person standing at the base of the tower. The actual gain in this direction was used per the manufactures supplied specifications.
- 5) The antenna used in this modeling is the RFS APXVSPPI8-C-A20. This is based on feedback from the carrier with regards to anticipated antenna selection. This antenna has a 15.9 dBd gain value at its main lobe at 1900 MHz and 13.4 dBd at its main lobe for 850 MHz. All calculations were performed assuming the main lobe of the antenna was focused at the base of the tower to present a worst case scenario.

- 6) The antenna mounting height centerline of the proposed antennas is **184.5 feet** above ground level (AGL)
 - 7) Emissions values for additional carriers were taken from the Connecticut Siting Council active database. Values in this database are provided by the individual carriers themselves.
-

All calculation were done with respect to uncontrolled / general public threshold limits

Site ID		CT03XC005 - Ansonia Nextel															
Site Address		401 Wakelee Avenue, Ansonia, CT 06401															
Site Type		Monopole															
Sector 1																	
Antenna Number	Antenna Make	Antenna Model	Radio Type	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain in direction of sample point (dBd)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss	ERP	Power Density Value	Power Density Percentage
1a	RFS	APXVSP18-C-A20	RRH	1900 MHz	CDMA / LTE	20	4	80	15.9	184.5	178.5	1/2 "	0.5	0	2773.8948	31.29821	3.12982%
1a	RFS	APXVSP18-C-A20	RRH	850 MHz	CDMA / LTE	20	1	20	13.4	184.5	178.5	1/2 "	0.5	0	389.96892	4.400069	0.77603%
Sector total Power Density Value:																3.906%	
Sector 2																	
Antenna Number	Antenna Make	Antenna Model	Radio Type	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain in direction of sample point (dBd)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss	ERP	Power Density Value	Power Density Percentage
2a	RFS	APXVSP18-C-A20	RRH	1900 MHz	CDMA / LTE	20	4	80	15.9	184.5	178.5	1/2 "	0.5	0	2773.8948	31.29821	3.12982%
2a	RFS	APXVSP18-C-A20	RRH	850 MHz	CDMA / LTE	20	1	20	13.4	184.5	178.5	1/2 "	0.5	0	389.96892	4.400069	0.77603%
Sector total Power Density Value:																3.906%	
Sector 3																	
Antenna Number	Antenna Make	Antenna Model	Radio Type	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain in direction of sample point (dBd)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss	ERP	Power Density Value	Power Density Percentage
3a	RFS	APXVSP18-C-A20	RRH	1900 MHz	CDMA / LTE	20	4	80	15.9	184.5	178.5	1/2 "	0.5	0	2773.8948	31.29821	3.12982%
3a	RFS	APXVSP18-C-A20	RRH	850 MHz	CDMA / LTE	20	1	20	13.4	184.5	178.5	1/2 "	0.5	0	389.96892	4.400069	0.77603%
Sector total Power Density Value:																3.906%	

Site Composite MPE %	
Carrier	MPE %
Sprint	11.718%
AT&T	7.400%
Pocket	2.760%
Clearwire	0.490%
Verizon Wireless	6.350%
Nextel	3.630%
T-Mobile	4.110%
Total Site MPE %	36.458%

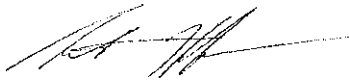
Summary

All calculations performed for this analysis yielded results that were well within the allowable limits for general public exposure to RF Emissions.

The anticipated Maximum Composite contributions from the Sprint facility are **11.718% (3.906% from each sector)** of the allowable FCC established general public limit considering all three sectors simultaneously sampled at the ground level.

The anticipated composite MPE value for this site assuming all carriers present is **36.452%** of the allowable FCC established general public limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions

FCC guidelines state that if a site is found to be out of compliance (over allowable thresholds), that carriers over a 5% contribution to the composite value will require measures to bring the site into compliance. For this facility, the composite values calculated were well within the allowable 100% threshold standard per the federal government



Scott Heffernan
RF Engineering Director

EBI Consulting
21 B Street
Burlington, MA 01803



AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure : 196 ft Rohn Self Supported Tower
ATC Site Name : Ansonia Wakelee, CT
ATC Site Number : 302470
Proposed Carrier : Sprint Nextel
Carrier Site Name : Ansonia / Nextel
Carrier Site Number : CT03XC005
County : New Haven
Engineering Number : 49386621
Date : June 13, 2012
Usage : 96% Legs, 100% Diagonals,
12% Horizontals
Result : Pass

Submitted by:
Esha Modi
Project Engineer



American Tower Engineering Services
400 Regency Forest Drive
Cary, NC 27518
Phone: 919-468-0112

Introduction

The purpose of this report is to summarize results of the structural analysis performed on the 196 ft Rohn Self Supported Tower located at 401 Wakelee Ave., Ansonia, CT 06401, New Haven County (ATC Site No. 302470). The tower was originally designed and manufactured by Rohn (Drawing No. A991899, dated July 7, 1999).

Analysis

The tower was analyzed using Semaan Engineering Solutions, Inc., Software.

Basic Wind Speed: 105 mph (3-Second Gust)
Radial Ice: 50 mph (3-Second Gust) w/ 1.5" ice
Code: ANSI/TIA-222-G / 2003 IBC w/ 2005 CT Supplements and
2009 CT Amendments

Antenna Loads

The following antenna loads were used in the tower analysis.

Existing Antennas

Elev. (ft)	Qty	Antennas	Mount	Coax (in)	Carrier
194.0	3	Argus LLPX310R	Sector Frames	(2) 3" Conduit (2) 1/2 (6) 5/16	Clearwire
	2	DragonWave A-ANT-18G-2-C			
	3	NextNet BTS-2500			
	2	DragonWave Horizon Compact		(10) 1 1/4 (6) 1 5/8	Sprint Nextel
	3	KMW TTA (HB-X-WM-17-65-00T)			
	3	72" x 12" Panels			
	9	48" x 12" Panels			
179.0	3	Rymosa MGD3-800T0	Sector Frames	(12) 1 5/8	Verizon
	3	Powerwave P65-16-XL-2			
	6	RFS FD9R6004/1C-3L			
	6	RFS APL868013-42T0			
167.0	9	72" x 12" Panel	Sector Frames	(2) 19.7 mm (1) 10 mm (12) 1 5/8	AT&T Mobility
	3	36" x 8" x 6" Panel			
	6	Ericsson RRUS 11			
	1	Raycap DC6-48-60-18-8F			
	9	14" x 9" TTA			
157.0	3	RFS APXV18-206517-C	Leg	(6) 1 5/8	Youghioghney
148.0	3	RFS APX16DWV-16DWVS-E-A20	Sector Frames	(18) 1 5/8	T-Mobile
	3	RFS ATMAA1412D-1A20			
	3	EMS DR65-18-XXDPL2Q			
	3	CCI DTMA-1819-DD-12			
125.0	2	Motorola PTP54600	Leg	(2) 1/4	City Of Ansonia
104.0	2	2" x 8" GPS	Side Arms	(2) 1/2	Sprint Nextel
82.0	1	10' Omni	Side Arm	(1) 1/2	Ansonia Fire Dept.
76.0	1	2" x 8" GPS	Side Arm	(1) 1/2	Sprint Nextel
12.0	1	Nortel NTGB01MA	Leg	(1) 7/8	Youghioghney

Proposed Antennas

Elev. (ft)	Qty	Antennas	Mount	Coax (in)	Carrier
183.0	3	Alcatel-Lucent 1900 MHz4X45 RRH	Sector Frames	(6) 7/8 (3) 1 1/4	Sprint Nextel
	1	RFS APXVSPP18-C-A20			
	3	Alcatel-Lucent 800 MHz RRH			
	6	Andrew DB980H90E-M			
	2	Powerwave P40-16-XLPP-RRR			

Install proposed coax alongside existing Sprint Nextel coax.

Results

The maximum structure usage is: 100 %

Foundation Reactions	Original Design Reactions	Factored Design Reactions*	Analysis Reactions	% of Design
Uplift/Leg (kips)	301.1	406.5	379.7	93
Axial/Leg (kips)	343.0	463.1	429.7	93
Shear/Leg (kips)	36.3	49.0	44.3	90

* The design reactions are factored by 1.35 per ANSI/TIA-222-G, Sec. 15.5.1

The structure base reactions resulting from this analysis are acceptable when compared to the reactions shown on the original structure drawings, therefore no modification or reinforcement of the foundation will be required.

Conclusion

Based on the analysis results, the structure meets the requirements per the ANSI/TIA-222-G standard and the 2003 IBC w/ 2005 CT Supplements and 2009 CT Amendments. The tower and foundation can support the existing and proposed antennas with the transmission line distribution as described in this report.

If you have any questions or require additional information, please call 919-466-5017.

Standard Conditions

All engineering services are performed on the basis that the information used is current and correct. This information may consist of, but is not necessary limited, to:

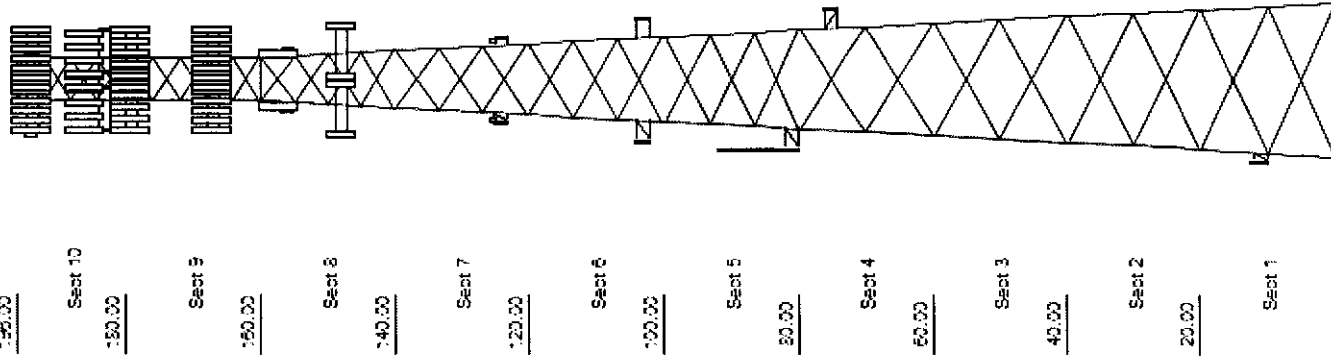
- Information supplied by the client regarding the structure itself, the antenna and feed line loading on the structure and its components, or other relevant information.
- Information from drawings in the possession of American Tower Corporation, or generated by field inspections or measurements of the structure.

It is the responsibility of the client to ensure that the information provided to ATC Engineering Services and used in the performance of our engineering services is correct and complete. In the absence of information to the contrary, we assume that all structures were constructed in accordance with the drawings and specifications and that their capacity has not significantly changed from the "as new" condition.

All services will be performed to the codes specified by the client, and we do not imply to meet any other codes or requirements unless explicitly agreed in writing. If wind and ice loads or other relevant parameters are to be different from the minimum values recommended by the codes, the client shall specify the exact requirement. In the absence of information to the contrary, all work will be performed in accordance with the latest relevant revision of ANSI/EIA-222.

All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. ATC Engineering Services is not responsible for the conclusions, opinions and recommendations made by others based on the information we supply.

Copyright Semacon Engineering Solutions, Inc
 Loads: 105 mph no ice
 50 mph w/ 3/4" radial ice
 60 mph Serviceability



Job Information		
Tower : 302470	Location : Ansonia Wakelee, CT	Base Width : 23.00 ft
Code : ANSI/TIA-222 Rev G	Shape : Triangle	Top Width : 6.66 ft
Client : 3 Angels Broadcasting		

Sections Properties			
Section	Leg Members	Diagonal Members	Horizontal Members
1	PX 50 ksi	8" DIA PIPE	SAE 50 ksi 4X4X0.25
2	PSP 50 ksi	ROHN 8 EHS	SAE 50 ksi 4X4X0.25
3	PSP 50 ksi	ROHN 8 EHS	SAE 50 ksi 3.5X3.5X0.25
4	PX 50 ksi	6" DIA PIPE	SAE 50 ksi 3.5X3.5X0.25
5	PSP 50 ksi	ROHN 6 EHS	SAE 50 ksi 3X3X0.25
6 - 7	PX 50 ksi	5" DIA PIPE	SAE 36 ksi 2.5X2.5X0.25
8	PX 50 ksi	4" DIA PIPE	SAE 36 ksi 2X2X0.25
9	PX 50 ksi	3" DIA PIPE	SAE 36 ksi 2X2X0.1875
10	PST 50 ksi	2-1/2" DIA PIPE	SAE 36 ksi 1.75X1.75X0.1875 SAE 36 ksi 2X2X0.125

Discrete Appurtenance			
Elev (ft)	Type	Qty	Description
194.00	Panel	3	Argus LLPX310R
194.00	Dish	2	DragonWave A-ANT-18G-2-C
194.00	Panel	3	NextNet BTS-2500
194.00	Panel	2	DragonWave Horizon Compact
194.00	Panel	3	KIMW TIA (HB-X-WIM-17-65-00T)
194.00	Mounting Frame	3	Round Sector Frames
194.00	Panel	3	72" x 12" Panels
194.00	Panel	9	48" x 12" Panels
183.00	Panel	2	Powerwave P40-16-XL-PP-RRR
183.00	Panel	6	Decibel DB980H90EM
183.00	Panel	1	RFS APXVSP18-C-A20
183.00	Panel	3	Alcatel-Lucent 800 MHz RRH
183.00	Panel	3	Alcatel-Lucent 1900 MHz 4x45 R
183.00	Mounting Frame	3	Round Sector Frames
179.00	Panel	6	Celwave APL868013-42T0
179.00	Panel	6	RFS FD9R6004/1C-3L
179.00	Mounting Frame	3	Flat Light Sector Frames
179.00	Panel	3	Powerwave P65-16-XL-2
179.00	Panel	3	Ryma MGD3-800T0
167.00	Panel	9	72" x 12" Panel
167.00	Panel	3	36" x 8" x 6" Panel
167.00	Panel	6	Ericsson RRUS 11
167.00	Panel	1	Raycap DC6-48-60-18-8F
167.00	Mounting Frame	3	Round Sector Frames
167.00	Mounting Frame	9	14" x 9" TIA
157.00	Panel	3	RFS APXV18-206517-C
148.00	Panel	3	RFS APX16DWV-16DWYS-E-A20
148.00	Panel	3	RFS ATMAAI412D-1A20
148.00	Panel	3	EMS DR65-18-XXDPL2Q
148.00	Panel	3	CCI DTMA-1819-DD-12
148.00	Mounting Frame	3	Round Sector Frames
125.00	Panel	2	Motorola PTP54600
104.00	Straight Arm	2	Side Arms
104.00	Whip	2	2" x 8" GPS
82.00	Straight Arm	1	Side Arm
82.00	Whip	1	10" Omni
76.00	Straight Arm	1	Side Arm
76.00	Whip	1	2" x 8" GPS
12.00	Whip	1	Nortel NTGB01MA

Linear Appurtenance			
Elev (ft)	From	To	Description
8,000	194.00	6	5/16" Coax
8,000	194.00	2	3" Conduit
8,000	194.00	2	1/2" Coax
8,000	194.00	6	1 5/8" Coax
8,000	194.00	10	1 1/4" Coax

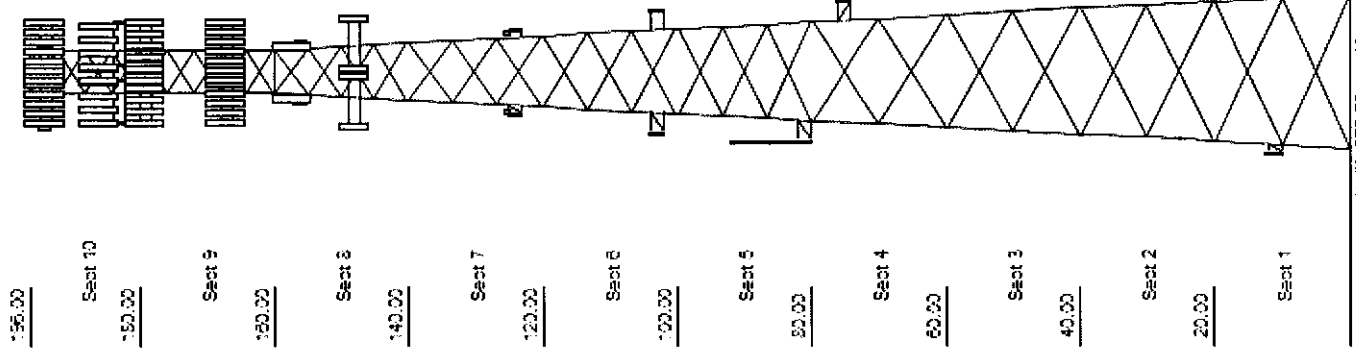
Uplift 373.70 k Moment 8,151.57 ft-k
 Vert 425.71 k Total Down 59.84 k
 Horiz 44.23 k Total Shear 72.77 k

Job Information

Tower : 302470 Location : Ansonia Wakelee, CT
 Code : ANSI/TIA-222 Rev G Shape : Triangle
 Client : 3 Angels Broadcasting Base Width : 23.00 ft
 Top Width : 6.66 ft

Copyright Semaen Engineering Solutions, Inc

8.000	193.99	1	Wave Guide
8.000	183.00	1	Wave Guide
8.000	183.00	6	1 5/8" Coax
8.000	183.00	3	1 1/4" Hybriflex
8.000	179.00	12	1 5/8" Coax
8.000	167.00	2	19.7 mm Cable
8.000	167.00	1	10 mm Cable
8.000	167.00	12	1 5/8" Coax
8.000	166.99	1	Wave Guide
8.000	157.00	6	1 5/8" Coax
8.000	148.00	18	1 5/8" Coax
8.000	147.99	1	Wave Guide
8.000	125.00	2	1/4" Coax
8.000	104.00	2	1/2" Coax
8.000	82.000	1	1/2" Coax
8.000	76.000	1	1/2" Coax
8.000	12.000	1	7/8" Coax

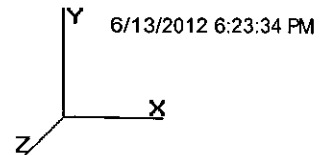


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 20.00
 Sect 1

Uplift 375.70 k Moment 8,161.97 ft-k
 Vert 425.77 k Total Down 29.54 k
 Horiz 44.23 k Total Shear 12.77 k

Site Number: 302470
 Location: Ansonia Wakelee, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

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Section Forces

LoadCase 1.2D + 1.6W Normal

105.00 mph Normal to Face with No Ice

Gust Response Factor : 0.85
 Dead Load Factor : 1.20
 Wind Load Factor : 1.60

Wind Importance Factor : 1.00

Seq	Wind Sect	Height (ft)	qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
10	188.0	28.39	9.85	7.67	0.00	0.16	2.74	1.00	1.00	0.00	14.20	32.96	0.00	1,430.2	0.0	1,503.75	1,202.5	2,706.30	
9	170.0	27.59	12.51	11.67	0.00	0.17	2.69	1.00	1.00	0.00	17.53	91.19	0.00	2,859.0	0.0	1,770.19	3,033.7	4,803.89	
8	150.0	26.62	12.84	15.03	0.00	0.17	2.70	1.00	1.00	0.00	19.29	141.25	0.00	3,955.3	0.0	1,883.05	4,462.7	6,345.84	
7	130.0	25.55	14.17	18.58	0.00	0.16	2.74	1.00	1.00	0.00	22.04	169.27	0.00	4,835.8	0.0	2,096.28	4,959.7	7,055.99	
6	110.0	24.36	16.34	18.58	0.00	0.14	2.80	1.00	1.00	0.00	24.04	170.13	0.00	4,992.9	0.0	2,231.28	4,749.1	6,980.39	
5	90.00	23.01	22.18	22.12	0.00	0.15	2.76	1.00	1.00	0.00	31.48	170.24	0.00	5,572.7	0.0	2,716.90	4,486.8	7,203.75	
4	70.00	21.41	21.17	22.12	0.00	0.13	2.84	1.00	1.00	0.00	30.23	172.02	0.00	5,929.9	0.0	2,500.03	4,213.3	6,713.42	
3	50.00	19.45	23.01	29.22	0.00	0.14	2.81	1.00	1.00	0.00	35.09	172.23	0.00	6,468.7	0.0	2,607.02	3,831.1	6,438.21	
2	30.00	16.81	28.69	29.22	0.00	0.14	2.81	1.00	1.00	0.00	40.78	172.23	0.00	6,875.4	0.0	2,618.11	3,310.9	5,929.03	
1	10.00	16.79	31.16	28.80	0.00	0.13	2.84	1.00	1.00	0.00	42.96	103.70	0.00	6,805.4	0.0	2,785.11	1,990.8	4,775.96	
															49,725.4	0.0			

LoadCase 1.2D + 1.6W 60 deg

105.00 mph 60 deg with No Ice

Gust Response Factor : 0.85
 Dead Load Factor : 1.20
 Wind Load Factor : 1.60

Wind Importance Factor : 1.00

Seq	Wind Sect	Height (ft)	qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
10	188.0	28.39	9.85	7.67	0.00	0.16	2.74	0.80	1.00	0.00	12.24	32.96	0.00	1,430.2	0.0	1,295.27	1,202.5	2,497.81	
9	170.0	27.59	12.51	11.67	0.00	0.17	2.69	0.80	1.00	0.00	15.03	91.19	0.00	2,859.0	0.0	1,517.55	3,033.7	4,551.26	
8	150.0	26.62	12.84	15.03	0.00	0.17	2.70	0.80	1.00	0.00	16.73	141.25	0.00	3,955.3	0.0	1,632.46	4,462.7	6,095.25	
7	130.0	25.55	14.17	18.58	0.00	0.16	2.74	0.80	1.00	0.00	19.20	169.27	0.00	4,835.8	0.0	1,826.70	4,959.7	6,786.41	
6	110.0	24.36	16.34	18.58	0.00	0.14	2.80	0.80	1.00	0.00	20.77	170.13	0.00	4,992.9	0.0	1,928.00	4,749.1	6,677.12	
5	90.00	23.01	22.18	22.12	0.00	0.15	2.76	0.80	1.00	0.00	27.05	170.24	0.00	5,572.7	0.0	2,334.09	4,486.8	6,820.94	
4	70.00	21.41	21.17	22.12	0.00	0.13	2.84	0.80	1.00	0.00	25.99	172.02	0.00	5,929.9	0.0	2,149.90	4,213.3	6,363.29	
3	50.00	19.45	23.01	29.22	0.00	0.14	2.81	0.80	1.00	0.00	30.49	172.23	0.00	6,468.7	0.0	2,265.19	3,831.1	6,096.38	
2	30.00	16.81	28.69	29.22	0.00	0.14	2.81	0.80	1.00	0.00	35.04	172.23	0.00	6,875.4	0.0	2,249.68	3,310.9	5,560.60	
1	10.00	16.79	31.16	28.80	0.00	0.13	2.84	0.80	1.00	0.00	36.73	103.70	0.00	6,805.4	0.0	2,381.12	1,990.8	4,371.97	
															49,725.4	0.0			

LoadCase 1.2D + 1.6W 90 deg

105.00 mph 90 deg with No Ice

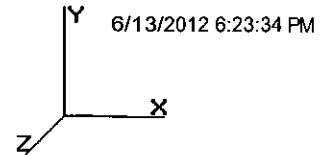
Gust Response Factor : 0.85
 Dead Load Factor : 1.20
 Wind Load Factor : 1.60

Wind Importance Factor : 1.00

Seq	Wind Sect	Height (ft)	qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
10	188.0	28.39	9.85	7.67	0.00	0.16	2.74	0.85	1.00	0.00	12.73	32.96	0.00	1,430.2	0.0	1,347.39	1,202.5	2,549.94	

Site Number: 302470
 Location: Ansonia Wakelee, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

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Section Forces

9	170.0	27.59	12.51	11.67	0.00	0.17	2.69	0.85	1.00	0.00	15.65	91.19	0.00	2,859.0	0.0	1,580.71	3,033.7	4,614.42
8	150.0	26.62	12.84	15.03	0.00	0.17	2.70	0.85	1.00	0.00	17.37	141.25	0.00	3,955.3	0.0	1,695.10	4,462.7	6,157.90
7	130.0	25.55	14.17	18.58	0.00	0.16	2.74	0.85	1.00	0.00	19.91	169.27	0.00	4,835.8	0.0	1,894.10	4,959.7	6,853.80
6	110.0	24.36	16.34	18.58	0.00	0.14	2.80	0.85	1.00	0.00	21.59	170.13	0.00	4,992.9	0.0	2,003.82	4,749.1	6,752.94
5	90.00	23.01	22.18	22.12	0.00	0.15	2.76	0.85	1.00	0.00	28.16	170.24	0.00	5,572.7	0.0	2,429.79	4,486.8	6,916.64
4	70.00	21.41	21.17	22.12	0.00	0.13	2.84	0.85	1.00	0.00	27.05	172.02	0.00	5,929.9	0.0	2,237.43	4,213.3	6,450.82
3	50.00	19.45	23.01	29.22	0.00	0.14	2.81	0.85	1.00	0.00	31.64	172.23	0.00	6,468.7	0.0	2,350.65	3,831.1	6,181.84
2	30.00	16.81	28.69	29.22	0.00	0.14	2.81	0.85	1.00	0.00	36.48	172.23	0.00	6,875.4	0.0	2,341.79	3,310.9	5,652.71
1	10.00	16.79	31.16	28.80	0.00	0.13	2.84	0.85	1.00	0.00	38.29	103.70	0.00	6,805.4	0.0	2,482.12	1,990.8	4,472.97
														49,725.4	0.0	56,603.97		

LoadCase 0.9D + 1.6W Normal

105.00 mph Normal to Face with No Ice (Reduced DL)

