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Street and Apt. No., or PO Box No. 270 Hartford Rd
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PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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Sent To: Richard Serra CT33XC578
Street and Apt. No., or PO Box No. 270 Hartford Rd
City, State, ZIP+4® Salem CT 06420

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<input type="checkbox"/> Adult Signature Required	\$0.00	
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00	
Postage	\$0.50	
Total Postage and Fees	\$6.70	06/14/2018

Sent To: John Paul CT33XC578
Street and Apt. No., or PO Box No. 70 Residential way
City, State, ZIP+4® Woburn MA 01801

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions



June 14th, 2018

Melanie Bachman, Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

RE: Notice of Exempt Modification – Antenna Swap for wireless facility located at 153 East Haddam Road (RT 82), SALEM, CONNECTICUT – CT33XC578 (lat. 41° 28' 6.48" N, long. - 72° 16' 23.86" W)

Dear Ms. Bachman:

Sprint Spectrum, LP ("Sprint") currently maintains wireless telecommunications antennas at the (150-foot level) on an existing (191-foot self support tower) at the above-referenced address. The property and the tower are owned by American Tower Corporation.

Sprint's proposed work involves antenna replacement and tower work. Sprint intends to replace six (6) antennas and add twelve (12) RRHs onto the tower. All the proposed work is contained within the existing fenced area. Please refer to the attached drawings for site plans prepared by Infinigy Engineering.

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to KEVIN LYDEN, FIRST SELECTMAN, RICHARD SERRA, PLANNER of the Town of SALEM. A copy of this letter is also being sent to AMERICAN TOWER CORPORATION the owner of the property and the tower.

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b).

1. The proposed modifications will not result in an increase in the height of the existing tower.
2. The antennas work is a one-for-one replacement of facility components.
3. The proposed modifications will include the addition of ground base equipment as depicted on the attached drawings; however, the proposed equipment will not require



an extension of the site boundaries.

4. The proposed modifications will not increase noise levels at the facility by six decibels or more.
5. The additional ground based equipment will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) adopted safety standard.

For the foregoing reasons, Sprint respectfully submits that the proposed modifications to the above referenced telecommunications facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b).

If you have any questions or require any additional information regarding this request, please do not hesitate to give me a call at (518) 350-4222 or email me to aperkowski@airosmithdevelopment.com

Kind Regards,

A handwritten signature in black ink, appearing to read 'Arthur Perkowski', is written over a large, light-colored oval shape that serves as a placeholder for a signature.

Arthur Perkowski
Airosmith Development Inc.
32 Clinton Street
Saratoga Springs, NY 12866
518-306-1711 desk & fax
518-871-3707 cell
aperkowski@airosmithdevelopment.com

Attachment

CC: Kevin Lyden (1st Selectman, SALEM, CT)
Richard Serra (Planner, SALEM, CT)
JUSTINE PAUL (Land/Tower Owner - American Tower Corporation)



Property Information

Property Location	153 EAST HADDAM RD
Owner	AMERICAN TOWER CORP
Co-Owner	
Mailing Address	P O BOX 723597 ATLANTA GA 31139
Land Use	4331 Cell Tower
Land Class	I
Zoning Code	HC
Census Tract	7151

Neighborhood	C100
Acreage	5.21
Utilities	
Lot Setting/Desc	
Additional Info	

Photo



Sketch

Primary Construction Details

Year Built	
Stories	
Building Style	
Building Use	
Building Condition	
Floors	
Total Rooms	

Bedrooms	
Full Bathrooms	
Half Bathrooms	
Bath Style	
Kitchen Style	
Roof Style	
Roof Cover	

Exterior Walls	
Interior Walls	
Heating Type	
Heating Fuel	
AC Type	
Gross Bldg Area	
Total Living Area	



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

SPRINT Existing Facility

Site ID: CT33XC578

(R2E) CT4995 to CT33-578 Salem/American Tower
153 East Haddam Road (Rt 82)
Salem, CT 06420

June 7, 2018

EBI Project Number: 6218004302

Site Compliance Summary	
Compliance Status:	COMPLIANT
Site total MPE% of FCC general population allowable limit:	4.91 %



June 7, 2018

SPRINT

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

Emissions Analysis for Site: **CT33XC578 – (R2E) CT4995 to CT33-578 Salem/American Tower**

EBI Consulting was directed to analyze the proposed SPRINT facility located at **153 East Haddam Road (Rt 82), Salem, CT**, for the purpose of determining whether the emissions from the Proposed SPRINT Antenna Installation located 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 population 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 population 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.

General population 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 limits for the 850 MHz Band is approximately $567 \mu\text{W}/\text{cm}^2$. The general population exposure limit for the 1900 MHz (PCS) and 2500 MHz (BRS) bands 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 SPRINT Wireless antenna facility located at **153 East Haddam Road (Rt 82), Salem, CT**, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since SPRINT is proposing highly focused directional panel antennas, which project most of the emitted energy out toward the horizon, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was focused at the base of the tower. 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 equipment was calculated using the following assumptions:

- 1) 1 CDMA channels (850 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 20 Watts per Channel.
- 2) 2 LTE channels (850 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 50 Watts per Channel.
- 3) 5 CDMA channels (1900 MHz (PCS)) were considered for each sector of the proposed installation. These Channels have a transmit power of 16 Watts per Channel.
- 4) 2 LTE channels (1900 MHz (PCS)) were considered for each sector of the proposed installation. These Channels have a transmit power of 40 Watts per Channel.
- 5) 8 LTE channels (2500 MHz (BRS)) were considered for each sector of the proposed installation. These Channels have a transmit power of 20 Watts per Channel.



- 6) 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.
- 7) For the following calculations, the sample point was the top of a 6-foot person standing at the base of the tower. The maximum gain of the antenna per the antenna manufactures supplied specifications minus 10 dB was used in this direction. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.
- 8) The antennas used in this modeling are the **Commscope NNVV-65B-R4 and the RFS APXVTM14-ALU-I20** for transmission in the 850 MHz, 1900 MHz (PCS) and 2500 MHz (BRS) frequency bands. This is based on feedback from the carrier with regards to anticipated antenna selection. Maximum gain values for all antennas are listed in the Inventory and Power Data table below. The maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.
- 9) The antenna mounting height centerlines of the proposed antennas are **150 feet** above ground level (AGL) for **Sector A**, **150 feet** above ground level (AGL) for **Sector B** and **150 feet** above ground level (AGL) for Sector C.
- 10) 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 calculations were done with respect to uncontrolled / general population threshold limits.



SPRINT Site Inventory and Power Data by Antenna

Sector:	A	Sector:	B	Sector:	C
Antenna #:	1	Antenna #:	1	Antenna #:	1
Make / Model:	Commscope NNVV-65B-R4	Make / Model:	Commscope NNVV-65B-R4	Make / Model:	Commscope NNVV-65B-R4
Gain:	12.75 / 15.05 dBd	Gain:	12.75 / 15.05 dBd	Gain:	12.75 / 15.05 dBd
Height (AGL):	150 feet	Height (AGL):	150 feet	Height (AGL):	150 feet
Frequency Bands	850 MHz / 1900 MHz (PCS)	Frequency Bands	850 MHz / 1900 MHz (PCS)	Frequency Bands	850 MHz / 1900 MHz (PCS)
Channel Count	10	Channel Count	10	Channel Count	10
Total TX Power(W):	280 Watts	Total TX Power(W):	280 Watts	Total TX Power(W):	280 Watts
ERP (W):	7,378.61	ERP (W):	7,378.61	ERP (W):	7,378.61
Antenna A1 MPE%	1.58 %	Antenna B1 MPE%	1.58 %	Antenna C1 MPE%	1.58 %
Antenna #:	2	Antenna #:	2	Antenna #:	2
Make / Model:	RFS APXVTM14-ALU-I20	Make / Model:	RFS APXVTM14-ALU-I20	Make / Model:	RFS APXVTM14-ALU-I20
Gain:	15.9 dBd	Gain:	15.9 dBd	Gain:	15.9 dBd
Height (AGL):	150 feet	Height (AGL):	150 feet	Height (AGL):	150 feet
Frequency Bands	2500 MHz (BRS)	Frequency Bands	2500 MHz (BRS)	Frequency Bands	2500 MHz (BRS)
Channel Count	8	Channel Count	8	Channel Count	8
Total TX Power(W):	160 Watts	Total TX Power(W):	160 Watts	Total TX Power(W):	160 Watts
ERP (W):	6,224.72	ERP (W):	6,224.72	ERP (W):	6,224.72
Antenna A2 MPE%	1.08 %	Antenna B2 MPE%	1.08 %	Antenna C2 MPE%	1.08 %

Site Composite MPE%	
Carrier	MPE%
SPRINT – Max per sector	2.66 %
T-Mobile	1.20 %
AT&T	1.05 %
Site Total MPE %:	4.91 %

SPRINT Sector A Total:	2.66 %
SPRINT Sector B Total:	2.66 %
SPRINT Sector C Total:	2.66 %
Site Total:	4.91 %

SPRINT _ Frequency Band / Technology (All Sectors)	# Channels	Watts ERP (Per Channel)	Height (feet)	Total Power Density ($\mu\text{W}/\text{cm}^2$)	Frequency (MHz)	Allowable MPE ($\mu\text{W}/\text{cm}^2$)	Calculated % MPE
Sprint 850 MHz CDMA	1	376.73	150	0.65	850 MHz	567	0.12%
Sprint 850 MHz LTE	2	941.82	150	3.27	850 MHz	567	0.58%
Sprint 1900 MHz (PCS) CDMA	5	511.82	150	4.44	1900 MHz (PCS)	1000	0.44%
Sprint 1900 MHz (PCS) LTE	2	1,279.56	150	4.44	1900 MHz (PCS)	1000	0.44%
Sprint 2500 MHz (BRS) LTE	8	778.09	150	10.79	2500 MHz (BRS)	1000	1.08%
						Total:	2.66%



Summary

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

The anticipated maximum composite contributions from the SPRINT facility as well as the site composite emissions value with regards to compliance with FCC's allowable limits for general population exposure to RF Emissions are shown here:

SPRINT Sector	Power Density Value (%)
Sector A:	2.66 %
Sector B:	2.66 %
Sector C:	2.66 %
SPRINT Maximum Total (per sector):	2.66 %
Site Total:	4.91 %
Site Compliance Status:	COMPLIANT

The anticipated composite MPE value for this site assuming all carriers present is **4.91 %** of the allowable FCC established general population 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.



AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure : 190 ft Self Supported Tower
ATC Site Name : Salem CT, CT
ATC Site Number : 10027
Engineering Number : OAA714423_C3_03
Proposed Carrier : Sprint Nextel
Carrier Site Name : Salem CT
Carrier Site Number : CT33XC578
Site Location : Intersection of Connecticut Rt. 82 and Rt. 11
Salem, CT 06420-3903
41.468500,-72.273300
County : New London
Date : March 22, 2018
Max Usage : 63%
Result : Pass

Prepared By:
Charles Dalton Wally, E.I.
Structural Engineer I

Reviewed By:

COA: PEC.0001553



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Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 190 ft self supported tower to reflect the change in loading by Sprint Nextel.

Supporting Documents

Tower Drawings	PiRod 204997-B, dated September 21, 1999
Foundation Drawing	PiRod 204997-B, dated September 21, 1999
Geotechnical Report	Tectonic Engineering Consultants P.C 2174.Salem, dated August 27, 1999

Analysis

The tower was analyzed using American Tower Corporation's tower analysis software. This program considers an elastic three-dimensional model and second-order effects per ANSI/TIA-222.

Basic Wind Speed:	105 mph (3-Second Gust, V_{asd}) / 135 mph (3-Second Gust, V_{ult})
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 3/4" radial ice concurrent
Code:	ANSI/TIA-222-G / 2012 IBC / 2016 Connecticut State Building Code
Structure Class:	II
Exposure Category:	B
Topographic Category:	1
Crest Height:	0 ft
Spectral Response:	$S_s = 0.17$, $S_1 = 0.06$
Site Class:	D - Stiff Soil

Conclusion

Based on the analysis results, the structure meets the requirements per the applicable codes listed above. The tower and foundation can support the equipment as described in this report.

If you have any questions or require additional information, please contact American Tower via email at Engineering@americantower.com. Please include the American Tower site name, site number, and engineering number in the subject line for any questions.



Existing and Reserved Equipment

Elevation ¹ (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
187.0	189.0	1	Raycap DC6-48-60-18-8F	Sector Frames	(12) 1 5/8" Coax (2) 0.78" 8 AWG 6 (1) 0.39" Fiber Trunk	AT&T Mobility
		3	Ericsson RRUS-11 800MHz			
		1	Andrew SBNH-1D6565C			
		2	Powerwave P65-17-XLH-RR			
		6	LGP LGP21903			
		6	Powerwave LGP21401			
		6	Allgon 7770.00			
175.0	175.0	3	Commscope LNX-6515DS-A1M	Sector Frames	(1) 1 5/8" Fiber	T-Mobile
		3	RFS APX16DWV-16DWVS-E-A20			
		3	Ericsson RRUS 11 B2			
		3	Ericsson RRUS 11 B4			
		3	Ericsson RRUS 11 B12			
150.0	-	-	-	Sector Frames	(6) 1 5/8" Coax	Sprint Nextel

Equipment to be Removed

Elevation ¹ (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
150.0	150.0	12	Decibel DB980F65E-M	-	(6) 1 5/8" Coax	Sprint Nextel

Proposed Equipment

Elevation ¹ (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
150.0	150.0	3	RFS APXVTM14-ALU-I20	Sector Frames w/ Site Pro 1 STK-U Stabilizers	(4) 1 1/4" Hybriflex	Sprint Nextel
		3	Commscope NNVV-65B-R4			
		3	Alcatel-Lucent TD-RRH8x20-25 w/ Solar Shield			
		3	Alcatel-Lucent 1900MHz 4x45 RRH			
		6	Alcatel-Lucent RRH2x50-08			
75.0	75.0	1	GPS	Stand-Off	(1) 1/2" Coax	

¹Mount elevation is defined as height above bottom of steel structure to the bottom of mount, RAD elevation is defined as center of antenna above ground level (AGL).

Install proposed coax alongside existing Sprint Nextel coax.



Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Legs	60%	Pass
Diagonals	63%	Pass
Horizontals	38%	Pass
Anchor Bolts	41%	Pass
Leg Bolts	44%	Pass

Foundations

Reaction Component	Original Design Reactions	Factored Design Reactions*	Analysis Reactions	% of Design
Uplift (Kips)	344.3	464.8	226.6	49%
Axial (Kips)	385.3	520.2	263.9	51%
Shear (Kips)	59.7	80.6	40.0	50%

* 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 those shown on the original structure drawings, therefore no modification or reinforcement of the foundation will be required.

Deflection, Twist and Sway*

Antenna Elevation (ft)	Antenna	Carrier	Deflection (ft)	Twist (°)	Sway (Rotation) (°)
150.0	Alcatel-Lucent 1900 MHz 4x45 RRH	Sprint Nextel	0.197	0.010	0.189
	Alcatel-Lucent RRH2x50-08				
	Alcatel-Lucent TD-RRH8x20-25 w/ Solar Shield				
	Commscope NNVV-65B-R4				
75.0	RFS APXVTM14-ALU-I20		0.037	0.003	0.060
	GPS				

*Deflection, Twist and Sway was evaluated considering a design wind speed of 60 mph (3-Second Gust) per ANSI/TIA-222-G



Standard Conditions

All engineering services performed by A.T. Engineering Service, PLLC are prepared on the basis that the information used is current and correct. This information may consist of, but is not limited to the following:

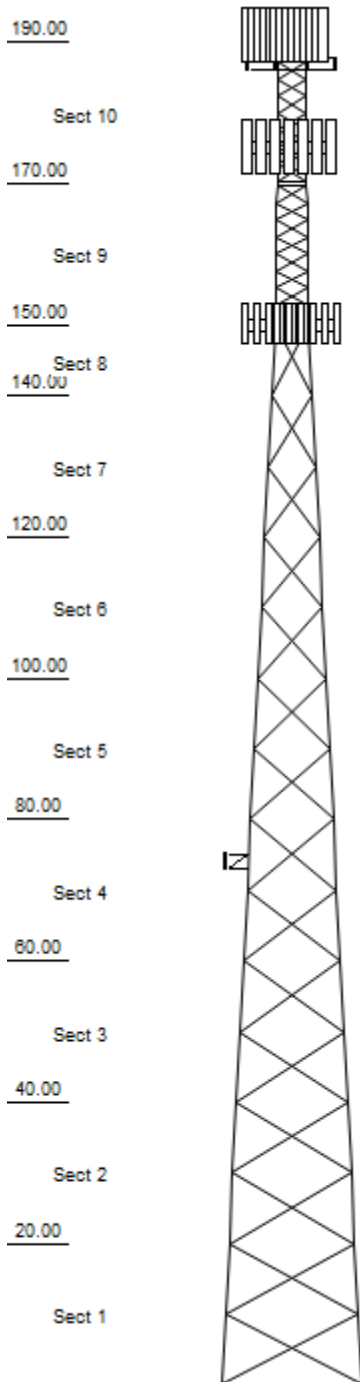
- Information supplied by the client regarding antenna, mounts and feed line loading
- Information from drawings, design and analysis documents, and field notes in the possession of A.T. Engineering Service, PLLC

It is the responsibility of the client to ensure that the information provided to A.T. Engineering Service, PLLC and used in the performance of our engineering services is correct and complete.

All assets of American Tower Corporation, its affiliates and subsidiaries (collectively "American Tower") are inspected at regular intervals. Based upon these inspections and in the absence of information to the contrary, American Tower assumes that all structures were constructed in accordance with the drawings and specifications.

Unless explicitly agreed by both the client and A.T. Engineering Service, PLLC, all services will be performed in accordance with the current revision of ANSI/TIA-222.

All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. A.T. Engineering Service, PLLC is not responsible for the conclusions, opinions and recommendations made by others based on the information supplied herein.



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Loads: 105 mph no ice
 50 mph w/ 3/4" radial ice
 Site Class: D Ss: 0.17 S1: 0.06
 60 mph Serviceability

Job Information		
Tower : 10027	Location : SALEM CT, CT	Base Width : 20.00 ft
Client : SPRINT NEXTEL		Top Width : 4.00 ft
Code : ANSI/TIA-222-G		Tower Ht : 190.00 ft
		Shape : Triangle

Sections Properties			
Section	Leg Members	Diagonal Members	Horizontal Members
1 - 2	12B 50 ksi 12"BD 2.25"	SAE 36 ksi 3.5X3.5X0.3125	
3 - 4	12B 50 ksi 12"BD 2"	SAE 36 ksi 3X3X0.3125	
5	12B 50 ksi 12"BD 1.75"	SAE 36 ksi 3X3X0.1875	
6 - 7	12B 50 ksi 12"BD 1.5"	SAE 36 ksi 3X3X0.1875	
8	12B 50 ksi 12"BD 1.25"	SAE 36 ksi 2.5X2.5X0.1875	
9	SOL 50 ksi 2" SOLID	SOL 50 ksi 1" SOLID	SOL 50 ksi 1" SOLID
10	SOL 50 ksi 1 1/2" SOLID	SOL 50 ksi 3/4" SOLID	SOL 50 ksi 3/4" SOLID

Discrete Appurtenance			
Elev (ft)	Type	Qty	Description
187.00	Panel	1	Raycap DC6-48-60-18-8F
187.00	Panel	3	Ericsson RRUS-11 800 MHz
187.00	Panel	1	Andrew SBNH-1D6565C
187.00	Panel	2	Powerwave P65-17-XLH-RR
187.00	Panel	6	LGP Allgon LGP21903
187.00	Panel	6	Powerwave LGP21401
187.00	Panel	6	Allgon 7770.00
187.00	Mounting Frame	3	Flat Light Sector Frame
175.00	Mounting Frame	3	Flat Light Sector Frame
175.00	Panel	3	Commscope LNX-6515DS-A1M
175.00	Panel	3	RFS APX16DWV-16DWVS-E-A20
175.00	Panel	3	Ericsson RRUS 11 B2
175.00	Panel	3	Ericsson RRUS 11 B4
175.00	Panel	3	Ericsson RRUS 11 B12
150.00	Panel	3	RFS APXVTM14-ALU-I20
150.00	Panel	3	Commscope NNVV-65B-R4
150.00	Panel	3	Alcatel-Lucent TD-RRH8x20-25 w
150.00	Panel	3	Alcatel-Lucent 1900 MHz 4x45 R
150.00	Panel	6	Alcatel-Lucent RRH2x50-08
150.00	Mounting Frame	3	Round Sector Frame
75.00	Straight Arm	1	Stand-Off
75.00	Whip	1	GPS

Linear Appurtenance			
Elev (ft)	From	To	Qty Description
0.00	187.00	187.00	1 Waveguide
0.00	187.00	187.00	12 1 5/8" Coax
0.00	187.00	187.00	2 0.78" 8 AWG 6
0.00	187.00	187.00	1 0.39" Fiber Trunk
0.00	175.00	175.00	1 Waveguide
0.00	175.00	175.00	1 1 5/8" Fiber
0.00	150.00	150.00	1 Waveguide
0.00	150.00	150.00	6 1 5/8" Coax
0.00	150.00	150.00	4 1 1/4" Hybriflex Cab
0.00	75.00	75.00	1 1/2" Coax

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Job Information		
Tower : 10027	Location : SALEM CT, CT	Base Width : 20.00 ft
Client : SPRINT NEXTEL		Top Width : 4.00 ft
Code : ANSI/TIA-222-G		Tower Ht : 190.00 ft
		Shape : Triangle

Global Base Foundation Design Loads			
Load Case	Moment (k-ft)	Vertical (kip)	Horizontal (kip)
DL + WL	4,284.93	49.66	39.98
DL + WL + IL	1,166.44	108.03	10.96

Individual Base Foundation Design Loads		
Vertical (kip)	Uplift (kip)	Horizontal (kip)
263.94	226.61	26.08

Site Number: 10027

Code:

ANSI/TIA-222-G

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Site Name: SALEM CT, CT

Engineering Number: OAA714423_C3_03

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Customer: SPRINT NEXTEL

Analysis Parameters

Location:	NEW LONDON County, CT	Height (ft):	190
Code:	ANSI/TIA-222-G	Base Elevation (ft):	0.00
Shape:	Triangle	Bottom Face Width (ft):	20.00
Tower Manufacturer:	Pirod	Top Face Width (ft):	4.00
Tower Type:	Self Support	Anchor Bolt Detail Type	c
Kd:			
Ke:			

Ice & Wind Parameters

Structure Class:	II	Design Windspeed Without Ice:	105 mph
Exposure Category:	B	Design Windspeed With Ice:	50 mph
Topographic Category:	1	Operational Windspeed:	60 mph
Crest Height:	0 ft	Design Ice Thickness:	0.75 in

Seismic Parameters

Analysis Method:	Equivalent Modal Analysis & Equivalent Lateral Force Methods		
Site Class:	D - Stiff Soil		
Period Based on Rayleigh Method (sec):	0.98		
T _L (sec):	6	p:	1.3
S _s :	0.169	S ₁ :	0.060
F _a :	1.600	F _v :	2.400
S _{ds} :	0.180	S _{d1} :	0.096
		C _s :	0.033
		C _s , Max:	0.033
		C _s , Min:	0.030

Load Cases

1.2D + 1.6W Normal	105 mph Normal with No Ice
1.2D + 1.6W 60 deg	105 mph 60 degree with No Ice
1.2D + 1.6W 90 deg	105 mph 90 degree with No Ice
1.2D + 1.6W 120 deg	105 mph 120 degree with No Ice
1.2D + 1.6W 180 deg	105 mph 180 degree with No Ice
1.2D + 1.6W 210 deg	105 mph 210 degree with No Ice
1.2D + 1.6W 240 deg	105 mph 240 degree with No Ice
1.2D + 1.6W 300 deg	105 mph 300 degree with No Ice
1.2D + 1.6W 330 deg	105 mph 330 degree with No Ice
0.9D + 1.6W Normal	105 mph Normal with No Ice (Reduced DL)
0.9D + 1.6W 60 deg	105 mph 60 deg with No Ice (Reduced DL)
0.9D + 1.6W 90 deg	105 mph 90 deg with No Ice (Reduced DL)
0.9D + 1.6W 120 deg	105 mph 120 deg with No Ice (Reduced DL)
0.9D + 1.6W 180 deg	105 mph 180 deg with No Ice (Reduced DL)
0.9D + 1.6W 210 deg	105 mph 210 deg with No Ice (Reduced DL)
0.9D + 1.6W 240 deg	105 mph 240 deg with No Ice (Reduced DL)
0.9D + 1.6W 300 deg	105 mph 300 deg with No Ice (Reduced DL)
0.9D + 1.6W 330 deg	105 mph 330 deg with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi Normal	50 mph Normal with 0.75 in Radial Ice

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Analysis Parameters

1.2D + 1.0Di + 1.0Wi 60 deg	50 mph 60 deg with 0.75 in Radial Ice
1.2D + 1.0Di + 1.0Wi 90 deg	50 mph 90 deg with 0.75 in Radial Ice
1.2D + 1.0Di + 1.0Wi 120 deg	50 mph 120 deg with 0.75 in Radial Ice
1.2D + 1.0Di + 1.0Wi 180 deg	50 mph 180 deg with 0.75 in Radial Ice
1.2D + 1.0Di + 1.0Wi 210 deg	50 mph 210 deg with 0.75 in Radial Ice
1.2D + 1.0Di + 1.0Wi 240 deg	50 mph 240 deg with 0.75 in Radial Ice
1.2D + 1.0Di + 1.0Wi 300 deg	50 mph 300 deg with 0.75 in Radial Ice
1.2D + 1.0Di + 1.0Wi 330 deg	50 mph 330 deg with 0.75 in Radial Ice
(1.2 + 0.2Sds) * DL + E Normal	Seismic Normal
(1.2 + 0.2Sds) * DL + E 60 deg	Seismic 60 deg
(1.2 + 0.2Sds) * DL + E 90 deg	Seismic 90 deg
(1.2 + 0.2Sds) * DL + E 120 deg	Seismic 120 deg
(1.2 + 0.2Sds) * DL + E 180 deg	Seismic 180 deg
(1.2 + 0.2Sds) * DL + E 210 deg	Seismic 210 deg
(1.2 + 0.2Sds) * DL + E 240 deg	Seismic 240 deg
(1.2 + 0.2Sds) * DL + E 300 deg	Seismic 300 deg
(1.2 + 0.2Sds) * DL + E 330 deg	Seismic 330 deg
(0.9 - 0.2Sds) * DL + E Normal	Seismic (Reduced DL) Normal
(0.9 - 0.2Sds) * DL + E 60 deg	Seismic (Reduced DL) 60 deg
(0.9 - 0.2Sds) * DL + E 90 deg	Seismic (Reduced DL) 90 deg
(0.9 - 0.2Sds) * DL + E 120 deg	Seismic (Reduced DL) 120 deg
(0.9 - 0.2Sds) * DL + E 180 deg	Seismic (Reduced DL) 180 deg
(0.9 - 0.2Sds) * DL + E 210 deg	Seismic (Reduced DL) 210 deg
(0.9 - 0.2Sds) * DL + E 240 deg	Seismic (Reduced DL) 240 deg
(0.9 - 0.2Sds) * DL + E 300 deg	Seismic (Reduced DL) 300 deg
(0.9 - 0.2Sds) * DL + E 330 deg	Seismic (Reduced DL) 330 deg
1.0D + 1.0W Service Normal	Serviceability - 60 mph Wind Normal
1.0D + 1.0W Service 60 deg	Serviceability - 60 mph Wind 60 deg
1.0D + 1.0W Service 90 deg	Serviceability - 60 mph Wind 90 deg
1.0D + 1.0W Service 120 deg	Serviceability - 60 mph Wind 120 deg
1.0D + 1.0W Service 180 deg	Serviceability - 60 mph Wind 180 deg
1.0D + 1.0W Service 210 deg	Serviceability - 60 mph Wind 210 deg
1.0D + 1.0W Service 240 deg	Serviceability - 60 mph Wind 240 deg
1.0D + 1.0W Service 300 deg	Serviceability - 60 mph Wind 300 deg
1.0D + 1.0W Service 330 deg	Serviceability - 60 mph Wind 330 deg

Site Number: 10027
 Site Name: SALEM CT, CT
 Customer: SPRINT NEXTEL

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Tower Loading

Discrete Appurtenance Properties 1.2D + 1.6W

Elevation (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K _a	Orient. Factor	Vert. Ecc.(ft)	M _u (lb-ft)	Q _z (psf)	F _a (WL) (lb)	P _a (DL) (lb)
187.0	Allgon 7770.00	6	35	5.5	4.6	11.0	5.0	0.80	0.65	2.0	1329.7	28.44	665	252
187.0	Andrew SBNH-	1	61	11.4	8.0	11.9	7.1	0.80	0.70	2.0	496.0	28.44	248	73
187.0	Ericsson RRUS-11	3	54	2.5	1.5	17.0	7.2	0.80	0.67	2.0	313.4	28.44	157	194
187.0	Flat Light Sector	3	400	17.9	0.0	0.0	0.0	0.75	0.75	0.0	0.0	28.35	1165	1440
187.0	LGP Allgon	6	6	0.3	0.4	6.3	3.0	0.80	0.50	2.0	50.1	28.44	25	40
187.0	Powerwave	6	14	1.1	1.2	9.2	2.6	0.80	0.50	2.0	204.2	28.44	102	102
187.0	Powerwave P65-17-	2	59	11.5	8.0	12.0	6.0	0.80	0.67	2.0	951.1	28.44	476	142
187.0	Raycap DC6-48-60-	1	20	1.1	2.0	9.7	9.7	0.80	1.00	2.0	68.7	28.44	34	24
175.0	Commscope LNX-	3	44	11.5	8.0	11.9	7.1	0.80	0.70	0.0	0.0	27.82	729	157
175.0	Ericsson RRUS 11	3	51	2.8	1.6	17.0	7.2	0.80	0.67	0.0	0.0	27.82	170	183
175.0	Ericsson RRUS 11 B2	3	51	2.8	1.6	17.0	7.2	0.80	0.67	0.0	0.0	27.82	170	183
175.0	Ericsson RRUS 11 B4	3	51	2.8	1.6	17.0	7.2	0.80	0.67	0.0	0.0	27.82	170	183
175.0	Flat Light Sector	3	400	17.9	0.0	0.0	0.0	0.75	0.75	0.0	0.0	27.82	1143	1440
175.0	RFS APX16DWV-	3	42	7.0	4.7	13.3	3.1	0.80	0.60	0.0	0.0	27.82	382	151
150.0	Alcatel-Lucent 1900	3	60	2.3	2.1	11.1	10.7	0.80	0.67	0.0	0.0	26.62	135	216
150.0	Alcatel-Lucent	6	53	1.7	1.3	13.0	9.8	0.80	0.50	0.0	0.0	26.62	148	381
150.0	Alcatel-Lucent TD-	3	70	4.1	2.2	18.6	6.7	0.80	0.67	0.0	0.0	26.62	236	252
150.0	Commscope NNVV-	3	77	12.3	6.0	19.6	7.8	0.80	0.64	0.0	0.0	26.62	682	279
150.0	RFS APXVTM14-ALU-	3	56	6.3	4.7	12.6	6.3	0.80	0.66	0.0	0.0	26.62	364	202
150.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.0	26.62	880	1080
75.00	GPS	1	10	1.0	0.5	9.0	6.0	1.00	1.00	0.0	0.0	21.84	30	12
75.00	Stand-Off	1	100	3.0	0.0	0.0	0.0	1.00	1.00	0.0	0.0	21.84	89	120
Totals		69	5920	404.6									8197	7104

Discrete Appurtenance Properties 0.9D + 1.6W

Elevation (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K _a	Orient. Factor	Vert. Ecc.(ft)	M _u (lb-ft)	Q _z (psf)	F _a (WL) (lb)	P _a (DL) (lb)
187.0	Allgon 7770.00	6	35	5.5	4.6	11.0	5.0	0.80	0.65	2.0	1329.7	28.44	665	189
187.0	Andrew SBNH-	1	61	11.4	8.0	11.9	7.1	0.80	0.70	2.0	496.0	28.44	248	55
187.0	Ericsson RRUS-11	3	54	2.5	1.5	17.0	7.2	0.80	0.67	2.0	313.4	28.44	157	146
187.0	Flat Light Sector	3	400	17.9	0.0	0.0	0.0	0.75	0.75	0.0	0.0	28.35	1165	1080
187.0	LGP Allgon	6	6	0.3	0.4	6.3	3.0	0.80	0.50	2.0	50.1	28.44	25	30
187.0	Powerwave	6	14	1.1	1.2	9.2	2.6	0.80	0.50	2.0	204.2	28.44	102	76
187.0	Powerwave P65-17-	2	59	11.5	8.0	12.0	6.0	0.80	0.67	2.0	951.1	28.44	476	106
187.0	Raycap DC6-48-60-	1	20	1.1	2.0	9.7	9.7	0.80	1.00	2.0	68.7	28.44	34	18
175.0	Commscope LNX-	3	44	11.5	8.0	11.9	7.1	0.80	0.70	0.0	0.0	27.82	729	118
175.0	Ericsson RRUS 11	3	51	2.8	1.6	17.0	7.2	0.80	0.67	0.0	0.0	27.82	170	137
175.0	Ericsson RRUS 11 B2	3	51	2.8	1.6	17.0	7.2	0.80	0.67	0.0	0.0	27.82	170	137
175.0	Ericsson RRUS 11 B4	3	51	2.8	1.6	17.0	7.2	0.80	0.67	0.0	0.0	27.82	170	137
175.0	Flat Light Sector	3	400	17.9	0.0	0.0	0.0	0.75	0.75	0.0	0.0	27.82	1143	1080
175.0	RFS APX16DWV-	3	42	7.0	4.7	13.3	3.1	0.80	0.60	0.0	0.0	27.82	382	113
150.0	Alcatel-Lucent 1900	3	60	2.3	2.1	11.1	10.7	0.80	0.67	0.0	0.0	26.62	135	162
150.0	Alcatel-Lucent	6	53	1.7	1.3	13.0	9.8	0.80	0.50	0.0	0.0	26.62	148	286
150.0	Alcatel-Lucent TD-	3	70	4.1	2.2	18.6	6.7	0.80	0.67	0.0	0.0	26.62	236	189
150.0	Commscope NNVV-	3	77	12.3	6.0	19.6	7.8	0.80	0.64	0.0	0.0	26.62	682	209
150.0	RFS APXVTM14-ALU-	3	56	6.3	4.7	12.6	6.3	0.80	0.66	0.0	0.0	26.62	364	152
150.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.0	26.62	880	810
75.00	GPS	1	10	1.0	0.5	9.0	6.0	1.00	1.00	0.0	0.0	21.84	30	9
75.00	Stand-Off	1	100	3.0	0.0	0.0	0.0	1.00	1.00	0.0	0.0	21.84	89	90

Site Number: 10027
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Tower Loading

Totals 69 5920 404.6 8197 5328

Discrete Appurtenance Properties 1.2D + 1.0Di + 1.0Wi

Elevation (ft)	Description	Qty	Ice Wt (lb)	Ice EPA (sf)	Length (ft)	Width (in)	Depth (in)	K _a	Orient. Factor	Vert. Ecc.(ft)	M _u (lb-ft)	Q _z (psf)	F _a (WL) (lb)	P _a (DL) (lb)		
187.0	Allgon 7770.00	6	173	6.6	4.6	11.0	5.0	0.80	0.65	2.0	225.1	6.45	113	1081		
187.0	Andrew SBNH-	1	330	13.1	8.0	11.9	7.1	0.80	0.70	2.0	80.6	6.45	40	342		
187.0	Ericsson RRUS-11	3	136	3.2	1.5	17.0	7.2	0.80	0.67	2.0	56.0	6.45	28	441		
187.0	Flat Light Sector	3	707	33.3	0.0	0.0	0.0	0.75	0.75	0.0	0.0	6.43	307	2361		
187.0	LGP Allgon	6	20	0.5	0.4	6.3	3.0	0.80	0.50	2.0	12.6	6.45	6	124		
187.0	Powerwave	6	49	1.6	1.2	9.2	2.6	0.80	0.50	2.0	41.4	6.45	21	309		
187.0	Powerwave P65-17-	2	314	13.2	8.0	12.0	6.0	0.80	0.67	2.0	154.6	6.45	77	653		
187.0	Raycap DC6-48-60-	1	102	2.5	2.0	9.7	9.7	0.80	1.00	2.0	22.2	6.45	11	106		
175.0	Commscope LNX-	3	313	13.1	8.0	11.9	7.1	0.80	0.70	0.0	0.0	6.31	118	965		
175.0	Ericsson RRUS 11	3	139	3.5	1.6	17.0	7.2	0.80	0.67	0.0	0.0	6.31	30	448		
175.0	Ericsson RRUS 11 B2	3	139	3.5	1.6	17.0	7.2	0.80	0.67	0.0	0.0	6.31	30	448		
175.0	Ericsson RRUS 11 B4	3	139	3.5	1.6	17.0	7.2	0.80	0.67	0.0	0.0	6.31	30	448		
175.0	Flat Light Sector	3	707	33.3	0.0	0.0	0.0	0.75	0.75	0.0	0.0	6.31	301	2361		
175.0	RFS APX16DWV-	3	183	7.7	4.7	13.3	3.1	0.80	0.60	0.0	0.0	6.31	60	575		
150.0	Alcatel-Lucent 1900	3	155	3.0	2.1	11.1	10.7	0.80	0.67	0.0	0.0	6.04	25	500		
150.0	Alcatel-Lucent	6	124	2.2	1.3	13.0	9.8	0.80	0.50	0.0	0.0	6.04	28	808		
150.0	Alcatel-Lucent TD-	3	164	5.4	2.2	18.6	6.7	0.80	0.67	0.0	0.0	6.04	44	535		
150.0	Commscope NNVV-	3	357	13.7	6.0	19.6	7.8	0.80	0.64	0.0	0.0	6.04	108	1119		
150.0	RFS APXVTM14-ALU-	3	216	7.4	4.7	12.6	6.3	0.80	0.66	0.0	0.0	6.04	61	681		
150.0	Round Sector Frame	3	667	30.9	0.0	0.0	0.0	0.75	0.75	0.0	0.0	6.04	268	2182		
75.00	GPS	1	33	0.5	0.5	9.0	6.0	1.00	1.00	0.0	0.0	4.95	2	35		
75.00	Stand-Off	1	145	4.5	0.0	0.0	0.0	1.00	1.00	0.0	0.0	4.95	19	165		
Totals		69	15504	597.0											1727	16688

Discrete Appurtenance Properties 1.0D + 1.0W Service

Elevation (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K _a	Orient. Factor	Vert. Ecc.(ft)	M _u (lb-ft)	Q _z (psf)	F _a (WL) (lb)	P _a (DL) (lb)
187.0	Allgon 7770.00	6	35	5.5	4.6	11.0	5.0	0.80	0.65	2.0	271.4	9.29	136	210
187.0	Andrew SBNH-	1	61	11.4	8.0	11.9	7.1	0.80	0.70	2.0	101.2	9.29	51	61
187.0	Ericsson RRUS-11	3	54	2.5	1.5	17.0	7.2	0.80	0.67	2.0	64.0	9.29	32	162
187.0	Flat Light Sector	3	400	17.9	0.0	0.0	0.0	0.75	0.75	0.0	0.0	9.26	238	1200
187.0	LGP Allgon	6	6	0.3	0.4	6.3	3.0	0.80	0.50	2.0	10.2	9.29	5	33
187.0	Powerwave	6	14	1.1	1.2	9.2	2.6	0.80	0.50	2.0	41.7	9.29	21	85
187.0	Powerwave P65-17-	2	59	11.5	8.0	12.0	6.0	0.80	0.67	2.0	194.1	9.29	97	118
187.0	Raycap DC6-48-60-	1	20	1.1	2.0	9.7	9.7	0.80	1.00	2.0	14.0	9.29	7	20
175.0	Commscope LNX-	3	44	11.5	8.0	11.9	7.1	0.80	0.70	0.0	0.0	9.08	149	131
175.0	Ericsson RRUS 11	3	51	2.8	1.6	17.0	7.2	0.80	0.67	0.0	0.0	9.08	35	152
175.0	Ericsson RRUS 11 B2	3	51	2.8	1.6	17.0	7.2	0.80	0.67	0.0	0.0	9.08	35	152
175.0	Ericsson RRUS 11 B4	3	51	2.8	1.6	17.0	7.2	0.80	0.67	0.0	0.0	9.08	35	152
175.0	Flat Light Sector	3	400	17.9	0.0	0.0	0.0	0.75	0.75	0.0	0.0	9.08	233	1200
175.0	RFS APX16DWV-	3	42	7.0	4.7	13.3	3.1	0.80	0.60	0.0	0.0	9.08	78	126
150.0	Alcatel-Lucent 1900	3	60	2.3	2.1	11.1	10.7	0.80	0.67	0.0	0.0	8.69	28	180
150.0	Alcatel-Lucent	6	53	1.7	1.3	13.0	9.8	0.80	0.50	0.0	0.0	8.69	30	317
150.0	Alcatel-Lucent TD-	3	70	4.1	2.2	18.6	6.7	0.80	0.67	0.0	0.0	8.69	48	210
150.0	Commscope NNVV-	3	77	12.3	6.0	19.6	7.8	0.80	0.64	0.0	0.0	8.69	139	232
150.0	RFS APXVTM14-ALU-	3	56	6.3	4.7	12.6	6.3	0.80	0.66	0.0	0.0	8.69	74	169
150.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.0	8.69	180	900

Site Number: 10027
Site Name: SALEM CT, CT
Customer: SPRINT NEXTEL

Code: ANSI/TIA-222-G
Engineering Number: OAA714423_C3_03

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Tower Loading

75.00 GPS	1	10	1.0	0.5	9.0	6.0	1.00	1.00	0.0	0.0	7.13	6	10
75.00 Stand-Off	1	100	3.0	0.0	0.0	0.0	1.00	1.00	0.0	0.0	7.13	18	100
Totals	69	5920	404.6									1673	5920

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Tower Loading

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
0.00	187.0	0.39" Fiber Trunk	1	0.39	0.06	0	2	Individual	0.00	N	1.00	1.00	0.00
0.00	187.0	0.78" 8 AWG 6	2	0.78	0.59	0	2	Individual	0.00	N	1.00	1.00	0.00
0.00	187.0	1 5/8" Coax	12	1.98	0.82	50	2	Block	0.00	N	0.50	1.00	0.00
0.00	187.0	Waveguide	1	2.00	6.00	0	2	Individual	0.00	N	1.00	1.00	0.00
0.00	175.0	1 5/8" Fiber	1	1.63	1.61	0	3	Individual	0.00	N	1.00	1.00	0.00
0.00	175.0	Waveguide	1	2.00	6.00	0	3	Individual	0.00	N	1.00	1.00	0.00
0.00	150.0	1 1/4" Hybriflex	4	1.54	1.00	0	Lin App	Individual	0.00	N	1.00	1.00	0.00
0.00	150.0	1 5/8" Coax	6	1.98	0.82	0	1	Individual	0.00	N	1.00	1.00	0.00
0.00	150.0	Waveguide	1	2.00	6.00	0	1	Individual	0.00	N	1.00	1.00	0.00
0.00	75.00	1/2" Coax	1	0.63	0.15	0	1	Individual	0.00	N	1.00	1.00	0.00

Site Number: 10027
 Site Name: SALEM CT, CT
 Customer: SPRINT NEXTEL

Code: ANSI/TIA-222-G
 Engineering Number: OAA714423_C3_03

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Section Forces

LoadCase 1.2D + 1.6W Normal

105 mph Normal with No Ice

Gust Response Factor (Gh): 0.85

Wind Importance Factor (Iw) : 1.00

Section	Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{bi} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
10	180.00	28.04	0.000	10.276	0.000	0.117	2.89	1.00	1.00	0.0	5.89	17.04	0.00	1296	0	650	946	1596
9	160.00	27.12	0.000	14.309	0.000	0.146	2.79	1.00	1.00	0.0	8.26	23.02	0.00	2274	0	849	1190	2039
8	145.00	26.36	4.586	7.813	0.000	0.211	2.56	1.00	1.00	0.0	8.76	22.43	0.00	1557	0	804	1038	1842
7	130.00	25.55	11.787	17.229	0.000	0.195	2.61	1.00	1.00	0.0	20.64	53.92	0.00	3695	0	1874	2013	3886
6	110.00	24.36	13.022	17.229	0.000	0.160	2.73	1.00	1.00	0.0	21.77	59.50	0.00	3761	0	1972	1919	3890
5	90.00	23.01	14.383	18.831	0.000	0.145	2.79	1.00	1.00	0.0	23.61	65.89	0.00	4291	0	2061	1812	3873
4	70.00	21.41	15.857	22.037	0.000	0.140	2.81	1.00	1.00	0.0	25.97	72.94	0.00	5712	0	2124	1703	3827
3	50.00	19.45	17.472	22.037	0.000	0.127	2.86	1.00	1.00	0.0	27.76	79.32	0.00	5856	0	2098	1552	3650
2	30.00	16.81	22.326	23.639	0.000	0.131	2.84	1.00	1.00	0.0	33.40	95.00	0.00	6966	0	2171	1341	3513
1	10.00	16.79	24.365	23.639	0.000	0.123	2.88	1.00	1.00	0.0	35.38	101.73	0.00	7147	0	2323	1340	3663
														42554	0			31780

LoadCase 1.2D + 1.6W 60 deg

105 mph 60 degree with No Ice

Gust Response Factor (Gh): 0.85

Wind Importance Factor (Iw) : 1.00

Section	Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{bi} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
10	180.00	28.04	0.000	10.276	0.000	0.117	2.89	0.80	1.00	0.0	5.89	17.04	0.00	1296	0	650	946	1596
9	160.00	27.12	0.000	14.309	0.000	0.146	2.79	0.80	1.00	0.0	8.26	23.02	0.00	2274	0	849	1190	2039
8	145.00	26.36	4.586	7.813	0.000	0.211	2.56	0.80	1.00	0.0	7.84	20.08	0.00	1557	0	720	1038	1758
7	130.00	25.55	11.787	17.229	0.000	0.195	2.61	0.80	1.00	0.0	18.29	47.76	0.00	3695	0	1660	2013	3672
6	110.00	24.36	13.022	17.229	0.000	0.160	2.73	0.80	1.00	0.0	19.16	52.38	0.00	3761	0	1736	1919	3655
5	90.00	23.01	14.383	18.831	0.000	0.145	2.79	0.80	1.00	0.0	20.73	57.86	0.00	4291	0	1810	1812	3622
4	70.00	21.41	15.857	22.037	0.000	0.140	2.81	0.80	1.00	0.0	22.79	64.03	0.00	5712	0	1865	1703	3568
3	50.00	19.45	17.472	22.037	0.000	0.127	2.86	0.80	1.00	0.0	24.26	69.34	0.00	5856	0	1834	1552	3386
2	30.00	16.81	22.326	23.639	0.000	0.131	2.84	0.80	1.00	0.0	28.94	82.30	0.00	6966	0	1881	1341	3222
1	10.00	16.79	24.365	23.639	0.000	0.123	2.88	0.80	1.00	0.0	30.51	87.72	0.00	7147	0	2003	1340	3343
														42554	0			29861

LoadCase 1.2D + 1.6W 90 deg

105 mph 90 degree with No Ice

Gust Response Factor (Gh): 0.85

Wind Importance Factor (Iw) : 1.00

Section	Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{bi} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
10	180.00	28.04	0.000	10.276	0.000	0.117	2.89	0.85	1.00	0.0	5.89	17.04	0.00	1296	0	650	946	1596
9	160.00	27.12	0.000	14.309	0.000	0.146	2.79	0.85	1.00	0.0	8.26	23.02	0.00	2274	0	849	1190	2039
8	145.00	26.36	4.586	7.813	0.000	0.211	2.56	0.85	1.00	0.0	8.07	20.67	0.00	1557	0	741	1038	1779
7	130.00	25.55	11.787	17.229	0.000	0.195	2.61	0.85	1.00	0.0	18.87	49.30	0.00	3695	0	1713	2013	3726
6	110.00	24.36	13.022	17.229	0.000	0.160	2.73	0.85	1.00	0.0	19.81	54.16	0.00	3761	0	1795	1919	3713
5	90.00	23.01	14.383	18.831	0.000	0.145	2.79	0.85	1.00	0.0	21.45	59.87	0.00	4291	0	1873	1812	3685
4	70.00	21.41	15.857	22.037	0.000	0.140	2.81	0.85	1.00	0.0	23.59	66.26	0.00	5712	0	1929	1703	3632
3	50.00	19.45	17.472	22.037	0.000	0.127	2.86	0.85	1.00	0.0	25.14	71.83	0.00	5856	0	1900	1552	3452
2	30.00	16.81	22.326	23.639	0.000	0.131	2.84	0.85	1.00	0.0	30.05	85.47	0.00	6966	0	1954	1341	3295
1	10.00	16.79	24.365	23.639	0.000	0.123	2.88	0.85	1.00	0.0	31.73	91.22	0.00	7147	0	2083	1340	3423