Gust Response Factor : 0.85
 Dead Load Factor : 0.90
 Wind Load Factor : 1.60

Wind Importance Factor : 1.00

Seq	Wind Sect	Height (ft)	qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
10	188.0	28.39	9.85	7.67	0.00	0.16	2.74	1.00	1.00	0.00	14.20	32.96	0.00	1,072.6	0.0	1,503.75	1,202.5	2,706.30	
9	170.0	27.59	12.51	11.67	0.00	0.17	2.69	1.00	1.00	0.00	17.53	91.19	0.00	2,144.3	0.0	1,770.19	3,033.7	4,803.89	
8	150.0	26.62	12.84	15.03	0.00	0.17	2.70	1.00	1.00	0.00	19.29	141.25	0.00	2,966.5	0.0	1,883.05	4,462.7	6,345.84	
7	130.0	25.55	14.17	18.58	0.00	0.16	2.74	1.00	1.00	0.00	22.04	169.27	0.00	3,626.9	0.0	2,096.28	4,959.7	7,055.99	
6	110.0	24.36	16.34	18.58	0.00	0.14	2.80	1.00	1.00	0.00	24.04	170.13	0.00	3,744.7	0.0	2,231.28	4,749.1	6,980.39	
5	90.00	23.01	22.18	22.12	0.00	0.15	2.76	1.00	1.00	0.00	31.48	170.24	0.00	4,179.5	0.0	2,716.90	4,486.8	7,203.75	
4	70.00	21.41	21.17	22.12	0.00	0.13	2.84	1.00	1.00	0.00	30.23	172.02	0.00	4,447.4	0.0	2,500.03	4,213.3	6,713.42	
3	50.00	19.45	23.01	29.22	0.00	0.14	2.81	1.00	1.00	0.00	35.09	172.23	0.00	4,851.5	0.0	2,607.02	3,831.1	6,438.21	
2	30.00	16.81	28.69	29.22	0.00	0.14	2.81	1.00	1.00	0.00	40.78	172.23	0.00	5,156.6	0.0	2,618.11	3,310.9	5,929.03	
1	10.00	16.79	31.16	28.80	0.00	0.13	2.84	1.00	1.00	0.00	42.96	103.70	0.00	5,104.0	0.0	2,785.11	1,990.8	4,775.96	
														37,294.1	0.0	58,952.79			

LoadCase 0.9D + 1.6W 60 deg

105.00 mph 60 deg with No Ice (Reduced DL)

Gust Response Factor : 0.85
 Dead Load Factor : 0.90
 Wind Load Factor : 1.60

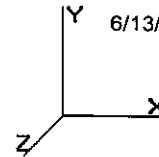
Wind Importance Factor : 1.00

Seq	Wind Sect	Height (ft)	qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
10	188.0	28.39	9.85	7.67	0.00	0.16	2.74	0.80	1.00	0.00	12.24	32.96	0.00	1,072.6	0.0	1,295.27	1,202.5	2,497.81	
9	170.0	27.59	12.51	11.67	0.00	0.17	2.69	0.80	1.00	0.00	15.03	91.19	0.00	2,144.3	0.0	1,517.55	3,033.7	4,551.26	
8	150.0	26.62	12.84	15.03	0.00	0.17	2.70	0.80	1.00	0.00	16.73	141.25	0.00	2,966.5	0.0	1,632.46	4,462.7	6,095.25	
7	130.0	25.55	14.17	18.58	0.00	0.16	2.74	0.80	1.00	0.00	19.20	169.27	0.00	3,626.9	0.0	1,826.70	4,959.7	6,786.41	
6	110.0	24.36	16.34	18.58	0.00	0.14	2.80	0.80	1.00	0.00	20.77	170.13	0.00	3,744.7	0.0	1,928.00	4,749.1	6,677.12	
5	90.00	23.01	22.18	22.12	0.00	0.15	2.76	0.80	1.00	0.00	27.05	170.24	0.00	4,179.5	0.0	2,334.09	4,486.8	6,820.94	
4	70.00	21.41	21.17	22.12	0.00	0.13	2.84	0.80	1.00	0.00	25.99	172.02	0.00	4,447.4	0.0	2,149.90	4,213.3	6,363.29	
3	50.00	19.45	23.01	29.22	0.00	0.14	2.81	0.80	1.00	0.00	30.49	172.23	0.00	4,851.5	0.0	2,265.19	3,831.1	6,096.38	
2	30.00	16.81	28.69	29.22	0.00	0.14	2.81	0.80	1.00	0.00	35.04	172.23	0.00	5,156.6	0.0	2,249.68	3,310.9	5,560.60	
1	10.00	16.79	31.16	28.80	0.00	0.13	2.84	0.80	1.00	0.00	36.73	103.70	0.00	5,104.0	0.0	2,381.12	1,990.8	4,371.97	
														37,294.1	0.0	55,821.02			

Site Number: 302470
 Location: Ansonia Wakelee, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

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Section Forces

LoadCase 0.9D + 1.6W 90 deg

105.00 mph 90 deg with No Ice (Reduced DL)

Gust Response Factor : 0.85
 Dead Load Factor : 0.90
 Wind Load Factor : 1.60

Wind Importance Factor : 1.00

Sect Seq	Height (ft)	Wind qz (psf)	Total Area			Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area		Total Weight (lb)	Ice Weight (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Flat (sqft)	Round (sqft)	Ice Round (sqft)							Linear Area (sqft)	Linear Area (sqft)					
10	188.0	28.39	9.85	7.67	0.00	0.16	2.74	0.85	1.00	0.00	12.73	32.96	0.00	1,072.6	0.0	1,347.39	1,202.5	2,549.94
9	170.0	27.59	12.51	11.67	0.00	0.17	2.69	0.85	1.00	0.00	15.65	91.19	0.00	2,144.3	0.0	1,580.71	3,033.7	4,614.42
8	150.0	26.62	12.84	15.03	0.00	0.17	2.70	0.85	1.00	0.00	17.37	141.25	0.00	2,966.5	0.0	1,695.10	4,462.7	6,157.90
7	130.0	25.55	14.17	18.58	0.00	0.16	2.74	0.85	1.00	0.00	19.91	169.27	0.00	3,626.9	0.0	1,894.10	4,959.7	6,853.80
6	110.0	24.36	16.34	18.58	0.00	0.14	2.80	0.85	1.00	0.00	21.59	170.13	0.00	3,744.7	0.0	2,003.82	4,749.1	6,752.94
5	90.00	23.01	22.18	22.12	0.00	0.15	2.76	0.85	1.00	0.00	28.16	170.24	0.00	4,179.5	0.0	2,429.79	4,486.8	6,916.64
4	70.00	21.41	21.17	22.12	0.00	0.13	2.84	0.85	1.00	0.00	27.05	172.02	0.00	4,447.4	0.0	2,237.43	4,213.3	6,450.82
3	50.00	19.45	23.01	29.22	0.00	0.14	2.81	0.85	1.00	0.00	31.64	172.23	0.00	4,851.5	0.0	2,350.65	3,831.1	6,181.84
2	30.00	16.81	28.69	29.22	0.00	0.14	2.81	0.85	1.00	0.00	36.48	172.23	0.00	5,156.6	0.0	2,341.79	3,310.9	5,652.71
1	10.00	16.79	31.16	28.80	0.00	0.13	2.84	0.85	1.00	0.00	38.29	103.70	0.00	5,104.0	0.0	2,482.12	1,990.8	4,472.97
														37,294.1	0.0			56,603.97

LoadCase 1.2D + 1.0Di + 1.0Wi Normal

50.00 mph Normal with 0.75 in Radial Ice

Gust Response Factor : 0.85
 Dead Load Factor : 1.20
 Wind Load Factor : 1.00

Ice Dead Load Factor : 1.00

Wind Importance Factor : 1.00
 Ice Importance Factor : 1.00

Sect Seq	Height (ft)	Wind qz (psf)	Total Area			Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area		Total Weight (lb)	Ice Weight (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Flat (sqft)	Round (sqft)	Ice Round (sqft)							Linear Area (sqft)	Linear Area (sqft)					
10	188.0	6.44	7.88	30.12	29.98	0.33	2.22	1.00	1.00	1.79	30.78	50.51	24.69	4,846.7	3,416.5	374.26	361.05	735.31
9	170.0	6.26	10.01	37.13	34.74	0.32	2.24	1.00	1.00	1.77	38.13	130.36	82.76	9,456.0	6,597.0	454.02	990.73	1,444.75
8	150.0	6.04	12.84	50.07	35.04	0.37	2.12	1.00	1.00	1.75	44.12	192.44	122.75	12,471.0	8,515.6	480.09	1,355.6	1,818.97
7	130.0	5.79	14.17	50.37	31.79	0.31	2.28	1.00	1.00	1.72	44.43	226.62	129.03	14,068.2	9,232.3	499.09	1,556.5	2,055.59
6	110.0	5.52	16.34	52.77	34.20	0.27	2.37	1.00	1.00	1.69	47.55	226.53	137.61	14,451.2	9,458.2	528.18	1,551.8	2,080.03
5	90.00	5.22	22.18	58.63	36.51	0.28	2.36	1.00	1.00	1.66	56.87	225.51	144.27	15,662.6	10,090.	596.23	1,486.0	2,082.29
4	70.00	4.86	21.17	53.08	30.95	0.22	2.52	1.00	1.00	1.62	51.88	225.93	149.86	15,628.4	9,698.5	540.39	1,460.7	2,001.11
3	50.00	4.41	23.01	60.97	31.76	0.22	2.52	1.00	1.00	1.56	58.29	224.35	145.94	16,228.0	9,759.3	551.55	1,307.1	1,858.65
2	30.00	3.81	28.69	61.18	31.96	0.21	2.55	1.00	1.00	1.49	64.00	221.76	138.67	16,531.3	9,655.9	528.26	1,104.9	1,633.17
1	10.00	3.81	31.16	59.06	30.27	0.20	2.61	1.00	1.00	1.33	65.06	130.33	75.43	13,490.4	6,685.0	548.92	637.68	1,186.60
														132,833.7	83,108.3			16,896.49

** = Section Force Exceeds Solidity Ratio Criteria

LoadCase 1.2D + 1.0Di + 1.0Wi 60 deg

50.00 mph 60 deg with 0.75 in Radial Ice

Gust Response Factor : 0.85
 Dead Load Factor : 1.20
 Wind Load Factor : 1.00

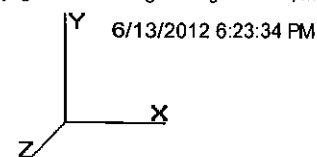
Ice Dead Load Factor : 1.00

Wind Importance Factor : 1.00
 Ice Importance Factor : 1.00

Sect Seq	Height (ft)	Wind qz (psf)	Total Area			Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area		Total Weight (lb)	Ice Weight (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Flat (sqft)	Round (sqft)	Ice Round (sqft)							Linear Area (sqft)	Linear Area (sqft)					
10	188.0	6.44	7.88	30.12	29.98	0.33	2.22	0.80	1.00	1.79	29.21	50.51	24.69	4,846.7	3,416.5	355.11	361.05	716.16

Site Number: 302470
 Location: Ansonia Wakelee, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

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Section Forces

9	170.0	6.26	10.01	37.13	34.74	0.32	2.24	0.80	1.00	1.77	36.13	130.36	82.76	9,456.0	6,597.0	430.20	990.73	1,420.93
8	150.0	6.04	12.84	50.07	35.04	0.37	2.12	0.80	1.00	1.75	41.55	192.44	122.75	12,471.0	8,515.6	452.15	1,355.6	1,807.79
7	130.0	5.79	14.17	50.37	31.79	0.31	2.28	0.80	1.00	1.72	41.59	226.62	129.03	14,068.2	9,232.3	467.25	1,556.5	2,023.75
6	110.0	5.52	16.34	52.77	34.20	0.27	2.37	0.80	1.00	1.69	44.28	226.53	137.61	14,451.2	9,458.2	491.88	1,551.8	2,043.74
5	90.00	5.22	22.18	58.63	36.51	0.28	2.36	0.80	1.00	1.66	52.43	225.51	144.27	15,662.6	10,090.	549.72	1,486.0	2,035.77
4	70.00	4.86	21.17	53.08	30.95	0.22	2.52	0.80	1.00	1.62	47.65	225.93	149.86	15,628.4	9,698.5	496.30	1,460.7	1,957.02
3	50.00	4.41	23.01	60.97	31.76	0.22	2.52	0.80	1.00	1.56	53.69	224.35	145.94	16,228.0	9,759.3	508.01	1,307.1	1,815.12
2	30.00	3.81	28.69	61.18	31.96	0.21	2.55	0.80	1.00	1.49	58.27	221.76	138.67	16,531.3	9,655.9	480.90	1,104.9	1,585.81
1	10.00	3.81	31.16	59.06	30.27	0.20	2.61	0.80	1.00	1.33	58.82	130.33	75.43	13,490.4	6,685.0	496.34	637.68	1,134.03

** = Section Force Exceeds Solidity Ratio Criteria

132,833.7 83,108.3

16,540.11

LoadCase 1.2D + 1.0Di + 1.0Wi 90 deg

50.00 mph 90 deg with 0.75 in Radial Ice

Gust Response Factor : 0.85

Dead Load Factor : 1.20

Wind Load Factor : 1.00

Ice Dead Load Factor : 1.00

Wind Importance Factor : 1.00

Ice Importance Factor : 1.00

Sect Seq	Height (ft)	Wind qz (psf)	Total		Ice		Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice		Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Flat Area (sqft)	Round Area (sqft)	Round Area (sqft)	Total Area (sqft)								Linear Area (sqft)	Total Weight (lb)			
10	188.0	6.44	7.88	30.12	29.98	0.33	2.22	0.85	1.00	1.79	29.60	50.51	24.69	4,846.7	3,416.5	359.90	361.05	720.95
9	170.0	6.26	10.01	37.13	34.74	0.32	2.24	0.85	1.00	1.77	36.63	130.36	82.76	9,456.0	6,597.0	436.15	990.73	1,426.89
8	150.0	6.04	12.84	50.07	35.04	0.37	2.12	0.85	1.00	1.75	42.19	192.44	122.75	12,471.0	8,515.6	459.13	1,355.6	1,814.77
7	130.0	5.79	14.17	50.37	31.79	0.31	2.28	0.85	1.00	1.72	42.30	226.62	129.03	14,068.2	9,232.3	475.21	1,556.5	2,031.71
6	110.0	5.52	16.34	52.77	34.20	0.27	2.37	0.85	1.00	1.69	45.10	226.53	137.61	14,451.2	9,458.2	500.95	1,551.8	2,052.81
5	90.00	5.22	22.18	58.63	36.51	0.28	2.36	0.85	1.00	1.66	53.54	225.51	144.27	15,662.6	10,090.	561.34	1,486.0	2,047.40
4	70.00	4.86	21.17	53.08	30.95	0.22	2.52	0.85	1.00	1.62	48.71	225.93	149.86	15,628.4	9,698.5	507.32	1,460.7	1,968.04
3	50.00	4.41	23.01	60.97	31.76	0.22	2.52	0.85	1.00	1.56	54.84	224.35	145.94	16,228.0	9,759.3	518.90	1,307.1	1,826.00
2	30.00	3.81	28.69	61.18	31.96	0.21	2.55	0.85	1.00	1.49	59.70	221.76	138.67	16,531.3	9,655.9	492.74	1,104.9	1,597.65
1	10.00	3.81	31.16	59.06	30.27	0.20	2.61	0.85	1.00	1.33	60.38	130.33	75.43	13,490.4	6,685.0	509.49	637.68	1,147.17

** = Section Force Exceeds Solidity Ratio Criteria

132,833.7 83,108.3

16,633.39

LoadCase 1.0D + 1.0W Service Normal

Serviceability - 60.00 Wind Normal

Gust Response Factor : 0.85

Dead Load Factor : 1.00

Wind Load Factor : 1.00

Wind Importance Factor : 1.00

Sect Seq	Height (ft)	Wind qz (psf)	Total		Ice		Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice		Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Flat Area (sqft)	Round Area (sqft)	Round Area (sqft)	Total Area (sqft)								Linear Area (sqft)	Total Weight (lb)			
10	188.0	9.27	9.85	7.67	0.00	0.16	2.74	1.00	1.00	0.00	14.20	32.96	0.00	1,191.8	0.0	306.89	217.58	524.47
9	170.0	9.01	12.51	11.67	0.00	0.17	2.69	1.00	1.00	0.00	19.16	91.19	0.00	2,382.5	0.0	394.90	578.99	973.89
8	150.0	8.69	12.84	15.03	0.00	0.17	2.70	1.00	1.00	0.00	21.40	141.25	0.00	3,296.1	0.0	426.30	870.23	1,296.54
7	130.0	8.34	14.17	18.58	0.00	0.16	2.74	1.00	1.00	0.00	24.73	169.27	0.00	4,029.9	0.0	480.10	1,012.1	1,492.28
6	110.0	7.96	16.34	18.58	0.00	0.14	2.80	1.00	1.00	0.00	26.86	170.13	0.00	4,160.8	0.0	508.89	969.21	1,478.10
5	90.00	7.51	22.18	22.12	0.00	0.15	2.76	1.00	1.00	0.00	31.48	170.24	0.00	4,643.9	0.0	554.47	915.68	1,470.15
4	70.00	6.99	21.17	22.12	0.00	0.13	2.84	1.00	1.00	0.00	33.69	172.02	0.00	4,941.6	0.0	568.59	859.88	1,428.46
3	50.00	6.35	23.01	29.22	0.00	0.14	2.81	1.00	1.00	0.00	35.09	172.23	0.00	5,390.6	0.0	532.04	781.88	1,313.92
2	30.00	5.49	28.69	29.22	0.00	0.14	2.81	1.00	1.00	0.00	40.78	172.23	0.00	5,729.5	0.0	534.31	675.70	1,210.01
1	10.00	5.48	31.16	28.80	0.00	0.13	2.84	1.00	1.00	0.00	42.96	103.70	0.00	5,671.2	0.0	568.39	406.30	974.69

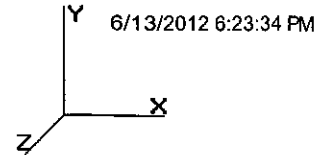
** = Section Force Exceeds Solidity Ratio Criteria

41,437.8 0.0

12,162.51

Site Number: 302470
 Location: Ansonia Wakelee, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

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Section Forces

LoadCase 1.0D + 1.0W Service 60 deg

Serviceability - 60.00 Wind 60 deg

Gust Response Factor : 0.85
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

Wind Importance Factor : 1.00

Seq	Wind Sect	Height (ft)	qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)	
10	188.0	9.27	9.85	7.67	0.00	0.16	2.74	0.80	1.00	0.00	12.24	32.96	0.00	1,191.8	0.0	264.34	217.58	481.92		
9	170.0	9.01	12.51	11.67	0.00	0.17	2.69	0.80	1.00	0.00	16.66	91.19	0.00	2,382.5	0.0	343.34	578.99	922.33		
8	150.0	8.69	12.84	15.03	0.00	0.17	2.70	0.80	1.00	0.00	18.83	141.25	0.00	3,296.1	0.0	375.16	870.23	1,245.39		
7	130.0	8.34	14.17	18.58	0.00	0.16	2.74	0.80	1.00	0.00	21.90	169.27	0.00	4,029.9	0.0	425.08	1,012.1	1,437.27		
6	110.0	7.96	16.34	18.58	0.00	0.14	2.80	0.80	1.00	0.00	23.60	170.13	0.00	4,160.8	0.0	447.00	969.21	1,416.20		
5	90.00	7.51	22.18	22.12	0.00	0.15	2.76	0.80	1.00	0.00	27.05	170.24	0.00	4,643.9	0.0	476.34	915.68	1,392.03		
4	70.00	6.99	21.17	22.12	0.00	0.13	2.84	0.80	1.00	0.00	29.45	172.02	0.00	4,941.6	0.0	497.13	859.88	1,357.01		
3	50.00	6.35	23.01	29.22	0.00	0.14	2.81	0.80	1.00	0.00	30.49	172.23	0.00	5,390.6	0.0	462.28	781.88	1,244.16		
2	30.00	5.49	28.69	29.22	0.00	0.14	2.81	0.80	1.00	0.00	35.04	172.23	0.00	5,729.5	0.0	459.12	675.70	1,134.82		
1	10.00	5.48	31.16	28.80	0.00	0.13	2.84	0.80	1.00	0.00	36.73	103.70	0.00	5,671.2	0.0	485.94	406.30	892.24		
																41,437.8	0.0			11,523.37

** = Section Force Exceeds Solidity Ratio Criteria

LoadCase 1.0D + 1.0W Service 90 deg

Serviceability - 60.00 Wind 90 deg

Gust Response Factor : 0.85
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

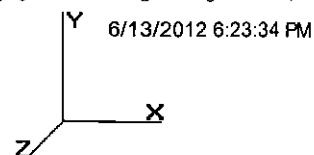
Wind Importance Factor : 1.00

Seq	Wind Sect	Height (ft)	qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)	
10	188.0	9.27	9.85	7.67	0.00	0.16	2.74	0.85	1.00	0.00	12.73	32.96	0.00	1,191.8	0.0	274.98	217.58	492.56		
9	170.0	9.01	12.51	11.67	0.00	0.17	2.69	0.85	1.00	0.00	17.28	91.19	0.00	2,382.5	0.0	356.23	578.99	935.22		
8	150.0	8.69	12.84	15.03	0.00	0.17	2.70	0.85	1.00	0.00	19.48	141.25	0.00	3,296.1	0.0	387.95	870.23	1,258.18		
7	130.0	8.34	14.17	18.58	0.00	0.16	2.74	0.85	1.00	0.00	22.61	169.27	0.00	4,029.9	0.0	438.84	1,012.1	1,451.02		
6	110.0	7.96	16.34	18.58	0.00	0.14	2.80	0.85	1.00	0.00	24.41	170.13	0.00	4,160.8	0.0	462.47	969.21	1,431.68		
5	90.00	7.51	22.18	22.12	0.00	0.15	2.76	0.85	1.00	0.00	28.16	170.24	0.00	4,643.9	0.0	495.88	915.68	1,411.56		
4	70.00	6.99	21.17	22.12	0.00	0.13	2.84	0.85	1.00	0.00	30.51	172.02	0.00	4,941.6	0.0	515.00	859.88	1,374.87		
3	50.00	6.35	23.01	29.22	0.00	0.14	2.81	0.85	1.00	0.00	31.64	172.23	0.00	5,390.6	0.0	479.72	781.88	1,261.60		
2	30.00	5.49	28.69	29.22	0.00	0.14	2.81	0.85	1.00	0.00	36.48	172.23	0.00	5,729.5	0.0	477.92	675.70	1,153.61		
1	10.00	5.48	31.16	28.80	0.00	0.13	2.84	0.85	1.00	0.00	38.29	103.70	0.00	5,671.2	0.0	506.55	406.30	912.85		
																41,437.8	0.0			11,683.15

** = Section Force Exceeds Solidity Ratio Criteria

Site Number: 302470
 Location: Ansonia Wakelee, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