Site Number: 10027
 Site Name: SALEM CT, CT
 Customer: SPRINT NEXTEL

Code: ANSI/TIA-222-G
 Engineering Number: OAA714423_C3_03

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Section Forces

42554 0 30341

LoadCase 1.2D + 1.6W 120 deg

105 mph 120 degree with No Ice

Gust Response Factor (Gh): 0.85
 Wind Importance Factor (Iw) : 1.00

Section Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{si} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)	
10	180.00	28.04	0.000	10.276	0.000	0.117	2.89	1.00	1.00	0.0	5.89	17.04	0.00	1296	0	650	946	1596
9	160.00	27.12	0.000	14.309	0.000	0.146	2.79	1.00	1.00	0.0	8.26	23.02	0.00	2274	0	849	1190	2039
8	145.00	26.36	4.586	7.813	0.000	0.211	2.56	1.00	1.00	0.0	8.76	22.43	0.00	1557	0	804	1038	1842
7	130.00	25.55	11.787	17.229	0.000	0.195	2.61	1.00	1.00	0.0	20.64	53.92	0.00	3695	0	1874	2013	3886
6	110.00	24.36	13.022	17.229	0.000	0.160	2.73	1.00	1.00	0.0	21.77	59.50	0.00	3761	0	1972	1919	3890
5	90.00	23.01	14.383	18.831	0.000	0.145	2.79	1.00	1.00	0.0	23.61	65.89	0.00	4291	0	2061	1812	3873
4	70.00	21.41	15.857	22.037	0.000	0.140	2.81	1.00	1.00	0.0	25.97	72.94	0.00	5712	0	2124	1703	3827
3	50.00	19.45	17.472	22.037	0.000	0.127	2.86	1.00	1.00	0.0	27.76	79.32	0.00	5856	0	2098	1552	3650
2	30.00	16.81	22.326	23.639	0.000	0.131	2.84	1.00	1.00	0.0	33.40	95.00	0.00	6966	0	2171	1341	3513
1	10.00	16.79	24.365	23.639	0.000	0.123	2.88	1.00	1.00	0.0	35.38	101.73	0.00	7147	0	2323	1340	3663
													42554	0				31780

LoadCase 1.2D + 1.6W 180 deg

105 mph 180 degree with No Ice

Gust Response Factor (Gh): 0.85
 Wind Importance Factor (Iw) : 1.00

Section Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{si} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)	
10	180.00	28.04	0.000	10.276	0.000	0.117	2.89	0.80	1.00	0.0	5.89	17.04	0.00	1296	0	650	946	1596
9	160.00	27.12	0.000	14.309	0.000	0.146	2.79	0.80	1.00	0.0	8.26	23.02	0.00	2274	0	849	1190	2039
8	145.00	26.36	4.586	7.813	0.000	0.211	2.56	0.80	1.00	0.0	7.84	20.08	0.00	1557	0	720	1038	1758
7	130.00	25.55	11.787	17.229	0.000	0.195	2.61	0.80	1.00	0.0	18.29	47.76	0.00	3695	0	1660	2013	3672
6	110.00	24.36	13.022	17.229	0.000	0.160	2.73	0.80	1.00	0.0	19.16	52.38	0.00	3761	0	1736	1919	3655
5	90.00	23.01	14.383	18.831	0.000	0.145	2.79	0.80	1.00	0.0	20.73	57.86	0.00	4291	0	1810	1812	3622
4	70.00	21.41	15.857	22.037	0.000	0.140	2.81	0.80	1.00	0.0	22.79	64.03	0.00	5712	0	1865	1703	3568
3	50.00	19.45	17.472	22.037	0.000	0.127	2.86	0.80	1.00	0.0	24.26	69.34	0.00	5856	0	1834	1552	3386
2	30.00	16.81	22.326	23.639	0.000	0.131	2.84	0.80	1.00	0.0	28.94	82.30	0.00	6966	0	1881	1341	3222
1	10.00	16.79	24.365	23.639	0.000	0.123	2.88	0.80	1.00	0.0	30.51	87.72	0.00	7147	0	2003	1340	3343
													42554	0				29861

LoadCase 1.2D + 1.6W 210 deg

105 mph 210 degree with No Ice

Gust Response Factor (Gh): 0.85
 Wind Importance Factor (Iw) : 1.00

Section Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{si} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)	
10	180.00	28.04	0.000	10.276	0.000	0.117	2.89	0.85	1.00	0.0	5.89	17.04	0.00	1296	0	650	946	1596
9	160.00	27.12	0.000	14.309	0.000	0.146	2.79	0.85	1.00	0.0	8.26	23.02	0.00	2274	0	849	1190	2039
8	145.00	26.36	4.586	7.813	0.000	0.211	2.56	0.85	1.00	0.0	8.07	20.67	0.00	1557	0	741	1038	1779
7	130.00	25.55	11.787	17.229	0.000	0.195	2.61	0.85	1.00	0.0	18.87	49.30	0.00	3695	0	1713	2013	3726
6	110.00	24.36	13.022	17.229	0.000	0.160	2.73	0.85	1.00	0.0	19.81	54.16	0.00	3761	0	1795	1919	3713
5	90.00	23.01	14.383	18.831	0.000	0.145	2.79	0.85	1.00	0.0	21.45	59.87	0.00	4291	0	1873	1812	3685
4	70.00	21.41	15.857	22.037	0.000	0.140	2.81	0.85	1.00	0.0	23.59	66.26	0.00	5712	0	1929	1703	3632
3	50.00	19.45	17.472	22.037	0.000	0.127	2.86	0.85	1.00	0.0	25.14	71.83	0.00	5856	0	1900	1552	3452

Site Number: 10027
 Site Name: SALEM CT, CT
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Section Forces

2	30.00	16.81	22.326	23.639	0.000	0.131	2.84	0.85	1.00	0.0	30.05	85.47	0.00	6966	0	1954	1341	3295
1	10.00	16.79	24.365	23.639	0.000	0.123	2.88	0.85	1.00	0.0	31.73	91.22	0.00	7147	0	2083	1340	3423
														42554	0	30341		

LoadCase 1.2D + 1.6W 240 deg

105 mph 240 degree with No Ice

Gust Response Factor (Gh): 0.85

Wind Importance Factor (Iw) : 1.00

Section	Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{bi} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
10	180.00	28.04	0.000	10.276	0.000	0.117	2.89	1.00	1.00	0.0	5.89	17.04	0.00	1296	0	650	946	1596
9	160.00	27.12	0.000	14.309	0.000	0.146	2.79	1.00	1.00	0.0	8.26	23.02	0.00	2274	0	849	1190	2039
8	145.00	26.36	4.586	7.813	0.000	0.211	2.56	1.00	1.00	0.0	8.76	22.43	0.00	1557	0	804	1038	1842
7	130.00	25.55	11.787	17.229	0.000	0.195	2.61	1.00	1.00	0.0	20.64	53.92	0.00	3695	0	1874	2013	3886
6	110.00	24.36	13.022	17.229	0.000	0.160	2.73	1.00	1.00	0.0	21.77	59.50	0.00	3761	0	1972	1919	3890
5	90.00	23.01	14.383	18.831	0.000	0.145	2.79	1.00	1.00	0.0	23.61	65.89	0.00	4291	0	2061	1812	3873
4	70.00	21.41	15.857	22.037	0.000	0.140	2.81	1.00	1.00	0.0	25.97	72.94	0.00	5712	0	2124	1703	3827
3	50.00	19.45	17.472	22.037	0.000	0.127	2.86	1.00	1.00	0.0	27.76	79.32	0.00	5856	0	2098	1552	3650
2	30.00	16.81	22.326	23.639	0.000	0.131	2.84	1.00	1.00	0.0	33.40	95.00	0.00	6966	0	2171	1341	3513
1	10.00	16.79	24.365	23.639	0.000	0.123	2.88	1.00	1.00	0.0	35.38	101.73	0.00	7147	0	2323	1340	3663
														42554	0	31780		

LoadCase 1.2D + 1.6W 300 deg

105 mph 300 degree with No Ice

Gust Response Factor (Gh): 0.85

Wind Importance Factor (Iw) : 1.00

Section	Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{bi} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
10	180.00	28.04	0.000	10.276	0.000	0.117	2.89	0.80	1.00	0.0	5.89	17.04	0.00	1296	0	650	946	1596
9	160.00	27.12	0.000	14.309	0.000	0.146	2.79	0.80	1.00	0.0	8.26	23.02	0.00	2274	0	849	1190	2039
8	145.00	26.36	4.586	7.813	0.000	0.211	2.56	0.80	1.00	0.0	7.84	20.08	0.00	1557	0	720	1038	1758
7	130.00	25.55	11.787	17.229	0.000	0.195	2.61	0.80	1.00	0.0	18.29	47.76	0.00	3695	0	1660	2013	3672
6	110.00	24.36	13.022	17.229	0.000	0.160	2.73	0.80	1.00	0.0	19.16	52.38	0.00	3761	0	1736	1919	3655
5	90.00	23.01	14.383	18.831	0.000	0.145	2.79	0.80	1.00	0.0	20.73	57.86	0.00	4291	0	1810	1812	3622
4	70.00	21.41	15.857	22.037	0.000	0.140	2.81	0.80	1.00	0.0	22.79	64.03	0.00	5712	0	1865	1703	3568
3	50.00	19.45	17.472	22.037	0.000	0.127	2.86	0.80	1.00	0.0	24.26	69.34	0.00	5856	0	1834	1552	3386
2	30.00	16.81	22.326	23.639	0.000	0.131	2.84	0.80	1.00	0.0	28.94	82.30	0.00	6966	0	1881	1341	3222
1	10.00	16.79	24.365	23.639	0.000	0.123	2.88	0.80	1.00	0.0	30.51	87.72	0.00	7147	0	2003	1340	3343
														42554	0	29861		

LoadCase 1.2D + 1.6W 330 deg

105 mph 330 degree with No Ice

Gust Response Factor (Gh): 0.85

Wind Importance Factor (Iw) : 1.00

Section	Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{bi} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
10	180.00	28.04	0.000	10.276	0.000	0.117	2.89	0.85	1.00	0.0	5.89	17.04	0.00	1296	0	650	946	1596
9	160.00	27.12	0.000	14.309	0.000	0.146	2.79	0.85	1.00	0.0	8.26	23.02	0.00	2274	0	849	1190	2039
8	145.00	26.36	4.586	7.813	0.000	0.211	2.56	0.85	1.00	0.0	8.07	20.67	0.00	1557	0	741	1038	1779
7	130.00	25.55	11.787	17.229	0.000	0.195	2.61	0.85	1.00	0.0	18.87	49.30	0.00	3695	0	1713	2013	3726
6	110.00	24.36	13.022	17.229	0.000	0.160	2.73	0.85	1.00	0.0	19.81	54.16	0.00	3761	0	1795	1919	3713
5	90.00	23.01	14.383	18.831	0.000	0.145	2.79	0.85	1.00	0.0	21.45	59.87	0.00	4291	0	1873	1812	3685

Site Number: 10027
 Site Name: SALEM CT, CT
 Customer: SPRINT NEXTEL

Code: ANSI/TIA-222-G
 Engineering Number: OAA714423_C3_03

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4	70.00	21.41	15.857	22.037	0.000	0.140	2.81	0.85	1.00	0.0	23.59	66.26	0.00	5712	0	1929	1703	3632
3	50.00	19.45	17.472	22.037	0.000	0.127	2.86	0.85	1.00	0.0	25.14	71.83	0.00	5856	0	1900	1552	3452
2	30.00	16.81	22.326	23.639	0.000	0.131	2.84	0.85	1.00	0.0	30.05	85.47	0.00	6966	0	1954	1341	3295
1	10.00	16.79	24.365	23.639	0.000	0.123	2.88	0.85	1.00	0.0	31.73	91.22	0.00	7147	0	2083	1340	3423
														42554	0	30341		

LoadCase 0.9D + 1.6W Normal

105 mph Normal with No Ice (Reduced DL)

Gust Response Factor (Gh): 0.85

Wind Importance Factor (Iw) : 1.00

Section	Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
10	180.00	28.04	0.000	10.276	0.000	0.117	2.89	1.00	1.00	0.0	5.89	17.04	0.00	972	0	650	946	1596
9	160.00	27.12	0.000	14.309	0.000	0.146	2.79	1.00	1.00	0.0	8.26	23.02	0.00	1705	0	849	1190	2039
8	145.00	26.36	4.586	7.813	0.000	0.211	2.56	1.00	1.00	0.0	8.76	22.43	0.00	1168	0	804	1038	1842
7	130.00	25.55	11.787	17.229	0.000	0.195	2.61	1.00	1.00	0.0	20.64	53.92	0.00	2771	0	1874	2013	3886
6	110.00	24.36	13.022	17.229	0.000	0.160	2.73	1.00	1.00	0.0	21.77	59.50	0.00	2821	0	1972	1919	3890
5	90.00	23.01	14.383	18.831	0.000	0.145	2.79	1.00	1.00	0.0	23.61	65.89	0.00	3218	0	2061	1812	3873
4	70.00	21.41	15.857	22.037	0.000	0.140	2.81	1.00	1.00	0.0	25.97	72.94	0.00	4284	0	2124	1703	3827
3	50.00	19.45	17.472	22.037	0.000	0.127	2.86	1.00	1.00	0.0	27.76	79.32	0.00	4392	0	2098	1552	3650
2	30.00	16.81	22.326	23.639	0.000	0.131	2.84	1.00	1.00	0.0	33.40	95.00	0.00	5225	0	2171	1341	3513
1	10.00	16.79	24.365	23.639	0.000	0.123	2.88	1.00	1.00	0.0	35.38	101.73	0.00	5360	0	2323	1340	3663
														31916	0	31780		

LoadCase 0.9D + 1.6W 60 deg

105 mph 60 deg with No Ice (Reduced DL)

Gust Response Factor (Gh): 0.85

Wind Importance Factor (Iw) : 1.00

Section	Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
10	180.00	28.04	0.000	10.276	0.000	0.117	2.89	0.80	1.00	0.0	5.89	17.04	0.00	972	0	650	946	1596
9	160.00	27.12	0.000	14.309	0.000	0.146	2.79	0.80	1.00	0.0	8.26	23.02	0.00	1705	0	849	1190	2039
8	145.00	26.36	4.586	7.813	0.000	0.211	2.56	0.80	1.00	0.0	7.84	20.08	0.00	1168	0	720	1038	1758
7	130.00	25.55	11.787	17.229	0.000	0.195	2.61	0.80	1.00	0.0	18.29	47.76	0.00	2771	0	1660	2013	3672
6	110.00	24.36	13.022	17.229	0.000	0.160	2.73	0.80	1.00	0.0	19.16	52.38	0.00	2821	0	1736	1919	3655
5	90.00	23.01	14.383	18.831	0.000	0.145	2.79	0.80	1.00	0.0	20.73	57.86	0.00	3218	0	1810	1812	3622
4	70.00	21.41	15.857	22.037	0.000	0.140	2.81	0.80	1.00	0.0	22.79	64.03	0.00	4284	0	1865	1703	3568
3	50.00	19.45	17.472	22.037	0.000	0.127	2.86	0.80	1.00	0.0	24.26	69.34	0.00	4392	0	1834	1552	3386
2	30.00	16.81	22.326	23.639	0.000	0.131	2.84	0.80	1.00	0.0	28.94	82.30	0.00	5225	0	1881	1341	3222
1	10.00	16.79	24.365	23.639	0.000	0.123	2.88	0.80	1.00	0.0	30.51	87.72	0.00	5360	0	2003	1340	3343
														31916	0	29861		

LoadCase 0.9D + 1.6W 90 deg

105 mph 90 deg with No Ice (Reduced DL)

Gust Response Factor (Gh): 0.85

Wind Importance Factor (Iw) : 1.00

Section	Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
10	180.00	28.04	0.000	10.276	0.000	0.117	2.89	0.85	1.00	0.0	5.89	17.04	0.00	972	0	650	946	1596
9	160.00	27.12	0.000	14.309	0.000	0.146	2.79	0.85	1.00	0.0	8.26	23.02	0.00	1705	0	849	1190	2039
8	145.00	26.36	4.586	7.813	0.000	0.211	2.56	0.85	1.00	0.0	8.07	20.67	0.00	1168	0	741	1038	1779
7	130.00	25.55	11.787	17.229	0.000	0.195	2.61	0.85	1.00	0.0	18.87	49.30	0.00	2771	0	1713	2013	3726

Site Number: 10027
 Site Name: SALEM CT, CT
 Customer: SPRINT NEXTEL

Code: ANSI/TIA-222-G
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6	110.00	24.36	13.022	17.229	0.000	0.160	2.73	0.85	1.00	0.0	19.81	54.16	0.00	2821	0	1795	1919	3713
5	90.00	23.01	14.383	18.831	0.000	0.145	2.79	0.85	1.00	0.0	21.45	59.87	0.00	3218	0	1873	1812	3685
4	70.00	21.41	15.857	22.037	0.000	0.140	2.81	0.85	1.00	0.0	23.59	66.26	0.00	4284	0	1929	1703	3632
3	50.00	19.45	17.472	22.037	0.000	0.127	2.86	0.85	1.00	0.0	25.14	71.83	0.00	4392	0	1900	1552	3452
2	30.00	16.81	22.326	23.639	0.000	0.131	2.84	0.85	1.00	0.0	30.05	85.47	0.00	5225	0	1954	1341	3295
1	10.00	16.79	24.365	23.639	0.000	0.123	2.88	0.85	1.00	0.0	31.73	91.22	0.00	5360	0	2083	1340	3423
														31916	0	30341		

LoadCase 0.9D + 1.6W 120 deg

105 mph 120 deg with No Ice (Reduced DL)

Gust Response Factor (Gh): 0.85

Wind Importance Factor (Iw) : 1.00

Section	Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{bi} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
10	180.00	28.04	0.000	10.276	0.000	0.117	2.89	1.00	1.00	0.0	5.89	17.04	0.00	972	0	650	946	1596
9	160.00	27.12	0.000	14.309	0.000	0.146	2.79	1.00	1.00	0.0	8.26	23.02	0.00	1705	0	849	1190	2039
8	145.00	26.36	4.586	7.813	0.000	0.211	2.56	1.00	1.00	0.0	8.76	22.43	0.00	1168	0	804	1038	1842
7	130.00	25.55	11.787	17.229	0.000	0.195	2.61	1.00	1.00	0.0	20.64	53.92	0.00	2771	0	1874	2013	3886
6	110.00	24.36	13.022	17.229	0.000	0.160	2.73	1.00	1.00	0.0	21.77	59.50	0.00	2821	0	1972	1919	3890
5	90.00	23.01	14.383	18.831	0.000	0.145	2.79	1.00	1.00	0.0	23.61	65.89	0.00	3218	0	2061	1812	3873
4	70.00	21.41	15.857	22.037	0.000	0.140	2.81	1.00	1.00	0.0	25.97	72.94	0.00	4284	0	2124	1703	3827
3	50.00	19.45	17.472	22.037	0.000	0.127	2.86	1.00	1.00	0.0	27.76	79.32	0.00	4392	0	2098	1552	3650
2	30.00	16.81	22.326	23.639	0.000	0.131	2.84	1.00	1.00	0.0	33.40	95.00	0.00	5225	0	2171	1341	3513
1	10.00	16.79	24.365	23.639	0.000	0.123	2.88	1.00	1.00	0.0	35.38	101.73	0.00	5360	0	2323	1340	3663
														31916	0	31780		

LoadCase 0.9D + 1.6W 180 deg

105 mph 180 deg with No Ice (Reduced DL)

Gust Response Factor (Gh): 0.85

Wind Importance Factor (Iw) : 1.00

Section	Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{bi} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
10	180.00	28.04	0.000	10.276	0.000	0.117	2.89	0.80	1.00	0.0	5.89	17.04	0.00	972	0	650	946	1596
9	160.00	27.12	0.000	14.309	0.000	0.146	2.79	0.80	1.00	0.0	8.26	23.02	0.00	1705	0	849	1190	2039
8	145.00	26.36	4.586	7.813	0.000	0.211	2.56	0.80	1.00	0.0	7.84	20.08	0.00	1168	0	720	1038	1758
7	130.00	25.55	11.787	17.229	0.000	0.195	2.61	0.80	1.00	0.0	18.29	47.76	0.00	2771	0	1660	2013	3672
6	110.00	24.36	13.022	17.229	0.000	0.160	2.73	0.80	1.00	0.0	19.16	52.38	0.00	2821	0	1736	1919	3655
5	90.00	23.01	14.383	18.831	0.000	0.145	2.79	0.80	1.00	0.0	20.73	57.86	0.00	3218	0	1810	1812	3622
4	70.00	21.41	15.857	22.037	0.000	0.140	2.81	0.80	1.00	0.0	22.79	64.03	0.00	4284	0	1865	1703	3568
3	50.00	19.45	17.472	22.037	0.000	0.127	2.86	0.80	1.00	0.0	24.26	69.34	0.00	4392	0	1834	1552	3386
2	30.00	16.81	22.326	23.639	0.000	0.131	2.84	0.80	1.00	0.0	28.94	82.30	0.00	5225	0	1881	1341	3222
1	10.00	16.79	24.365	23.639	0.000	0.123	2.88	0.80	1.00	0.0	30.51	87.72	0.00	5360	0	2003	1340	3343
														31916	0	29861		

LoadCase 0.9D + 1.6W 210 deg

105 mph 210 deg with No Ice (Reduced DL)

Gust Response Factor (Gh): 0.85

Wind Importance Factor (Iw) : 1.00

Section	Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{bi} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
10	180.00	28.04	0.000	10.276	0.000	0.117	2.89	0.85	1.00	0.0	5.89	17.04	0.00	972	0	650	946	1596
9	160.00	27.12	0.000	14.309	0.000	0.146	2.79	0.85	1.00	0.0	8.26	23.02	0.00	1705	0	849	1190	2039

Site Number: 10027
 Site Name: SALEM CT, CT
 Customer: SPRINT NEXTEL

Code: ANSI/TIA-222-G
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8	145.00	26.36	4.586	7.813	0.000	0.211	2.56	0.85	1.00	0.0	8.07	20.67	0.00	1168	0	741	1038	1779
7	130.00	25.55	11.787	17.229	0.000	0.195	2.61	0.85	1.00	0.0	18.87	49.30	0.00	2771	0	1713	2013	3726
6	110.00	24.36	13.022	17.229	0.000	0.160	2.73	0.85	1.00	0.0	19.81	54.16	0.00	2821	0	1795	1919	3713
5	90.00	23.01	14.383	18.831	0.000	0.145	2.79	0.85	1.00	0.0	21.45	59.87	0.00	3218	0	1873	1812	3685
4	70.00	21.41	15.857	22.037	0.000	0.140	2.81	0.85	1.00	0.0	23.59	66.26	0.00	4284	0	1929	1703	3632
3	50.00	19.45	17.472	22.037	0.000	0.127	2.86	0.85	1.00	0.0	25.14	71.83	0.00	4392	0	1900	1552	3452
2	30.00	16.81	22.326	23.639	0.000	0.131	2.84	0.85	1.00	0.0	30.05	85.47	0.00	5225	0	1954	1341	3295
1	10.00	16.79	24.365	23.639	0.000	0.123	2.88	0.85	1.00	0.0	31.73	91.22	0.00	5360	0	2083	1340	3423
														31916	0			30341

LoadCase 0.9D + 1.6W 240 deg

105 mph 240 deg with No Ice (Reduced DL)

Gust Response Factor (Gh): 0.85

Wind Importance Factor (Iw) : 1.00

Section	Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
10	180.00	28.04	0.000	10.276	0.000	0.117	2.89	1.00	1.00	0.0	5.89	17.04	0.00	972	0	650	946	1596
9	160.00	27.12	0.000	14.309	0.000	0.146	2.79	1.00	1.00	0.0	8.26	23.02	0.00	1705	0	849	1190	2039
8	145.00	26.36	4.586	7.813	0.000	0.211	2.56	1.00	1.00	0.0	8.76	22.43	0.00	1168	0	804	1038	1842
7	130.00	25.55	11.787	17.229	0.000	0.195	2.61	1.00	1.00	0.0	20.64	53.92	0.00	2771	0	1874	2013	3886
6	110.00	24.36	13.022	17.229	0.000	0.160	2.73	1.00	1.00	0.0	21.77	59.50	0.00	2821	0	1972	1919	3890
5	90.00	23.01	14.383	18.831	0.000	0.145	2.79	1.00	1.00	0.0	23.61	65.89	0.00	3218	0	2061	1812	3873
4	70.00	21.41	15.857	22.037	0.000	0.140	2.81	1.00	1.00	0.0	25.97	72.94	0.00	4284	0	2124	1703	3827
3	50.00	19.45	17.472	22.037	0.000	0.127	2.86	1.00	1.00	0.0	27.76	79.32	0.00	4392	0	2098	1552	3650
2	30.00	16.81	22.326	23.639	0.000	0.131	2.84	1.00	1.00	0.0	33.40	95.00	0.00	5225	0	2171	1341	3513
1	10.00	16.79	24.365	23.639	0.000	0.123	2.88	1.00	1.00	0.0	35.38	101.73	0.00	5360	0	2323	1340	3663
														31916	0			31780

LoadCase 0.9D + 1.6W 300 deg

105 mph 300 deg with No Ice (Reduced DL)

Gust Response Factor (Gh): 0.85

Wind Importance Factor (Iw) : 1.00

Section	Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
10	180.00	28.04	0.000	10.276	0.000	0.117	2.89	0.80	1.00	0.0	5.89	17.04	0.00	972	0	650	946	1596
9	160.00	27.12	0.000	14.309	0.000	0.146	2.79	0.80	1.00	0.0	8.26	23.02	0.00	1705	0	849	1190	2039
8	145.00	26.36	4.586	7.813	0.000	0.211	2.56	0.80	1.00	0.0	7.84	20.08	0.00	1168	0	720	1038	1758
7	130.00	25.55	11.787	17.229	0.000	0.195	2.61	0.80	1.00	0.0	18.29	47.76	0.00	2771	0	1660	2013	3672
6	110.00	24.36	13.022	17.229	0.000	0.160	2.73	0.80	1.00	0.0	19.16	52.38	0.00	2821	0	1736	1919	3655
5	90.00	23.01	14.383	18.831	0.000	0.145	2.79	0.80	1.00	0.0	20.73	57.86	0.00	3218	0	1810	1812	3622
4	70.00	21.41	15.857	22.037	0.000	0.140	2.81	0.80	1.00	0.0	22.79	64.03	0.00	4284	0	1865	1703	3568
3	50.00	19.45	17.472	22.037	0.000	0.127	2.86	0.80	1.00	0.0	24.26	69.34	0.00	4392	0	1834	1552	3386
2	30.00	16.81	22.326	23.639	0.000	0.131	2.84	0.80	1.00	0.0	28.94	82.30	0.00	5225	0	1881	1341	3222
1	10.00	16.79	24.365	23.639	0.000	0.123	2.88	0.80	1.00	0.0	30.51	87.72	0.00	5360	0	2003	1340	3343
														31916	0			29861

LoadCase 0.9D + 1.6W 330 deg

105 mph 330 deg with No Ice (Reduced DL)

Gust Response Factor (Gh): 0.85

Wind Importance Factor (Iw) : 1.00

Section	Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
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Site Number: 10027
 Site Name: SALEM CT, CT
 Customer: SPRINT NEXTEL

Code: ANSI/TIA-222-G
 Engineering Number: OAA714423_C3_03

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Section Forces

10	180.00	28.04	0.000	10.276	0.000	0.117	2.89	0.85	1.00	0.0	5.89	17.04	0.00	972	0	650	946	1596
9	160.00	27.12	0.000	14.309	0.000	0.146	2.79	0.85	1.00	0.0	8.26	23.02	0.00	1705	0	849	1190	2039
8	145.00	26.36	4.586	7.813	0.000	0.211	2.56	0.85	1.00	0.0	8.07	20.67	0.00	1168	0	741	1038	1779
7	130.00	25.55	11.787	17.229	0.000	0.195	2.61	0.85	1.00	0.0	18.87	49.30	0.00	2771	0	1713	2013	3726
6	110.00	24.36	13.022	17.229	0.000	0.160	2.73	0.85	1.00	0.0	19.81	54.16	0.00	2821	0	1795	1919	3713
5	90.00	23.01	14.383	18.831	0.000	0.145	2.79	0.85	1.00	0.0	21.45	59.87	0.00	3218	0	1873	1812	3685
4	70.00	21.41	15.857	22.037	0.000	0.140	2.81	0.85	1.00	0.0	23.59	66.26	0.00	4284	0	1929	1703	3632
3	50.00	19.45	17.472	22.037	0.000	0.127	2.86	0.85	1.00	0.0	25.14	71.83	0.00	4392	0	1900	1552	3452
2	30.00	16.81	22.326	23.639	0.000	0.131	2.84	0.85	1.00	0.0	30.05	85.47	0.00	5225	0	1954	1341	3295
1	10.00	16.79	24.365	23.639	0.000	0.123	2.88	0.85	1.00	0.0	31.73	91.22	0.00	5360	0	2083	1340	3423
														31916	0			30341

LoadCase 1.2D + 1.0Di + 1.0Wi Normal

50 mph Normal with 0.75 in Radial Ice

Gust Response Factor (Gh): 0.85 Ice Dead Load Factor :1.00 Ice Importance Factor :1.00
 Wind Importance Factor (Iw) : 1.00

Section Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{bi} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)	
10	180.00	6.36	0.000	47.793	37.51	0.512	1.89	1.00	1.00	1.8	33.14	62.48	37.52	4282	2987	338	213	551
9	160.00	6.15	0.000	53.745	39.43	0.516	1.88	1.00	1.00	1.8	37.45	70.42	39.44	5968	3695	368	277	645
8	145.00	5.98	4.586	20.239	12.42	0.402	2.06	1.00	1.00	1.7	17.48	36.01	12.43	4180	2623	183	354	537
7	130.00	5.79	11.787	42.729	25.50	0.353	2.16	1.00	1.00	1.7	38.16	82.58	25.50	9207	5513	407	718	1125
6	110.00	5.52	13.022	43.711	26.48	0.292	2.32	1.00	1.00	1.7	39.09	90.59	26.48	9306	5545	425	721	1146
5	90.00	5.22	14.383	46.347	27.51	0.259	2.41	1.00	1.00	1.7	41.59	100.33	27.52	9918	5627	445	694	1139
4	70.00	4.86	15.857	50.523	28.48	0.240	2.47	1.00	1.00	1.6	45.29	111.75	28.49	11516	5804	461	666	1127
3	50.00	4.41	17.472	51.276	29.23	0.217	2.54	1.00	1.00	1.6	47.09	119.57	29.24	11616	5760	448	611	1059
2	30.00	3.81	22.326	53.101	29.46	0.211	2.56	1.00	1.00	1.5	52.94	135.44	29.46	12866	5900	439	516	954
1	10.00	3.81	24.365	51.586	27.94	0.192	2.62	1.00	1.00	1.3	53.93	141.50	27.95	12481	5334	458	493	951
														91341	48787			9235

LoadCase 1.2D + 1.0Di + 1.0Wi 60 deg

50 mph 60 deg with 0.75 in Radial Ice

Gust Response Factor (Gh): 0.85 Ice Dead Load Factor :1.00 Ice Importance Factor :1.00
 Wind Importance Factor (Iw) : 1.00

Section Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{bi} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)	
10	180.00	6.36	0.000	47.793	37.51	0.512	1.89	0.80	1.00	1.8	33.14	62.48	37.52	4282	2987	338	213	551
9	160.00	6.15	0.000	53.745	39.43	0.516	1.88	0.80	1.00	1.8	37.45	70.42	39.44	5968	3695	368	277	645
8	145.00	5.98	4.586	20.239	12.42	0.402	2.06	0.80	1.00	1.7	16.56	34.12	12.43	4180	2623	173	354	527
7	130.00	5.79	11.787	42.729	25.50	0.353	2.16	0.80	1.00	1.7	35.80	77.48	25.50	9207	5513	382	718	1100
6	110.00	5.52	13.022	43.711	26.48	0.292	2.32	0.80	1.00	1.7	36.49	84.56	26.48	9306	5545	397	721	1118
5	90.00	5.22	14.383	46.347	27.51	0.259	2.41	0.80	1.00	1.7	38.72	93.39	27.52	9918	5627	414	694	1109
4	70.00	4.86	15.857	50.523	28.48	0.240	2.47	0.80	1.00	1.6	42.12	103.93	28.49	11516	5804	429	666	1095
3	50.00	4.41	17.472	51.276	29.23	0.217	2.54	0.80	1.00	1.6	43.60	110.70	29.24	11616	5760	415	611	1026
2	30.00	3.81	22.326	53.101	29.46	0.211	2.56	0.80	1.00	1.5	48.48	124.01	29.46	12866	5900	402	516	917
1	10.00	3.81	24.365	51.586	27.94	0.192	2.62	0.80	1.00	1.3	49.05	128.71	27.95	12481	5334	417	493	910
														91341	48787			8997

Site Number: 10027
 Site Name: SALEM CT, CT
 Customer: SPRINT NEXTEL

Code: ANSI/TIA-222-G
 Engineering Number: OAA714423_C3_03

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Section Forces

LoadCase 1.2D + 1.0Di + 1.0Wi 90 deg

50 mph 90 deg with 0.75 in Radial Ice

Gust Response Factor (Gh): 0.85 Ice Dead Load Factor :1.00 Ice Importance Factor :1.00
 Wind Importance Factor (Iw) : 1.00

Section	Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
10	180.00	6.36	0.000	47.793	37.51	0.512	1.89	0.85	1.00	1.8	33.14	62.48	37.52	4282	2987	338	213	551
9	160.00	6.15	0.000	53.745	39.43	0.516	1.88	0.85	1.00	1.8	37.45	70.42	39.44	5968	3695	368	277	645
8	145.00	5.98	4.586	20.239	12.42	0.402	2.06	0.85	1.00	1.7	16.79	34.60	12.43	4180	2623	176	354	530
7	130.00	5.79	11.787	42.729	25.50	0.353	2.16	0.85	1.00	1.7	36.39	78.75	25.50	9207	5513	388	718	1106
6	110.00	5.52	13.022	43.711	26.48	0.292	2.32	0.85	1.00	1.7	37.14	86.06	26.48	9306	5545	404	721	1125
5	90.00	5.22	14.383	46.347	27.51	0.259	2.41	0.85	1.00	1.7	39.44	95.13	27.52	9918	5627	422	694	1116
4	70.00	4.86	15.857	50.523	28.48	0.240	2.47	0.85	1.00	1.6	42.91	105.88	28.49	11516	5804	437	666	1103
3	50.00	4.41	17.472	51.276	29.23	0.217	2.54	0.85	1.00	1.6	44.47	112.91	29.24	11616	5760	423	611	1034
2	30.00	3.81	22.326	53.101	29.46	0.211	2.56	0.85	1.00	1.5	49.59	126.87	29.46	12866	5900	411	516	927
1	10.00	3.81	24.365	51.586	27.94	0.192	2.62	0.85	1.00	1.3	50.27	131.91	27.95	12481	5334	427	493	920
														91341	48787			9056

LoadCase 1.2D + 1.0Di + 1.0Wi 120 deg

50 mph 120 deg with 0.75 in Radial Ice

Gust Response Factor (Gh): 0.85 Ice Dead Load Factor :1.00 Ice Importance Factor :1.00
 Wind Importance Factor (Iw) : 1.00

Section	Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
10	180.00	6.36	0.000	47.793	37.51	0.512	1.89	1.00	1.00	1.8	33.14	62.48	37.52	4282	2987	338	213	551
9	160.00	6.15	0.000	53.745	39.43	0.516	1.88	1.00	1.00	1.8	37.45	70.42	39.44	5968	3695	368	277	645
8	145.00	5.98	4.586	20.239	12.42	0.402	2.06	1.00	1.00	1.7	17.48	36.01	12.43	4180	2623	183	354	537
7	130.00	5.79	11.787	42.729	25.50	0.353	2.16	1.00	1.00	1.7	38.16	82.58	25.50	9207	5513	407	718	1125
6	110.00	5.52	13.022	43.711	26.48	0.292	2.32	1.00	1.00	1.7	39.09	90.59	26.48	9306	5545	425	721	1146
5	90.00	5.22	14.383	46.347	27.51	0.259	2.41	1.00	1.00	1.7	41.59	100.33	27.52	9918	5627	445	694	1139
4	70.00	4.86	15.857	50.523	28.48	0.240	2.47	1.00	1.00	1.6	45.29	111.75	28.49	11516	5804	461	666	1127
3	50.00	4.41	17.472	51.276	29.23	0.217	2.54	1.00	1.00	1.6	47.09	119.57	29.24	11616	5760	448	611	1059
2	30.00	3.81	22.326	53.101	29.46	0.211	2.56	1.00	1.00	1.5	52.94	135.44	29.46	12866	5900	439	516	954
1	10.00	3.81	24.365	51.586	27.94	0.192	2.62	1.00	1.00	1.3	53.93	141.50	27.95	12481	5334	458	493	951
														91341	48787			9235

LoadCase 1.2D + 1.0Di + 1.0Wi 180 deg

50 mph 180 deg with 0.75 in Radial Ice

Gust Response Factor (Gh): 0.85 Ice Dead Load Factor :1.00 Ice Importance Factor :1.00
 Wind Importance Factor (Iw) : 1.00

Section	Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
10	180.00	6.36	0.000	47.793	37.51	0.512	1.89	0.80	1.00	1.8	33.14	62.48	37.52	4282	2987	338	213	551
9	160.00	6.15	0.000	53.745	39.43	0.516	1.88	0.80	1.00	1.8	37.45	70.42	39.44	5968	3695	368	277	645
8	145.00	5.98	4.586	20.239	12.42	0.402	2.06	0.80	1.00	1.7	16.56	34.12	12.43	4180	2623	173	354	527
7	130.00	5.79	11.787	42.729	25.50	0.353	2.16	0.80	1.00	1.7	35.80	77.48	25.50	9207	5513	382	718	1100
6	110.00	5.52	13.022	43.711	26.48	0.292	2.32	0.80	1.00	1.7	36.49	84.56	26.48	9306	5545	397	721	1118
5	90.00	5.22	14.383	46.347	27.51	0.259	2.41	0.80	1.00	1.7	38.72	93.39	27.52	9918	5627	414	694	1109
4	70.00	4.86	15.857	50.523	28.48	0.240	2.47	0.80	1.00	1.6	42.12	103.93	28.49	11516	5804	429	666	1095
3	50.00	4.41	17.472	51.276	29.23	0.217	2.54	0.80	1.00	1.6	43.60	110.70	29.24	11616	5760	415	611	1026
2	30.00	3.81	22.326	53.101	29.46	0.211	2.56	0.80	1.00	1.5	48.48	124.01	29.46	12866	5900	402	516	917
1	10.00	3.81	24.365	51.586	27.94	0.192	2.62	0.80	1.00	1.3	49.05	128.71	27.95	12481	5334	417	493	910

Site Number: 10027
 Site Name: SALEM CT, CT
 Customer: SPRINT NEXTEL

Code: ANSI/TIA-222-G
 Engineering Number: OAA714423_C3_03

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Section Forces

91341 48787 8997

LoadCase 1.2D + 1.0Di + 1.0Wi 210 deg 50 mph 210 deg with 0.75 in Radial Ice

Gust Response Factor (Gh): 0.85 Ice Dead Load Factor :1.00 Ice Importance Factor :1.00
 Wind Importance Factor (Iw) : 1.00

Section Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{bi} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
10 180.00	6.36	0.000	47.793	37.51	0.512	1.89	0.85	1.00	1.8	33.14	62.48	37.52	4282	2987	338	213	551
9 160.00	6.15	0.000	53.745	39.43	0.516	1.88	0.85	1.00	1.8	37.45	70.42	39.44	5968	3695	368	277	645
8 145.00	5.98	4.586	20.239	12.42	0.402	2.06	0.85	1.00	1.7	16.79	34.60	12.43	4180	2623	176	354	530
7 130.00	5.79	11.787	42.729	25.50	0.353	2.16	0.85	1.00	1.7	36.39	78.75	25.50	9207	5513	388	718	1106
6 110.00	5.52	13.022	43.711	26.48	0.292	2.32	0.85	1.00	1.7	37.14	86.06	26.48	9306	5545	404	721	1125
5 90.00	5.22	14.383	46.347	27.51	0.259	2.41	0.85	1.00	1.7	39.44	95.13	27.52	9918	5627	422	694	1116
4 70.00	4.86	15.857	50.523	28.48	0.240	2.47	0.85	1.00	1.6	42.91	105.88	28.49	11516	5804	437	666	1103
3 50.00	4.41	17.472	51.276	29.23	0.217	2.54	0.85	1.00	1.6	44.47	112.91	29.24	11616	5760	423	611	1034
2 30.00	3.81	22.326	53.101	29.46	0.211	2.56	0.85	1.00	1.5	49.59	126.87	29.46	12866	5900	411	516	927
1 10.00	3.81	24.365	51.586	27.94	0.192	2.62	0.85	1.00	1.3	50.27	131.91	27.95	12481	5334	427	493	920
													91341	48787			9056

LoadCase 1.2D + 1.0Di + 1.0Wi 240 deg 50 mph 240 deg with 0.75 in Radial Ice

Gust Response Factor (Gh): 0.85 Ice Dead Load Factor :1.00 Ice Importance Factor :1.00
 Wind Importance Factor (Iw) : 1.00

Section Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{bi} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
10 180.00	6.36	0.000	47.793	37.51	0.512	1.89	1.00	1.00	1.8	33.14	62.48	37.52	4282	2987	338	213	551
9 160.00	6.15	0.000	53.745	39.43	0.516	1.88	1.00	1.00	1.8	37.45	70.42	39.44	5968	3695	368	277	645
8 145.00	5.98	4.586	20.239	12.42	0.402	2.06	1.00	1.00	1.7	17.48	36.01	12.43	4180	2623	183	354	537
7 130.00	5.79	11.787	42.729	25.50	0.353	2.16	1.00	1.00	1.7	38.16	82.58	25.50	9207	5513	407	718	1125
6 110.00	5.52	13.022	43.711	26.48	0.292	2.32	1.00	1.00	1.7	39.09	90.59	26.48	9306	5545	425	721	1146
5 90.00	5.22	14.383	46.347	27.51	0.259	2.41	1.00	1.00	1.7	41.59	100.33	27.52	9918	5627	445	694	1139
4 70.00	4.86	15.857	50.523	28.48	0.240	2.47	1.00	1.00	1.6	45.29	111.75	28.49	11516	5804	461	666	1127
3 50.00	4.41	17.472	51.276	29.23	0.217	2.54	1.00	1.00	1.6	47.09	119.57	29.24	11616	5760	448	611	1059
2 30.00	3.81	22.326	53.101	29.46	0.211	2.56	1.00	1.00	1.5	52.94	135.44	29.46	12866	5900	439	516	954
1 10.00	3.81	24.365	51.586	27.94	0.192	2.62	1.00	1.00	1.3	53.93	141.50	27.95	12481	5334	458	493	951
													91341	48787			9235

LoadCase 1.2D + 1.0Di + 1.0Wi 300 deg 50 mph 300 deg with 0.75 in Radial Ice

Gust Response Factor (Gh): 0.85 Ice Dead Load Factor :1.00 Ice Importance Factor :1.00
 Wind Importance Factor (Iw) : 1.00

Section Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{bi} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
10 180.00	6.36	0.000	47.793	37.51	0.512	1.89	0.80	1.00	1.8	33.14	62.48	37.52	4282	2987	338	213	551
9 160.00	6.15	0.000	53.745	39.43	0.516	1.88	0.80	1.00	1.8	37.45	70.42	39.44	5968	3695	368	277	645
8 145.00	5.98	4.586	20.239	12.42	0.402	2.06	0.80	1.00	1.7	16.56	34.12	12.43	4180	2623	173	354	527
7 130.00	5.79	11.787	42.729	25.50	0.353	2.16	0.80	1.00	1.7	35.80	77.48	25.50	9207	5513	382	718	1100
6 110.00	5.52	13.022	43.711	26.48	0.292	2.32	0.80	1.00	1.7	36.49	84.56	26.48	9306	5545	397	721	1118
5 90.00	5.22	14.383	46.347	27.51	0.259	2.41	0.80	1.00	1.7	38.72	93.39	27.52	9918	5627	414	694	1109
4 70.00	4.86	15.857	50.523	28.48	0.240	2.47	0.80	1.00	1.6	42.12	103.93	28.49	11516	5804	429	666	1095
3 50.00	4.41	17.472	51.276	29.23	0.217	2.54	0.80	1.00	1.6	43.60	110.70	29.24	11616	5760	415	611	1026

Site Number: 10027

Code:

ANSI/TIA-222-G

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Site Name: SALEM CT, CT

Engineering Number: OAA714423_C3_03

3/22/2018 5:02:20 PM

Customer: SPRINT NEXTEL

Section Forces

2	30.00	3.81	22.326	53.101	29.46	0.211	2.56	0.80	1.00	1.5	48.48	124.01	29.46	12866	5900	402	516	917
1	10.00	3.81	24.365	51.586	27.94	0.192	2.62	0.80	1.00	1.3	49.05	128.71	27.95	12481	5334	417	493	910
														91341	48787			8997

LoadCase 1.2D + 1.0Di + 1.0Wi 330 deg

50 mph 330 deg with 0.75 in Radial Ice

Gust Response Factor (Gh): 0.85

Ice Dead Load Factor :1.00

Ice Importance Factor :1.00

Wind Importance Factor (Iw) : 1.00

Section	Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
10	180.00	6.36	0.000	47.793	37.51	0.512	1.89	0.85	1.00	1.8	33.14	62.48	37.52	4282	2987	338	213	551
9	160.00	6.15	0.000	53.745	39.43	0.516	1.88	0.85	1.00	1.8	37.45	70.42	39.44	5968	3695	368	277	645
8	145.00	5.98	4.586	20.239	12.42	0.402	2.06	0.85	1.00	1.7	16.79	34.60	12.43	4180	2623	176	354	530
7	130.00	5.79	11.787	42.729	25.50	0.353	2.16	0.85	1.00	1.7	36.39	78.75	25.50	9207	5513	388	718	1106
6	110.00	5.52	13.022	43.711	26.48	0.292	2.32	0.85	1.00	1.7	37.14	86.06	26.48	9306	5545	404	721	1125
5	90.00	5.22	14.383	46.347	27.51	0.259	2.41	0.85	1.00	1.7	39.44	95.13	27.52	9918	5627	422	694	1116
4	70.00	4.86	15.857	50.523	28.48	0.240	2.47	0.85	1.00	1.6	42.91	105.88	28.49	11516	5804	437	666	1103
3	50.00	4.41	17.472	51.276	29.23	0.217	2.54	0.85	1.00	1.6	44.47	112.91	29.24	11616	5760	423	611	1034
2	30.00	3.81	22.326	53.101	29.46	0.211	2.56	0.85	1.00	1.5	49.59	126.87	29.46	12866	5900	411	516	927
1	10.00	3.81	24.365	51.586	27.94	0.192	2.62	0.85	1.00	1.3	50.27	131.91	27.95	12481	5334	427	493	920
														91341	48787			9056

LoadCase 1.0D + 1.0W Service Normal

Serviceability - 60 mph Wind Normal

Gust Response Factor (Gh): 0.85

Wind Importance Factor (Iw) : 1.00

Section	Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
10	180.00	9.16	0.000	10.276	0.000	0.117	2.89	1.00	1.00	0.0	5.89	17.04	0.00	1080	0	133	193	326
9	160.00	8.85	0.000	14.309	0.000	0.146	2.79	1.00	1.00	0.0	8.26	23.02	0.00	1895	0	173	243	416
8	145.00	8.61	4.586	7.813	0.000	0.211	2.56	1.00	1.00	0.0	9.09	23.28	0.00	1298	0	170	212	382
7	130.00	8.34	11.787	17.229	0.000	0.195	2.61	1.00	1.00	0.0	21.67	56.60	0.00	3079	0	401	411	812
6	110.00	7.96	13.022	17.229	0.000	0.160	2.73	1.00	1.00	0.0	22.82	62.37	0.00	3134	0	422	392	813
5	90.00	7.51	14.383	18.831	0.000	0.145	2.79	1.00	1.00	0.0	25.06	69.93	0.00	3576	0	447	370	816
4	70.00	6.99	15.857	22.037	0.000	0.140	2.81	1.00	1.00	0.0	28.34	79.62	0.00	4760	0	473	348	821
3	50.00	6.35	17.472	22.037	0.000	0.127	2.86	1.00	1.00	0.0	29.93	85.55	0.00	4880	0	462	317	778
2	30.00	5.49	22.326	23.639	0.000	0.131	2.84	1.00	1.00	0.0	35.70	101.53	0.00	5805	0	474	274	747
1	10.00	5.48	24.365	23.639	0.000	0.123	2.88	1.00	1.00	0.0	37.73	108.47	0.00	5956	0	506	273	779
														35462	0			6691

LoadCase 1.0D + 1.0W Service 60 deg

Serviceability - 60 mph Wind 60 deg

Gust Response Factor (Gh): 0.85

Wind Importance Factor (Iw) : 1.00

Section	Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
10	180.00	9.16	0.000	10.276	0.000	0.117	2.89	0.80	1.00	0.0	5.89	17.04	0.00	1080	0	133	193	326
9	160.00	8.85	0.000	14.309	0.000	0.146	2.79	0.80	1.00	0.0	8.26	23.02	0.00	1895	0	173	243	416
8	145.00	8.61	4.586	7.813	0.000	0.211	2.56	0.80	1.00	0.0	8.17	20.93	0.00	1298	0	153	212	365
7	130.00	8.34	11.787	17.229	0.000	0.195	2.61	0.80	1.00	0.0	19.31	50.44	0.00	3079	0	358	411	768