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Tower Loading

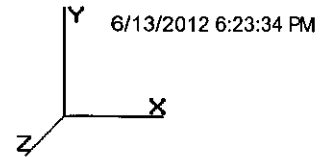
Discrete Appurtenance Properties

Attach Elev (ft)	Description	Qty	No Ice		Ice		Len (ft)	Width (in)	Depth (in)	Ka	Orientation Factor	Vert Ecc (ft)
			Weight (lb)	CaAa (sf)	Weight (lb)	CaAa (sf)						
194.0	Argus LLPX310R	3	28.60	4.290	38.81	5.822	3.500	11.80	4.500	0.80	0.73	0.000
194.0	DragonWave A-ANT-18G-2-C	2	27.10	4.690	127.12	6.364	2.170	0.000	0.000	0.80	0.80	0.000
194.0	NextNet BTS-2500	3	35.00	2.120	47.50	2.877	1.583	11.30	5.100	0.80	0.50	0.000
194.0	DragonWave Horizon	2	10.60	0.430	14.38	0.584	0.392	9.300	9.300	0.80	0.50	0.000
194.0	KMW TTA (HB-X-WM-17-65-	3	15.90	0.650	21.58	0.882	1.325	7.300	3.700	0.80	0.50	0.000
194.0	Round Sector Frames	3	300.00	14.400	677.01	31.365	0.000	0.000	0.000	0.75	0.75	0.000
194.0	72" x 12" Panels	3	40.00	8.130	54.28	11.033	6.000	12.00	6.000	0.80	0.67	0.000
194.0	48" x 12" Panels	9	30.00	5.070	40.71	6.880	4.000	12.00	6.000	0.80	0.67	0.000
183.0	Powerwave P40-16-XLPP-	2	64.00	10.500	226.83	10.346	4.500	20.00	0.650	0.80	0.67	2.000
183.0	Decibel DB980H90E-M	6	8.50	3.900	105.35	4.974	5.000	6.300	3.000	0.80	0.79	2.000
183.0	RFS APXVSPP18-C-A20	1	57.00	8.260	262.15	9.346	6.000	11.80	7.000	0.80	0.82	2.000
183.0	Alcatel-Lucent 800 MHz RRH	3	53.00	2.490	142.87	2.761	1.640	13.00	10.80	0.80	0.92	2.000
183.0	Alcatel-Lucent 1900 MHz	3	60.00	2.710	157.84	3.010	2.090	11.10	10.70	0.80	0.67	2.000
183.0	Round Sector Frames	3	300.00	14.400	621.31	24.682	0.000	0.000	0.000	0.75	0.75	0.000
179.0	Celwave APL868013-42T0	6	6.30	3.730	115.30	4.520	4.000	8.000	6.000	0.75	0.88	0.000
179.0	RFS FD9R6004/1C-3L	6	3.10	0.370	16.54	0.586	0.483	6.500	1.500	0.80	0.50	0.000
179.0	Flat Light Sector Frames	3	400.00	17.900	705.37	33.210	0.000	0.000	0.000	0.75	0.75	0.000
179.0	Powerwave P65-16-XL-2	3	33.00	8.130	217.53	9.447	6.000	12.00	5.000	0.80	0.75	0.000
179.0	Ryma MGD3-800T0	3	19.80	3.450	26.80	4.669	4.530	6.300	3.500	0.80	0.82	0.000
167.0	72" x 12" Panel	9	45.00	8.130	239.56	9.447	6.000	12.00	6.000	0.80	0.67	0.000
167.0	36" x 8" x 6" Panel	3	25.00	2.580	109.90	3.323	3.000	8.000	6.000	0.80	0.89	0.000
167.0	Ericsson RRUS 11	6	55.00	2.940	136.67	3.174	1.480	17.00	7.200	0.80	0.50	0.000
167.0	Raycap DC6-48-60-18-8F	1	32.80	1.470	127.19	2.862	2.000	11.00	11.00	0.80	0.50	0.000
167.0	Round Sector Frames	3	300.00	14.400	618.10	24.579	0.000	0.000	0.000	0.75	0.75	0.000
167.0	14" x 9" TTA	9	10.00	1.230	13.53	1.404	1.167	9.000	4.000	0.80	0.50	0.000
157.0	RFS APXV18-206517-C	3	26.40	5.170	35.61	6.975	6.000	6.800	3.200	1.00	0.80	0.000
148.0	RFS APX16DWV-16DWVS-E-	3	40.70	7.220	54.91	9.740	4.660	13.30	3.100	0.80	0.65	0.000
148.0	RFS ATMAA1412D-1A20	3	13.00	1.170	17.54	1.578	1.000	10.00	4.000	0.80	0.50	0.000
148.0	EMS DR65-18-XXDPL2Q	3	24.00	6.300	156.18	6.867	4.500	12.00	4.000	0.80	0.69	0.000
148.0	CCI DTMA-1819-DD-12	3	14.30	0.710	19.29	0.958	1.100	5.500	3.200	0.80	0.50	0.000
148.0	Round Sector Frames	3	300.00	14.400	614.14	24.452	0.000	0.000	0.000	0.75	0.75	0.000
125.0	Motorola PTP54600	2	12.10	2.040	16.26	2.742	1.210	14.50	3.800	1.00	0.80	0.000
104.0	Side Arms	2	200.00	2.000	267.68	2.271	0.000	0.000	0.000	1.00	0.80	0.000
104.0	2" x 8" GPS	2	0.26	0.160	0.40	0.532	0.670	2.000	2.000	0.90	0.90	0.000
82.00	Side Arm	1	200.00	2.000	266.33	2.265	0.000	0.000	0.000	1.00	1.00	0.000
82.00	10' Omni	1	10.00	3.000	13.32	3.995	10.00	3.000	3.000	0.90	1.00	5.000
76.00	Side Arm	1	200.00	2.000	264.69	2.259	0.000	0.000	0.000	1.00	1.00	0.000
76.00	2" x 8" GPS	1	0.26	0.160	0.39	0.516	0.670	2.000	2.000	0.90	1.00	0.000
12.00	Nortel NTGB01MA	1	10.00	0.090	12.66	0.114	0.670	2.000	2.000	1.00	1.00	0.335
Totals		127	8426.68		20149.08					Number of Appurtenances : 39		

Linear Appurtenance Properties

Elev From (ft)	Elev To (ft)	Description	Qty	Width (in)	Weight (lb/ft)	Pct In Block	Spread On Faces	Bundling Arrangement	Cluster Dia (in)	Out Of Zone	Spacing (in)	Orientation Factor	Ka Override
8.00	194.0	1 1/4" Coax	10	1.55	0.63	60	3	Block	0.00	N	0.00	1.00	0.00
8.00	194.0	1 5/8" Coax	6	1.98	0.82	50	3	Block	0.00	N	0.00	1.00	0.00

Site Number: 302470
 Location: Ansonia Wakelee, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

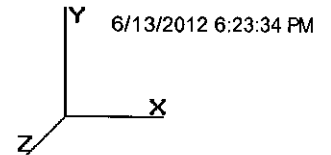


Tower Loading

8.00	194.0	1/2" Coax	2	0.63	0.15	0	2	Individual	0.00	N	0.00	1.00	0.00
8.00	194.0	3" Conduit	2	3.50	7.58	0	Lin App	Individual	0.00	N	1.00	1.00	0.00
8.00	194.0	5/16" Coax	6	0.00	0.04	50	2	Block	0.00	N	0.00	1.00	0.00
8.00	193.9	Wave Guide	1	1.00	5.00	0	3	Individual	0.00	N	0.00	1.00	0.00
8.00	183.0	1 1/4" Hybriflex	3	1.54	1.00	100	Lin App	Individual	0.00	N	0.00	1.00	0.00
8.00	183.0	1 5/8" Coax	6	1.98	0.82	0	2	Individual	0.00	N	0.00	1.00	0.00
8.00	183.0	Wave Guide	1	1.00	5.00	100	2	Individual	0.00	N	0.00	1.00	0.00
8.00	179.0	1 5/8" Coax	12	1.98	0.82	33	3	Block	0.00	N	0.00	1.00	0.00
8.00	167.0	1 5/8" Coax	12	1.98	0.82	50	1	Block	0.00	N	0.00	1.00	0.00
8.00	167.0	10 mm Cable	1	0.39	0.07	0	Lin App	Individual	0.00	N	0.00	1.00	0.00
8.00	167.0	19.7 mm Cable	2	0.78	0.59	0	Lin App	Individual	0.00	N	0.00	1.00	0.00
8.00	166.9	Wave Guide	1	1.00	5.00	100	1	Individual	0.00	N	0.00	1.00	0.00
8.00	157.0	1 5/8" Coax	6	1.98	0.82	0	1	Individual	0.00	N	0.00	1.00	0.00
8.00	148.0	1 5/8" Coax	18	1.98	0.82	66	3	Block	0.00	N	0.00	1.00	0.00
8.00	147.9	Wave Guide	1	1.00	5.00	100	3	Individual	0.00	N	0.00	1.00	0.00
8.00	125.0	1/4" Coax	2	0.34	0.06	0	1	Individual	0.00	N	0.00	1.00	0.00
8.00	104.0	1/2" Coax	2	0.00	0.15	0	3	Individual	0.00	N	0.00	1.00	0.00
8.00	82.00	1/2" Coax	1	0.63	0.15	0	1	Individual	0.00	N	0.00	1.00	0.00
8.00	76.00	1/2" Coax	1	0.63	0.15	0	2	Individual	0.00	N	0.00	1.00	0.00
8.00	12.00	7/8" Coax	1	1.09	0.33	0	1	Individual	0.00	N	0.00	1.00	0.00

Site Number: 302470
 Location: Ansonia Wakelee, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

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Force/Stress Summary

Section: 1 15N25 Bot Elev (ft): 0.00 Height (ft): 20.000

		Force	Len	Bracing %			Fy	phi	Num	Num	Shear	Bear	Use	
		(kip)	(ft)	X	Y	Z	(ksi)	Pn	Bo	Holes	Cap (kip)	Cap (kip)	%	Controls
Max Compression Member	Load Case													
LEG PX - 8" DIA PIPE	1.2D + 1.6W	-420.17	9.85	100	100	100	41.0	50.0	0	0	0.00	0.00	82	Member X
HORIZ		0.00	0.000	0	0	0	0.0	0.0	0	0	0.00	0.00	0	
DIAG SAE - 4X4X0.25	1.2D + 1.6W 90	-12.32	24.54	50	50	50	185.2	43.5	1	1	17.89	23.40	96	Member Z

Max Tension Member	Load Case	Force (kip)	Fy (ksi)	Fu (ksi)	phi	Pn	Num	Num	Shear	Bear	Use	Controls
					(kip)		Bo	Holes	Cap (kip)	Cap (kip)	%	
LEG PX - 8" DIA PIPE	0.9D + 1.6W 60	381.76	50	65	576.00	0	0	0	0.00	0.00	66	Member
HORIZ		0.00	0	0	0.00	0	0	0	0.00	0.00	0	
DIAG SAE - 4X4X0.25	1.2D + 1.6W 90	13.01	50	65	62.93	1	1	0	0.00	23.40	20	Member

Max Splice Forces	Load Case	Force (kip)	Capacity (kip)	Use %	Num	Bolt Type
Top Tension	0.9D + 1.6W 60	347.47	0.00	0	0	
Top Compression	1.2D + 1.6W	392.48	0.00	0		
Bot Tension	0.9D + 1.6W 60	381.76	605.70	63	10	1" A354-BC
Bot Compression	1.2D + 1.6W	431.10	0.00	0		

Section: 2 14N46 Bot Elev (ft): 20.00 Height (ft): 20.000

		Force	Len	Bracing %			Fy	phi	Num	Num	Shear	Bear	Use	
		(kip)	(ft)	X	Y	Z	(ksi)	Pn	Bo	Holes	Cap (kip)	Cap (kip)	%	Controls
Max Compression Member	Load Case													
LEG PSP - ROHN 8 EHS	1.2D + 1.6W	-380.13	9.85	100	100	100	40.3	50.0	0	0	0.00	0.00	96	Member X
HORIZ		0.00	0.000	0	0	0	0.0	0.0	0	0	0.00	0.00	0	
DIAG SAE - 4X4X0.25	1.2D + 1.6W 90	-12.88	22.69	50	50	50	171.3	43.5	1	1	17.89	23.40	86	Member Z

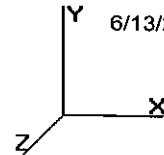
Max Tension Member	Load Case	Force (kip)	Fy (ksi)	Fu (ksi)	phi	Pn	Num	Num	Shear	Bear	Use	Controls
					(kip)		Bo	Holes	Cap (kip)	Cap (kip)	%	
LEG PSP - ROHN 8 EHS	0.9D + 1.6W 60	347.79	50	65	444.15	0	0	0	0.00	0.00	78	Member
HORIZ		0.00	0	0	0.00	0	0	0	0.00	0.00	0	
DIAG SAE - 4X4X0.25	1.2D + 1.6W 90	12.63	50	65	62.93	1	1	0	0.00	23.40	20	Member

Max Splice Forces	Load Case	Force (kip)	Capacity (kip)	Use %	Num	Bolt Type
Top Tension	0.9D + 1.6W 60	310.37	0.00	0	0	
Top Compression	1.2D + 1.6W	349.70	0.00	0		
Bot Tension	0.9D + 1.6W 60	347.47	436.16	80	8	1 A325
Bot Compression	1.2D + 1.6W	392.48	0.00	0		

Site Number: 302470
 Location: Ansonia Wakelee, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class: II
 Exposure: B
 Topo: 1

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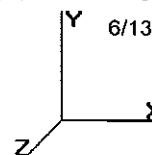
Force/Stress Summary

Section: 3		13N88		Bot Elev (ft): 40.00				Height (ft): 20.000							
		Force	Len	Bracing %			Fy	phi	Shear	Bear					
Max Compression Member		(kip)	(ft)	X	Y	Z	(ksi)	Pn	Num	Num	phiRnv	phiRn	Use		
		Load Case						(kip)	Boles	Holes	(kip)	(kip)	%		
				KL/R									Controls		
LEG	PSP - ROHN 8 EHS	-337.13	9.85	100	100	100	40.3	50.0	394.32	0	0	0.00	0.00	85 Member X	
HORIZ		0.00	0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG	SAE - 3.5X3.5X0.25	-12.28	20.88	49	49	49	177.0	49.5	12.19	1	1	17.89	23.40	100 Member Z	
Max Tension Member		Force	Fy	Fu	phi	Pn	Num	Num	Shear	Bear	Use				
		(kip)	(ksi)	(ksi)	(kip)	Boles	Holes	Cap	(kip)	Cap	(kip)	%	Controls		
LEG	PSP - ROHN 8 EHS	307.50	50	65	444.15	0	0	0.00	0.00	0.00	69	Member			
HORIZ		0.00	0	0	0.00	0	0	0.00	0.00	0.00	0				
DIAG	SAE - 3.5X3.5X0.25	11.95	50	65	53.79	1	1	0.00	23.40	22	Member				
Max Splice Forces		Force	Capacity	Use			Num								
		(kip)	(kip)	%			Boles	Bolt Type							
Top Tension		271.76	0.00	0			0								
Top Compression		305.45	0.00	0											
Bot Tension		310.37	436.16	71			8	1 A325							
Bot Compression		349.70	0.00	0											

Section: 4		12N50		Bot Elev (ft): 60.00				Height (ft): 20.000							
		Force	Len	Bracing %			Fy	phi	Shear	Bear					
Max Compression Member		(kip)	(ft)	X	Y	Z	(ksi)	Pn	Num	Num	phiRnv	phiRn	Use		
		Load Case						(kip)	Boles	Holes	(kip)	(kip)	%		
				KL/R									Controls		
LEG	PX - 6" DIA PIPE	-292.94	9.85	100	100	100	53.9	50.0	305.78	0	0	0.00	0.00	95 Member X	
HORIZ		0.00	0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG	SAE - 3.5X3.5X0.25	-11.49	19.11	50	50	50	165.3	49.5	13.97	1	1	17.89	23.40	82 Member Z	
Max Tension Member		Force	Fy	Fu	phi	Pn	Num	Num	Shear	Bear	Use				
		(kip)	(ksi)	(ksi)	(kip)	Boles	Holes	Cap	(kip)	Cap	(kip)	%	Controls		
LEG	PX - 6" DIA PIPE	269.39	50	65	378.00	0	0	0.00	0.00	0.00	71	Member			
HORIZ		0.00	0	0	0.00	0	0	0.00	0.00	0.00	0				
DIAG	SAE - 3.5X3.5X0.25	11.39	50	65	53.79	1	1	0.00	23.40	21	Member				
Max Splice Forces		Force	Capacity	Use			Num								
		(kip)	(kip)	%			Boles	Bolt Type							
Top Tension		231.85	0.00	0			0								
Top Compression		260.08	0.00	0											
Bot Tension		271.76	436.16	62			8	1 A325							
Bot Compression		305.45	0.00	0											

Site Number: 302470
 Location: Ansonia Wakelee, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

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Force/Stress Summary

Section: 5 11N223 Bot Elev (ft): 80.00 Height (ft): 20.000

		Force	Len	Bracing %			Fy	phi	Shear	Bear	Use			
		(kip)	(ft)	X	Y	Z	(ksi)	Pn	Num	Num	phiRnv	phiRn	%	Controls
Max Compression Member		Load Case						(kip)	Bolts	Holes	(kip)	(kip)		
LEG	PSP - ROHN 6 EHS	-250.96	6.57	100	100	100	35.4	50.0	275.49	0	0	0.00	0.00	91 Member X
HORIZ		0.00	0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0
DIAG	SAE - 3X3X0.25	-9.87	15.94	50	50	50	161.6	50.0	12.46	1	1	17.89	23.40	79 Member Z

Max Tension Member		Force	Fy	Fu	phi	Pn	Num	Num	Shear	Bear	Use	Controls	
		(kip)	(ksi)	(ksi)	(kip)		Bolts	Holes	Cap (kip)	Cap (kip)	%		
		Load Case											
LEG	PSP - ROHN 6 EHS	229.94	50	65	301.95	0	0	0	0.00	0.00	76	Member	
HORIZ		0.00	0	0	0.00	0	0	0	0.00	0.00	0		
DIAG	SAE - 3X3X0.25	9.66	50	65	44.65	1	1	0.00	0.00	23.40	21	Member	

Max Splice Forces		Force	Capacity	Use	Num	
		(kip)	(kip)	%	Bolts	Bolt Type
		Load Case				
Top Tension		190.93	0.00	0	0	
Top Compression		213.90	0.00	0	0	
Bot Tension		231.85	327.12	71	6 1 A325	
Bot Compression		260.08	0.00	0	0	

Section: 6 10N152 Bot Elev (ft): 100.0 Height (ft): 20.000

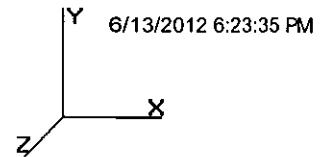
		Force	Len	Bracing %			Fy	phi	Shear	Bear	Use			
		(kip)	(ft)	X	Y	Z	(ksi)	Pn	Num	Num	phiRnv	phiRn	%	Controls
Max Compression Member		Load Case						(kip)	Bolts	Holes	(kip)	(kip)		
LEG	PX - 5" DIA PIPE	-205.00	6.57	100	100	100	42.8	50.0	240.44	0	0	0.00	0.00	85 Member X
HORIZ		0.00	0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0
DIAG	SAE - 2.5X2.5X0.25	-8.84	14.11	50	50	50	172.5	36.0	9.03	1	1	12.43	17.40	97 Member Z

Max Tension Member		Force	Fy	Fu	phi	Pn	Num	Num	Shear	Bear	Use	Controls	
		(kip)	(ksi)	(ksi)	(kip)		Bolts	Holes	Cap (kip)	Cap (kip)	%		
		Load Case											
LEG	PX - 5" DIA PIPE	191.17	50	65	274.95	0	0	0	0.00	0.00	69	Member	
HORIZ		0.00	0	0	0.00	0	0	0	0.00	0.00	0		
DIAG	SAE - 2.5X2.5X0.25	8.64	36	58	32.71	1	1	0.00	0.00	17.40	26	Member	

Max Splice Forces		Force	Capacity	Use	Num	
		(kip)	(kip)	%	Bolts	Bolt Type
		Load Case				
Top Tension		148.79	0.00	0	0	
Top Compression		167.06	0.00	0	0	
Bot Tension		190.93	327.12	58	6 1 A325	
Bot Compression		213.90	0.00	0	0	

Site Number: 302470
 Location: Ansonia Wakelee, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

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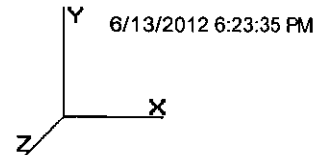
Force/Stress Summary

Section: 7		9N216		Bot Elev (ft): 120.0				Height (ft): 20.000								
Max Compression Member		Force (kip)	Load Case	Len (ft)	Bracing %			Fy (ksi)	Fu (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG	PX - 5" DIA PIPE	-157.94	1.2D + 1.6W	6.57	100	100	100	42.8	50.0	240.44	0	0	0.00	0.00	65	Member X
HORIZ		0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG	SAE - 2.5X2.5X0.25	-8.09	1.2D + 1.6W 90	12.35	50	50	50	151.0	36.0	11.79	1	1	12.43	17.40	68	Member Z
Max Tension Member		Force (kip)	Load Case	Fy (ksi)	Fu (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls				
LEG	PX - 5" DIA PIPE	149.01	0.9D + 1.6W 60	50	65	274.95	0	0	0.00	0.00	54	Member				
HORIZ		0.00		0	0	0.00	0	0	0.00	0.00	0					
DIAG	SAE - 2.5X2.5X0.25	7.94	1.2D + 1.6W 90	36	58	32.71	1	1	0.00	17.40	24	Member				
Max Splice Forces		Force (kip)	Load Case	Capacity (kip)	Use %	Num Bolts	Bolt Type									
Top Tension		104.14	0.9D + 1.6W 60	0.00	0	0										
Top Compression		118.23	1.2D + 1.6W	0.00	0											
Bot Tension		148.79	0.9D + 1.6W 60	218.08	68	4	1 A325									
Bot Compression		167.06	1.2D + 1.6W	0.00	0											

Section: 8		A780252		Bot Elev (ft): 140.0				Height (ft): 20.000								
Max Compression Member		Force (kip)	Load Case	Len (ft)	Bracing %			Fy (ksi)	Fu (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG	PX - 4" DIA PIPE	-111.19	1.2D + 1.6W	4.93	100	100	100	39.9	50.0	176.61	0	0	0.00	0.00	62	Member X
HORIZ		-0.34	1.2D + 1.6W 60	6.760	100	100	100	203.8	36.0	2.61	1	1	12.43	8.70	12	Member Z
DIAG	SAE - 2X2X0.25	-6.75	1.2D + 1.6W 90	9.841	50	50	50	151.0	36.0	9.31	1	1	12.43	17.40	72	Member Z
Max Tension Member		Force (kip)	Load Case	Fy (ksi)	Fu (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls				
LEG	PX - 4" DIA PIPE	103.24	1.2D + 1.6W 60	50	65	198.45	0	0	0.00	0.00	52	Member				
HORIZ		0.24	1.2D + 1.6W	36	58	12.60	1	1	0.00	8.70	1	Member				
DIAG	SAE - 2X2X0.25	6.71	1.2D + 1.6W 90	36	58	24.55	1	1	0.00	17.40	27	Member				
Max Splice Forces		Force (kip)	Load Case	Capacity (kip)	Use %	Num Bolts	Bolt Type									
Top Tension		58.45	0.9D + 1.6W 60	0.00	0	0										
Top Compression		68.04	1.2D + 1.6W	0.00	0											
Bot Tension		104.14	0.9D + 1.6W 60	218.08	48	4	1 A325									
Bot Compression		118.23	1.2D + 1.6W	0.00	0											

Site Number: 302470
 Location: Ansonia Wakelee, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

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Force/Stress Summary

Section: 9 A780178 Bot Elev (ft): 160.0 Height (ft): 20.000

		Force	Len	Bracing %			F'y	phi	Shear	Bear	Use			
		(kip)	(ft)	X	Y	Z	(ksi)	Pn	Num	Num	phiRnv	phiRn	%	Controls
Max Compression Member	Load Case							(kip)	Bolts	Holes	(kip)	(kip)		
LEG PX - 3" DIA PIPE	1.2D + 1.6W	-60.67	3.93	100	100	100	41.4	50.0	119.89	0	0	0.00	0.00	50 Member X
HORIZ		0.00	0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0
DIAG SAE - 2X2X0.1875	1.2D + 1.6W 90	-7.14	7.816	50	50	50	119.3	36.0	10.96	1	1	12.43	13.05	65 Member Z

		Force	Fy	Fu	phi	Pn	Num	Num	Shear	Bear	Use	Controls	
		(kip)	(ksi)	(ksi)	(kip)		Bolts	Holes	Cap (kip)	Cap (kip)	%		
Max Tension Member	Load Case												
LEG PX - 3" DIA PIPE	1.2D + 1.6W 60	57.35	50	65	135.90	0	0	0	0.00	0.00	42	Member	
HORIZ		0.00	0	0	0.00	0	0	0	0.00	0.00	0		
DIAG SAE - 2X2X0.1875	1.2D + 1.6W 90	7.03	36	58	18.74	1	1	0.00	0.00	13.05	37	Member	

		Force	Capacity	Use	Num	
		(kip)	(kip)	%	Bolts	Bolt Type
Max Splice Forces	Load Case					
Top Tension	0.9D + 1.6W 60	10.05	0.00	0	0	
Top Compression	1.2D + 1.6W	14.42	0.00	0		
Bot Tension	0.9D + 1.6W 60	58.45	166.24	35	4	7/8 A325
Bot Compression	1.2D + 1.6W	68.04	0.00	0		

Section: 10 A780178 Bot Elev (ft): 180.0 Height (ft): 16.000

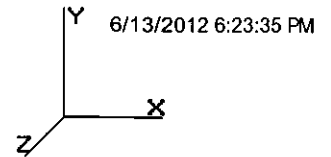
		Force	Len	Bracing %			F'y	phi	Shear	Bear	Use			
		(kip)	(ft)	X	Y	Z	(ksi)	Pn	Num	Num	phiRnv	phiRn	%	Controls
Max Compression Member	Load Case							(kip)	Bolts	Holes	(kip)	(kip)		
LEG PST - 2-1/2" DIA PIP	1.2D + 1.6W	-14.29	0.17	100	100	100	2.1	50.0	76.65	0	0	0.00	0.00	18 Member X
HORIZ SAE - 2X2X0.125	1.2D + 1.6W 90	-0.33	6.655	100	100	100	200.7	36.0	2.69	1	1	12.43	8.70	12 Member Z
DIAG SAE - 1.75X1.75X0.18	1.2D + 1.6W	-3.15	7.778	50	50	50	136.1	36.0	7.58	1	1	12.43	13.05	41 Member Z

		Force	Fy	Fu	phi	Pn	Num	Num	Shear	Bear	Use	Controls	
		(kip)	(ksi)	(ksi)	(kip)		Bolts	Holes	Cap (kip)	Cap (kip)	%		
Max Tension Member	Load Case												
LEG PST - 2-1/2" DIA PIP	0.9D + 1.6W 60	10.15	50	65	76.68	0	0	0	0.00	0.00	13	Member	
HORIZ SAE - 2X2X0.125	1.2D + 1.6W 60	0.34	36	58	12.60	1	1	0.00	0.00	8.70	2	Member	
DIAG SAE - 1.75X1.75X0.18	1.2D + 1.6W 60	3.06	36	58	15.67	1	1	0.00	0.00	13.05	19	Member	

		Force	Capacity	Use	Num	
		(kip)	(kip)	%	Bolts	Bolt Type
Max Splice Forces	Load Case					
Top Tension		0.00	0.00	0	0	
Top Compression	1.2D + 1.0Di +	0.32	0.00	0		
Bot Tension	0.9D + 1.6W 60	10.05	120.39	8	4	3/4 A325
Bot Compression	1.2D + 1.6W	14.42	0.00	0		

Site Number: 302470
 Location: Ansonia Wakelee, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

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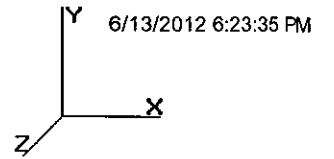
Support Forces Summary