Site Number: 10027
 Site Name: SALEM CT, CT
 Customer: SPRINT NEXTEL

Code: ANSI/TIA-222-G
 Engineering Number: OAA714423_C3_03

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Section Forces

6	110.00	7.96	13.022	17.229	0.000	0.160	2.73	0.80	1.00	0.0	20.21	55.25	0.00	3134	0	374	392	765
5	90.00	7.51	14.383	18.831	0.000	0.145	2.79	0.80	1.00	0.0	22.18	61.91	0.00	3576	0	395	370	765
4	70.00	6.99	15.857	22.037	0.000	0.140	2.81	0.80	1.00	0.0	25.17	70.71	0.00	4760	0	420	348	768
3	50.00	6.35	17.472	22.037	0.000	0.127	2.86	0.80	1.00	0.0	26.44	75.56	0.00	4880	0	408	317	725
2	30.00	5.49	22.326	23.639	0.000	0.131	2.84	0.80	1.00	0.0	31.24	88.83	0.00	5805	0	414	274	688
1	10.00	5.48	24.365	23.639	0.000	0.123	2.88	0.80	1.00	0.0	32.85	94.46	0.00	5956	0	440	273	714
														35462	0			6300

LoadCase 1.0D + 1.0W Service 90 deg

Serviceability - 60 mph Wind 90 deg

Gust Response Factor (Gh): 0.85

Wind Importance Factor (Iw) : 1.00

Section	Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{bi} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
10	180.00	9.16	0.000	10.276	0.000	0.117	2.89	0.85	1.00	0.0	5.89	17.04	0.00	1080	0	133	193	326
9	160.00	8.85	0.000	14.309	0.000	0.146	2.79	0.85	1.00	0.0	8.26	23.02	0.00	1895	0	173	243	416
8	145.00	8.61	4.586	7.813	0.000	0.211	2.56	0.85	1.00	0.0	8.40	21.52	0.00	1298	0	157	212	369
7	130.00	8.34	11.787	17.229	0.000	0.195	2.61	0.85	1.00	0.0	19.90	51.98	0.00	3079	0	369	411	779
6	110.00	7.96	13.022	17.229	0.000	0.160	2.73	0.85	1.00	0.0	20.86	57.03	0.00	3134	0	386	392	777
5	90.00	7.51	14.383	18.831	0.000	0.145	2.79	0.85	1.00	0.0	22.90	63.91	0.00	3576	0	408	370	778
4	70.00	6.99	15.857	22.037	0.000	0.140	2.81	0.85	1.00	0.0	25.96	72.93	0.00	4760	0	433	348	781
3	50.00	6.35	17.472	22.037	0.000	0.127	2.86	0.85	1.00	0.0	27.31	78.06	0.00	4880	0	421	317	738
2	30.00	5.49	22.326	23.639	0.000	0.131	2.84	0.85	1.00	0.0	32.35	92.01	0.00	5805	0	429	274	703
1	10.00	5.48	24.365	23.639	0.000	0.123	2.88	0.85	1.00	0.0	34.07	97.96	0.00	5956	0	457	273	730
														35462	0			6398

LoadCase 1.0D + 1.0W Service 120 deg

Serviceability - 60 mph Wind 120 deg

Gust Response Factor (Gh): 0.85

Wind Importance Factor (Iw) : 1.00

Section	Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{bi} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
10	180.00	9.16	0.000	10.276	0.000	0.117	2.89	1.00	1.00	0.0	5.89	17.04	0.00	1080	0	133	193	326
9	160.00	8.85	0.000	14.309	0.000	0.146	2.79	1.00	1.00	0.0	8.26	23.02	0.00	1895	0	173	243	416
8	145.00	8.61	4.586	7.813	0.000	0.211	2.56	1.00	1.00	0.0	9.09	23.28	0.00	1298	0	170	212	382
7	130.00	8.34	11.787	17.229	0.000	0.195	2.61	1.00	1.00	0.0	21.67	56.60	0.00	3079	0	401	411	812
6	110.00	7.96	13.022	17.229	0.000	0.160	2.73	1.00	1.00	0.0	22.82	62.37	0.00	3134	0	422	392	813
5	90.00	7.51	14.383	18.831	0.000	0.145	2.79	1.00	1.00	0.0	25.06	69.93	0.00	3576	0	447	370	816
4	70.00	6.99	15.857	22.037	0.000	0.140	2.81	1.00	1.00	0.0	28.34	79.62	0.00	4760	0	473	348	821
3	50.00	6.35	17.472	22.037	0.000	0.127	2.86	1.00	1.00	0.0	29.93	85.55	0.00	4880	0	462	317	778
2	30.00	5.49	22.326	23.639	0.000	0.131	2.84	1.00	1.00	0.0	35.70	101.53	0.00	5805	0	474	274	747
1	10.00	5.48	24.365	23.639	0.000	0.123	2.88	1.00	1.00	0.0	37.73	108.47	0.00	5956	0	506	273	779
														35462	0			6691

LoadCase 1.0D + 1.0W Service 180 deg

Serviceability - 60 mph Wind 180 deg

Gust Response Factor (Gh): 0.85

Wind Importance Factor (Iw) : 1.00

Section	Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{bi} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
10	180.00	9.16	0.000	10.276	0.000	0.117	2.89	0.80	1.00	0.0	5.89	17.04	0.00	1080	0	133	193	326
9	160.00	8.85	0.000	14.309	0.000	0.146	2.79	0.80	1.00	0.0	8.26	23.02	0.00	1895	0	173	243	416

Site Number: 10027

Code:

ANSI/TIA-222-G

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Site Name: SALEM CT, CT

Engineering Number: OAA714423_C3_03

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Customer: SPRINT NEXTEL

Section Forces

8	145.00	8.61	4.586	7.813	0.000	0.211	2.56	0.80	1.00	0.0	8.17	20.93	0.00	1298	0	153	212	365
7	130.00	8.34	11.787	17.229	0.000	0.195	2.61	0.80	1.00	0.0	19.31	50.44	0.00	3079	0	358	411	768
6	110.00	7.96	13.022	17.229	0.000	0.160	2.73	0.80	1.00	0.0	20.21	55.25	0.00	3134	0	374	392	765
5	90.00	7.51	14.383	18.831	0.000	0.145	2.79	0.80	1.00	0.0	22.18	61.91	0.00	3576	0	395	370	765
4	70.00	6.99	15.857	22.037	0.000	0.140	2.81	0.80	1.00	0.0	25.17	70.71	0.00	4760	0	420	348	768
3	50.00	6.35	17.472	22.037	0.000	0.127	2.86	0.80	1.00	0.0	26.44	75.56	0.00	4880	0	408	317	725
2	30.00	5.49	22.326	23.639	0.000	0.131	2.84	0.80	1.00	0.0	31.24	88.83	0.00	5805	0	414	274	688
1	10.00	5.48	24.365	23.639	0.000	0.123	2.88	0.80	1.00	0.0	32.85	94.46	0.00	5956	0	440	273	714
														35462	0			6300

LoadCase 1.0D + 1.0W Service 210 deg

Serviceability - 60 mph Wind 210 deg

Gust Response Factor (Gh): 0.85

Wind Importance Factor (Iw) : 1.00

Section	Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
10	180.00	9.16	0.000	10.276	0.000	0.117	2.89	0.85	1.00	0.0	5.89	17.04	0.00	1080	0	133	193	326
9	160.00	8.85	0.000	14.309	0.000	0.146	2.79	0.85	1.00	0.0	8.26	23.02	0.00	1895	0	173	243	416
8	145.00	8.61	4.586	7.813	0.000	0.211	2.56	0.85	1.00	0.0	8.40	21.52	0.00	1298	0	157	212	369
7	130.00	8.34	11.787	17.229	0.000	0.195	2.61	0.85	1.00	0.0	19.90	51.98	0.00	3079	0	369	411	779
6	110.00	7.96	13.022	17.229	0.000	0.160	2.73	0.85	1.00	0.0	20.86	57.03	0.00	3134	0	386	392	777
5	90.00	7.51	14.383	18.831	0.000	0.145	2.79	0.85	1.00	0.0	22.90	63.91	0.00	3576	0	408	370	778
4	70.00	6.99	15.857	22.037	0.000	0.140	2.81	0.85	1.00	0.0	25.96	72.93	0.00	4760	0	433	348	781
3	50.00	6.35	17.472	22.037	0.000	0.127	2.86	0.85	1.00	0.0	27.31	78.06	0.00	4880	0	421	317	738
2	30.00	5.49	22.326	23.639	0.000	0.131	2.84	0.85	1.00	0.0	32.35	92.01	0.00	5805	0	429	274	703
1	10.00	5.48	24.365	23.639	0.000	0.123	2.88	0.85	1.00	0.0	34.07	97.96	0.00	5956	0	457	273	730
														35462	0			6398

LoadCase 1.0D + 1.0W Service 240 deg

Serviceability - 60 mph Wind 240 deg

Gust Response Factor (Gh): 0.85

Wind Importance Factor (Iw) : 1.00

Section	Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
10	180.00	9.16	0.000	10.276	0.000	0.117	2.89	1.00	1.00	0.0	5.89	17.04	0.00	1080	0	133	193	326
9	160.00	8.85	0.000	14.309	0.000	0.146	2.79	1.00	1.00	0.0	8.26	23.02	0.00	1895	0	173	243	416
8	145.00	8.61	4.586	7.813	0.000	0.211	2.56	1.00	1.00	0.0	9.09	23.28	0.00	1298	0	170	212	382
7	130.00	8.34	11.787	17.229	0.000	0.195	2.61	1.00	1.00	0.0	21.67	56.60	0.00	3079	0	401	411	812
6	110.00	7.96	13.022	17.229	0.000	0.160	2.73	1.00	1.00	0.0	22.82	62.37	0.00	3134	0	422	392	813
5	90.00	7.51	14.383	18.831	0.000	0.145	2.79	1.00	1.00	0.0	25.06	69.93	0.00	3576	0	447	370	816
4	70.00	6.99	15.857	22.037	0.000	0.140	2.81	1.00	1.00	0.0	28.34	79.62	0.00	4760	0	473	348	821
3	50.00	6.35	17.472	22.037	0.000	0.127	2.86	1.00	1.00	0.0	29.93	85.55	0.00	4880	0	462	317	778
2	30.00	5.49	22.326	23.639	0.000	0.131	2.84	1.00	1.00	0.0	35.70	101.53	0.00	5805	0	474	274	747
1	10.00	5.48	24.365	23.639	0.000	0.123	2.88	1.00	1.00	0.0	37.73	108.47	0.00	5956	0	506	273	779
														35462	0			6691

LoadCase 1.0D + 1.0W Service 300 deg

Serviceability - 60 mph Wind 300 deg

Gust Response Factor (Gh): 0.85

Wind Importance Factor (Iw) : 1.00

Section	Elev. (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
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Site Number: 10027
 Site Name: SALEM CT, CT
 Customer: SPRINT NEXTEL

Code: ANSI/TIA-222-G
 Engineering Number: OAA714423_C3_03

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Section Forces

10	180.00	9.16	0.000	10.276	0.000	0.117	2.89	0.80	1.00	0.0	5.89	17.04	0.00	1080	0	133	193	326
9	160.00	8.85	0.000	14.309	0.000	0.146	2.79	0.80	1.00	0.0	8.26	23.02	0.00	1895	0	173	243	416
8	145.00	8.61	4.586	7.813	0.000	0.211	2.56	0.80	1.00	0.0	8.17	20.93	0.00	1298	0	153	212	365
7	130.00	8.34	11.787	17.229	0.000	0.195	2.61	0.80	1.00	0.0	19.31	50.44	0.00	3079	0	358	411	768
6	110.00	7.96	13.022	17.229	0.000	0.160	2.73	0.80	1.00	0.0	20.21	55.25	0.00	3134	0	374	392	765
5	90.00	7.51	14.383	18.831	0.000	0.145	2.79	0.80	1.00	0.0	22.18	61.91	0.00	3576	0	395	370	765
4	70.00	6.99	15.857	22.037	0.000	0.140	2.81	0.80	1.00	0.0	25.17	70.71	0.00	4760	0	420	348	768
3	50.00	6.35	17.472	22.037	0.000	0.127	2.86	0.80	1.00	0.0	26.44	75.56	0.00	4880	0	408	317	725
2	30.00	5.49	22.326	23.639	0.000	0.131	2.84	0.80	1.00	0.0	31.24	88.83	0.00	5805	0	414	274	688
1	10.00	5.48	24.365	23.639	0.000	0.123	2.88	0.80	1.00	0.0	32.85	94.46	0.00	5956	0	440	273	714
														35462	0			6300

LoadCase 1.0D + 1.0W Service 330 deg

Serviceability - 60 mph Wind 330 deg

Gust Response Factor (Gh): 0.85

Wind Importance Factor (Iw) : 1.00

Section	Elev. (ft)	Q _z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{bi} (sf)	Wt. (lb)	Ice Wt. (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
10	180.00	9.16	0.000	10.276	0.000	0.117	2.89	0.85	1.00	0.0	5.89	17.04	0.00	1080	0	133	193	326
9	160.00	8.85	0.000	14.309	0.000	0.146	2.79	0.85	1.00	0.0	8.26	23.02	0.00	1895	0	173	243	416
8	145.00	8.61	4.586	7.813	0.000	0.211	2.56	0.85	1.00	0.0	8.40	21.52	0.00	1298	0	157	212	369
7	130.00	8.34	11.787	17.229	0.000	0.195	2.61	0.85	1.00	0.0	19.90	51.98	0.00	3079	0	369	411	779
6	110.00	7.96	13.022	17.229	0.000	0.160	2.73	0.85	1.00	0.0	20.86	57.03	0.00	3134	0	386	392	777
5	90.00	7.51	14.383	18.831	0.000	0.145	2.79	0.85	1.00	0.0	22.90	63.91	0.00	3576	0	408	370	778
4	70.00	6.99	15.857	22.037	0.000	0.140	2.81	0.85	1.00	0.0	25.96	72.93	0.00	4760	0	433	348	781
3	50.00	6.35	17.472	22.037	0.000	0.127	2.86	0.85	1.00	0.0	27.31	78.06	0.00	4880	0	421	317	738
2	30.00	5.49	22.326	23.639	0.000	0.131	2.84	0.85	1.00	0.0	32.35	92.01	0.00	5805	0	429	274	703
1	10.00	5.48	24.365	23.639	0.000	0.123	2.88	0.85	1.00	0.0	34.07	97.96	0.00	5956	0	457	273	730
														35462	0			6398

Site Number: 10027
 Site Name: SALEM CT, CT
 Customer: SPRINT NEXTEL

Code: ANSI/TIA-222-G
 Engineering Number: OAA714423_C3_03

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Force/Stress Summary

Section: 1		U20		Bot Elev (ft): 0.00				Height (ft): 20.000					
		Pu	Len	Bracing %			F'y	Phic Pn	Num	Shear	Bear	Use	
		(kip)	(ft)	X	Y	Z	(ksi)	(kip)	phiRnv	phiRn	%	Controls	
Max Compression Member													
LEG	12B - 12"BD 2.25"	-257.68	10.02	100	100	100	0.0	0.0	512.40	0	0	50	User Input
HORIZ		0.00	0.000	0	0	0	0.0	0.0	0.00	0	0	0	
DIAG	SAE - 3.5X3.5X0.3125	-6.51	21.91	50	50	50	190.6	36.0	13.00	1	1	50	Member Z
Max Tension Member													
		Pu	Fy	Fu	Phit Pn	Num	Num	Shear	Bear	Blk Shear	Use		
		(kip)	(ksi)	(ksi)	(kip)	Bolts	Holes	phiRnv	phiRn	phiT Pn	%	Controls	
LEG	12B - 12"BD 2.25"	222.06	50	65	536.80	0	0	0.00	0.00		41	User Input	
HORIZ		0.00	0	0	0.00	0	0	0.00	0.00	0.00	0		
DIAG	SAE - 3.5X3.5X0.3125	6.31	36	58	54.17	1	1	49.70	26.64	20.54	30	Blk Shear	
Max Splice Forces													
		Pu	phiRnt	Use	Num	Bolt Type							
		(kip)	(kip)	%	Bolts								
Top Tension		208.03	0.00	0	0								
Top Compression		241.25	0.00	0									
Bot Tension		228.13	654.15	41	6	1.25" A687							
Bot Compression		264.19	0.00	0									

Section: 2		U18		Bot Elev (ft): 20.00				Height (ft): 20.000					
		Pu	Len	Bracing %			F'y	Phic Pn	Num	Shear	Bear	Use	
		(kip)	(ft)	X	Y	Z	(ksi)	(kip)	phiRnv	phiRn	%	Controls	
Max Compression Member													
LEG	12B - 12"BD 2.25"	-235.02	10.02	100	100	100	0.0	0.0	512.40	0	0	45	User Input
HORIZ		0.00	0.000	0	0	0	0.0	0.0	0.00	0	0	0	
DIAG	SAE - 3.5X3.5X0.3125	-6.44	20.15	50	50	50	175.3	36.0	15.37	1	1	41	Member Z
Max Tension Member													
		Pu	Fy	Fu	Phit Pn	Num	Num	Shear	Bear	Blk Shear	Use		
		(kip)	(ksi)	(ksi)	(kip)	Bolts	Holes	phiRnv	phiRn	phiT Pn	%	Controls	
LEG	12B - 12"BD 2.25"	200.18	50	65	536.80	0	0	0.00	0.00		37	User Input	
HORIZ		0.00	0	0	0.00	0	0	0.00	0.00	0.00	0		
DIAG	SAE - 3.5X3.5X0.3125	6.22	36	58	54.17	1	1	49.70	26.64	20.54	30	Blk Shear	
Max Splice Forces													
		Pu	phiRnt	Use	Num	Bolt Type							
		(kip)	(kip)	%	Bolts								
Top Tension		187.86	0.00	0	0								
Top Compression		216.28	0.00	0									
Bot Tension		208.03	523.32	40	6	1.25" A325							
Bot Compression		241.25	0.00	0									

Site Number: 10027
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Force/Stress Summary

Section: 3		U16		Bot Elev (ft): 40.00				Height (ft): 20.000							
		Pu (kip)	Load Case	Len (ft)	Bracing %			F'y (ksi)	Phic (kip)	Pn Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
Max Compression Member															
LEG	12B - 12"BD 2"	-209.39	1.2D + 1.6W	10.02	100	100	100	0.0	0.0	399.90	0	0	0.00	0.00	52 User Input
HORIZ		0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0
DIAG	SAE - 3X3X0.3125	-6.12	1.2D + 1.6W 90	18.44	50	50	50	187.9	36.0	11.39	1	1	49.70	43.50	53 Member Z

		Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit (kip)	Pn Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
Max Tension Member													
LEG	12B - 12"BD 2"	183.14	0.9D + 1.6W 60	50	65	424.10	0	0	0.00	0.00			43 User Input
HORIZ		0.00		0	0	0.00	0	0	0.00	0.00	0.00		0
DIAG	SAE - 3X3X0.3125	5.89	1.2D + 1.6W 90	36	58	44.05	1	1	49.70	26.64	17.14		34 Blk Shear

		Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Max Splice Forces							
Top Tension		167.07	0.9D + 1.6W 180	0.00	0	0	
Top Compression		190.45	1.2D + 1.6W	0.00	0		
Bot Tension		187.86	0.9D + 1.6W 180	523.32	36	6	1.25" A325
Bot Compression		216.28	1.2D + 1.6W	0.00	0		

Section: 4		U14		Bot Elev (ft): 60.00				Height (ft): 20.000							
		Pu (kip)	Load Case	Len (ft)	Bracing %			F'y (ksi)	Phic (kip)	Pn Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
Max Compression Member															
LEG	12B - 12"BD 2"	-183.48	1.2D + 1.6W	10.02	100	100	100	0.0	0.0	399.90	0	0	0.00	0.00	45 User Input
HORIZ		0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0
DIAG	SAE - 3X3X0.3125	-5.79	1.2D + 1.6W 90	16.80	50	50	50	171.2	36.0	13.73	1	1	49.70	43.50	42 Member Z

		Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit (kip)	Pn Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
Max Tension Member													
LEG	12B - 12"BD 2"	161.87	0.9D + 1.6W 60	50	65	424.10	0	0	0.00	0.00			38 User Input
HORIZ		0.00		0	0	0.00	0	0	0.00	0.00	0.00		0
DIAG	SAE - 3X3X0.3125	5.59	1.2D + 1.6W 90	36	58	44.05	1	1	49.70	26.64	17.14		32 Blk Shear

		Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Max Splice Forces							
Top Tension		145.20	0.9D + 1.6W 180	0.00	0	0	
Top Compression		163.88	1.2D + 1.6W	0.00	0		
Bot Tension		167.07	0.9D + 1.6W 180	523.32	32	6	1.25" A325
Bot Compression		190.45	1.2D + 1.6W	0.00	0		

Site Number: 10027
 Site Name: SALEM CT, CT
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Force/Stress Summary

Section: 5		U12		Bot Elev (ft): 80.00				Height (ft): 20.000							
		Pu (kip)	Load Case	Len (ft)	Bracing %			F'y (ksi)	Phic (kip)	Pn Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
Max Compression Member															
LEG	12B - 12"BD 1.75"	-156.64	1.2D + 1.6W	10.02	100	100	100	0.0	0.0	300.70	0	0	0.00	0.00	52 User Input
HORIZ		0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0
DIAG	SAE - 3X3X0.1875	-5.35	1.2D + 1.6W 90	15.24	50	50	50	153.4	36.0	10.46	1	1	31.81	20.88	51 Member Z

		Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit (kip)	Pn Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
Max Tension Member													
LEG	12B - 12"BD 1.75"	139.67	0.9D + 1.6W 60	50	65	324.70	0	0	0.00	0.00			43 User Input
HORIZ		0.00		0	0	0.00	0	0	0.00	0.00	0.00		0
DIAG	SAE - 3X3X0.1875	5.11	1.2D + 1.6W 90	36	58	28.68	1	1	31.81	12.72	10.16		50 Blk Shear

Max Splice Forces		Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension		122.79	0.9D + 1.6W 180	0.00	0	0	
Top Compression		137.40	1.2D + 1.6W	0.00	0		
Bot Tension		145.20	0.9D + 1.6W 180	327.10	44	6	1 A325
Bot Compression		163.88	1.2D + 1.6W	0.00	0		

Section: 6		U10		Bot Elev (ft): 100.0				Height (ft): 20.000							
		Pu (kip)	Load Case	Len (ft)	Bracing %			F'y (ksi)	Phic (kip)	Pn Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
Max Compression Member															
LEG	12B - 12"BD 1.5"	-129.89	1.2D + 1.6W	10.02	100	100	100	0.0	0.0	214.90	0	0	0.00	0.00	60 User Input
HORIZ		0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0
DIAG	SAE - 3X3X0.1875	-5.24	1.2D + 1.6W 90	13.79	50	50	50	138.9	36.0	12.77	1	1	31.81	20.88	41 Member Z

		Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit (kip)	Pn Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
Max Tension Member													
LEG	12B - 12"BD 1.5"	117.14	0.9D + 1.6W 180	50	65	238.60	0	0	0.00	0.00			49 User Input
HORIZ		0.00		0	0	0.00	0	0	0.00	0.00	0.00		0
DIAG	SAE - 3X3X0.1875	4.94	1.2D + 1.6W 90	36	58	28.68	1	1	31.81	12.72	10.16		48 Blk Shear

Max Splice Forces		Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension		98.15	0.9D + 1.6W 180	0.00	0	0	
Top Compression		109.42	1.2D + 1.6W	0.00	0		
Bot Tension		122.79	0.9D + 1.6W 180	327.10	38	6	1 A325
Bot Compression		137.40	1.2D + 1.6W	0.00	0		

Site Number: 10027
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 Customer: SPRINT NEXTEL

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Force/Stress Summary

Section: 7		U8		Bot Elev (ft): 120.0				Height (ft): 20.000								
		Pu		Len	Bracing %			F'y	Phic Pn	Num	Shear	Bear	Use			
Max Compression Member		(kip)	Load Case	(ft)	X	Y	Z	KL/R	(ksi)	(kip)	Bolts	Holes	phiRnv	phiRn	%	Controls
LEG	12B - 12"BD 1.5"	-101.16	1.2D + 1.6W	10.02	100	100	100	0.0	0.0	214.90	0	0	0.00	0.00	47	User Input
HORIZ		0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG	SAE - 3X3X0.1875	-5.20	1.2D + 1.6W 90	12.50	50	50	50	125.9	36.0	15.34	1	1	31.81	20.88	33	Member Z

Max Tension Member		Pu		Fy	Fu	Phit Pn	Num	Num	Shear	Bear	Blk Shear	Use		
		(kip)	Load Case	(ksi)	(ksi)	(kip)	Bolts	Holes	phiRnv	phiRn	phit Pn	(kip)	%	Controls
LEG	12B - 12"BD 1.5"	90.84	0.9D + 1.6W 60	50	65	238.60	0	0	0.00	0.00			38	User Input
HORIZ		0.00		0	0	0.00	0	0	0.00	0.00	0.00		0	
DIAG	SAE - 3X3X0.1875	5.28	1.2D + 1.6W 90	36	58	28.68	1	1	31.81	12.72	10.16		51	Blk Shear

Max Splice Forces		Pu		phiRnt	Use	Num	Bolt Type	
		(kip)	Load Case	(kip)	%	Bolts		
Top Tension		70.26	0.9D + 1.6W 180	0.00	0	0		
Top Compression		78.59	1.2D + 1.6W	0.00	0			
Bot Tension		98.15	0.9D + 1.6W 180	327.10	30	6	1 A325	
Bot Compression		109.42	1.2D + 1.6W	0.00	0			