Load Case	Node	FX (kip)	FY (kip)	FZ (kip)	(-) = Uplift (+) = Down
1.0D + 1.0W Service 90 deg	1b	-5.81	-54.24	-2.75	
	1a	-7.65	87.48	3.82	
	1	-1.04	16.62	-1.07	
1.0D + 1.0W Service 60 deg	1b	-6.47	-64.49	-3.73	
	1a	-5.06	57.15	1.90	
	1	-0.89	57.20	-5.34	
1.0D + 1.0W Service Normal	1b	-2.45	-25.40	-2.51	
	1a	2.45	-25.40	-2.51	
	1	0.00	100.67	-9.96	
1.2D + 1.0Di + 1.0Wi 90 deg	1b	-9.03	-40.22	-4.39	
	1a	-8.67	141.32	4.20	
	1	-1.41	50.55	0.19	
1.2D + 1.0Di + 1.0Wi 60 deg	1b	-9.94	-53.86	-5.74	
	1a	-5.32	102.73	1.67	
	1	-1.21	102.78	-5.44	
1.2D + 1.0Di + 1.0Wi Normal	1b	-4.51	-2.42	-4.05	
	1a	4.51	-2.42	-4.05	
	1	0.00	156.50	-11.27	
0.9D + 1.6W 90 deg	1b	-32.07	-329.84	-15.51	
	1a	-33.31	359.75	16.40	
	1	-5.05	14.97	-0.89	
0.9D + 1.6W 60 deg	1b	-35.28	-379.70	-20.36	
	1a	-20.80	212.15	7.12	
	1	-4.24	212.42	-21.58	
0.9D + 1.6W Normal	1b	-15.67	-189.64	-14.41	
	1a	15.67	-189.64	-14.41	
	1	0.00	424.16	-43.95	
1.2D + 1.6W 90 deg	1b	-31.79	-325.32	-15.36	
	1a	-33.59	365.20	16.57	
	1	-5.04	19.95	-1.21	
1.2D + 1.6W 60 deg	1b	-35.01	-375.25	-20.21	
	1a	-21.08	217.41	7.29	
	1	-4.23	217.68	-21.90	
1.2D + 1.6W Normal	1b	-15.40	-184.94	-14.25	
	1a	15.40	-184.94	-14.25	
	1	0.00	429.71	-44.28	

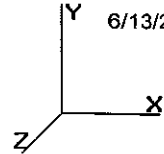
Max Uplift:	379.70 (kip)	Moment:	8,161.91 (ft-kip)	1.2D + 1.6W Normal
Max Down:	429.71 (kip)	Total Down:	59.84 (kip)	
Max Shear:	44.28 (kip)	Total Shear:	72.77 (kip)	

Site Number: 302470
Location: Ansonia Wakelee, CT
Code: ANSI/TIA-222 Rev G
Struct Class : II
Exposure : B
Topo : 1

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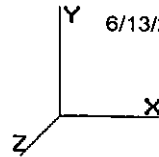
Site Number: 302470
 Location: Ansonia Wakelee, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1



Deflections and Rotations

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)
Serviceability - 60.00 Wind 60 deg	10.00	0.0020	0.0008	0.0160
	79.83	0.0689	0.0051	0.1063
	80.17	0.0695	0.0051	0.1066
	106.72	0.1254	0.0068	0.1404
	126.72	0.1805	0.0081	0.1705
	150.00	0.2578	0.0097	0.2104
	154.92	0.2761	0.0100	0.2141
	168.03	0.3285	0.0112	0.2401
	179.83	0.3787	0.0119	0.2653
	184.13	0.3973	0.0125	0.2329
Serviceability - 60.00 Wind 90 deg	10.00	0.0022	0.0005	0.0163
	79.83	0.0695	0.0031	0.1064
	80.17	0.0702	0.0031	0.1066
	106.72	0.1264	0.0039	0.1415
	126.72	0.1819	0.0046	0.1717
	150.00	0.2597	0.0053	0.2115
	154.92	0.2782	0.0053	0.2164
	168.03	0.3309	0.0058	0.2423
	179.83	0.3814	0.0059	0.2665
	184.13	0.4001	0.0060	0.2215
Serviceability - 60.00 Wind Normal	10.00	0.0024	0.0008	0.0168
	79.83	0.0715	0.0044	0.1086
	80.17	0.0721	0.0044	0.1091
	106.72	0.1298	0.0059	0.1449
	126.72	0.1866	0.0070	0.1759
	150.00	0.2663	0.0081	0.2173
	154.92	0.2852	0.0082	0.2212
	168.03	0.3392	0.0085	0.2483
	179.83	0.3910	0.0080	0.2707
	184.13	0.4103	0.0077	0.2756
105.00 mph 60 deg with No Ice (Reduced DL)	10.00	0.0104	0.0044	0.0781
	79.83	0.3360	0.0319	0.5137
	80.17	0.3391	0.0320	0.5155
	106.72	0.6119	0.0454	0.6861
	126.72	0.8812	0.0575	0.8350
	150.00	1.2598	0.0750	1.0320
	154.92	1.3495	0.0788	1.0522
	168.03	1.6066	0.1000	1.1803
	179.83	1.8529	0.1220	1.3057
	184.13	1.9443	0.1385	1.1453
105.00 mph 60 deg with No Ice	10.00	0.0103	0.0044	0.0781
	79.83	0.3365	0.0319	0.5149
	80.17	0.3396	0.0320	0.5167
	106.72	0.6129	0.0455	0.6876

Site Number: 302470
 Location: Ansonia Wakelee, CT
 Code: ANSI/TIA-222 Rev G
 Struct Class : II
 Exposure : B
 Topo : 1

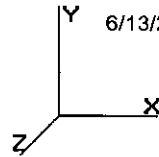


	126.72	0.8828	0.0576	0.8369
	150.00	1.2623	0.0752	1.0344
	154.92	1.3522	0.0790	1.0547
	168.03	1.6099	0.1003	1.1832
	179.83	1.8569	0.1224	1.3090
	184.13	1.9485	0.1389	1.1483
	192.04	2.1163	0.1408	1.2145
105.00 mph 90 deg with No Ice (Reduced DL)	10.00	0.0099	0.0023	0.0786
	79.83	0.3382	0.0154	0.5145
	80.17	0.3413	0.0155	0.5161
	106.72	0.6160	0.0197	0.6907
	126.72	0.8872	0.0229	0.8397
	150.00	1.2685	0.0268	1.0360
	154.92	1.3585	0.0271	1.0610
	168.03	1.6175	0.0297	1.1891
	179.83	1.8652	0.0310	1.3077
	184.13	1.9570	0.0311	1.0880
	192.04	2.1253	0.0310	1.2160
105.00 mph 90 deg with No Ice	10.00	0.0099	0.0023	0.0787
	79.83	0.3387	0.0155	0.5156
	80.17	0.3418	0.0155	0.5172
	106.72	0.6170	0.0197	0.6921
	126.72	0.8889	0.0230	0.8416
	150.00	1.2710	0.0269	1.0385
	154.92	1.3612	0.0272	1.0636
	168.03	1.6208	0.0298	1.1922
	179.83	1.8692	0.0311	1.3113
	184.13	1.9612	0.0312	1.0911
	192.04	2.1300	0.0311	1.2191
105.00 mph Normal to Face with No Ice (Reduced	10.00	0.0110	0.0038	0.0813
	79.83	0.3474	0.0216	0.5329
	80.17	0.3506	0.0216	0.5351
	106.72	0.6318	0.0292	0.7076
	126.72	0.9094	0.0350	0.8605
	150.00	1.3000	0.0409	1.0644
	154.92	1.3921	0.0417	1.0841
	168.03	1.6581	0.0436	1.2176
	179.83	1.9125	0.0416	1.3287
	184.13	2.0070	0.0408	1.3522
	192.04	2.1805	0.0406	1.2628
105.00 mph Normal to Face with No Ice	10.00	0.0111	0.0038	0.0814
	79.83	0.3479	0.0216	0.5335
	80.17	0.3511	0.0216	0.5358
	106.72	0.6329	0.0293	0.7091
	126.72	0.9111	0.0350	0.8624
	150.00	1.3026	0.0410	1.0670
	154.92	1.3949	0.0418	1.0868
	168.03	1.6616	0.0438	1.2208
	179.83	1.9166	0.0418	1.3324
	184.13	2.0114	0.0410	1.3554
	192.04	2.1853	0.0407	1.2661
50.00 mph 60 deg with 0.75 in Radial Ice	10.00	0.0060	0.0011	0.0299
	79.83	0.0898	0.0065	0.1370
	80.17	0.0906	0.0065	0.1373

Site Number: 302470
Location: Ansonia Wakelee, CT
Code: ANSI/TIA-222 Rev G
Struct Class : II
Exposure : B
Topo : 1

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50.00 mph 90 deg with 0.75 in Radial Ice

106.72	0.1604	0.0085	0.1744
126.72	0.2283	0.0100	0.2093
150.00	0.3223	0.0119	0.2540
154.92	0.3441	0.0121	0.2581
168.03	0.4071	0.0134	0.2870
179.83	0.4667	0.0142	0.3118
184.13	0.4888	0.0147	0.2809
192.04	0.5293	0.0147	0.2927
10.00	0.0057	0.0006	0.0291
79.83	0.0898	0.0039	0.1362
80.17	0.0906	0.0039	0.1364
106.72	0.1607	0.0049	0.1750
126.72	0.2288	0.0056	0.2099
150.00	0.3231	0.0065	0.2550
154.92	0.3450	0.0065	0.2601
168.03	0.4082	0.0070	0.2880
179.83	0.4680	0.0071	0.3130
184.13	0.4901	0.0072	0.2723
192.04	0.5307	0.0072	0.2933

50.00 mph Normal with 0.75 in Radial Ice

10.00	0.0049	0.0010	0.0269
79.83	0.0901	0.0058	0.1354
80.17	0.0909	0.0059	0.1356
106.72	0.1616	0.0077	0.1766
126.72	0.2305	0.0091	0.2118
150.00	0.3260	0.0105	0.2582
154.92	0.3480	0.0106	0.2623
168.03	0.4120	0.0111	0.2915
179.83	0.4725	0.0108	0.3152
184.13	0.4949	0.0105	0.3128
192.04	0.5361	0.0105	0.2991
192.04	0.0000	0.0000	0.0000



Know what's below. Call before you dig.

APPROVALS			
	DATE	APPROVED	AS NOTED
SPRINT REPRESENTATIVES		<input type="checkbox"/>	<input type="checkbox"/>
SPRINT RF ENGINEER		<input type="checkbox"/>	<input type="checkbox"/>
SITE OWNER		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>

Sprint



SITE ID: CT03XC005
SITE NAME: ANSONIA/NEXTEL

THE STRUCTURAL ENGINEERING CONCERNING THE STRUCTURAL STABILITY OF THE TOWER/POLE, FOUNDATION, ANTENNAS, MOUNTS AND ALL ASSOCIATED ANCILLARY RADIO EQUIPMENT IS BEING COMPLETED BY OTHERS. KMB DESIGN GROUP, LLC HAS NOT BEEN REQUESTED TO PERFORM ANY STRUCTURAL ANALYSIS SERVICES TO VERIFY THAT THE TOWER/POLE AND/OR FOUNDATION IS CAPABLE OF SUPPORTING THE PROPOSED EQUIPMENT DEPICTED WITHIN THESE SIGNED AND SEALED DRAWINGS. FURTHERMORE KMB DESIGN GROUP, LLC HAS NOT BEEN REQUESTED TO PHYSICALLY CONFIRM THE EXISTING MOUNT CONFIGURATION AND PERFORM A STRUCTURAL ANALYSIS TO VERIFY THAT THE EXISTING, INTERIM AND PROPOSED ANTENNAS, MOUNTS AND ALL ASSOCIATED ANCILLARY RADIO EQUIPMENT CAN BE SAFELY SUPPORTED. SIGNED AND SEALED DRAWINGS REVISED TO STATE "ISSUED FOR CONSTRUCTION" SHALL BE PROVIDED TO THE PROFESSIONAL ENGINEERS RESPONSIBLE FOR THE STRUCTURAL ANALYSIS OF THE TOWER/POLE, ANTENNAS, MOUNTS AND ALL ASSOCIATED ANCILLARY RADIO EQUIPMENT. KMB DESIGN GROUP, LLC SHALL BE NOTIFIED SHOULD THE STRUCTURAL ANALYSIS RESULT IN SOME ELEMENTS NOT BEING STRUCTURALLY CAPABLE OF SUPPORTING THE PROPOSED DESIGN DEPICTED. THE CONTRACTOR SHALL NOT COMMENCE CONSTRUCTION WITHOUT OBTAINING (A) A SIGNED AND SEALED COPY OF THE PLANS "ISSUED FOR CONSTRUCTION"; (B) STRUCTURAL ANALYSIS REPORT STATING THAT THE TOWER/POLE/FOUNDATION IS CAPABLE OF SUPPORTING THE PROPOSED LOADING REFERENCING THE SIGNED AND SEALED PLANS BY KMB DESIGN GROUP, LLC; (C) SPRINT PLATFORM ANALYSIS STATING THAT THE SPRINT PLATFORM IS CAPABLE OF SUPPORTING THE PROPOSED DESIGN AS REFERENCED WITHIN THE SIGNED AND SEALED PLANS BY KMB DESIGN GROUP, LLC.

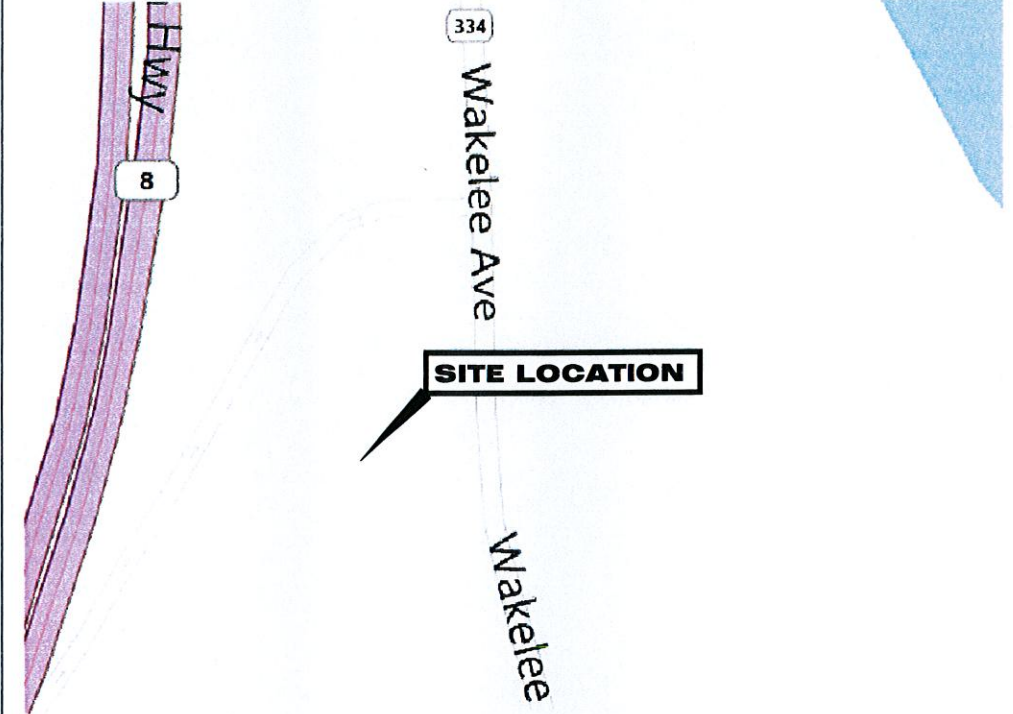


NETWORK VISION CONSTRUCTION DRAWINGS



SITE LOCATION

AERIAL VIEW
SCALE: NTS



SITE LOCATION

LOCATION MAP
SCALE: NTS

SITE INFORMATION

BLOCK: TBD
PARCEL: 01900030000
MAP: TBD
ZONING CLASSIFICATION: TBD
ZONING JURISDICTION: TBD

PROJECT INFORMATION:

SITE ADDRESS:
NOLAN FIELD - 401 WAKELEE AVENUE
ANSONIA, CT 06401
NEW HAVEN COUNTY

COORDINATES:
LATITUDE: 41° 21' 22.64" N
LONGITUDE: 73° 5' 31.36" W
DATUM: NAD 83

STRUCTURE HEIGHT:
±196'-0" (TOP OF EXISTING LATTICE TOWER)

PROJECT DIRECTORY:

PROPERTY OWNER:
CITY OF ANSONIA
253 MAIN STREET
ANSONIA, CT 06401

STRUCTURE OWNER:
AMERICAN TOWER
116 HUNTINGTON AVENUE, 11TH FLOOR
BOSTON, MA 02116
(617) 375-7500

APPLICANT:
SPRINT-NEXTEL
6200 SPRINT PARKWAY
OVERLAND PARK, KS 66251

ENGINEER:
KMB DESIGN GROUP, LLC
1800 ROUTE 34, SUITE 209
WALL, NJ 07719
KEITH C DRENNAN - PROJECT MANAGER
(732) 280-5623

POWER COMPANY:
UNITED ILLUMINATING

CONSTRUCTION MANAGER:
TODD AMANN
(914) 715-9363

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REV.	DATE	REVISION DESCRIPTION	DRAWN BY	CHKD. BY
△	07-30-12	ISSUED FOR CONSTRUCTION	MCD	KCD



Stephen A. Bray



CT LICENSE: 26657 9/13/12

PROJECT NUMBER: **332.1455**

SITE INFORMATION:
NOLAN FIELD - 401 WAKELEE AVENUE
ANSONIA, CT 06401
NEW HAVEN COUNTY

CT03XC005

PROJECT TYPE: **NETWORK VISION**

DRAWN BY:	CHECKED BY:	DATE:
JLS		03-05-12

SHEET TITLE: **COVER SHEET**

SHEET NUMBER:	REV.:
A01	0

DRAWING INDEX

DWG #	DRAWING TITLES
A01	COVER SHEET
C01	GENERAL NOTES 1 OF 2
C01A	GENERAL NOTES 2 OF 2
C02	COMPOUND PLAN
C02A	ELEVATION
C03	EQUIPMENT PLANS
C03A	EQUIPMENT & ANTENNA SPECIFICATIONS
C04	EXISTING ANTENNA PLAN (ALL SECTORS)
C04A	INTERIM ANTENNA PLAN (ALL SECTORS)
C04B	FINAL ANTENNA PLAN (ALL SECTORS)
C04C	INTERIM RRH PLAN (ALL SECTORS)
C04D	FINAL RRH PLAN (ALL SECTORS)
C04E	RRH MOUNT DETAILS (ALL SECTORS)
C05	SITE DETAILS
C06	RF SCHEDULE & PLUMBING DIAGRAM
C06A	RF DATA SHEET
C07	AAV DRAWINGS
C07A	AAV DRAWINGS
C07B	AAV DRAWINGS
C07C	AAV DRAWINGS
E01	ELECTRICAL NOTES
E02	GROUNDING DETAILS

CODES & STANDARDS

These documents are in compliance & all construction to be in accordance with the following codes & standards as applicable:

State Building Code: 2005 Connecticut Supplement

2003 International Building Code
2003 International Residential Code
2003 International Existing Building Code
2003 International Mechanic Code
2003 International Plumbing Code
2003 International Energy Conservation Code (re-adopted with changes)
ICC/ANSI A117.1-2003 Accessible and Usable Buildings and Facilities

2005 National Electrical Code (NFPA-70)

DRIVING DIRECTIONS

- TAKE 3RD EXIT FROM ROUNDABOUT INTERNATIONAL BLVD ONTO LEISURE LN.
- TAKE RAMP ONTO STATE HIGHWAY 17 (RT-17 N).
- CONTINUE ON I-287 N. 18.6 MI/30.0 KMTAKE THE I-87 S/I-287/NEW YORK STATE THRUWAY SOUTH/TAPPAN ZEE BR/NEW YORK CITY EXIT ONTO NEW YORK STATE THRUWAY SOUTH (I-287 E, I-87 S) (PARTIAL TOLL ROAD).
- KEEP LEFT ONTO CROSS WESTCHESTER EXPY (I-287 E) AT EXIT #8 TOWARD WHITE PLAINS/RYE.
- TAKE EXIT #9S-N/HUTCHINSON PKWY/WHITESTONE BR/MERRITT PKWY ONTO WESTCHESTER AVE (CR-62 E).
- TAKE EXIT #9N/HUTCHINSON PKWY NORTH/MERRITT PKWY ONTO HUTCHINSON RIVER PKY N.
- CONTINUE ON MERRITT PKY (CT-15 N).
- TAKE EXIT #52/CT-8 N/WATERBURY ONTO CT-8 N.
- TAKE EXIT #19/CT-334/WAKELEE AVENUE.
- TURN RIGHT ONTO WAKELEE AVE (CT-334).

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K:\332_Sprint\332.1000_Alcatel-Lucent\Nolan Field - 401 Wakelee Avenue\332.1455_Construction\332.1455.A01.dwg, 9/13/2012 11:39:04 AM, exampbell

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△	07-30-12	ISSUED FOR CONSTRUCTION	MCD	KCD
REV.	DATE	REVISION DESCRIPTION	DRAWN BY	CHKD. BY



Stephen A. Bray
PROFESSIONAL ENGINEER



CT LICENSE: 26657 9/13/12

PROJECT NUMBER:
332.1455

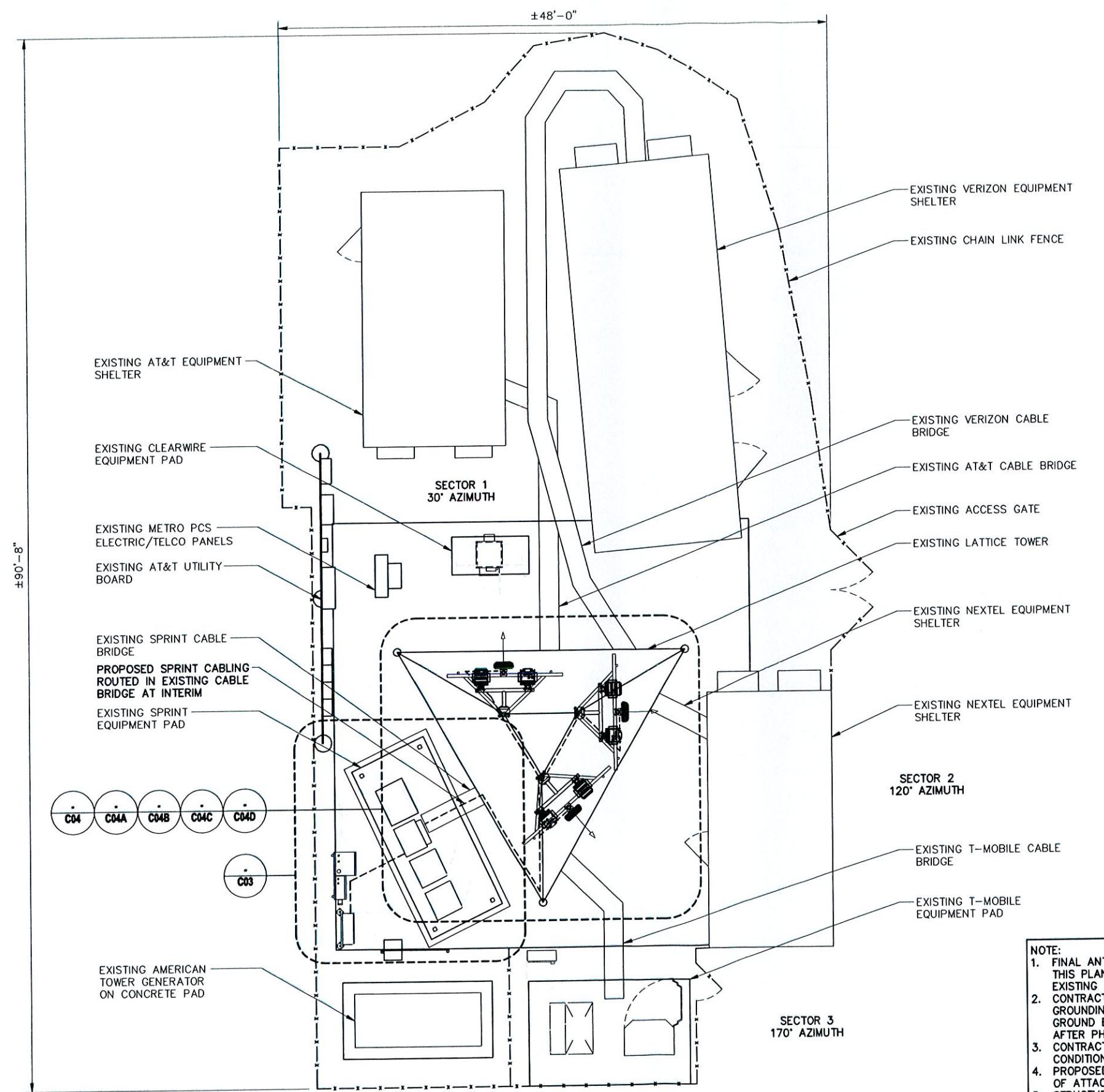
SITE INFORMATION:
**NOLAN FIELD - 401 WAKELEE AVENUE
ANSONIA, CT 06401
NEW HAVEN COUNTY
CT03XC005**

PROJECT TYPE:
NETWORK VISION

DRAWN BY: **JLS** CHECKED BY: DATE: **03-05-12**

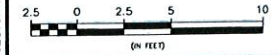
SHEET TITLE:
COMPOUND PLAN

SHEET NUMBER: **C02** REV.: **0**



NOTE:

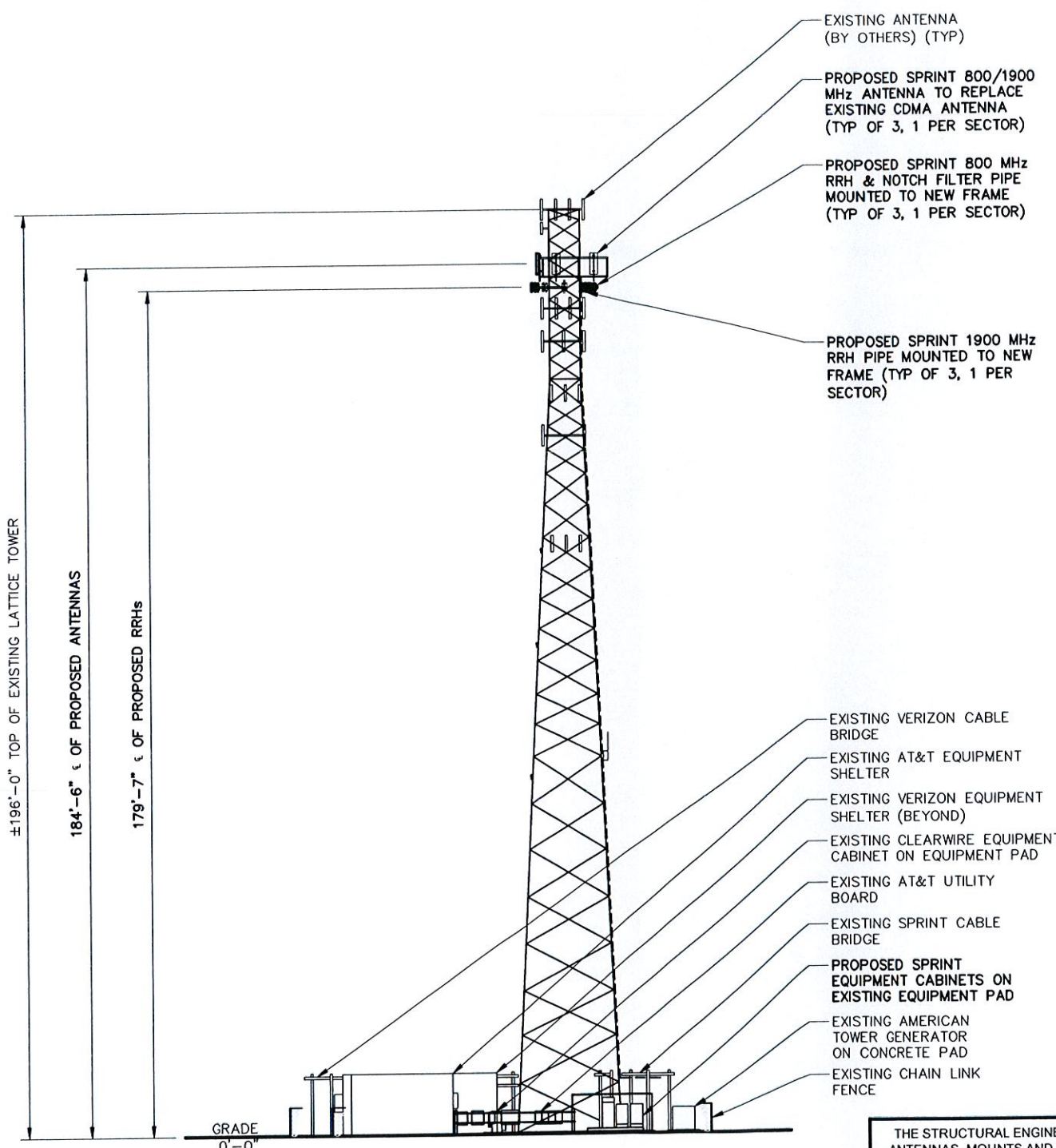
1. FINAL ANTENNA & EQUIPMENT CONFIGURATION SHOWN ON THIS PLAN. SEE EQUIPMENT & ANTENNA PLAN SHEETS FOR EXISTING AND INTERIM CONFIGURATION.
2. CONTRACTOR TO REPLACE ALL MISSING GROUND BARS AND GROUNDING CONNECTIONS AS REQUIRED WITH GALVANIZED GROUND BARS. CONTRACTOR SHALL PROVIDE BEFORE & AFTER PHOTOS.
3. CONTRACTOR TO RESTORE ANY RUST AREA TO ORIGINAL CONDITION AND PROTECTIVE COATING TO BE APPLIED.
4. PROPOSED CABLING TO FOLLOW EXISTING ROUTE & METHOD OF ATTACHMENT. EXISTING COAX TO BE REMOVED AT FINAL.
5. STRUCTURAL ANALYSIS PROVIDED UNDER SEPARATE COVER.
6. PROPOSED SPRINT GPS UNIT TO REPLACE EXISTING GPS AT FINAL.



1 COMPOUND PLAN
11x17 SCALE: 1" = 10' 24x36 SCALE: 1" = 5'

K:\332_Sprint\332_1000_Alcatel-Lucent\332_1455_CT03XC005_Nolan Field - 401 Wakelee Avenue\332_1455_CAD\332_1455_Construction\332_1455_C02.dwg, 9/13/2012 11:39:11 AM ezampheila

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NOTES:
 1. FINAL ANTENNA & EQUIPMENT CONFIGURATION SHOWN ON THIS PLAN. SEE EQUIPMENT & ANTENNA PLAN SHEETS FOR EXISTING AND INTERIM CONFIGURATION.
 2. EXISTING TOWER INVENTORY PROVIDED BY OTHERS.
 3. ALL ANTENNA AND CABLING WORK ON THE TOWER SHALL BE IN ACCORDANCE WITH STRUCTURAL REPORT FOR THE TOWER (BY OTHERS).
 4. PROPOSED CABLING TO FOLLOW EXISTING ROUTE & METHOD OF ATTACHMENT.



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△	07-30-12	ISSUED FOR CONSTRUCTION	MCD	KCD
REV.	DATE	REVISION DESCRIPTION	DRAWN BY	CHKD. BY



Stephen A. Bray
 PROFESSIONAL ENGINEER
 STATE OF CONNECTICUT
 STEPHEN A. BRAY
 No. 26657
 LICENSED PROFESSIONAL ENGINEER

CT LICENSE: 26657 9/13/12

PROJECT NUMBER: **332.1455**

SITE INFORMATION:
NOLAN FIELD - 401 WAKELEE AVENUE
 ANSONIA, CT 06401
 NEW HAVEN COUNTY

CT03XC005

PROJECT TYPE: **NETWORK VISION**

DRAWN BY:	CHECKED BY:	DATE:
JLS		03-05-12

SHEET TITLE: **ELEVATION**

SHEET NUMBER:	REV:
C02A	0

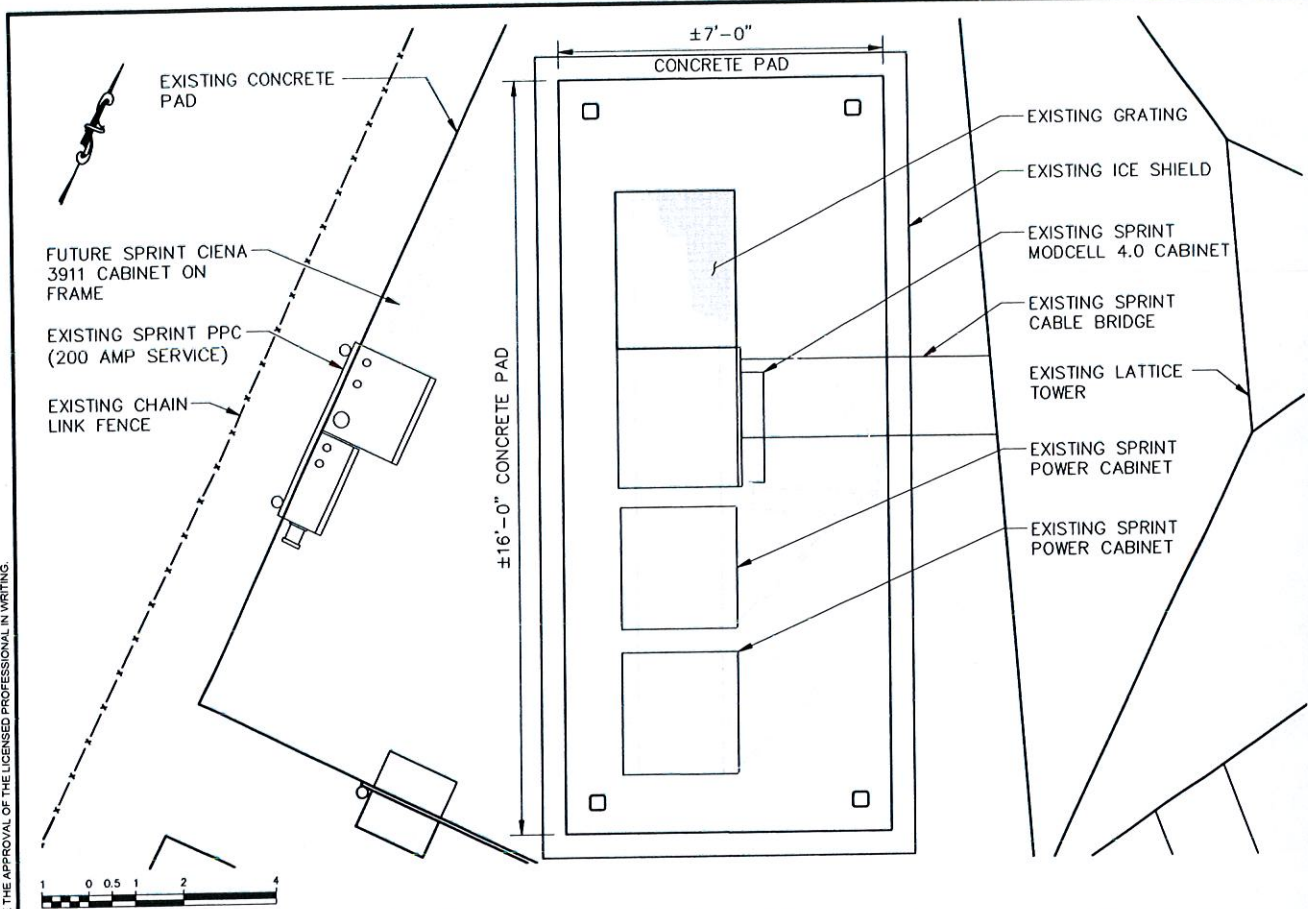
THE STRUCTURAL ENGINEERING CONCERNING THE STRUCTURAL STABILITY OF THE TOWER/POLE, FOUNDATION, ANTENNAS, MOUNTS AND ALL ASSOCIATED ANCILLARY RADIO EQUIPMENT IS BEING COMPLETED BY OTHERS. KMB DESIGN GROUP, LLC HAS NOT BEEN REQUESTED TO PERFORM ANY STRUCTURAL ANALYSIS SERVICES TO VERIFY THAT THE TOWER/POLE AND/OR FOUNDATION IS CAPABLE OF SUPPORTING THE PROPOSED EQUIPMENT DEPICTED WITHIN THESE SIGNED AND SEALED DRAWINGS. FURTHERMORE KMB DESIGN GROUP, LLC HAS NOT BEEN REQUESTED TO PHYSICALLY CONFIRM THE EXISTING MOUNT CONFIGURATION AND PERFORM A STRUCTURAL ANALYSIS TO VERIFY THAT THE EXISTING, INTERIM AND PROPOSED ANTENNAS, MOUNTS AND ALL ASSOCIATED ANCILLARY RADIO EQUIPMENT CAN BE SAFELY SUPPORTED. SIGNED AND SEALED DRAWINGS REVISED TO STATE "ISSUED FOR CONSTRUCTION" SHALL BE PROVIDED TO THE PROFESSIONAL ENGINEERS RESPONSIBLE FOR THE STRUCTURAL ANALYSIS OF THE TOWER/POLE, ANTENNAS, MOUNTS AND ALL ASSOCIATED ANCILLARY RADIO EQUIPMENT. KMB DESIGN GROUP, LLC SHALL BE NOTIFIED SHOULD THE STRUCTURAL ANALYSIS RESULT IN SOME ELEMENTS NOT BEING STRUCTURALLY CAPABLE OF SUPPORTING THE PROPOSED DESIGN DEPICTED. THE CONTRACTOR SHALL NOT COMMENCE CONSTRUCTION WITHOUT OBTAINING (A) A SIGNED AND SEALED COPY OF THE PLANS "ISSUED FOR CONSTRUCTION"; (B) STRUCTURAL ANALYSIS REPORT STATING THAT THE TOWER/POLE/FOUNDATION IS CAPABLE OF SUPPORTING THE PROPOSED LOADING REFERENCING THE SIGNED AND SEALED PLANS BY KMB DESIGN GROUP, LLC; (C) SPRINT PLATFORM ANALYSIS STATING THAT THE SPRINT PLATFORM IS CAPABLE OF SUPPORTING THE PROPOSED DESIGN AS REFERENCED WITHIN THE SIGNED AND SEALED PLANS BY KMB DESIGN GROUP, LLC.



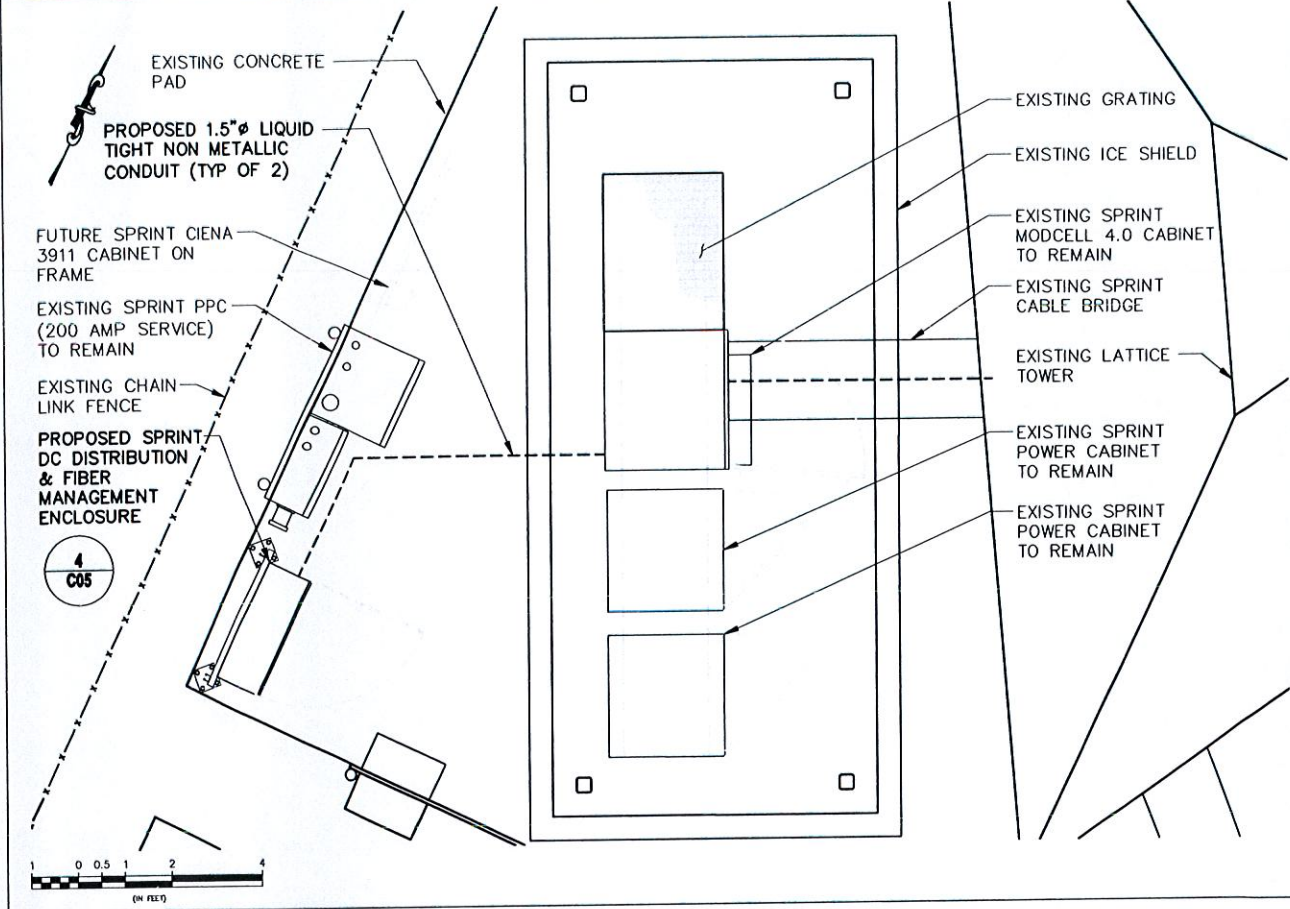
1 NORTHWEST ELEVATION
 11x17 SCALE: 1/32" = 1'-0"
 24x36 SCALE: 1/16" = 1'-0"

K:\332_Sprint\332.1000_Alcatel-Lucent\332.1455_CAD\332.1455_Construction\332.1455_C02A.dwg, 9/13/2012 11:39:16 AM, exampitella

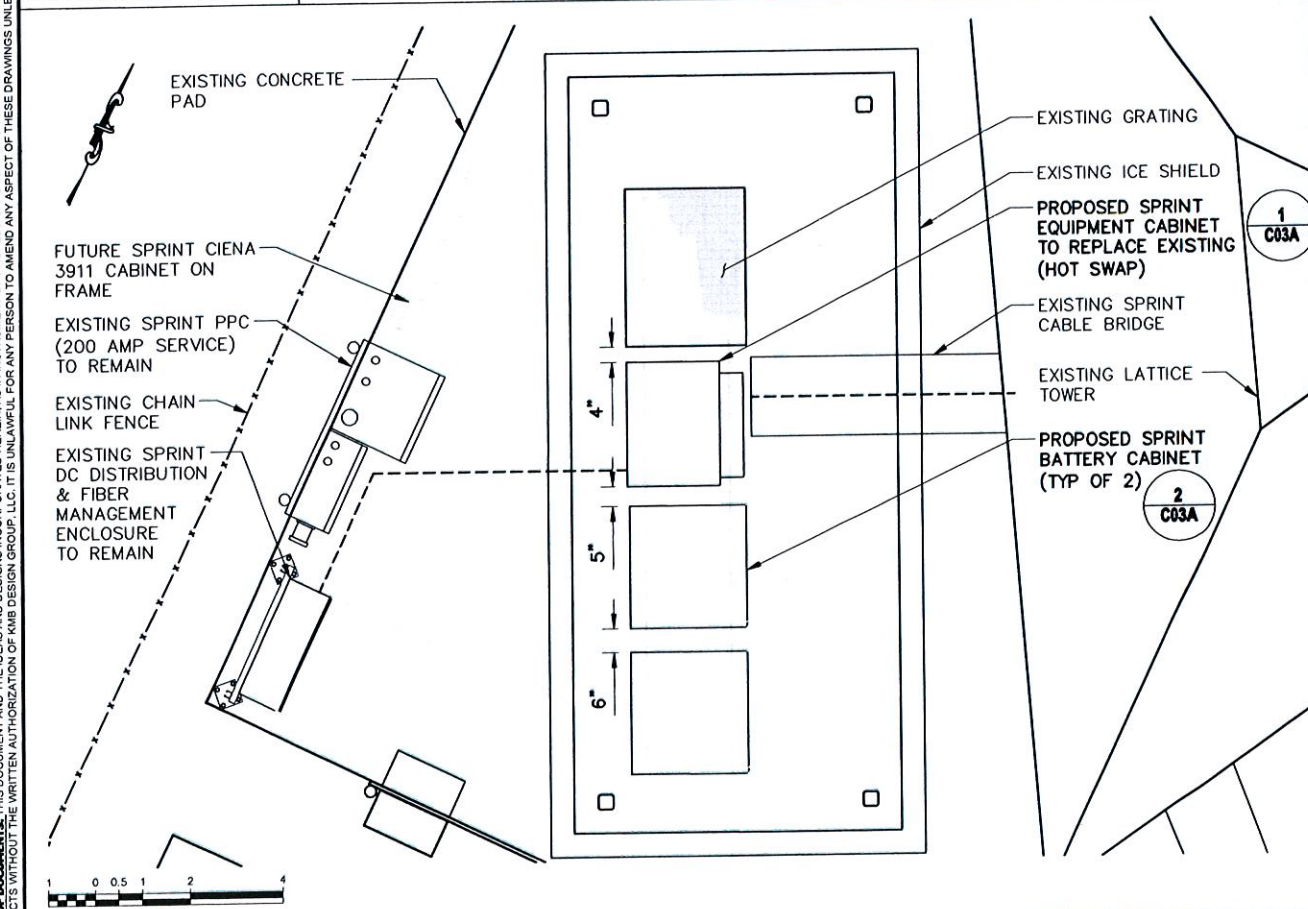
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1 EXISTING EQUIPMENT PLAN
 11x17 SCALE: 1/4" = 1'-0" | 24x36 SCALE: 1/2" = 1'-0"



2 INTERIM EQUIPMENT PLAN
 11x17 SCALE: 1/4" = 1'-0" | 24x36 SCALE: 1/2" = 1'-0"



3 FINAL EQUIPMENT PLAN
 11x17 SCALE: 1/4" = 1'-0" | 24x36 SCALE: 1/2" = 1'-0"

NOTE:
 1. CONTRACTOR TO REPLACE ALL MISSING GROUND BARS AND GROUNDING CONNECTIONS AS REQUIRED.
 2. EXISTING & PROPOSED ANTENNAS NOT SHOWN FOR CLARITY.



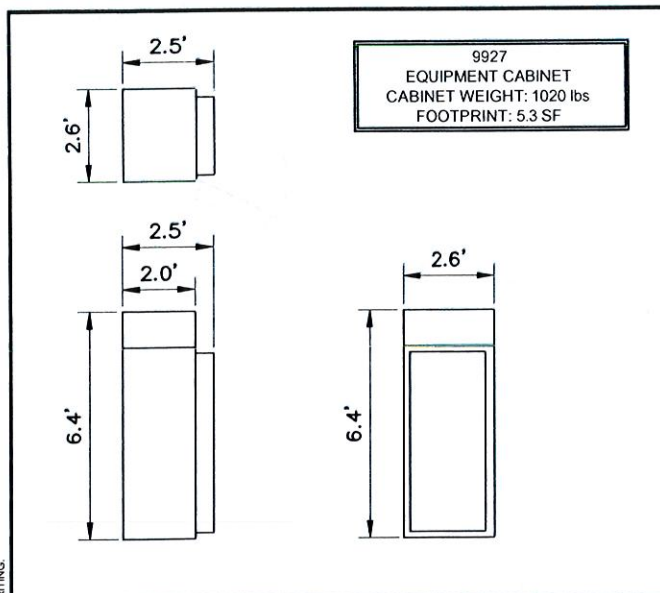
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△	07-30-12	ISSUED FOR CONSTRUCTION	MCD	KCD
REV.	DATE	REVISION DESCRIPTION	DRAWN BY	CHKD. BY



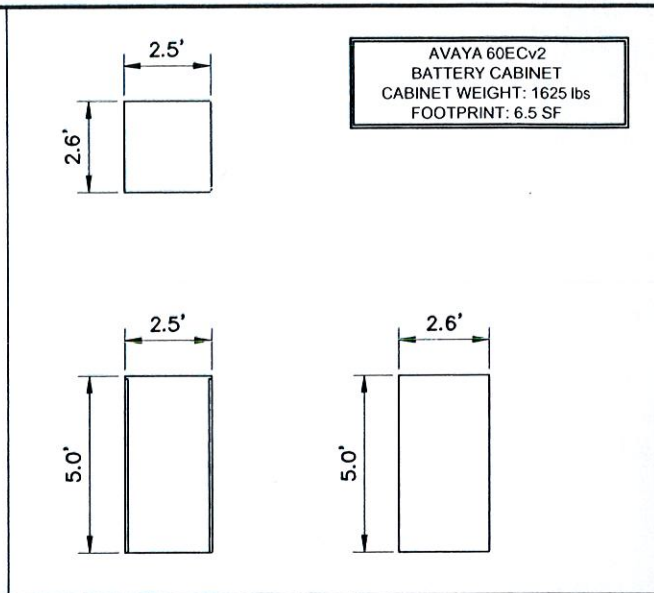
CT LICENSE: 26657		9/13/12
PROJECT NUMBER: 332.1455		
SITE INFORMATION: NOLAN FIELD - 401 WAKELEE AVENUE ANSONIA, CT 06401 NEW HAVEN COUNTY		
PROJECT TYPE: NETWORK VISION		
DRAWN BY: JLS	CHECKED BY:	DATE: 03-05-12
SHEET TITLE: EQUIPMENT PLANS		
SHEET NUMBER: C03	REV.: 0	

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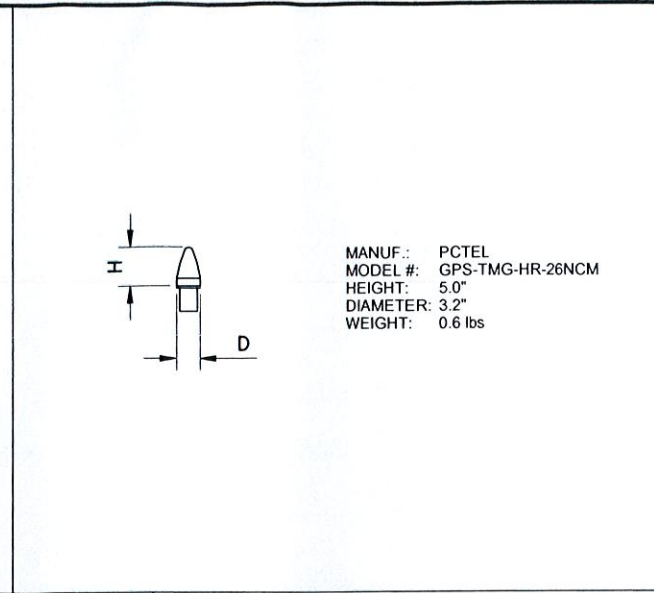
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9927
 EQUIPMENT CABINET
 CABINET WEIGHT: 1020 lbs
 FOOTPRINT: 5.3 SF