Section: 8		U-6.0		Bot Elev (ft): 140.0				Height (ft): 10.000								
		Pu		Len	Bracing %			F'y	Phic Pn	Num	Shear	Bear	Use			
Max Compression Member		(kip)	Load Case	(ft)	X	Y	Z	KL/R	(ksi)	(kip)	Bolts	Holes	phiRnv	phiRn	%	Controls
LEG	12B - 12"BD 1.25"	-67.16	1.2D + 1.6W	10.02	100	100	100	0.0	0.0	142.50	0	0	0.00	0.00	47	User Input
HORIZ		0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG	SAE - 2.5X2.5X0.1875	-6.29	1.2D + 1.6W	11.41	50	50	50	138.4	36.0	10.64	1	1	31.81	20.88	59	Member Z

Max Tension Member		Pu		Fy	Fu	Phit Pn	Num	Num	Shear	Bear	Blk Shear	Use		
		(kip)	Load Case	(ksi)	(ksi)	(kip)	Bolts	Holes	phiRnv	phiRn	phit Pn	(kip)	%	Controls
LEG	12B - 12"BD 1.25"	60.25	1.2D + 1.6W 180	50	65	165.70	0	0	0.00	0.00			36	User Input
HORIZ		0.00		0	0	0.00	0	0	0.00	0.00	0.00		0	
DIAG	SAE - 2.5X2.5X0.1875	5.81	0.9D + 1.6W 60	36	58	22.55	1	1	31.81	12.72	9.14		63	Blk Shear

Max Splice Forces		Pu		phiRnt	Use	Num	Bolt Type	
		(kip)	Load Case	(kip)	%	Bolts		
Top Tension		55.20	0.9D + 1.6W 180	0.00	0	0		
Top Compression		62.38	1.2D + 1.6W	0.00	0			
Bot Tension		70.26	0.9D + 1.6W 180	327.10	21	6	1 A325	
Bot Compression		78.59	1.2D + 1.6W	0.00	0			

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Force/Stress Summary

Section: 9		H-5.0		Bot Elev (ft): 150.0				Height (ft): 20.000							
Max Compression Member		Pu (kip)	Load Case	Len (ft)	Bracing %			F'y (ksi)	Phic (kip)	Pn Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG	SOL - 2" SOLID	-58.56	1.2D + 1.6W	2.41	100	100	100	57.8	50.0	110.77	0	0	0.00	0.00	52 Member X
HORIZ	SOL - 1" SOLID	-1.42	1.2D + 1.6W	60	4.509	100	100	140.7	50.0	8.97	0	0	0.00	0.00	15 Member X
DIAG	SOL - 1" SOLID	-3.12	1.2D + 1.6W	90	5.513	50	50	119.1	50.0	12.51	0	0	0.00	0.00	24 Member X

Max Tension Member		Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit (kip)	Pn Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
LEG	SOL - 2" SOLID	55.82	1.2D + 1.6W	180	50	65	141.37	0	0	0.00	0.00		39 Member
HORIZ	SOL - 1" SOLID	1.47	1.2D + 1.6W		50	65	35.34	0	0	0.00	0.00	0.00	4 Member
DIAG	SOL - 1" SOLID	3.43	1.2D + 1.6W	90	50	65	35.34	0	0	0.00	0.00	0.00	9 Member

Max Splice Forces		Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension		20.29	0.9D + 1.6W	180	87.50	23	0
Top Compression		23.78	1.2D + 1.6W		141.40	17	
Bot Tension		55.20	0.9D + 1.6W	180	327.10	17	6 1 A325
Bot Compression		62.38	1.2D + 1.6W		0.00	0	

Section: 10		S-4.5		Bot Elev (ft): 170.0				Height (ft): 20.000							
Max Compression Member		Pu (kip)	Load Case	Len (ft)	Bracing %			F'y (ksi)	Phic (kip)	Pn Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG	SOL - 1 1/2" SOLID	-21.34	1.2D + 1.6W	2.41	100	100	100	77.0	50.0	51.54	0	0	0.00	0.00	41 Member X
HORIZ	SOL - 3/4" SOLID	-1.10	1.2D + 1.6W		4.491	100	100	186.8	50.0	2.86	0	0	0.00	0.00	38 Member X
DIAG	SOL - 3/4" SOLID	-2.87	1.2D + 1.6W	90	5.068	50	50	145.9	50.0	4.69	0	0	0.00	0.00	61 Member X

Max Tension Member		Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit (kip)	Pn Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
LEG	SOL - 1 1/2" SOLID	19.94	1.2D + 1.6W	180	50	65	79.52	0	0	0.00	0.00		25 Member
HORIZ	SOL - 3/4" SOLID	1.01	1.2D + 1.6W	60	50	65	19.88	0	0	0.00	0.00	0.00	5 Member
DIAG	SOL - 3/4" SOLID	2.88	1.2D + 1.6W	90	50	65	19.88	0	0	0.00	0.00	0.00	14 Member

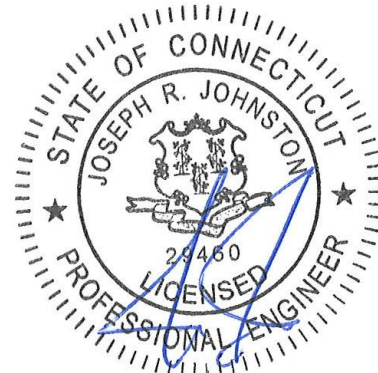
Max Splice Forces		Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension		0.00			0.00	0	0
Top Compression		0.20	(1.2 + 0.2Sds) *		0.00	0	
Bot Tension		20.29	0.9D + 1.6W	180	0.00	0	
Bot Compression		23.78	1.2D + 1.6W		0.00	0	

Mount Analysis Report

April 15, 2018

Sprint Site #	CT33XC578
Infinigy Job Number	526-104
Client	Airosmith
Proposed Carrier	Sprint
Site Location	Intersection of Connecticut Rt. 82 and Rt. 11 Salem, CT 06420 41.46850° N NAD83 72.27330° W NAD83
Mount Centerline EL.	150.0'
Mount Classification	Sector Frame
Failing Structural Usage	>200.0%
Passing Structural Usage	98.3%
Overall Result	Contingent Pass – See Modification Below
Notes	Install SitePro1 STK-U Stiff Arm kits to each unbraced end of existing sector frames. Tie-backs must be attached to opposite tower legs.

Upon reviewing the results of this analysis, it is our opinion that the structure and anchorage meets the specified TIA code requirements. The mount is therefore deemed adequate to support the existing and proposed loading as listed in this report.



04-16-18

Nathaniel R. Ober, E.I.T.
Northeast Structural Region Lead

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Calculations.....	Appended

Introduction

Infinigy Engineering has been requested to perform a mount analysis on the existing Sprint mounts. All supporting documents have been obtained from the client and are assumed to be accurate and applicable to this site. The mount was analyzed using RISA-3D Version 16.0.2 structural analysis software.

Supporting Documentation

Structural Analysis	ATC Eng #OAA714423_C3_03, dated March 22, 2018
----------------------------	--

Analysis Code Requirements

Wind Speed	105 mph (3-Second Gust, V_{asd}) / 135 mph (3-Second Gust V_{ult})
Wind Speed w/ ice	50 mph (3-Second Gust) w/ 3/4" ice
TIA Revision	ANSI/TIA222-G
Adopted IBC	2012 IBC / 2016 Connecticut State Building Code
Structure Class	II
Exposure Category	B
Topographic Category	1
Calculated Crest Height	0 ft

Conclusion

Upon reviewing the results of this analysis, it is our opinion that the structure meets the specified TIA code requirements. The mount for the proposed carrier is therefore deemed adequate to support the final loading configuration as listed in this report.

If you have any questions, require additional information, or actual conditions differ from those as detailed in this report please contact me via the information below:

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nober@infinigy.com | www.infinigy.com

Final Configuration Loading

Mount Centerline (ft)	RAD Height (ft)	Horizontal Offset (ft)*	Qty.	Appurtenance	Carrier
150.0	150.0	12.0	3	Commscope NNVV-65B-R4	Sprint
		0.0	3	RFS APXVTM14-ALU-I20	
		12.0	3	Alcatel-Lucent TD-RRH8x20-25	
		0.0,12.0	6	Alcatel-Lucent RRH2x50-08	
		0.0	3	Alcatel-Lucent 1900 MHz 4X45 RRH	

* Horizontal Offset is defined as the distance from the left most edge of the mount face horizontal when viewed facing the tower

Structure Usages

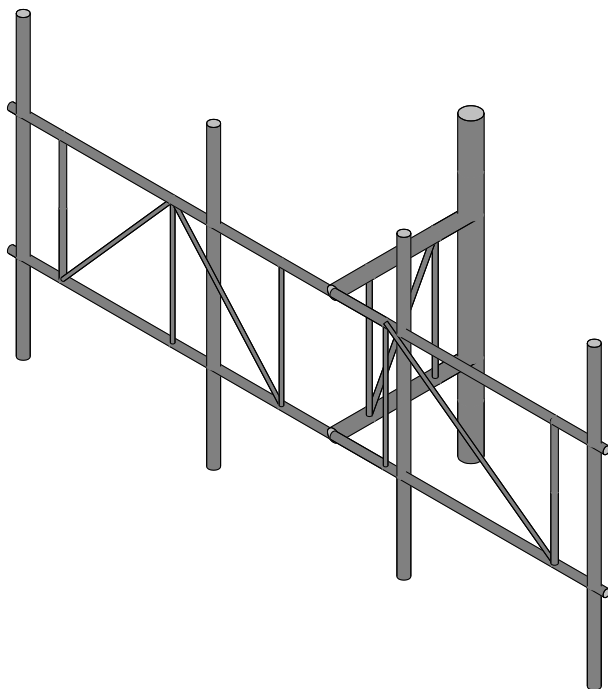
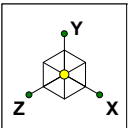
Stand off	67.5	Pass
Face Horizontal	98.3	Pass
Mount Pipe	41.5	Pass
RATING =	98.3	Pass

Assumptions and Limitations

Our structural calculations are completed assuming all information provided to Infinigy Engineering is accurate and applicable to this site. For the purposes of calculations, we assume an overall structure condition of “like new” and all members and connections to be free of corrosion and/or structural defects. The structure owner and/or contractor shall verify the structure’s condition prior to installation of any proposed equipment. If actual conditions differ from those described in this report Infinigy Engineering should be notified immediately to complete a revised evaluation.

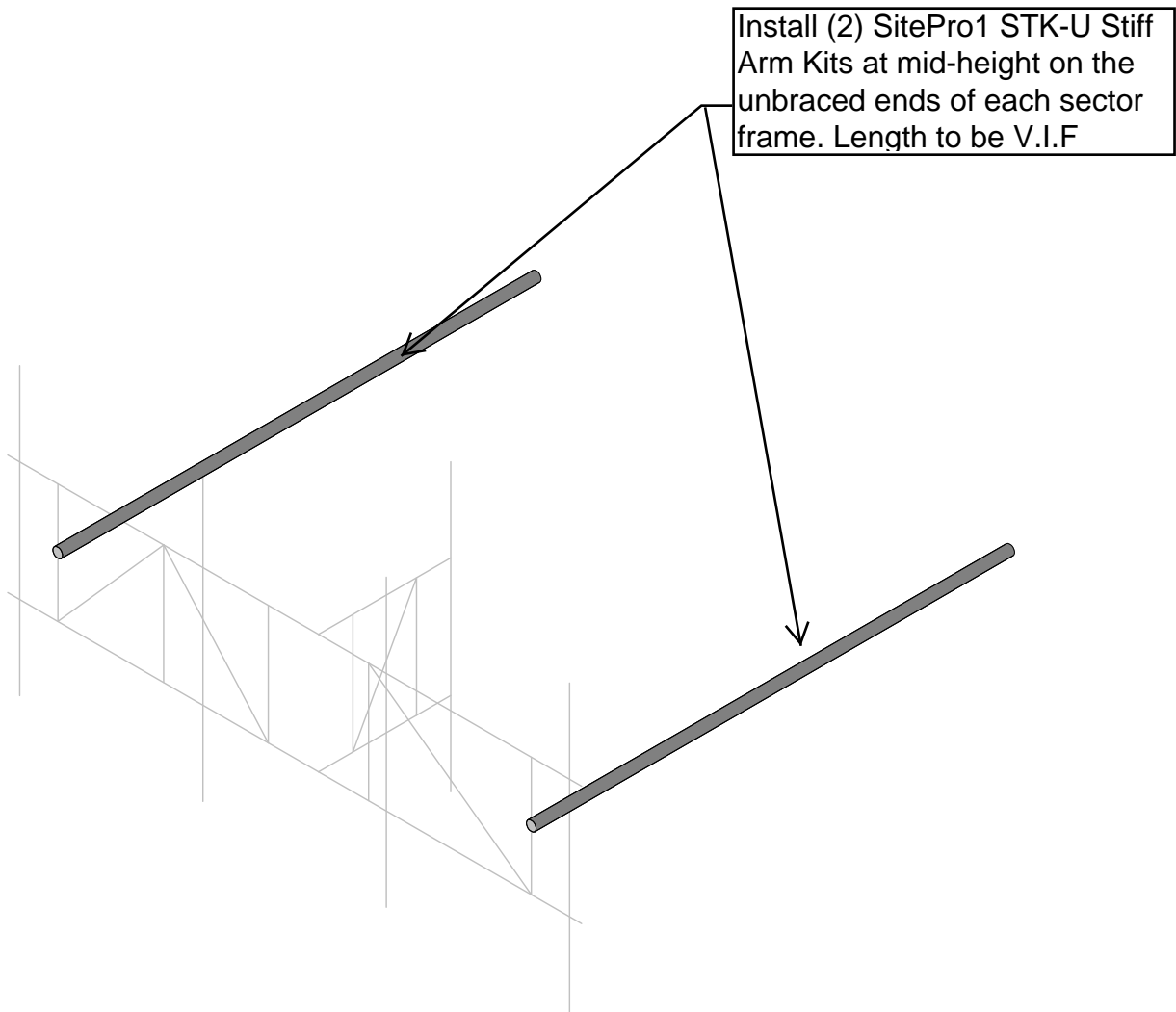
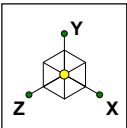
Our evaluation is completed using standard TIA, AISC, ACI, and ASCE methods and procedures. Our structural results are proprietary and should not be used by others as their own. Infinigy Engineering is not responsible for decisions made by others that are or are not based on our supplied assumptions and conclusions.

This report is an evaluation of the proposed carriers mount structure only and does not reflect adequacy of the existing tower, other mounts, or coax mounting attachments. These elements are assumed to be adequate for the purposes of this analysis and are assumed to have been installed per their manufacturer requirements.



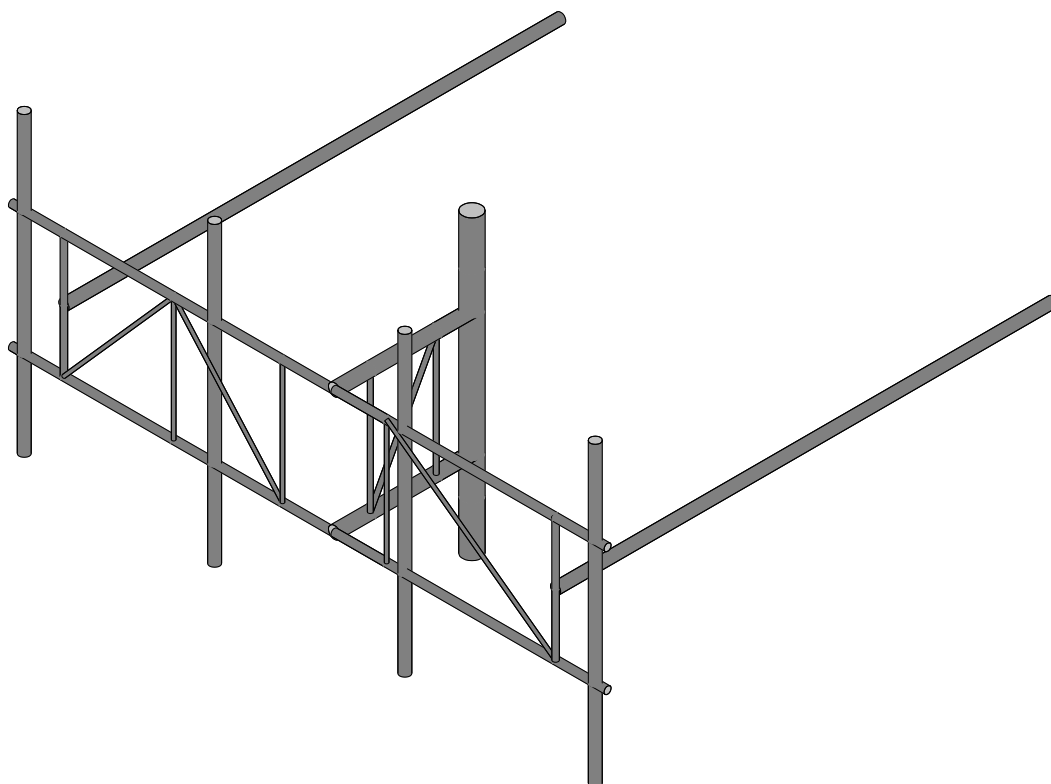
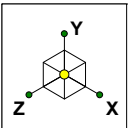
Envelope Only Solution

Infinigy Engineering PLLC	CT33XC578 Existing Configuration	Apr 15, 2018 at 11:16 AM
NRO		CT33XC578.r3d
526-104		



Envelope Only Solution

Infinigy Engineering PLLC	CT33XC578 Proposed Modification	
NRO		Apr 15, 2018 at 11:16 AM
526-104		CT33XC578.r3d



Envelope Only Solution

Infinigy Engineering PLLC	CT33XC578 Final Configuration	Apr 15, 2018 at 11:15 AM
NRO		CT33XC578.r3d
526-104		

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M3	N11	N13			2" STD Pipe	Beam	None	A53 Gr.B	Typical
2	M2	N22	N24			2" STD Pipe	Beam	None	A53 Gr.B	Typical
3	M5	N10	N9			1.25" S.R.	Beam	None	A36 Gr.36	Typical
4	M6	N9	N15			0.75" S.R.	Beam	None	A36 Gr.36	Typical
5	M7	N14	N15			0.75" S.R.	Beam	None	A36 Gr.36	Typical
6	M8	N16	N15			0.75" S.R.	Beam	None	A36 Gr.36	Typical
7	M9	N16	N17			0.75" S.R.	Beam	None	A36 Gr.36	Typical
8	M10	N19	N18			1.25" S.R.	Beam	None	A36 Gr.36	Typical
9	M11	N18	N21			0.75" S.R.	Beam	None	A36 Gr.36	Typical
10	M12	N20	N21			0.75" S.R.	Beam	None	A36 Gr.36	Typical
11	MP4	N34	N33			2" STD Pipe	Beam	None	A53 Gr.B	Typical
12	MP1	N36	N35			2" STD Pipe	Beam	None	A53 Gr.B	Typical
13	M16	N36A	N35A			1" S.R.	Beam	None	A36 Gr.36	Typical
14	M17	N35A	N34A			1" S.R.	Beam	None	A36 Gr.36	Typical
15	M18A	N34A	N33A			1" S.R.	Beam	None	A36 Gr.36	Typical
16	M19A	N4	N32A			2.5" STD Pipe	Beam	None	A53 Gr.B	Typical
17	M20A	N3	N31A			2.5" STD Pipe	Beam	None	A53 Gr.B	Typical
18	M21	N37	N38			4" STD Pipe	Beam	None	A53 Gr.B	Typical
19	M20B	N8	N4			1.25" STD Pipe	Beam	None	A53 Gr.B	Typical
20	M21A	N7	N3			1.25" STD Pipe	Beam	None	A53 Gr.B	Typical
21	M22	N6	N4			1.25" STD Pipe	Beam	None	A53 Gr.B	Typical
22	M23	N5	N3			1.25" STD Pipe	Beam	None	A53 Gr.B	Typical
23	MP3	N48A	N47A			2" STD Pipe	Beam	None	A53 Gr.B	Typical
24	MP2	N52A	N51A			2" STD Pipe	Beam	None	A53 Gr.B	Typical

Material Takeoff

	Material	Size	Pieces	Length[in]	Weight[K]
1	Hot Rolled Steel				
2	A36 Gr.36	SR 1.25" Bar	2	60	0
3	A36 Gr.36	SR 0.75" Bar	6	220.9	0
4	A36 Gr.36	SR 1" Bar	3	94	0
5	A53 Gr.B	PIPE 1.25	4	289	0
6	A53 Gr.B	PIPE 2.0	6	529	.2
7	A53 Gr.B	PIPE 2.5	2	66.6	0
8	A53 Gr.B	PIPE 4.0	1	72	0
9	Total HR Steel		24	1331.5	.4

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distribut..	Area(M...	Surface...
1	Self Weight	DL		-1			8			
2	Wind Load AZI 000	WLZ					8		1	
3	Wind Load AZI 090	WLX					8		1	
4	Ice Weight	OL1					8	24		
5	Wind + Ice Load AZI 000	OL2					8		1	
6	Wind + Ice Load AZI 090	OL3					8		1	
7	Service Live 1	LL				2				
8	BLC 2 Transient Area Loads	None						20		
9	BLC 3 Transient Area Loads	None						20		
10	BLC 5 Transient Area Loads	None						20		
11	BLC 6 Transient Area Loads	None						20		

Load Combinations

	Description	So..	P...	S...	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..
1	1.4D	Yes	Y		DL	1.4									
2	1.2D + 1.6W AZI 000	Yes	Y		DL	1.2	W...	1.6							
3	1.2D + 1.6W AZI 030	Yes	Y		DL	1.2	W...	1.3...	W...	.8					
4	1.2D + 1.6W AZI 060	Yes	Y		DL	1.2	W...	.8	W...	1.3...					
5	1.2D + 1.6W AZI 090	Yes	Y		DL	1.2			W...	1.6					
6	1.2D + 1.6W AZI 120	Yes	Y		DL	1.2	W...	-.8	W...	1.3...					
7	1.2D + 1.6W AZI 150	Yes	Y		DL	1.2	W...	-1.3...	W...	.8					
8	1.2D + 1.6W AZI 180	Yes	Y		DL	1.2	W...	-1.6							
9	1.2D + 1.6W AZI 210	Yes	Y		DL	1.2	W...	-1.3...	W...	-.8					
10	1.2D + 1.6W AZI 240	Yes	Y		DL	1.2	W...	-.8	W...	-1.3...					
11	1.2D + 1.6W AZI 270	Yes	Y		DL	1.2			W...	-1.6					
12	1.2D + 1.6W AZI 300	Yes	Y		DL	1.2	W...	.8	W...	-1.3...					
13	1.2D + 1.6W AZI 330	Yes	Y		DL	1.2	W...	1.3...	W...	-.8					
14	0.9D + 1.6W AZI 000	Yes	Y		DL	.9	W...	1.6							
15	0.9D + 1.6W AZI 030	Yes	Y		DL	.9	W...	1.3...	W...	.8					
16	0.9D + 1.6W AZI 060	Yes	Y		DL	.9	W...	.8	W...	1.3...					
17	0.9D + 1.6W AZI 090	Yes	Y		DL	.9			W...	1.6					
18	0.9D + 1.6W AZI 120	Yes	Y		DL	.9	W...	-.8	W...	1.3...					
19	0.9D + 1.6W AZI 150	Yes	Y		DL	.9	W...	-1.3...	W...	.8					
20	0.9D + 1.6W AZI 180	Yes	Y		DL	.9	W...	-1.6							
21	0.9D + 1.6W AZI 210	Yes	Y		DL	.9	W...	-1.3...	W...	-.8					
22	0.9D + 1.6W AZI 240	Yes	Y		DL	.9	W...	-.8	W...	-1.3...					
23	0.9D + 1.6W AZI 270	Yes	Y		DL	.9			W...	-1.6					
24	0.9D + 1.6W AZI 300	Yes	Y		DL	.9	W...	.8	W...	-1.3...					
25	0.9D + 1.6W AZI 330	Yes	Y		DL	.9	W...	1.3...	W...	-.8					
26	1.2D + 1.0Di	Yes	Y		DL	1.2	OL1	1							
27	1.2D + 1.0Di + 1.0Wi A...	Yes	Y		DL	1.2	OL1	1	OL2	1					
28	1.2D + 1.0Di + 1.0Wi A...	Yes	Y		DL	1.2	OL1	1	OL2	.866	OL3	.5			
29	1.2D + 1.0Di + 1.0Wi A...	Yes	Y		DL	1.2	OL1	1	OL2	.5	OL3	.866			
30	1.2D + 1.0Di + 1.0Wi A...	Yes	Y		DL	1.2	OL1	1			OL3	1			
31	1.2D + 1.0Di + 1.0Wi A...	Yes	Y		DL	1.2	OL1	1	OL2	-.5	OL3	.866			
32	1.2D + 1.0Di + 1.0Wi A...	Yes	Y		DL	1.2	OL1	1	OL2	-.866	OL3	.5			
33	1.2D + 1.0Di + 1.0Wi A...	Yes	Y		DL	1.2	OL1	1	OL2	-.1					
34	1.2D + 1.0Di + 1.0Wi A...	Yes	Y		DL	1.2	OL1	1	OL2	-.866	OL3	-.5			
35	1.2D + 1.0Di + 1.0Wi A...	Yes	Y		DL	1.2	OL1	1	OL2	-.5	OL3	-.866			
36	1.2D + 1.0Di + 1.0Wi A...	Yes	Y		DL	1.2	OL1	1			OL3	-.1			
37	1.2D + 1.0Di + 1.0Wi A...	Yes	Y		DL	1.2	OL1	1	OL2	.5	OL3	-.866			
38	1.2D + 1.0Di + 1.0Wi A...	Yes	Y		DL	1.2	OL1	1	OL2	.866	OL3	-.5			
39	1.2D + 1.5L + 1.0WL (...)	Yes	Y		DL	1.2	LL	1.5	W...	.111					
40	1.2D + 1.5L + 1.0WL (...)	Yes	Y		DL	1.2	LL	1.5	W...	.096	W...	.056			
41	1.2D + 1.5L + 1.0WL (...)	Yes	Y		DL	1.2	LL	1.5	W...	.056	W...	.096			
42	1.2D + 1.5L + 1.0WL (...)	Yes	Y		DL	1.2	LL	1.5			W...	.111			
43	1.2D + 1.5L + 1.0WL (...)	Yes	Y		DL	1.2	LL	1.5	W...	-.056	W...	.096			
44	1.2D + 1.5L + 1.0WL (...)	Yes	Y		DL	1.2	LL	1.5	W...	-.096	W...	.056			
45	1.2D + 1.5L + 1.0WL (...)	Yes	Y		DL	1.2	LL	1.5	W...	-.111					
46	1.2D + 1.5L + 1.0WL (...)	Yes	Y		DL	1.2	LL	1.5	W...	-.096	W...	-.056			
47	1.2D + 1.5L + 1.0WL (...)	Yes	Y		DL	1.2	LL	1.5	W...	-.056	W...	-.096			
48	1.2D + 1.5L + 1.0WL (...)	Yes	Y		DL	1.2	LL	1.5			W...	-.111			
49	1.2D + 1.5L + 1.0WL (...)	Yes	Y		DL	1.2	LL	1.5	W...	.056	W...	-.096			
50	1.2D + 1.5L + 1.0WL (...)	Yes	Y		DL	1.2	LL	1.5	W...	.096	W...	-.056			

Envelope Joint Reactions

Joint	X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
1	N13	max	70.525	17	57.584	33	1284.528	2	0	1	0	1
2		min	-70.793	23	13.325	15	-1284.206	8	0	1	0	1
3	N24	max	70.858	5	56.53	27	955.535	14	0	1	0	1
4		min	-70.462	11	14.882	19	-956.005	8	0	1	0	1
5	N52	max	653.938	17	1095.854	27	1903.92	27	720.402	27	1533.72	17
6		min	-942.971	11	261.269	20	417.333	25	141.689	14	-1869.617	11
7	N51	max	1199.45	5	1370.904	33	-83.137	14	636.223	33	2183.64	5
8		min	-909.222	23	331.475	14	-1995.875	33	-18.209	14	-1858.093	23
9	Totals:	max	1952.428	5	2557.579	35	2575.121	14				
10		min	-1952.428	23	669.389	17	-2575.121	8				

Envelope AISC 14th(360-10): LRFD Steel Code Checks

Member	Shape	Code Check	Lo	Shear C	Loc[in]	LC	phi*Pnc	phi*Pnt	phi*	phi*	Eqn	
1	M21A	PIPE_1...	.983	78	.263	78.25	27	6788.737	19687.5	800	800	H1-
2	M8	SR 0.7...	.834	0	.036	39.9	4	2199.035	14313.8	.178	.178	H1-
3	M20B	PIPE_1...	.824	78	.249	78.25	27	6788.737	19687.5	800	800	H1-
4	M5	SR 1.2...	.706	15	.068	15	8	35219	39760.7	.828	.828	1 H1-
5	M19A	PIPE_2.5	.675	33	.255	33.3	30	49982	50715	3596	3596	1 H1-
6	M20A	PIPE_2.5	.534	33	.220	33.3	38	49982	50715	3596	3596	1 H1-
7	M10	SR 1.2...	.511	15	.095	15	8	35219	39760.7	.828	.828	1 H1-
8	M23	PIPE_1...	.438	13	.266	12.4	8	9179.16	19687.5	800	800	H1-
9	MP4	PIPE_2.0	.415	21	.065	51	8	29810	32130	1871	1871	1 H1-
10	M22	PIPE_1...	.398	53	.215	13.1	8	9179.16	19687.5	800	800	H1-
11	MP1	PIPE_2.0	.269	21	.076	51	2	29810	32130	1871	1871	1 H1-
12	M16	SR 1" B...	.236	30	.135	30	29	11923	25446.8	.424	.424	H1-
13	M6	SR 0.7...	.222	0	.013	40.1	11	2180.925	14313.8	.178	.178	H1-
14	M12	SR 0.7...	.184	0	.039	30	33	3898.744	14313.8	.178	.178	H1-
15	M9	SR 0.7...	.169	30	.058	0	2	3898.744	14313.8	.178	.178	H1-
16	M11	SR 0.7...	.160	0	.034	0	3	1359.5	14313.8	.178	.178	H1-
17	M17	SR 1" B...	.155	34	.071	0	36	9592.869	25446.8	.424	.424	H1-
18	M21	PIPE_4.0	.135	12	.276	12	5	91394	93240	1063	1063	1 H3-6
19	M3	PIPE_2.0	.132	0	.008	0	11	9755.135	32130	1871	1871	H1-
20	M18A	SR 1" B...	.127	30	.075	30	29	11923	25446.8	.424	.424	H1-
21	MP2	PIPE_2.0	.119	21	.089	51	8	29810	32130	1871	1871	1 H1-
22	M2	PIPE_2.0	.115	60	.008	0	11	9755.135	32130	1871	1871	H1-
23	MP3	PIPE_2.0	.075	21	.104	51	8	29810	32130	1871	1871	1 H1-
24	M7	SR 0.7...	.067	0	.028	0	8	3898.744	14313.8	.178	.178	H1-

Sprint



PROJECT: DO MACRO UPGRADE
SITE NAME: (R2E) CT4995 TO CT33-578 SALEM/AMERICAN TOWER
SITE CASCADE: CT33XC578
SITE ADDRESS: 153 EAST HADDAM RD (RT 82) SALEM, CT 06420
SITE TYPE: SELF SUPPORT TOWER
MARKET: NORTHERN CONNECTICUT

PLANS PREPARED FOR:



PLANS PREPARED BY:

INFINIGY
 FROM ZERO TO INFINIGY
 the solutions are endless
 1033 Watervliet Shaker Rd | Albany, NY 12205
 Phone: 518-690-0790 | Fax: 518-690-0793
 www.infinigy.com
 JOB NUMBER 526-104

PROJECT MANAGER:

AIRSMITH
 DEVELOPMENT
 32 CLINTON ST.
 SARATOGA SPRINGS, NY 12886
 OFFICE# (518) 308-3740

ENGINEERING LICENSE:

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REVISIONS:

DESCRIPTION	DATE	BY	REV.
ISSUED FOR PERMIT	05/23/18	ETC	0

SITE NAME:

(R2E) CT4995 TO CT33-578 SALEM/AMERICAN TOWER

SITE NUMBER:

CT33XC578

SITE ADDRESS:

153 EAST HADDAM RD SALEM, CT 06420

SHEET DESCRIPTION:

TITLE SHEET & PROJECT DATA

SHEET NUMBER:

T-1

SITE INFORMATION

TOWER OWNER:
 AMERICAN TOWER CORPORATION
 10 PRESIDENTIAL WAY
 WOBURN, MA 01801

LATITUDE (NAD83):
 41° 28' 6.48" N
 41.468467°

LONGITUDE (NAD83):
 72° 16' 23.86" W
 -72.273294°

COUNTY:
 NEW LONDON COUNTY

ZONING JURISDICTION:
 CONNECTICUT SITING COUNCIL/
 TOWN OF SALEM, CT

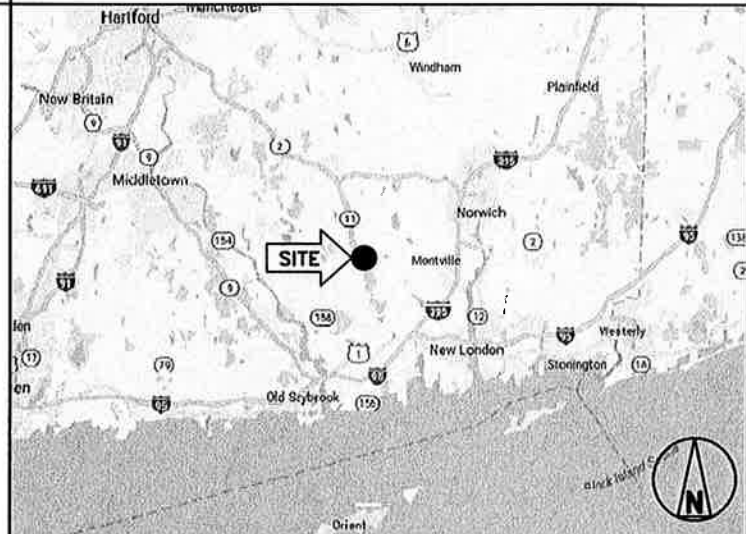
ZONING DISTRICT:
 TBD

POWER COMPANY:
 CL&P
 PHONE: (800) 286-2000

AAV PROVIDER:
 FRONTIER COMMUNICATIONS
 PHONE: (866) 502-7167

PROJECT MANAGER:
 AIROSMITH DEVELOPMENT
 TERRI BURKHOLDER
 (315) 719-2928
 TBURKHOLDER@AIROSMITHDEVELOPMENT.COM

AREA MAP



PROJECT DESCRIPTION

SPRINT PROPOSES TO MODIFY AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY.

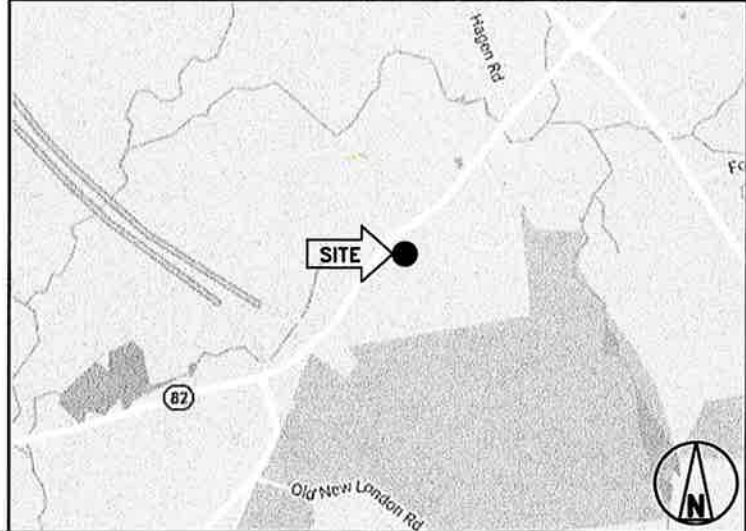
- REMOVE (6) EXISTING PANEL ANTENNAS
- INSTALL (6) PANEL ANTENNAS
- RELOCATE (3) 1900 MHz RRHS BEHIND ANTENNAS
- INSTALL (3) 2.5 GHz & (6) 800 MHz RRH'S BEHIND ANTENNAS
- INSTALL (48) JUMPER CABLES
- INSTALL (4) HYBRID CABLE
- INSTALL 2.5 EQUIPMENT INSIDE EXISTING N.V. MMBS CABINET

THESE PLANS HAVE BEEN DEVELOPED FOR THE MODIFICATION OF AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY OWNED OR LEASED BY SPRINT IN ACCORDANCE WITH THE SCOPE OF WORK PROVIDED BY SPRINT. INFINIGY HAS INCORPORATED THIS SCOPE OF WORK IN THE PLANS. THESE PLANS ARE NOT FOR CONSTRUCTION UNLESS ACCOMPANIED BY A PASSING STRUCTURAL STABILITY ANALYSIS PREPARED BY A LICENSED STRUCTURAL ENGINEER. STRUCTURAL ANALYSIS MUST INCLUDE BOTH TOWER AND MOUNT.

DRAWING INDEX

SHEET NO.	SHEET TITLE	REV.
T-1	TITLE SHEET & PROJECT DATA	0
SP-1	SPRINT SPECIFICATIONS	0
SP-2	SPRINT SPECIFICATIONS	0
SP-3	SPRINT SPECIFICATIONS	0
A-1	SITE PLAN	0
A-2	TOWER ELEVATION	0
A-3	ANTENNA LAYOUT & MOUNTING DETAILS	0
A-4	EQUIPMENT & MOUNTING DETAILS	0
A-5	EQUIPMENT & MOUNTING DETAILS	0
A-6	CIVIL DETAILS	0
A-7	PLUMBING DIAGRAM	0
E-1	ELECTRICAL & GROUNDING PLAN	0
E-2	ELECTRICAL & GROUNDING DETAILS	0

LOCATION MAP



APPLICABLE CODES

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALL IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

- INTERNATIONAL BUILDING CODE (2015 IBC)
- TIA-222-G OR LATEST EDITION
- NFPA 780 - LIGHTNING PROTECTION CODE
- 2011 NATIONAL ELECTRIC CODE OR LATEST EDITION
- ANY OTHER NATIONAL OR LOCAL APPLICABLE CODES, MOST RECENT EDITIONS
- CT BUILDING CODE
- LOCAL BUILDING CODE
- CITY/COUNTY ORDINANCES



THESE OUTLINE SPECIFICATIONS IN CONJUNCTION WITH THE SPRINT STANDARD CONSTRUCTION SPECIFICATIONS, INCLUDING CONTRACT DOCUMENTS AND THE CONSTRUCTION DRAWINGS DESCRIBE THE WORK TO BE PERFORMED BY THE CONTRACTOR.

SECTION 01 100 - SCOPE OF WORK

PART 1 - GENERAL

- 1.1 THE WORK: THESE STANDARD CONSTRUCTION SPECIFICATIONS IN CONJUNCTION WITH THE SPRINT CONSTRUCTION STANDARDS FOR WIRELESS SITES, CONTRACT DOCUMENTS AND THE CONSTRUCTION DRAWINGS DESCRIBE THE WORK TO BE PERFORMED BY THE CONTRACTOR.
- 1.2 RELATED DOCUMENTS:
 - A. THE REQUIREMENTS OF THIS SECTION APPLY TO ALL SECTIONS IN THIS SPECIFICATION.
 - B. SPRINT "STANDARD CONSTRUCTION DETAILS FOR WIRELESS SITES" ARE INCLUDED IN AND MADE A PART OF THESE SPECIFICATIONS HEREWITH.
- 1.3 PRECEDENCE: SHOULD CONFLICTS OCCUR BETWEEN THE STANDARD CONSTRUCTION SPECIFICATIONS FOR WIRELESS SITES INCLUDING THE STANDARD CONSTRUCTION DETAILS FOR WIRELESS SITES AND THE CONSTRUCTION DRAWINGS, INFORMATION ON THE CONSTRUCTION DRAWINGS SHALL TAKE PRECEDENCE. NOTIFY SPRINT CONSTRUCTION MANAGER IF THIS OCCURS.
- 1.4 NATIONALLY RECOGNIZED CODES AND STANDARDS:
 - A. THE WORK SHALL COMPLY WITH APPLICABLE NATIONAL AND LOCAL CODES AND STANDARDS, LATEST EDITION, AND PORTIONS THEREOF, INCLUDED BUT NOT LIMITED TO THE FOLLOWING:
 - 1. GR-63-CORE NEBS REQUIREMENTS: PHYSICAL PROTECTION
 - 5. GR-78-CORE GENERIC REQUIREMENTS FOR THE PHYSICAL DESIGN AND MANUFACTURE OF TELECOMMUNICATIONS EQUIPMENT.
 - 3. GR-1089 CORE, ELECTROMAGNETIC COMPATIBILITY AND ELECTRICAL SAFETY -GENERIC CRITERIA FOR NETWORK TELECOMMUNICATIONS EQUIPMENT.
 - 4. NATIONAL FIRE PROTECTION ASSOCIATION CODES AND STANDARDS (NFPA) INCLUDING NFPA 70 (NATIONAL ELECTRICAL CODE - "NEC") AND NFPA 101 (LIFE SAFETY CODE).
 - 5. AMERICAN SOCIETY FOR TESTING OF MATERIALS (ASTM)
 - 6. INSTITUTE OF ELECTRONIC AND ELECTRICAL ENGINEERS (IEEE)
 - 7. AMERICAN CONCRETE INSTITUTE (ACI)
 - 8. AMERICAN WIRE PRODUCERS ASSOCIATION (AWPA)
 - 9. CONCRETE REINFORCING STEEL INSTITUTE (CRSI)
 - 10. AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO)
 - 11. PORTLAND CEMENT ASSOCIATION (PCA)
 - 12. NATIONAL CONCRETE MASONRY ASSOCIATION (NCMA)
 - 13. BRICK INDUSTRY ASSOCIATION (BIA)
 - 14. AMERICAN WELDING SOCIETY (AWS)
 - 15. NATIONAL ROOFING CONTRACTORS ASSOCIATION (NRCA)
 - 16. SHEET METAL AND AIR CONDITIONING CONTRACTORS' NATIONAL ASSOCIATION (SMACNA)
 - 17. DOOR AND HARDWARE INSTITUTE (DHI)
 - 18. OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA)
 - 19. APPLICABLE BUILDING CODES INCLUDING UNIFORM BUILDING CODE, SOUTHERN BUILDING CODE, BOCA, AND THE INTERNATIONAL BUILDING CODE.

1.5 DEFINITIONS:

- A. WORK: THE SUM OF TASKS AND RESPONSIBILITIES IDENTIFIED IN THE CONTRACT DOCUMENTS.
- B. COMPANY: SPRINT CORPORATION
- C. ENGINEER: SYNONYMOUS WITH ARCHITECT & ENGINEER AND "A&E". THE DESIGN PROFESSIONAL HAVING PROFESSIONAL RESPONSIBILITY FOR DESIGN OF THE PROJECT.
- D. CONTRACTOR: CONSTRUCTION CONTRACTOR; CONSTRUCTION VENDOR; INDIVIDUAL OR ENTITY WHO AFTER EXECUTION OF A CONTRACT IS BOUND TO ACCOMPLISH THE WORK.
- E. THIRD PARTY VENDOR OR AGENCY: A VENDOR OR AGENCY ENGAGED SEPARATELY BY THE COMPANY, A&E, OR CONTRACTOR TO PROVIDE MATERIALS OR TO ACCOMPLISH SPECIFIC TASKS RELATED TO BUT NOT INCLUDED IN THE WORK.
- F. OFCI: OWNER FURNISHED, CONTRACTOR INSTALLED EQUIPMENT.
- G. CONSTRUCTION MANAGER - ALL PROJECTS RELATED COMMUNICATION TO FLOW THROUGH SPRINT REPRESENTATIVE IN CHARGE OF PROJECT...

- 1.6 SITE FAMILIARITY: CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIMSELF WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE SPRINT CONSTRUCTION MANAGER PRIOR TO THE COMMENCEMENT OF WORK. NO COMPENSATION WILL BE AWARDED BASED ON CLAIM OF LACK OF KNOWLEDGE OR FIELD CONDITIONS.
- 1.7 POINT OF CONTACT: COMMUNICATION BETWEEN SPRINT AND THE CONTRACTOR SHALL FLOW THROUGH THE SINGLE SPRINT CONSTRUCTION MANAGER APPOINTED TO MANAGE THE PROJECT FOR SPRINT.
- 1.8 ON-SITE SUPERVISION: THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL EMPLOY A COMPETENT SUPERINTENDENT WHO SHALL BE IN ATTENDANCE AT THE SITE AT ALL TIMES DURING PERFORMANCE OF THE WORK.
- 1.9 DRAWINGS, SPECIFICATIONS AND DETAILS REQUIRED AT JOBSITE: THE CONSTRUCTION CONTRACTOR SHALL MAINTAIN A FULL SET OF THE CONSTRUCTION DRAWINGS, STANDARD CONSTRUCTION DETAILS FOR WIRELESS SITES AND THE STANDARD CONSTRUCTION SPECIFICATIONS FOR WIRELESS SITES AT THE JOBSITE FROM MOBILIZATION THROUGH CONSTRUCTION COMPLETION.
 - A. THE JOBSITE DRAWINGS, SPECIFICATIONS AND DETAILS SHALL BE CLEARLY MARKED DAILY IN RED PENCIL WITH ANY CHANGES IN CONSTRUCTION OVER WHAT IS DEPICTED IN THE DOCUMENTS. AT CONSTRUCTION COMPLETION, THIS JOBSITE MARKUP SET SHALL BE DELIVERED TO THE COMPANY OR COMPANY'S DESIGNATED REPRESENTATIVE TO BE FORWARDED TO THE COMPANY'S A&E VENDOR FOR PRODUCTION OF "AS-BUILT" DRAWINGS.
 - B. DETAILS ARE INTENDED TO SHOW DESIGN INTENT. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK. CONTRACTOR SHALL NOTIFY SPRINT CONSTRUCTION MANAGER OF ANY VARIATIONS PRIOR TO PROCEEDING WITH THE WORK.
 - C. DIMENSIONS SHOWN ARE TO FINISH SURFACES UNLESS NOTED OTHERWISE. SPACING BETWEEN EQUIPMENT IS THE REQUIRED CLEARANCE. SHOULD THERE BE ANY QUESTIONS REGARDING THE CONTRACT DOCUMENTS, EXISTING CONDITIONS AND/OR DESIGN INTENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE SPRINT CONSTRUCTION MANAGER PRIOR TO PROCEEDING WITH THE WORK.
- 1.10 USE OF JOB SITE: THE CONTRACTOR SHALL CONFINE ALL CONSTRUCTION AND RELATED OPERATIONS INCLUDING STAGING AND STORAGE OF MATERIALS AND EQUIPMENT, PARKING, TEMPORARY FACILITIES, AND WASTE STORAGE TO THE LEASE PARCEL UNLESS OTHERWISE PERMITTED BY THE CONTRACT DOCUMENTS.
- 1.11 UTILITIES SERVICES: WHERE NECESSARY TO CUT EXISTING PIPES, ELECTRICAL WIRES, CONDUITS, CABLES, ETC., OF UTILITY SERVICES, OR OF FIRE PROTECTION OR COMMUNICATIONS SYSTEMS, THEY SHALL BE CUT AND CAPPED AT SUITABLE PLACES OR WHERE SHOWN. ALL SUCH ACTIONS SHALL BE COORDINATED WITH THE UTILITY COMPANY INVOLVED.
- 1.12 PERMITS / FEES: WHEN REQUIRED THAT A PERMIT OR CONNECTION FEE BE PAID TO A PUBLIC UTILITY PROVIDER FOR NEW SERVICE TO THE CONSTRUCTION PROJECT, PAYMENT OF SUCH FEE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 1.13 CONTRACTOR SHALL TAKE ALL MEASURES AND PROVIDE ALL MATERIAL NECESSARY FOR PROTECTING EXISTING EQUIPMENT AND PROPERTY.
- 1.14 METHODS OF PROCEDURE (MOPS) FOR CONSTRUCTION: CONTRACTOR SHALL PERFORM WORK AS DESCRIBED IN THE FOLLOWING INSTALLATION AND COMMISSIONING MOPS.