AVAYA 60ECv2
 BATTERY CABINET
 CABINET WEIGHT: 1625 lbs
 FOOTPRINT: 6.5 SF



MANUF.: PCTEL
 MODEL #: GPS-TMG-HR-26NCM
 HEIGHT: 5.0"
 DIAMETER: 3.2"
 WEIGHT: 0.6 lbs

DETAIL NOT USED

1 EQUIPMENT CABINET SPECIFICATIONS
 11x17 SCALE: 3/16" = 1'-0" 24x36 SCALE: 3/8" = 1'-0"

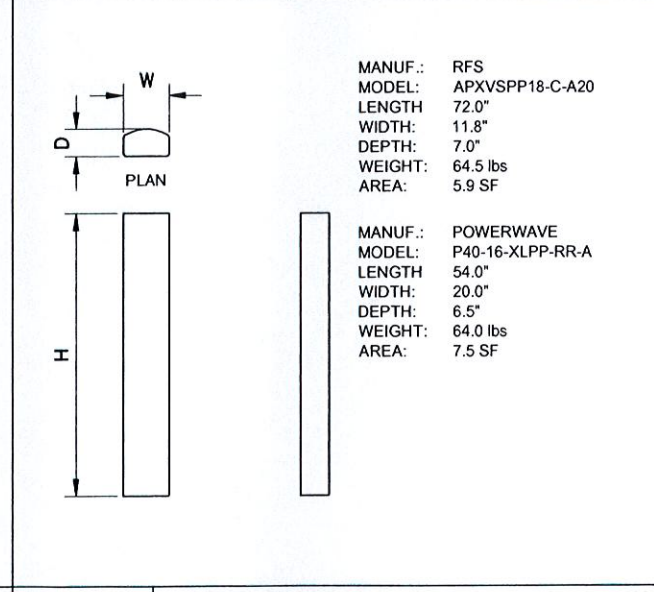
2 BATTERY CABINET SPECIFICATION
 11x17 SCALE: 3/16" = 1'-0" 24x36 SCALE: 3/8" = 1'-0"

3 GPS UNIT SPECIFICATIONS
 11x17 SCALE: 1/4" = 1'-0" 24x36 SCALE: 1/2" = 1'-0"

4

DETAIL NOT USED

DETAIL NOT USED



MANUF.: RFS
 MODEL: APXVSP18-C-A20
 LENGTH: 72.0"
 WIDTH: 11.8"
 DEPTH: 7.0"
 WEIGHT: 64.5 lbs
 AREA: 5.9 SF

MANUF.: POWERWAVE
 MODEL: P40-16-XLPP-RR-A
 LENGTH: 54.0"
 WIDTH: 20.0"
 DEPTH: 6.5"
 WEIGHT: 64.0 lbs
 AREA: 7.5 SF

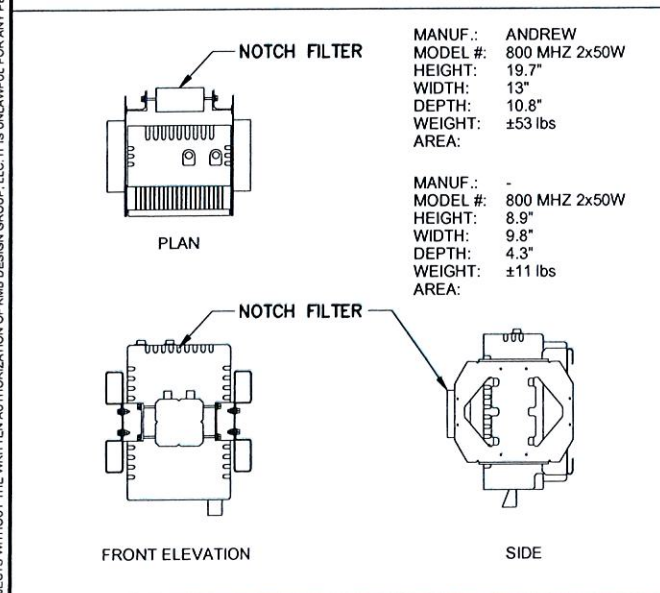
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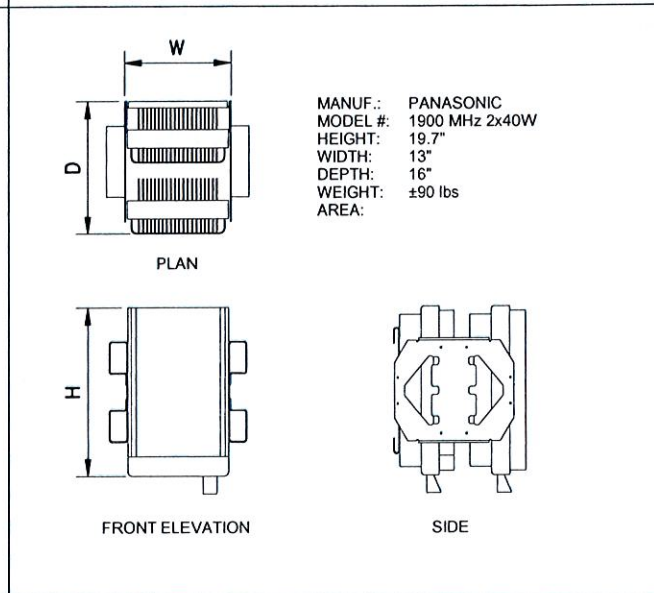
7 ANTENNA SPECIFICATIONS - 800/1900 MHz
 SCALE: NTS

8



MANUF.: ANDREW
 MODEL #: 800 MHZ 2x50W
 HEIGHT: 19.7"
 WIDTH: 13"
 DEPTH: 10.8"
 WEIGHT: ±53 lbs
 AREA:

MANUF.: -
 MODEL #: 800 MHZ 2x50W
 HEIGHT: 8.9"
 WIDTH: 9.8"
 DEPTH: 4.3"
 WEIGHT: ±11 lbs
 AREA:



MANUF.: PANASONIC
 MODEL #: 1900 MHZ 2x40W
 HEIGHT: 19.7"
 WIDTH: 13"
 DEPTH: 16"
 WEIGHT: ±90 lbs
 AREA:

DETAIL NOT USED

9 RRH SPECIFICATIONS - 800 MHz
 11x17 SCALE: 1/2" = 1'-0" 24x36 SCALE: 1" = 1'-0"

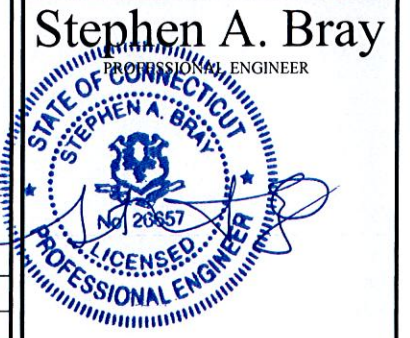
10 RRH SPECIFICATIONS - 1900 MHz
 11x17 SCALE: 1/2" = 1'-0" 24x36 SCALE: 1" = 1'-0"

11



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△	07-30-12	ISSUED FOR CONSTRUCTION	MCD	KCD
REV.	DATE	REVISION DESCRIPTION	DRAWN BY	CHKD. BY



CT LICENSE: 26657 9/13/12

PROJECT NUMBER: **332.1455**

SITE INFORMATION:
NOLAN FIELD - 401 WAKELEE AVENUE
 ANSONIA, CT 06401
 NEW HAVEN COUNTY

CT03XC005

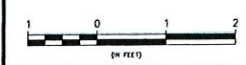
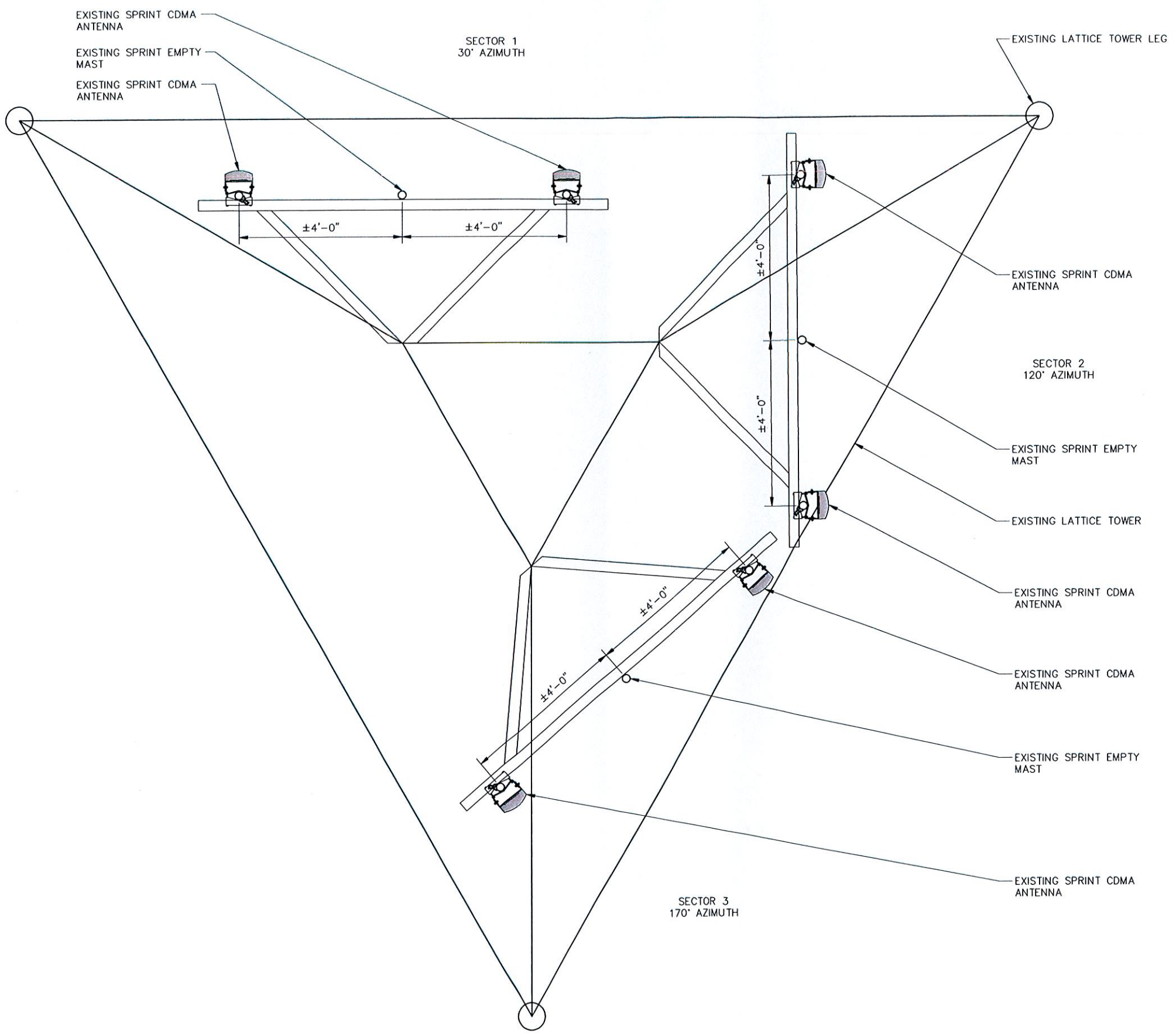
PROJECT TYPE: NETWORK VISION

DRAWN BY: JLS CHECKED BY: DATE: 03-05-12

SHEET TITLE:
EQUIPMENT & ANTENNA SPECIFICATIONS

SHEET NUMBER: **C03A** REV.: **0**

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1 EXISTING ANTENNA PLAN @ ±184'-6" AGL (ALL SECTORS)

11x17 SCALE: 3/8" = 1'-0" | 24x36 SCALE: 3/4" = 1'-0"



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REV.	DATE	REVISION DESCRIPTION	DRAWN BY	CHKD BY	
△	07-30-12	ISSUED FOR CONSTRUCTION	MCD	KCD	

KMB
DESIGN GROUP
kmbdg.com

1800 ROUTE 34, SUITE 205
WALL, NJ 07719
(732) 260-5623

Stephen A. Bray
PROFESSIONAL ENGINEER

STATE OF CONNECTICUT
STEPHEN A. BRAY
LICENSED PROFESSIONAL ENGINEER

CT LICENSE: 26657 | 9/13/12

PROJECT NUMBER:
332.1455

SITE INFORMATION:
**NOLAN FIELD - 401 WAKELEE AVENUE
ANSONIA, CT 06401
NEW HAVEN COUNTY**

CT03XC005

PROJECT TYPE:
NETWORK VISION

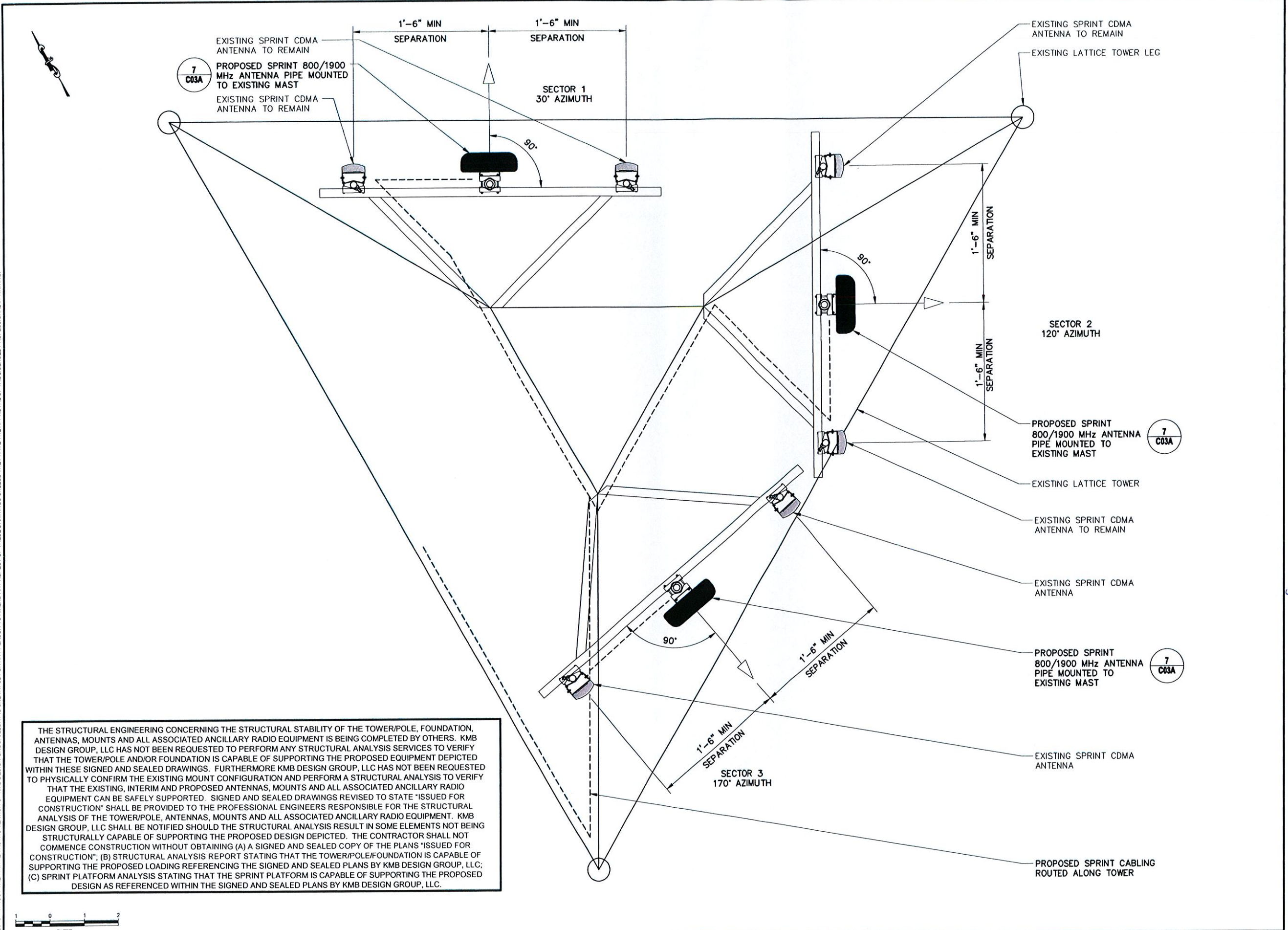
DRAWN BY: JLS	CHECKED BY:	DATE: 03-05-12
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SHEET TITLE:
**EXISTING ANTENNA PLAN
(ALL SECTORS)**

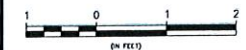
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



THE STRUCTURAL ENGINEERING CONCERNING THE STRUCTURAL STABILITY OF THE TOWER/POLE, FOUNDATION, ANTENNAS, MOUNTS AND ALL ASSOCIATED ANCILLARY RADIO EQUIPMENT IS BEING COMPLETED BY OTHERS. KMB DESIGN GROUP, LLC HAS NOT BEEN REQUESTED TO PERFORM ANY STRUCTURAL ANALYSIS SERVICES TO VERIFY THAT THE TOWER/POLE AND/OR FOUNDATION IS CAPABLE OF SUPPORTING THE PROPOSED EQUIPMENT DEPICTED WITHIN THESE SIGNED AND SEALED DRAWINGS. FURTHERMORE KMB DESIGN GROUP, LLC HAS NOT BEEN REQUESTED TO PHYSICALLY CONFIRM THE EXISTING MOUNT CONFIGURATION AND PERFORM A STRUCTURAL ANALYSIS TO VERIFY THAT THE EXISTING, INTERIM AND PROPOSED ANTENNAS, MOUNTS AND ALL ASSOCIATED ANCILLARY RADIO EQUIPMENT CAN BE SAFELY SUPPORTED. SIGNED AND SEALED DRAWINGS REVISED TO STATE "ISSUED FOR CONSTRUCTION" SHALL BE PROVIDED TO THE PROFESSIONAL ENGINEERS RESPONSIBLE FOR THE STRUCTURAL ANALYSIS OF THE TOWER/POLE, ANTENNAS, MOUNTS AND ALL ASSOCIATED ANCILLARY RADIO EQUIPMENT. KMB DESIGN GROUP, LLC SHALL BE NOTIFIED SHOULD THE STRUCTURAL ANALYSIS RESULT IN SOME ELEMENTS NOT BEING STRUCTURALLY CAPABLE OF SUPPORTING THE PROPOSED DESIGN DEPICTED. THE CONTRACTOR SHALL NOT COMMENCE CONSTRUCTION WITHOUT OBTAINING (A) A SIGNED AND SEALED COPY OF THE PLANS "ISSUED FOR CONSTRUCTION"; (B) STRUCTURAL ANALYSIS REPORT STATING THAT THE TOWER/POLE/FOUNDATION IS CAPABLE OF SUPPORTING THE PROPOSED LOADING REFERENCING THE SIGNED AND SEALED PLANS BY KMB DESIGN GROUP, LLC; (C) SPRINT PLATFORM ANALYSIS STATING THAT THE SPRINT PLATFORM IS CAPABLE OF SUPPORTING THE PROPOSED DESIGN AS REFERENCED WITHIN THE SIGNED AND SEALED PLANS BY KMB DESIGN GROUP, LLC.




1 INTERIM ANTENNA PLAN @ ±184'-6" AGL (ALL SECTORS)

11x17 SCALE: 3/8" = 1'-0" | 24x36 SCALE: 3/4" = 1'-0"

						
						
						
						
						
						
						
	07-30-12	ISSUED FOR CONSTRUCTION	MCD	KCD		
REV.	DATE	REVISION DESCRIPTION	DRAWN BY	CHKD. BY		




KMB DESIGN GROUP
kmbdg.com

1800 ROUTE 34, SUITE 205
WALL, NJ 07719
(732) 260-5623

Stephen A. Bray

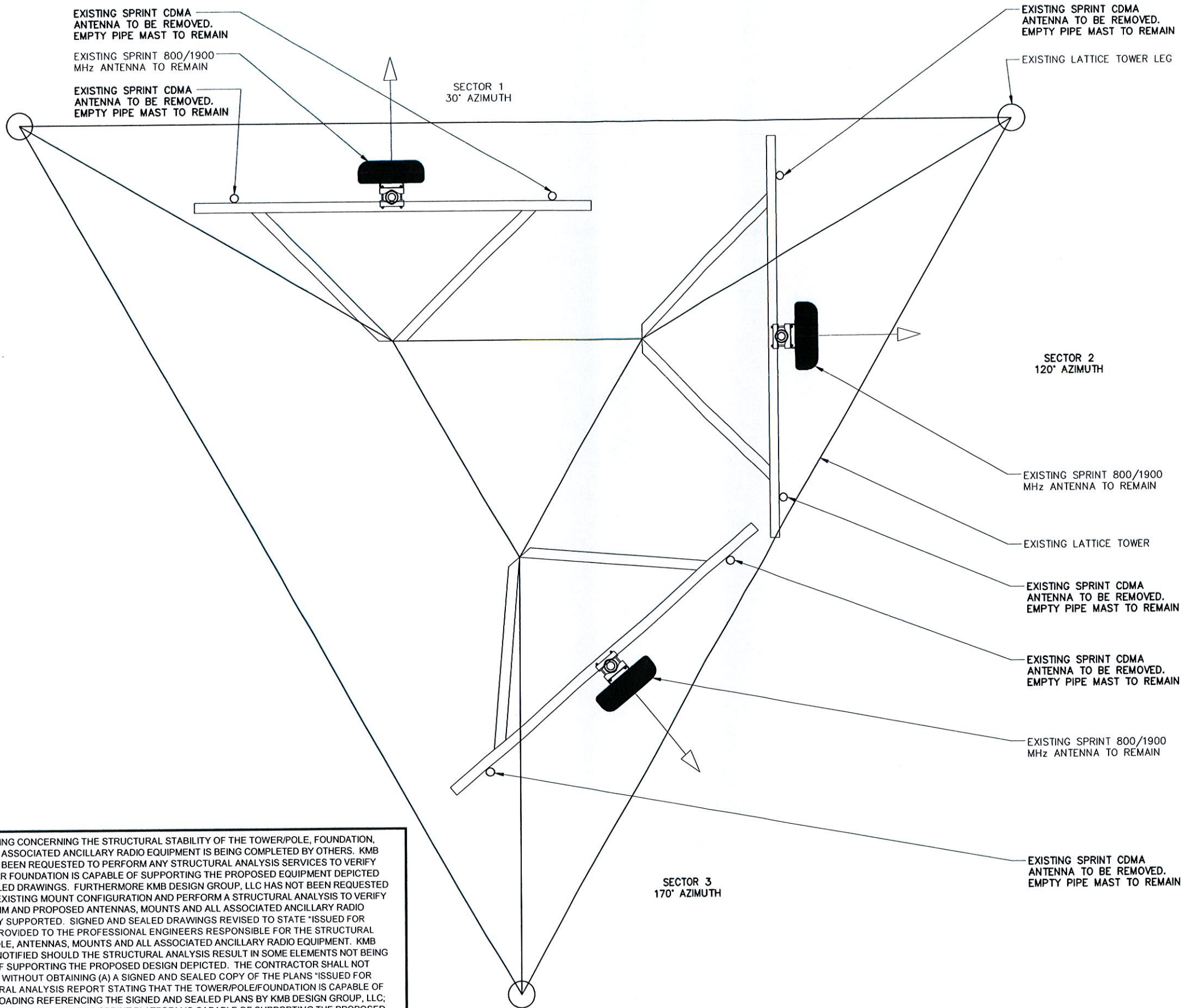
PROFESSIONAL ENGINEER



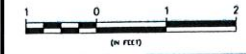
CT LICENSE: 26657 | 9/13/12

PROJECT NUMBER: 332.1455	
SITE INFORMATION: NOLAN FIELD - 401 WAKELEE AVENUE ANSONIA, CT 06401 NEW HAVEN COUNTY	
CT03XC005	
PROJECT TYPE: NETWORK VISION	
DRAWN BY: JLS	CHECKED BY:
DATE: 03-05-12	
SHEET TITLE: INTERIM ANTENNA PLAN (ALL SECTORS)	
SHEET NUMBER: C04A	REV.: 0

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THE STRUCTURAL ENGINEERING CONCERNING THE STRUCTURAL STABILITY OF THE TOWER/POLE, FOUNDATION, ANTENNAS, MOUNTS AND ALL ASSOCIATED ANCILLARY RADIO EQUIPMENT IS BEING COMPLETED BY OTHERS. KMB DESIGN GROUP, LLC HAS NOT BEEN REQUESTED TO PERFORM ANY STRUCTURAL ANALYSIS SERVICES TO VERIFY THAT THE TOWER/POLE AND/OR FOUNDATION IS CAPABLE OF SUPPORTING THE PROPOSED EQUIPMENT DEPICTED WITHIN THESE SIGNED AND SEALED DRAWINGS. FURTHERMORE KMB DESIGN GROUP, LLC HAS NOT BEEN REQUESTED TO PHYSICALLY CONFIRM THE EXISTING MOUNT CONFIGURATION AND PERFORM A STRUCTURAL ANALYSIS TO VERIFY THAT THE EXISTING, INTERIM AND PROPOSED ANTENNAS, MOUNTS AND ALL ASSOCIATED ANCILLARY RADIO EQUIPMENT CAN BE SAFELY SUPPORTED. SIGNED AND SEALED DRAWINGS REVISED TO STATE "ISSUED FOR CONSTRUCTION" SHALL BE PROVIDED TO THE PROFESSIONAL ENGINEERS RESPONSIBLE FOR THE STRUCTURAL ANALYSIS OF THE TOWER/POLE, ANTENNAS, MOUNTS AND ALL ASSOCIATED ANCILLARY RADIO EQUIPMENT. KMB DESIGN GROUP, LLC SHALL BE NOTIFIED SHOULD THE STRUCTURAL ANALYSIS RESULT IN SOME ELEMENTS NOT BEING STRUCTURALLY CAPABLE OF SUPPORTING THE PROPOSED DESIGN DEPICTED. THE CONTRACTOR SHALL NOT COMMENCE CONSTRUCTION WITHOUT OBTAINING (A) A SIGNED AND SEALED COPY OF THE PLANS "ISSUED FOR CONSTRUCTION"; (B) STRUCTURAL ANALYSIS REPORT STATING THAT THE TOWER/POLE/FOUNDATION IS CAPABLE OF SUPPORTING THE PROPOSED LOADING REFERENCING THE SIGNED AND SEALED PLANS BY KMB DESIGN GROUP, LLC; (C) SPRINT PLATFORM ANALYSIS STATING THAT THE SPRINT PLATFORM IS CAPABLE OF SUPPORTING THE PROPOSED DESIGN AS REFERENCED WITHIN THE SIGNED AND SEALED PLANS BY KMB DESIGN GROUP, LLC.

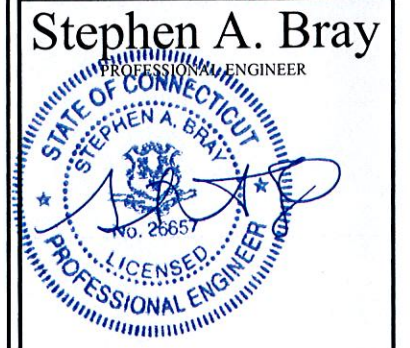


1 FINAL ANTENNA PLAN @ ±184'-6" AGL (ALL SECTORS)

11x17 SCALE: 3/8" = 1'-0" 24x36 SCALE: 3/4" = 1'-0"



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△	07-30-12	ISSUED FOR CONSTRUCTION	MCD	KCD	
REV.	DATE	REVISION DESCRIPTION	DRAWN BY	CHKD. BY	



CT LICENSE: 26657 9/13/12

PROJECT NUMBER: **332.1455**

SITE INFORMATION:
**NOLAN FIELD - 401 WAKELEE AVENUE
ANSONIA, CT 06401
NEW HAVEN COUNTY
CT03XC005**

PROJECT TYPE: **NETWORK VISION**

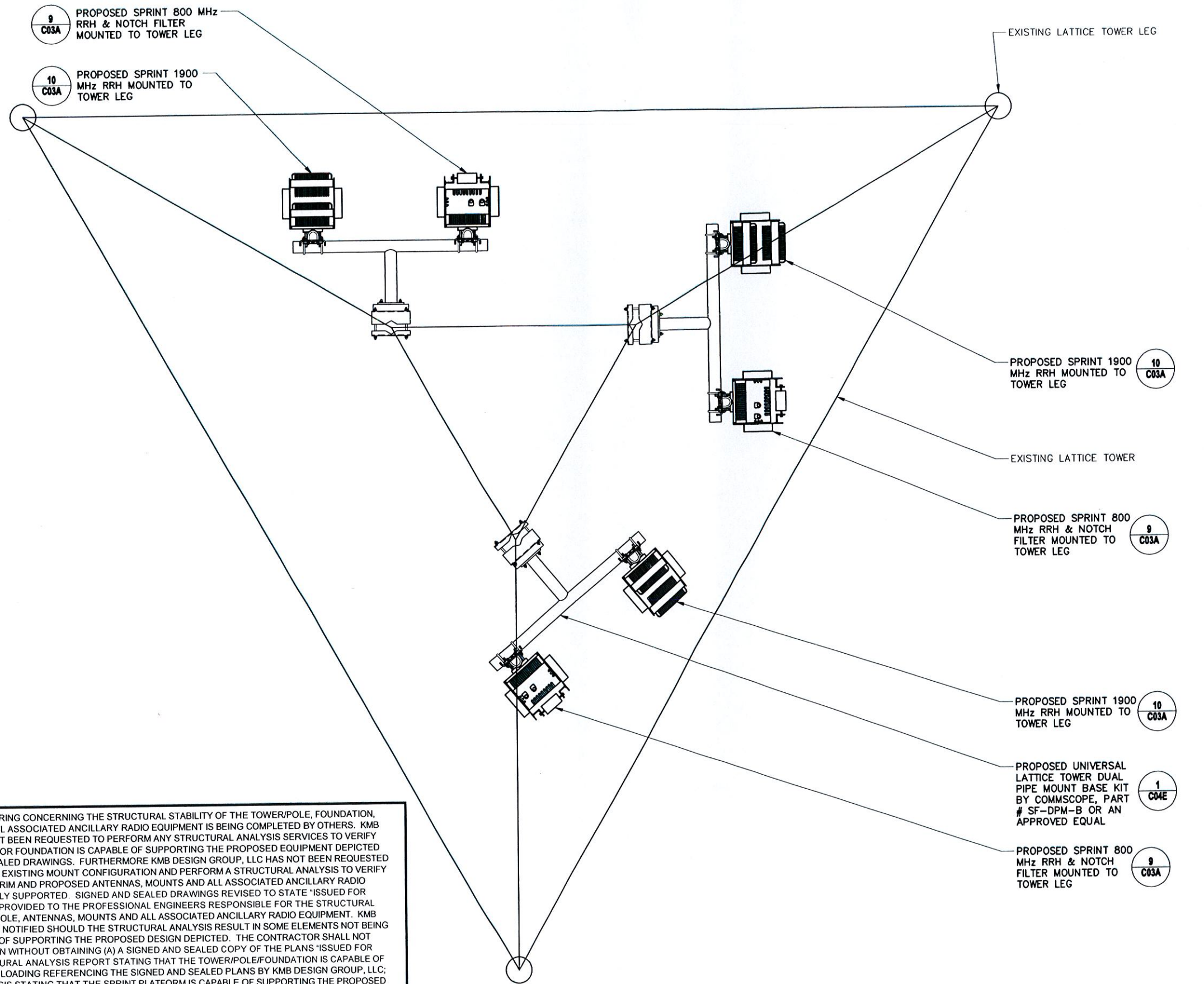
DRAWN BY: **JLS** CHECKED BY: DATE: **03-05-12**

SHEET TITLE:
**FINAL ANTENNA PLAN
(ALL SECTORS)**

SHEET NUMBER: **C04B** REV.: **0**

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THE STRUCTURAL ENGINEERING CONCERNING THE STRUCTURAL STABILITY OF THE TOWER/POLE, FOUNDATION, ANTENNAS, MOUNTS AND ALL ASSOCIATED ANCILLARY RADIO EQUIPMENT IS BEING COMPLETED BY OTHERS. KMB DESIGN GROUP, LLC HAS NOT BEEN REQUESTED TO PERFORM ANY STRUCTURAL ANALYSIS SERVICES TO VERIFY THAT THE TOWER/POLE AND/OR FOUNDATION IS CAPABLE OF SUPPORTING THE PROPOSED EQUIPMENT DEPICTED WITHIN THESE SIGNED AND SEALED DRAWINGS. FURTHERMORE KMB DESIGN GROUP, LLC HAS NOT BEEN REQUESTED TO PHYSICALLY CONFIRM THE EXISTING MOUNT CONFIGURATION AND PERFORM A STRUCTURAL ANALYSIS TO VERIFY THAT THE EXISTING, INTERIM AND PROPOSED ANTENNAS, MOUNTS AND ALL ASSOCIATED ANCILLARY RADIO EQUIPMENT CAN BE SAFELY SUPPORTED. SIGNED AND SEALED DRAWINGS REVISED TO STATE "ISSUED FOR CONSTRUCTION" SHALL BE PROVIDED TO THE PROFESSIONAL ENGINEERS RESPONSIBLE FOR THE STRUCTURAL ANALYSIS OF THE TOWER/POLE, ANTENNAS, MOUNTS AND ALL ASSOCIATED ANCILLARY RADIO EQUIPMENT. KMB DESIGN GROUP, LLC SHALL BE NOTIFIED SHOULD THE STRUCTURAL ANALYSIS RESULT IN SOME ELEMENTS NOT BEING STRUCTURALLY CAPABLE OF SUPPORTING THE PROPOSED DESIGN DEPICTED. THE CONTRACTOR SHALL NOT COMMENCE CONSTRUCTION WITHOUT OBTAINING (A) A SIGNED AND SEALED COPY OF THE PLANS "ISSUED FOR CONSTRUCTION"; (B) STRUCTURAL ANALYSIS REPORT STATING THAT THE TOWER/POLE/FOUNDATION IS CAPABLE OF SUPPORTING THE PROPOSED LOADING REFERENCING THE SIGNED AND SEALED PLANS BY KMB DESIGN GROUP, LLC; (C) SPRINT PLATFORM ANALYSIS STATING THAT THE SPRINT PLATFORM IS CAPABLE OF SUPPORTING THE PROPOSED DESIGN AS REFERENCED WITHIN THE SIGNED AND SEALED PLANS BY KMB DESIGN GROUP, LLC.

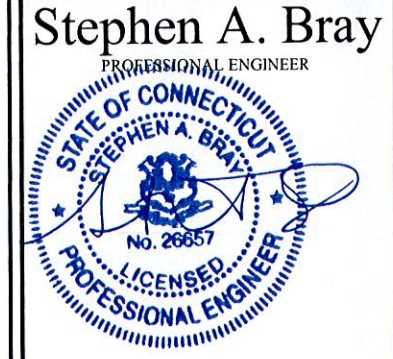


1 INTERIM RRH PLAN @ ±179'-7" AGL (ALL SECTORS)

11x17 SCALE: 3/8" = 1'-0" 24x36 SCALE: 3/4" = 1'-0"



REV.	DATE	REVISION DESCRIPTION	DRAWN BY	CHKD. BY



CT LICENSE: 26657 9/13/12

PROJECT NUMBER: 332.1455

SITE INFORMATION:
NOLAN FIELD - 401 WAKELEE AVENUE
 ANSONIA, CT 06401
 NEW HAVEN COUNTY
CT03XC005

PROJECT TYPE:
NETWORK VISION

DRAWN BY: JLS	CHECKED BY:	DATE: 03-05-12
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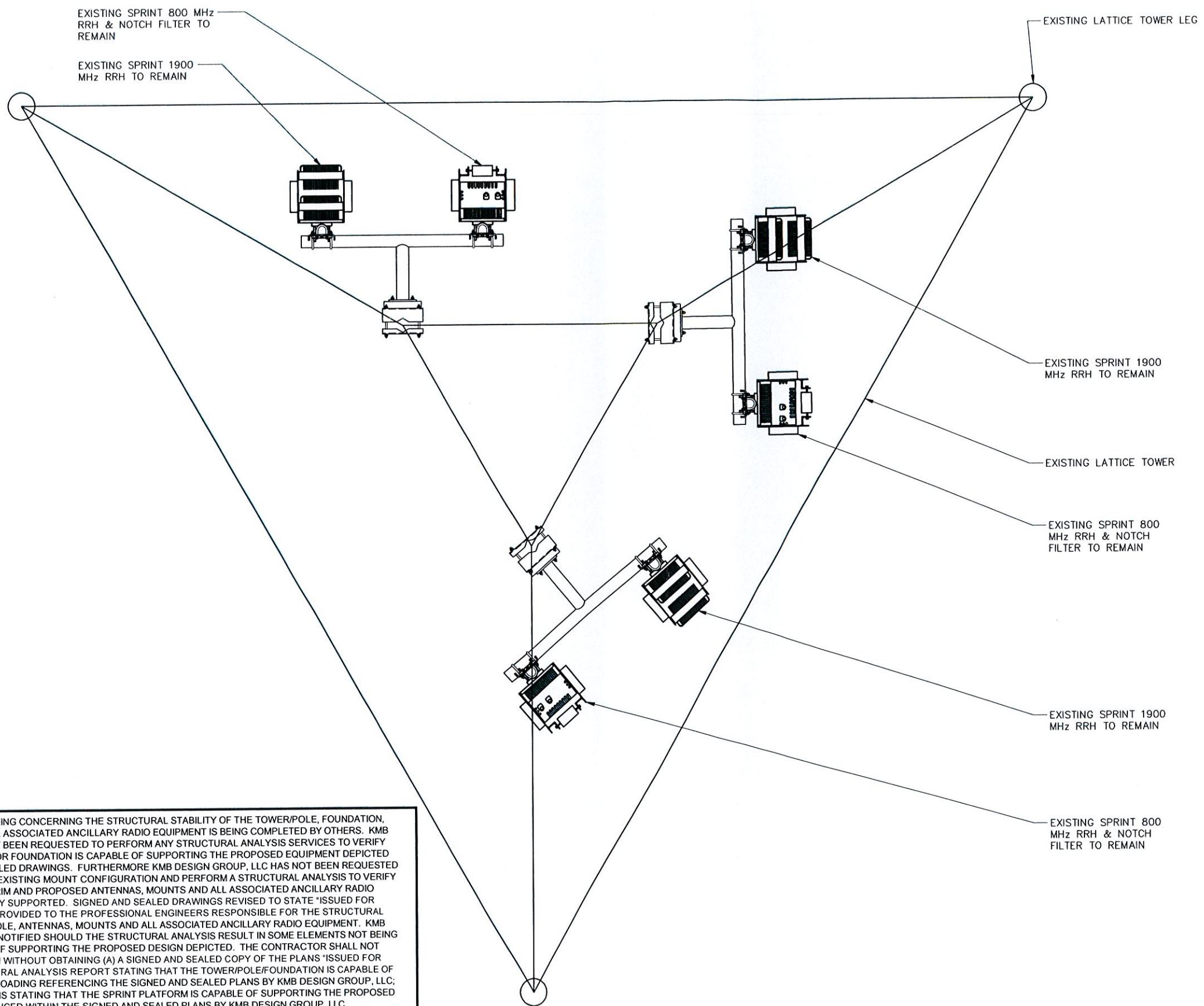
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**INTERIM RRH PLAN
 (ALL SECTORS)**

SHEET NUMBER: C04C	REV.: 0
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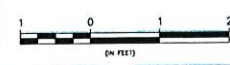
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THE STRUCTURAL ENGINEERING CONCERNING THE STRUCTURAL STABILITY OF THE TOWER/POLE, FOUNDATION, ANTENNAS, MOUNTS AND ALL ASSOCIATED ANCILLARY RADIO EQUIPMENT IS BEING COMPLETED BY OTHERS. KMB DESIGN GROUP, LLC HAS NOT BEEN REQUESTED TO PERFORM ANY STRUCTURAL ANALYSIS SERVICES TO VERIFY THAT THE TOWER/POLE AND/OR FOUNDATION IS CAPABLE OF SUPPORTING THE PROPOSED EQUIPMENT DEPICTED WITHIN THESE SIGNED AND SEALED DRAWINGS. FURTHERMORE KMB DESIGN GROUP, LLC HAS NOT BEEN REQUESTED TO PHYSICALLY CONFIRM THE EXISTING MOUNT CONFIGURATION AND PERFORM A STRUCTURAL ANALYSIS TO VERIFY THAT THE EXISTING, INTERIM AND PROPOSED ANTENNAS, MOUNTS AND ALL ASSOCIATED ANCILLARY RADIO EQUIPMENT CAN BE SAFELY SUPPORTED. SIGNED AND SEALED DRAWINGS REVISED TO STATE "ISSUED FOR CONSTRUCTION" SHALL BE PROVIDED TO THE PROFESSIONAL ENGINEERS RESPONSIBLE FOR THE STRUCTURAL ANALYSIS OF THE TOWER/POLE, ANTENNAS, MOUNTS AND ALL ASSOCIATED ANCILLARY RADIO EQUIPMENT. KMB DESIGN GROUP, LLC SHALL BE NOTIFIED SHOULD THE STRUCTURAL ANALYSIS RESULT IN SOME ELEMENTS NOT BEING STRUCTURALLY CAPABLE OF SUPPORTING THE PROPOSED DESIGN DEPICTED. THE CONTRACTOR SHALL NOT COMMENCE CONSTRUCTION WITHOUT OBTAINING (A) A SIGNED AND SEALED COPY OF THE PLANS "ISSUED FOR CONSTRUCTION"; (B) STRUCTURAL ANALYSIS REPORT STATING THAT THE TOWER/POLE/FOUNDATION IS CAPABLE OF SUPPORTING THE PROPOSED LOADING REFERENCING THE SIGNED AND SEALED PLANS BY KMB DESIGN GROUP, LLC; (C) SPRINT PLATFORM ANALYSIS STATING THAT THE SPRINT PLATFORM IS CAPABLE OF SUPPORTING THE PROPOSED DESIGN AS REFERENCED WITHIN THE SIGNED AND SEALED PLANS BY KMB DESIGN GROUP, LLC.

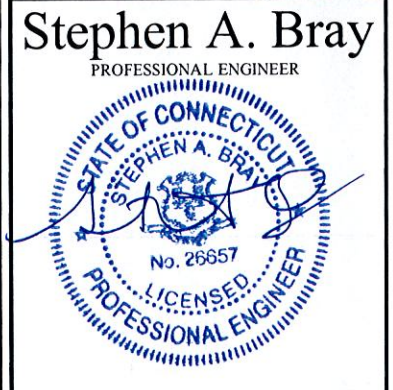


1 FINAL RRH PLAN @ ±179'-7" AGL (ALL SECTORS)

11x17 SCALE: 3/8" = 1'-0" 24x36 SCALE: 3/4" = 1'-0"



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REV.	DATE	REVISION DESCRIPTION	DRAWN BY	CHKD. BY



CT LICENSE: 26657 9/13/12
PROJECT NUMBER: **332.1455**

SITE INFORMATION:
NOLAN FIELD - 401 WAKELEE AVENUE
ANSONIA, CT 06401
NEW HAVEN COUNTY
CT03XC005

PROJECT TYPE:
NETWORK VISION

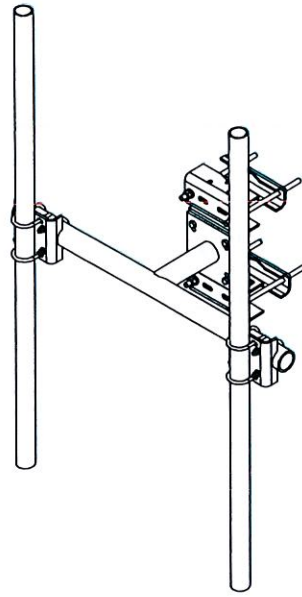
DRAWN BY: **JLS** CHECKED BY: DATE: **03-05-12**

SHEET TITLE:
FINAL RRH PLAN (ALL SECTORS)

SHEET NUMBER: **C04D** REV: **0**

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NOTE:
RRHs NOT SHOWN FOR CLARITY.

UNIVERSAL LATTICE TOWER DUAL PIPE
MOUNT BASE KIT BY COMMSCOPE, PART #
SF-DPM-B OR AN APPROVED EQUAL
KIT INCLUDES:
MOUNT, WELDMENT & HARDWARE (PIPES
NOT INCLUDED)

1 RRH MOUNT DETAIL

SCALE: NTS

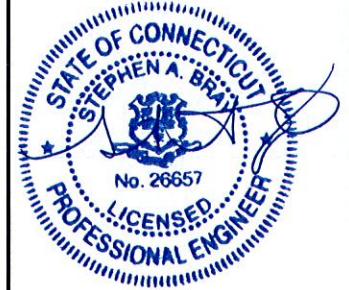


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REV.	DATE	REVISION DESCRIPTION	DRAWN BY	CHKD. BY



1800 ROUTE 34, SUITE 209
WALL NJ 07719
(732) 280-5623

Stephen A. Bray
PROFESSIONAL ENGINEER



CT LICENSE: 26657 9/13/12

PROJECT NUMBER: **332.1455**

SITE INFORMATION:
**NOLAN FIELD - 401 WAKELEE AVENUE
ANSONIA, CT 06401
NEW HAVEN COUNTY
CT03XC005**

PROJECT TYPE:
NETWORK VISION

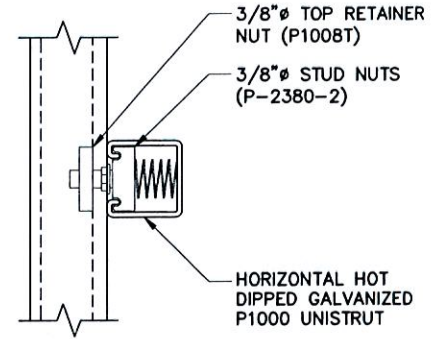
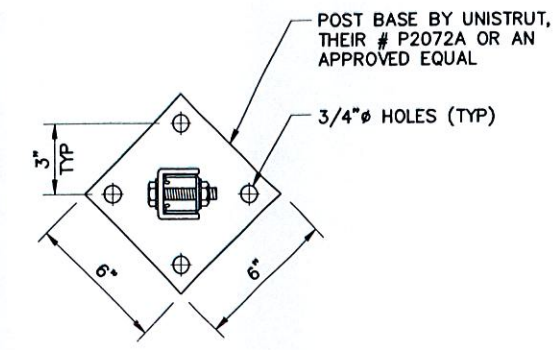
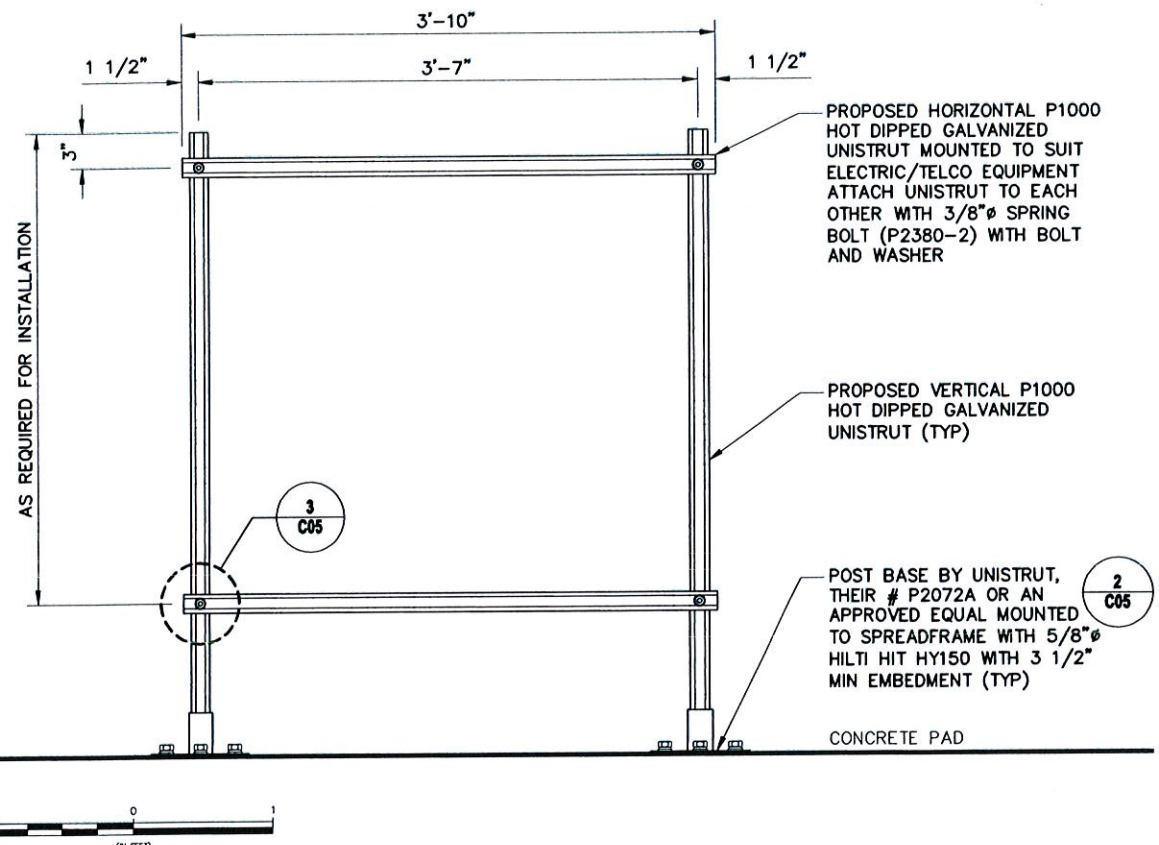
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SHEET TITLE:
**RRH MOUNT DETAILS
(ALL SECTORS)**

SHEET NUMBER: C04E	REV.: 0
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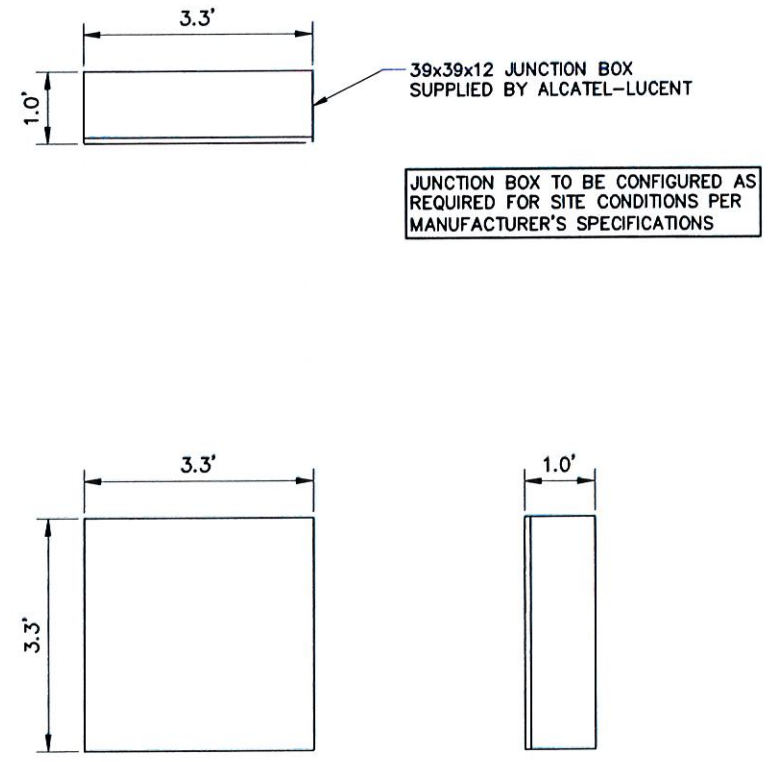
UNISTRUT BACKBOARD ELEVATION
 11x17 SCALE: 3/4" = 1'-0"
 24x36 SCALE: 1 1/2" = 1'-0"
 DC DISTRIBUTION & FIBER MGMT ENCLOSURE DETAIL
 11x17 SCALE: 3/8" = 1'-0"
 24x36 SCALE: 3/4" = 1'-0"



1 UNISTRUT BACKBOARD ELEVATION

2 POST BASE DETAIL

3 UNISTRUT CONNECTION DETAIL



4 DC DISTRIBUTION & FIBER MGMT ENCLOSURE DETAIL



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REV.	DATE	REVISION DESCRIPTION	DRAWN BY	CHKD. BY
	07-30-12	ISSUED FOR CONSTRUCTION	MCD	KCD

1800 ROUTE 34, SUITE 209
 WALL TOWN, CT 06719
 (860) 285-5423
 kmbdg.com

Stephen A. Bray
 PROFESSIONAL ENGINEER

CT LICENSE: 26657 9/13/12

PROJECT NUMBER: 332.1455

SITE INFORMATION:
 NOLAN FIELD - 401 WAKELEE AVENUE
 ANSONIA, CT 06401
 NEW HAVEN COUNTY

CT03XC005

PROJECT TYPE:
 NETWORK VISION

DRAWN BY: JLS **CHECKED BY:** [blank] **DATE:** 03-05-12

SHEET TITLE:
 SITE DETAILS

SHEET NUMBER: C05 **REV.:** 0

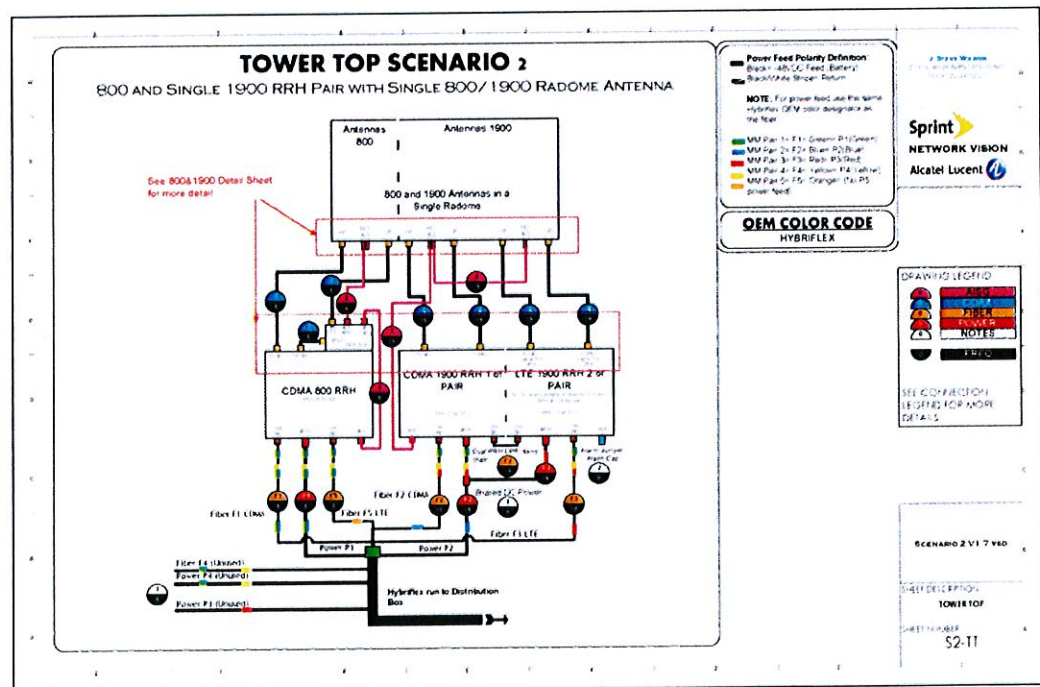
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FINAL ANTENNA AND CABLE SCHEDULE

SECTOR	ANTENNA	AZIMUTH (DEGREES)	MECHANICAL DT (DEGREES)	ELECTRICAL DT (DEGREES)	RAD CENTER AGL (FT)	ANTENNA		RRH	TOP COAX JUMPER		COMBINER JUMPER		NOTCH FILTER JUMPER		HYBRIFLEX LENGTH (FT)
						MAKE	MODEL		QTY	LENGTH (FT)	QTY	LENGTH (FT)	QTY	LENGTH (FT)	
1	800/1900	30	0	800	184.5	RFS	APXVSP18-C-A20	800	10	-	-	1	3	210	
				1900				1900							
2	800/1900	120	0	800	184.5	POWERWAVE	P40-16-XLPP-RR-A	800	10	-	-	1	3	210	
				1900				1900							
3	800/1900	170	0	800	184.5	POWERWAVE	P40-16-XLPP-RR-A	800	10	-	-	1	3	210	
				1900				1900							

- NOTES:
- DUE TO FIELD MEASUREMENTS AND THE INSTALLATION OF NEW ANTENNAS THAT VARY IN SIZE FROM THE EXISTING ANTENNAS, THE ANTENNA RAD CENTER HAS CHANGED FROM WHAT IS ON RECORD. THE DATABASE MAY NEED TO BE UPDATED TO MATCH THESE PLANS.
 - SOME CABLING MAY CHANGE AT THE TIME OF CONSTRUCTION. CONTRACTOR TO CONFIRM ALL CABLE LENGTHS, TYPE, QUANTITIES, AND CONFIGURATION PRIOR TO CONSTRUCTION.
 - ALL UNUSED POWER AND FIBER MUST BE PROPERLY TERMINATED AND WEATHERPROOFED.

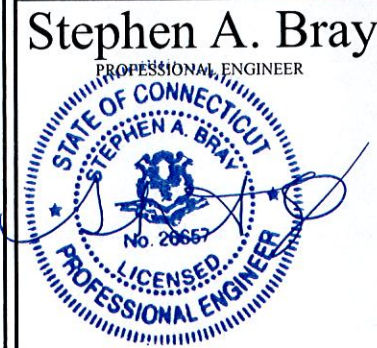
CONTRACTOR TO VERIFY & USE THE LATEST TOWER TOP SCENARIO AS PROVIDED BY ALCATEL-LUCENT CONSTRUCTION MANAGER



ALL SECTORS



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△	07-30-12	ISSUED FOR CONSTRUCTION	MCD	KCD
REV.	DATE	REVISION DESCRIPTION	DRAWN BY	CHKD BY



CT LICENSE: 26657	9/13/12
PROJECT NUMBER:	332.1455
SITE INFORMATION:	NOLAN FIELD - 401 WAKELEE AVENUE ANSONIA, CT 06401 NEW HAVEN COUNTY CT03XC005
PROJECT TYPE:	NETWORK VISION
DRAWN BY:	JLS
CHECKED BY:	
DATE:	03-05-12
SHEET TITLE:	RF SCHEDULE & PLUMBING DIAGRAM
SHEET NUMBER:	C06
REV.:	0

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GENERAL SPECIFICATIONS

- Contractor shall verify that the total number of service entrance disconnects in the existing utility company pedestal must not exceed six. If the new service added exceeds this value, contractor must coordinate with the utility company and authority having jurisdiction. Run an additional exclusive and dedicated service lateral set for the new load added to the compound as per NEC Article # 230-2(B)
- All work should be done in a neat workmanlike manner, left clean and free from defects, and completely operable. The contractor shall provide all equipment as scheduled on the drawings. All materials shall be new and all work and materials shall be guaranteed by the contractor for a period of one (1) year from the date of acceptance by the owner.
- All work shall be carefully coordinated with the landlord and all trades involved, and the contractor shall provide proper connections, fittings, valves, piping, etc. for all equipment furnished by carrier or other trades involved in this contract.
- Contractor shall inform the engineer immediately of any conflict discovered before performing any work related to such conflict.
- Provide all required temporary utilities and pay all associated fees and operating costs.
- Before submitting this bid, the contractor shall visit the job site to examine and fully acquaint himself with the existing job conditions, paying particular attention to the location of existing conditions to make a complete and operable system without additional cost to the carrier or the engineer.
- Obtain all permits and approvals from authorities having jurisdiction and paying all fees required.
- Label all equipment served from Sprint panelboard with phenolic labels sized in relation to usage.
- Contractor to provide and install engraved label on the Sprint meter socket enclosure.
- Redlined As-Builts are to be delivered to a Sprint representative.
- The equipment/protections must be rated for standard of AIC rate higher than incoming equipment and/or utility company AIC rate.

GROUNDING NOTES

- The subcontractor 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.
- All exterior ground conductors shall be #2 AWG solid tinned copper unless otherwise indicated.
- All ground connections above grade (interior & exterior) shall be formed using high press crimps.
- All ground connections below grade shall be exothermic (Cadweld).
- Connections to equipment and enclosures shall be made utilizing two-hole ground lugs with an antioxidant compound.
- Maximum resistance of the completed ground system shall not exceed 5 Ohms. Testing shall be performed in accordance with technical specification for facility grounding, using fall potential method.
- Where grounding connections are made to painted metal surfaces shall be scraped clean to bare metal to ensure proper contact. Surfaces shall be restored to match original finishes.
- Use of 90° bends in the protection grounding conductors shall be avoided when 45° bends can be adequately supported.
- Ground depth shall be 30" minimum below finished grade, or 6" below frost line, whichever is greater.

ELECTRICAL SYMBOLS		ABBREVIATIONS	
WIRING SYMBOLS		AWG	AMERICAN WIRE GAUGE
	DISCONNECT SWITCH	BCW	BARE COPPER WIRE
	METER	DWG	DRAWING
	CIRCUIT BREAKER	EMT	ELECTRICAL METALLIC TUBING
	CADWELD TYPE CONNECTION	GEN	GENERATOR
	COMPRESSION TYPE CONNECTION	MGB	MASTER GROUND BAR
	GROUND ROD WITH ACCESS	PVC	RIGID (SCH 40) PVC CONDUIT
	CHEMICAL GROUND ROD	RGS	RIGID GALVANIZED STEEL
	GROUND ROD	RWY	RACEWAY
	CONDUIT TURNING DOWN	TYP	TYPICAL
	CONDUIT TURNING UP		
	JUNCTION BOX		
	PULL BOX		
	CONDUIT RUNNING ABOVE GRADE		
	CONDUIT RUNNING UNDER GROUND		

ELECTRICAL SPECIFICATIONS

- General:
 - The electrical contractor shall furnish all labor, materials, tools, transportation equipment, services and facilities required for the complete, proper and substantial installation of all electrical work. All fixtures, devices, and equipment shown, noted or required on these drawings, and/or contained herein shall be connected from the source of electric power to the final connection, tested and made ready for satisfactory operation.
 - Service equipment shall be 120/240 VAC, 100 Amp, single phase, unless otherwise directed by the Sprint Construction Manager.
 - Unless otherwise indicated, the arrangement, position, connections, etc. shown on the drawings shall be taken on a diagram basis. The right is reserved by the engineer to make minor changes in locations and arrangements when required by job development without additional compensation to the contractor.
 - All work shall conform to the adopted edition of the National Electrical Code and local, state and applicable codes.
 - When a utility company meter is specified, the contractor shall obtain all associated cut-in cards, inspections, etc., necessary to have the meter set. It is the responsibility of the contractor to meet with utility company prior to construction to verify source of electric service, tap and meter location.
- Identification:
 - Provide typewritten directories for panels, indicating use of each branch circuit and designating spare circuits. Handwritten directories are not acceptable.
 - All panel boards, switches and other equipment enclosures shall bear engraved nameplates as manufactured by Seton Nameplate Corp., or equal lettering to be 1/2" white letters on black background unless noted otherwise.
- Raceways:
 - Minimum conduit size shall be 3/4" unless otherwise noted on the drawings.
 - Exposed raceways shall be run true, plumb, and parallel or perpendicular to building lines.
 - Conduit routings are schematic. Sub contractor shall install conduits so that access to equipment is not blocked.
- Wiring Methods:
 - All feeders shall consist of pulled conductors in conduit. All branch circuits shall consist of pulled conductors in conduit. Except 15 and 20 Ampere 1 pole lighting receptacles, miscellaneous branch circuits concealed above suspended ceilings or within dry walls shall consist of type MC metal clad cable if allowed by code. Connections to communications cabinets and vibrating equipment shall consist of pulled conductors in LFMC, maximum 6' in length.
 - Conductors shall be continuous from origin to panel or equipment without splices. Where tap splices are necessary and approved, they shall be made with suitable connectors in junction boxes.
 - Equipment ground conductors shall be provided for all feeders and branch circuits.
 - The contractor shall conceal all conduit routing passing through finished areas. Conduit routing through unfinished shall be supported as specified in drawings. Unless clearly specified, no conduits shall be routed on exterior surface of buildings.
 - All conductor terminals shall be U.L. listed for minimum of 75° C.
 - Provide fire stopping around all conduits at wall and floor penetrations.
 - Seal all exterior wall penetrations as required.
 - Underground conduits shall be a minimum of 24" below finished grade. All underground work shall be documented by photograph before any backfill is begun. Photos will be required at time punchlist is performed. Feeders shall be individual conductors in schedule 40 PVC, direct burial conduit. When buried conduits are subject to vehicular traffic, conduits shall be encased in concrete. All sweeps below grade shall be schedule 80 PVC.
 - All feeders in "damp" or "wet" locations shall consist of individual conductor in rigid galvanized steel or rigid aluminum conduit. Liquid-tight flexible metallic conduit shall be utilized when connecting to equipment cabinets and vibrating equipment. The maximum length for flexible conduit shall be 6'-0".
- Wiring Devices:
 - Switches, receptacles and other wiring devices shall be specification grade of type, size and rating indicated on the drawings.
- Disconnect Switches:
 - Switches shall be quick-make, quick-break NEMA 1 for indoor use and NEMA 3R for outdoor use as manufactured by General Electric, Square D or equal. Electrical contractor to provide all safety disconnects.
- Special Requirements:
 - The electrical contractor shall furnish and install all power and control wiring for equipment contained in contract documents.
 - All work requiring an outage or interruption of service (power, telephone) shall be scheduled only at such time permitted by owner.
- Lighting fixtures and lamps:
 - Lighting fixtures shall be furnished complete with necessary hardware and lamps.
- Transformers:
 - Transformers shall be dry type with average temperature rise not to exceed 150° C (115° C)(80° C)
 - Transformers shall be as manufactured by Square D, General Electric, or Siemens.

The contractor is required to contact the utility companies prior to starting construction. This is necessary to reconfirm that the utility points have remained consistent with the contractor documents:

- * Telephone Demarcation Point
- * Electrical Service Tap Point
- * New Utility Meter Location



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REV.	DATE	REVISION DESCRIPTION	DRAWN BY	CHKD. BY	



CT LICENSE: 26657 9/13/12

PROJECT NUMBER: **332.1455**

SITE INFORMATION:
NOLAN FIELD - 401 WAKELEE AVENUE
 ANSONIA, CT 06401
 NEW HAVEN COUNTY

CT03XC005

PROJECT TYPE:
NETWORK VISION

DRAWN BY: JLS	CHECKED BY:	DATE: 03-05-12
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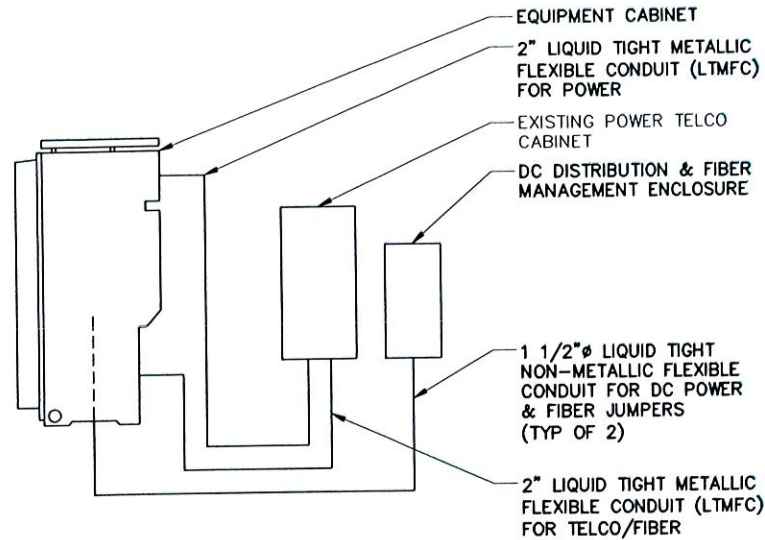
SHEET TITLE:
GENERAL NOTES

SHEET NUMBER: E01	REV.: 0
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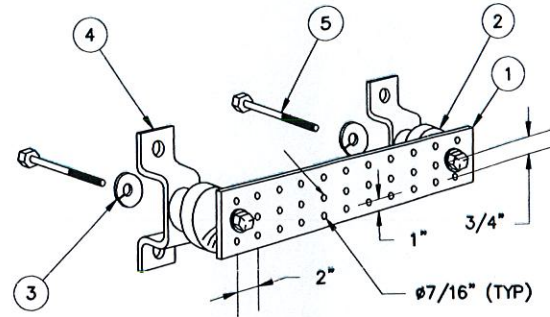
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1 PLUMBING SCHEMATIC (IF REQUIRED)

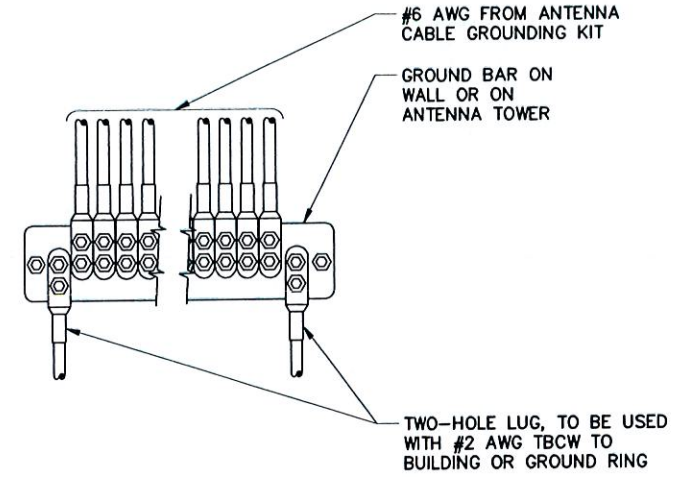
SCALE: NTS



- 1. GALVANIZED STEEL GROUND BAR, 1/4" x 4" x 20", HAGER PART NO. TGBI-14420C OR A.L.T. PART NO. 382227. HOLE CENTERS TO MATCH NEMA DOUBLE LUG CONFIGURATION.
- 2. INSULATORS, NEWTON INSTRUMENT CAT. NO. 3061-4.
- 3. 5/8" LOCKWASHERS, NEWTON INSTRUMENT CO. CAT. NO. 3015-8.
- 4. WALL MOUNTING BRACKET, NEWTON INSTRUMENT CO. CAT. NO. A-6056.
- 5. 5/8-11 X 1" H.H.C.S. BOLTS, NEWTON INSTRUMENT CO. CAT. NO. 3012-1

2 GROUND BAR DETAIL

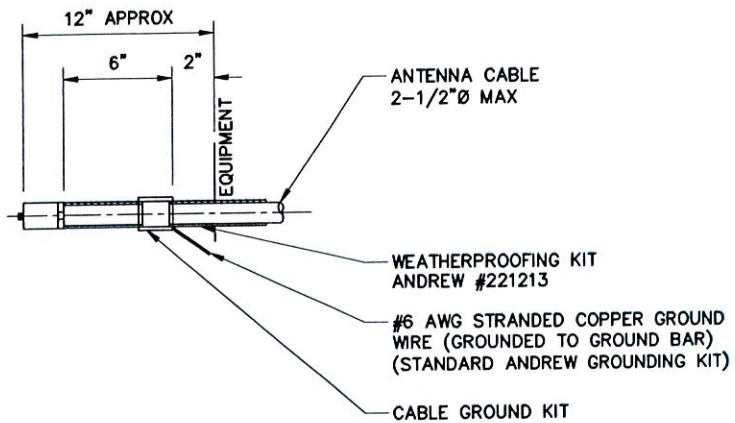
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NOTE:
CONTRACTOR TO UTILIZE KOPR-SHIELD (THOMAS & BETTS) ON ALL LUG CONNECTIONS

3 GROUND LUG TO GROUND BAR CONNECTION DETAIL

SCALE: NTS



NOTE:
DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.

4 CABLE GROUND KIT CONNECTION DETAIL

SCALE: NTS

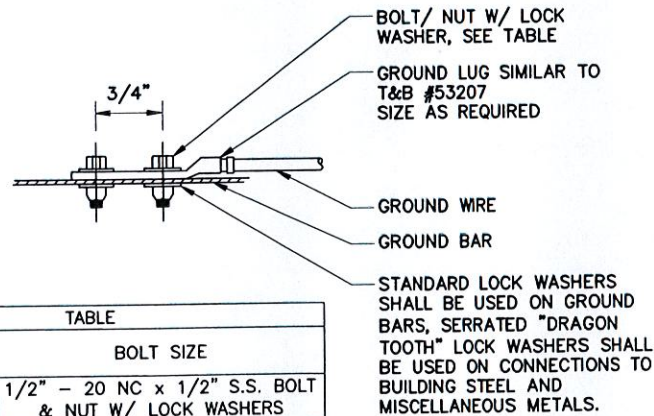
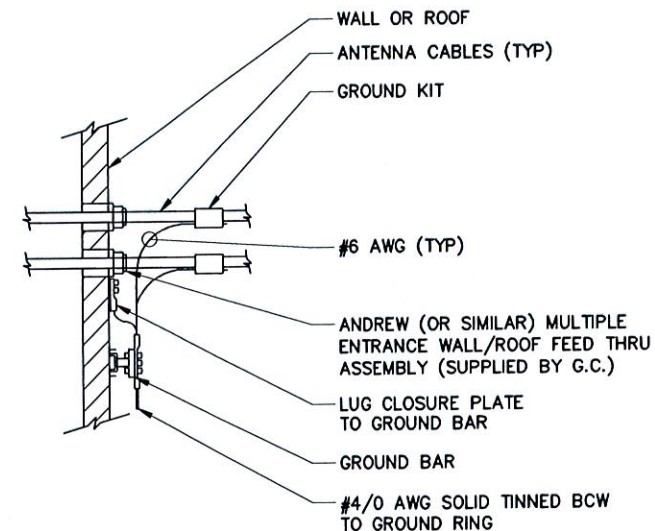


TABLE		
WIRE SIZE	LUG #	BOLT SIZE
#4/0	53212	1/2" - 20 NC x 1/2" S.S. BOLT & NUT W/ LOCK WASHERS
#2	53207	1/4" - 20 NC x 1/2" S.S. BOLT & NUT W/ LOCK WASHERS
#6	53205	

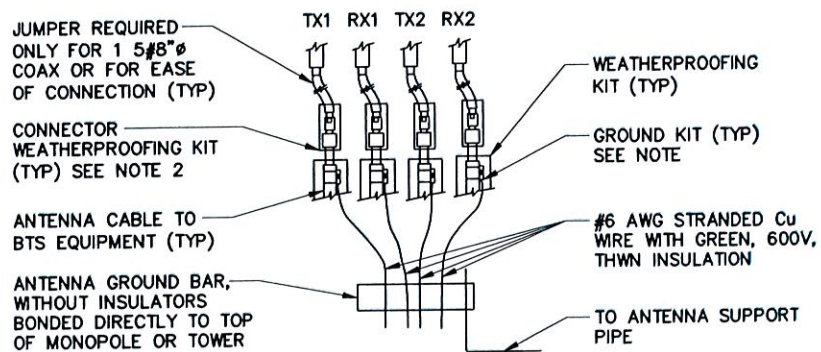
5 GROUND LUG CONNECTION DETAIL

SCALE: NTS



6 CABLE GROUNDING DETAIL

SCALE: NTS



- NOTES:**
- 1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO ANTENNA GROUND BAR.
 - 2. WEATHER PROOFING SHALL BE TWO-PART TAPE KIT. COLD SHRINK SHALL NOT BE USED.
 - 3. ATTACH "DO NOT DISCONNECT" LABELS TO GROUND BARS. CAN USE BRASS TAG "DO NOT DISCONNECT" AT EACH COAX GROUND POINT OR BACK-A-LITE PLATE ON GROUND BAR.

7 GROUND BAR TO GROUND WIRE CONNECTION DETAIL

SCALE: NTS



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Stephen A. Bray
PROFESSIONAL ENGINEER

LICENSED PROFESSIONAL ENGINEER

CT LICENSE: 26657 9/13/12

PROJECT NUMBER:
332.1455

SITE INFORMATION:
**NOLAN FIELD - 401 WAKELEE AVENUE
ANSONIA, CT 06401
NEW HAVEN COUNTY
CT03XC005**

PROJECT TYPE:
NETWORK VISION

DRAWN BY: JLS	CHECKED BY:	DATE: 03-05-12
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SHEET TITLE:
**ELECTRICAL &
GROUNDING DETAILS**

SHEET NUMBER: E02	REV.: 0
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K:\332_Sprint\332-1000_Alcatel-Lucent\332-1455_CT03XC005_Nolan Field - 401 Wakelee Avenue\332-1455_Construction\332-1455.E02.dwg, 9/13/2012 11:40:06 AM, ezampitella



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

www.ct.gov/csc

October 16, 2012

The Honorable James T. DellaVolpe
Mayor
City of Ansonia
City Hall
253 Main Street
Ansonia, CT 06401-1866

RE: **EM-SPRINT-002-121015** – Sprint Spectrum notice of intent to modify an existing telecommunications facility located at 401 Wakelee Avenue, Ansonia, Connecticut.

Dear Mayor DellaVolpe:

The Connecticut Siting Council (Council) received a request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72. A copy of which has already been provided to you.

If you have any questions or comments regarding the proposal, please call me or inform the Council by October 30, 2012.

Thank you for your cooperation and consideration.

Very truly yours,

Linda Roberts
Executive Director

LR/jbw

c: James Tanner, Zoning Enforcement Officer, City of Ansonia