NOTE: IN SHORT-FORM SPECIFICATIONS ON THE DRAWINGS, A/E TO INSERT LIST OF APPLICABLE MOPS INCLUDING EN-2012-001, EN-2013-002, EL-0568, AND TS-0193
- 1.15 USE OF ELECTRONIC PROJECT MANAGEMENT SYSTEMS:

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

- 3.1 TEMPORARY UTILITIES AND FACILITIES: THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY UTILITIES AND FACILITIES NECESSARY EXCEPT AS OTHERWISE INDICATED IN THE CONSTRUCTION DOCUMENTS. TEMPORARY UTILITIES AND FACILITIES INCLUDE POTABLE WATER, HEAT, HVAC, ELECTRICITY, SANITARY FACILITIES, WASTE DISPOSAL FACILITIES, AND TELEPHONE/COMMUNICATION SERVICES. PROVIDE TEMPORARY UTILITIES AND FACILITIES IN ACCORDANCE WITH OSHA AND THE AUTHORITY HAVING JURISDICTION. CONTRACTOR MAY UTILIZE THE COMPANY ELECTRICAL SERVICE IN THE COMPLETION OF THE WORK WHEN IT BECOMES AVAILABLE. USE OF THE LESSORS OR SITE OWNER'S UTILITIES OR FACILITIES IS EXPRESSLY FORBIDDEN EXCEPT AS OTHERWISE ALLOWED IN THE CONTRACT DOCUMENTS.
- 3.2 ACCESS TO WORK: THE CONTRACTOR SHALL PROVIDE ACCESS TO THE JOB SITE FOR AUTHORIZED COMPANY PERSONNEL AND AUTHORIZED REPRESENTATIVES OF THE ARCHITECT/ENGINEER DURING ALL PHASES OF THE WORK.
- 3.3 TESTING: REQUIREMENTS FOR TESTING BY THIS CONTRACTOR SHALL BE AS INDICATED HEREWITH, ON THE CONSTRUCTION DRAWINGS, AND IN THE INDIVIDUAL SECTIONS OF THESE SPECIFICATIONS. SHOULD COMPANY CHOOSE TO ENGAGE ANY THIRD-PARTY TO CONDUCT ADDITIONAL TESTING, THE CONTRACTOR SHALL COOPERATE WITH AND PROVIDE A WORK AREA FOR COMPANY'S TEST AGENCY.
- 3.4 DIMENSIONS: VERIFY DIMENSIONS INDICATED ON DRAWINGS WITH FIELD DIMENSIONS BEFORE FABRICATION OR ORDERING OF MATERIALS. DO NOT SCALE DRAWINGS.

3.5 EXISTING CONDITIONS: NOTIFY THE SPRINT CONSTRUCTION MANAGER OF EXISTING CONDITIONS DIFFERING FROM THOSE INDICATED ON THE DRAWINGS. DO NOT REMOVE OR ALTER STRUCTURAL COMPONENTS WITHOUT PRIOR WRITTEN APPROVAL FROM THE ARCHITECT AND ENGINEER.

SECTION 01 200 - COMPANY FURNISHED MATERIAL AND EQUIPMENT

PART 1 - GENERAL

- 1.1 THE WORK: THESE STANDARD CONSTRUCTION SPECIFICATIONS IN CONJUNCTION WITH THE OTHER CONTRACT DOCUMENTS AND THE CONSTRUCTION DRAWINGS DESCRIBE THE WORK TO BE PERFORMED BY THE CONTRACTOR.
- 1.2 RELATED DOCUMENTS:
 - A. THE REQUIREMENTS OF THIS SECTION APPLY TO ALL SECTIONS IN THIS SPECIFICATION.
 - B. SPRINT "STANDARD CONSTRUCTION DETAILS FOR WIRELESS SITES" ARE INCLUDED IN AND MADE A PART OF THESE SPECIFICATIONS HEREWITH.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

- 3.1 RECEIPT OF MATERIAL AND EQUIPMENT:
 - A. A COMPANY FURNISHED MATERIAL AND EQUIPMENT IS IDENTIFIED ON THE RF DATA SHEET IN THE CONSTRUCTION DOCUMENTS.
 - B. THE CONTRACTOR IS RESPONSIBLE FOR SPRINT PROVIDED MATERIAL AND EQUIPMENT AND UPON RECEIPT SHALL:
 - 1. ACCEPT DELIVERIES AS SHIPPED AND TAKE RECEIPT.
 - 2. VERIFY COMPLETENESS AND CONDITION OF ALL DELIVERIES.
 - 3. TAKE RESPONSIBILITY FOR EQUIPMENT AND PROVIDE INSURANCE PROTECTION AS REQUIRED IN AGREEMENT.
 - 4. RECORD ANY DEFECTS OR DAMAGES AND WITHIN TWENTY-FOUR HOURS AFTER RECEIPT, REPORT TO SPRINT OR ITS DESIGNATED PROJECT REPRESENTATIVE OF SUCH.
 - 5. PROVIDE SECURE AND NECESSARY WEATHER PROTECTED WAREHOUSING.
 - 6. COORDINATE SAFE AND SECURE TRANSPORTATION OF MATERIAL AND EQUIPMENT, DELIVERING AND OFF-LOADING FROM CONTRACTOR'S WAREHOUSE TO SITE.
- 3.2 DELIVERABLES:
 - A. COMPLETE SHIPPING AND RECEIPT DOCUMENTATION IN ACCORDANCE WITH COMPANY PRACTICE.
 - B. IF APPLICABLE, COMPLETE LOST/STOLEN/DAMAGED DOCUMENTATION REPORT AS NECESSARY IN ACCORDANCE WITH COMPANY PRACTICE, AND AS DIRECTED BY COMPANY.
 - C. UPLOAD DOCUMENTATION INTO SPRINT SITE MANAGEMENT SYSTEM (SMS) AND/OR PROVIDE HARD COPY DOCUMENTATION AS REQUESTED.

SECTION 01 300 - CELL SITE CONSTRUCTION CO.

PART 1 - GENERAL

- 1.1 THE WORK: THESE STANDARD CONSTRUCTION SPECIFICATIONS IN CONJUNCTION WITH THE OTHER CONTRACT DOCUMENTS AND THE CONSTRUCTION DRAWINGS DESCRIBE THE WORK TO BE PERFORMED BY THE CONTRACTOR.
- 1.2 RELATED DOCUMENTS:
 - A. THE REQUIREMENTS OF THIS SECTION APPLY TO ALL SECTIONS IN THIS SPECIFICATION.
 - B. SPRINT "STANDARD CONSTRUCTION DETAILS FOR WIRELESS SITES" ARE INCLUDED IN AND MADE A PART OF THESE SPECIFICATIONS HEREWITH.
- 1.3 NOTICE TO PROCEED
 - A. NO WORK SHALL COMMENCE PRIOR TO COMPANY'S WRITTEN NOTICE TO PROCEED AND THE ISSUANCE OF THE WORK ORDER.
 - B. UPON RECEIVING NOTICE TO PROCEED, CONTRACTOR SHALL FULLY PERFORM ALL WORK NECESSARY TO PROVIDE SPRINT WITH AN OPERATIONAL WIRELESS FACILITY.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

- 3.1 FUNCTIONAL REQUIREMENTS:
 - A. THE ACTIVITIES DESCRIBED IN THIS PARAGRAPH REPRESENT MINIMUM ACTIONS AND PROCESSES REQUIRED TO SUCCESSFULLY COMPLETE THE WORK. THE ACTIVITIES DESCRIBED ARE NOT EXHAUSTIVE, AND CONTRACTOR SHALL TAKE ANY AND ALL ACTIONS AS NECESSARY TO SUCCESSFULLY COMPLETE THE CONSTRUCTION OF A FULLY FUNCTIONING WIRELESS FACILITY AT THE SITE IN ACCORDANCE WITH COMPANY PROCESSES.
 - B. SUBMIT SPECIFIC DOCUMENTATION AS INDICATED HEREIN, AND OBTAIN REQUIRED APPROVALS WHILE THE WORK IS BEING PERFORMED.
 - C. MANAGE AND CONDUCT ALL FIELD CONSTRUCTION SERVICE RELATED ACTIVITIES
 - D. PROVIDE CONSTRUCTION ACTIVITIES TO THE EXTENT REQUIRED BY THE CONTRACT DOCUMENTS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

PLANS PREPARED FOR:



PLANS PREPARED BY:

INFINIGY
FROM ZERO TO INFINIGY
the solutions are endless
1033 Watervliet Shaker Rd | Albany, NY 12209
Phone: 518-690-0790 | Fax: 518-690-0793
www.infinigy.com
JOB NUMBER 526-104

PROJECT MANAGER:

AIRSMITH
DEVELOPMENT
32 CLINTON ST.
SARATOGA SPRINGS, NY 12886
OFFICE# (518) 308-3740

ENGINEERING LICENSE:



DRAWING NOTICE:

THESE DOCUMENTS ARE CONFIDENTIAL AND ARE THE SOLE PROPERTY OF SPRINT AND MAY NOT BE REPRODUCED, DISSEMINATED OR REDISTRIBUTED WITHOUT THE EXPRESS WRITTEN CONSENT OF SPRINT.

REVISIONS:

DESCRIPTION	DATE	BY	REV
ISSUED FOR PERMIT	05/23/18	ETC	0

SITE NAME:

(R2E) CT4995 TO CT33-578
SALEM/AMERICAN TOWER

SITE NUMBER:

CT33XC578

SITE ADDRESS:

**153 EAST HADDAM RD
SALEM, CT 06420**

SHEET DESCRIPTION:

SPRINT SPECIFICATIONS

SHEET NUMBER:

SP-1

CONTINUE FROM SP-1

1. PERFORM ANY REQUIRED SITE ENVIRONMENTAL MITIGATION.
2. PREPARE GROUND SITES; PROVIDE DE-GRUBBING; AND ROUGH AND FINAL GRADING, AND COMPOUND SURFACE TREATMENTS.
3. MANAGE AND CONDUCT ALL ACTIVITIES FOR INSTALLATION OF UTILITIES INCLUDING ELECTRICAL AND TELCO BACKHAUL.
4. INSTALL UNDERGROUND FACILITIES INCLUDING UNDERGROUND POWER AND COMMUNICATIONS CONDUITS, AND UNDERGROUND GROUNDING SYSTEM.
5. INSTALL ABOVE GROUND GROUNDING SYSTEMS.
6. PROVIDE NEW HVAC INSTALLATIONS AND MODIFICATIONS.
7. INSTALL "H-FRAMES", CABINETS AND SHELTERS AS INDICATED.
8. INSTALL ROADS, ACCESS WAYS, CURBS AND DRAINS AS INDICATED.
9. ACCOMPLISH REQUIRED MODIFICATION OF EXISTING FACILITIES.
10. PROVIDE ANTENNA SUPPORT STRUCTURE FOUNDATIONS.
11. PROVIDE SLABS AND EQUIPMENT PLATFORMS.
12. INSTALL COMPOUND FENCING, SIGHT SHIELDING, LANDSCAPING AND ACCESS BARRIERS.
13. PERFORM INSPECTION AND MATERIAL TESTING AS REQUIRED HEREINAFTER.
14. CONDUCT SITE RESISTANCE TO EARTH TESTING AS REQUIRED HEREINAFTER.
15. INSTALL FIXED GENERATOR SETS AND OTHER STANDBY POWER SOLUTIONS.
16. INSTALL TOWERS, ANTENNA SUPPORT STRUCTURES AND PLATFORMS ON EXISTING TOWERS AS REQUIRED.
17. INSTALL CELL SITE RADIOS, MICROWAVE, GPS, COAXIAL MAINLINE, ANTENNAS, CROSS BAND COUPLERS, TOWER TOP AMPLIFIERS, LOW NOISE AMPLIFIERS AND RELATED EQUIPMENT.
18. PERFORM, DOCUMENT, AND CLOSE OUT ANY CONSTRUCTION CONTROL DOCUMENTS THAT MAY BE REQUIRED BY GOVERNMENT AGENCIES AND LANDLORDS.
19. PERFORM ANTENNA AND COAX SWEEP TESTING AND MAKE ANY AND ALL NECESSARY CORRECTIONS.
20. REMAIN ON SITE MOBILIZED THROUGHOUT HAND-OFF AND INTEGRATION TO ASSIST AS NEEDED UNTIL SITE IS DEEMED SUBSTANTIALLY COMPLETE AND PLACED "ON AIR."

3.2 GENERAL REQUIREMENTS FOR CIVIL CONSTRUCTION:

- A. CONTRACTOR SHALL KEEP THE SITE FREE FROM ACCUMULATING WASTE MATERIAL, DEBRIS, AND TRASH. AT THE COMPLETION OF THE WORK, CONTRACTOR SHALL REMOVE FROM THE SITE ALL REMAINING RUBBISH, IMPLEMENTS, TEMPORARY FACILITIES, AND SURPLUS MATERIALS.
- B. EQUIPMENT ROOMS SHALL AT ALL TIMES BE MAINTAINED 'BROOM CLEAN' AND CLEAR OF DEBRIS.
- C. CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS TO DISCOVER AND LOCATE ANY HAZARDOUS CONDITION.
 1. IN THE EVENT CONTRACTOR ENCOUNTERS ANY HAZARDOUS CONDITION WHICH HAS NOT BEEN ABATED OR OTHERWISE MITIGATED, CONTRACTOR AND ALL OTHER PERSONS SHALL IMMEDIATELY STOP WORK IN THE AFFECTED AREA AND NOTIFY COMPANY IN WRITING. THE WORK IN THE AFFECTED AREA SHALL NOT BE RESUMED EXCEPT BY WRITTEN NOTIFICATION BY COMPANY.
 2. CONTRACTOR AGREES TO USE CARE WHILE ON THE SITE AND SHALL NOT TAKE ANY ACTION THAT WILL OR MAY RESULT IN OR CAUSE THE HAZARDOUS CONDITION TO BE FURTHER RELEASED IN THE ENVIRONMENT, OR TO FURTHER EXPOSE INDIVIDUALS TO THE HAZARD.
- D. CONTRACTOR'S ACTIVITIES SHALL BE RESTRICTED TO THE PROJECT LIMITS. SHOULD AREAS OUTSIDE THE PROJECT LIMITS BE AFFECTED BY CONTRACTOR'S ACTIVITIES, CONTRACTOR SHALL IMMEDIATELY RETURN THEM TO ORIGINAL CONDITION
- E. CONDUCT TESTING AS REQUIRED HEREIN.

3.3 DELIVERABLES:

- A. CONTRACTOR SHALL REVIEW, APPROVE, AND SUBMIT TO SPRINT SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND SIMILAR SUBMITTALS AS REQUIRED HEREINAFTER
- B. PROVIDE DOCUMENTATION INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING. DOCUMENTATION SHALL BE FORWARDED IN ORIGINAL FORMAT AND/OR UPLOADED INTO SMS.
 1. ALL CORRESPONDENCE AND PRELIMINARY CONSTRUCTION REPORTS.
 2. PROJECT PROGRESS REPORTS.
 3. CIVIL CONSTRUCTION START DATE (POPULATE FIELD IN SMS AND/OR FORWARD NOTIFICATION).
 4. ELECTRICAL SERVICE COMPLETION DATE (POPULATE FIELD IN SMS AND/OR FORWARD NOTIFICATION).

5. LINES AND ANTENNA INSTALL DATE (POPULATE FIELD IN SMS AND/OR FORWARD NOTIFICATION).
6. POWER INSTALL DATE (POPULATE FIELD IN SMS AND/OR FORWARD NOTIFICATION).
7. TELCO READY DATE (POPULATE FIELD IN SMS AND/OR FORWARD NOTIFICATION).
8. PPC (OR SHELTER) INSTALL DATE (POPULATE FIELD IN SMS AND/OR FORWARD NOTIFICATION).
9. TOWER CONSTRUCTION START DATE (POPULATE FIELD IN SMS AND/OR FORWARD NOTIFICATION).
10. TOWER CONSTRUCTION COMPLETE DATE (POPULATE FIELD IN SMS AND/OR FORWARD NOTIFICATION).
11. BTS AND RADIO EQUIPMENT DELIVERED AT SITE DATE (POPULATE FIELD IN SMS AND/OR FORWARD NOTIFICATION).
12. NETWORK OPERATIONS HANDOFF CHECKLIST (HOC WALK) COMPLETE (UPLOAD FORM IN SMS)
13. CIVIL CONSTRUCTION COMPLETE DATE (POPULATE FIELD IN SMS AND/OR FORWARD NOTIFICATION).
14. SITE CONSTRUCTION PROGRESS PHOTOS UNLOADED INTO SMS.

SECTION 01 400 - SUBMITTALS & TESTS

PART 1 - GENERAL

- 1.1 THE WORK: THESE STANDARD CONSTRUCTION SPECIFICATIONS IN CONJUNCTION WITH THE OTHER CONTRACT DOCUMENTS AND THE CONSTRUCTION DRAWINGS DESCRIBE THE WORK TO BE PERFORMED BY THE CONTRACTOR.
- 1.2 RELATED DOCUMENTS:
 - A. THE REQUIREMENTS OF THIS SECTION APPLY TO ALL SECTIONS IN THIS SPECIFICATION.
 - B. SPRINT 'STANDARD CONSTRUCTION DETAILS FOR WIRELESS SITES' ARE INCLUDED IN AND MADE A PART OF THESE SPECIFICATIONS HEREWITH.
- 1.3 SUBMITTALS:
 - A. THE WORK IN ALL ASPECTS SHALL COMPLY WITH THE CONSTRUCTION DRAWINGS AND THESE SPECIFICATIONS.
 - B. SUBMIT THE FOLLOWING TO COMPANY REPRESENTATIVE FOR APPROVAL
 1. CONCRETE MIX-DESIGNS FOR TOWER FOUNDATIONS, ANCHORS PIERS, AND CONCRETE PAVING.
 2. CONCRETE BREAK TESTS AS SPECIFIED HEREIN.
 3. SPECIAL FINISHES FOR INTERIOR SPACES, IF ANY.
 4. ALL EQUIPMENT AND MATERIALS SO IDENTIFIED ON THE CONSTRUCTION DRAWINGS.
 5. CHEMICAL GROUNDING DESIGN
 - D. ALTERNATES: AT THE COMPANY'S REQUEST, ANY ALTERNATIVES TO THE MATERIALS OR METHODS SPECIFIED SHALL BE SUBMITTED TO SPRINT'S CONSTRUCTION MANAGER FOR APPROVAL PRIOR TO BEING SHIPPED TO SITE. SPRINT WILL REVIEW AND APPROVE ONLY THOSE REQUESTS MADE IN WRITING. NO VERBAL APPROVALS WILL BE CONSIDERED. SUBMITTAL FOR APPROVAL SHALL INCLUDE A STATEMENT OF COST REDUCTION PROPOSED FOR USE OF ALTERNATE PRODUCT.

1.4 TESTS AND INSPECTIONS:

- A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION TESTS, INSPECTIONS AND PROJECT DOCUMENTATION.
- B. CONTRACTOR SHALL ACCOMPLISH TESTING INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
 1. COAX SWEEPS AND FIBER TESTS PER TS-0200 REV 4 ANTENNA LINE ACCEPTANCE STANDARDS.
 2. AGL, AZIMUTH AND DOWNTILT USING ELECTRONIC COMMERCIAL MADE-FOR-THE-PURPOSE ANTENNA ALIGNMENT TOOL.
 3. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL CORRECTIONS TO ANY WORK IDENTIFIED AS UNACCEPTABLE IN SITE INSPECTION ACTIVITIES AND/OR AS A RESULT OF TESTING.
- C. REQUIRED CLOSEOUT DOCUMENTATION INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING:
 1. AZIMUTH, DOWNTILT, AGL - UPLOAD REPORT FROM ANTENNA ALIGNMENT TOOL TO SITERRA TASK 485. INSTALLED AZIMUTH, DOWNTILT, AND AGL MUST CONFORM TO THE RF DATA SHEETS. SWEEP AND FIBER TESTS
 2. SCANABLE BARCODE PHOTOGRAPHS OF TOWER TOP AND INACCESSIBLE SERIALIZED EQUIPMENT
 3. ALL AVAILABLE JURISDICTIONAL INFORMATION
 4. PDF SCAN OF REDLINES PRODUCED IN FIELD

5. ELECTRONIC AS-BUILT DRAWINGS IN AUTOCAD AND PDF FORMATS. ANY FIELD CHANGE MUST BE REFLECTED BY MODIFYING THE PLANS, ELEVATIONS, AND DETAILS IN THE DRAWING SETS. GENERAL NOTES INDICATING MODIFICATIONS WILL NOT BE ACCEPTED. CHANGES SHALL BE HIGHLIGHTED AS "CLOUDS" IDENTIFIED AS THE "AS-BUILT" CONDITION.
6. LIEN WAIVERS
7. FINAL PAYMENT APPLICATION
8. REQUIRED FINAL CONSTRUCTION PHOTOS
9. CONSTRUCTION AND COMMISSIONING CHECKLIST COMPLETE WITH NO DEFICIENT ITEMS
10. ALL POST NTP TASKS INCLUDING DOCUMENT UPLOADS COMPLETED IN SITERRA (SPRINTS DOCUMENT REPOSITORY OF RECORD).

1.5 COMMISSIONING: PERFORM ALL COMMISSIONING AS REQUIRED BY APPLICABLE MOPa

1.6 INTEGRATION: PERFORM ALL INTEGRATION ACTIVITIES AS REQUIRED BY APPLICABLE MOPa

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 REQUIREMENTS FOR TESTING:

A. THIRD PARTY TESTING AGENCY:

1. WHEN THE USE OF A THIRD PARTY INDEPENDENT TESTING AGENCY IS REQUIRED, THE AGENCY THAT IS SELECTED MUST PERFORM SUCH WORK ON A REGULAR BASIS IN THE STATE WHERE THE PROJECT IS LOCATED AND HAVE A THOROUGH UNDERSTANDING OF LOCAL AVAILABLE MATERIALS, INCLUDING THE SOIL, ROCK, AND GROUNDWATER CONDITIONS.
2. THE THIRD PARTY TESTING AGENCY IS TO BE FAMILIAR WITH THE APPLICABLE REQUIREMENTS FOR THE TESTS TO BE DONE, EQUIPMENT TO BE USED, AND ASSOCIATED HEALTH AND SAFETY ISSUES.
3. EXPERIENCE IN SOILS, CONCRETE, MASONRY, AGGREGATE, AND ASPHALT TESTING USING ASTM, AASJTO, AND OTHER METHODS IS NEEDED.
4. EXPERIENCE IN SOILS, CONCRETE, MASONRY, AGGREGATE, AND ASPHALT TESTING USING ASTM, AASJTO, AND OTHER METHODS IS NEEDED.

3.2 REQUIRED TESTS:

A. CONTRACTOR SHALL ACCOMPLISH TESTING INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

1. CONCRETE CYLINDER BREAK TESTS FOR THE TOWER AND ANCHOR FOUNDATIONS AS SPECIFIED IN SECTION: PORTLAND CEMENT CONCRETE PAVING.
2. ASPHALT ROADWAY COMPACTED THICKNESS, SURFACE SMOOTHNESS, AND COMPACTED DENSITY TESTING AS SPECIFIED IN SECTION: HOT MIX ASPHALT PAVING.
3. FIELD QUALITY CONTROL TESTING AS SPECIFIED IN SECTION: PORTLAND CEMENT CONCRETE PAVING.
4. TESTING REQUIRED UNDER SECTION: AGGREGATE BASE FOR ACCESS ROADS, PADS AND ANCHOR LOCATIONS
5. STRUCTURAL BACKFILL COMPACTION TESTS FOR THE TOWER FOUNDATION.
6. SITE RESISTANCE TO EARTH TESTING PER EXHIBIT: CELL SITE GROUNDING SYSTEM DESIGN.
7. ANTENNA AND COAX SWEEP TESTS PER EXHIBIT: ANTENNA TRANSMISSION LINE ACCEPTANCE STANDARDS.
8. GROUNDING AT ANTENNA MASTS FOR GPS AND ANTENNAS
9. ALL OTHER TESTS REQUIRED BY COMPANY OR JURISDICTION.

3.3 REQUIRED INSPECTIONS

A. SCHEDULE INSPECTIONS WITH COMPANY REPRESENTATIVE.

B. CONDUCT INSPECTIONS INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

1. GROUNDING SYSTEM INSTALLATION PRIOR TO EARTH CONCEALMENT DOCUMENTED WITH DIGITAL PHOTOGRAPHS BY CONTRACTOR, APPROVED BY A&E OR SPRINT REPRESENTATIVE.
2. FORMING FOR CONCRETE AND REBAR PLACEMENT PRIOR TO POUR DOCUMENTED WITH DIGITAL PHOTOGRAPHS BY CONTRACTOR, APPROVED BY A&E OR SPRINT REPRESENTATIVE.
3. COMPACTION OF BACKFILL MATERIALS; AGGREGATE BASE FOR ROADS, PADS, AND ANCHORS; ASPHALT PAVING; AND SHAFT BACKFILL FOR CONCRETE AND WOOD POLES, BY INDEPENDENT THIRD PARTY AGENCY.
4. PRE- AND POST-CONSTRUCTION ROOFTOP AND STRUCTURAL INSPECTIONS ON EXISTING FACILITIES.
5. TOWER ERECTION SECTION STACKING AND PLATFORM ATTACHMENT DOCUMENTED BY DIGITAL PHOTOGRAPHS BY THIRD PARTY AGENCY.
6. ANTENNA AZIMUTH, DOWN TILT AND PER SUNLIGHT TOOL SUNSIGHT INSTRUMENTS - ANTENNALIGN ALIGNMENT TOOL (AAT)

PLANS PREPARED FOR:



PLANS PREPARED BY:



PROJECT MANAGER:



32 CLINTON ST.
SARATOGA SPRINGS, NY 12868
OFFICE# (518) 308-3740

ENGINEERING LICENSE:



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REVISIONS:

DESCRIPTION	DATE	BY	REV
ISSUED FOR PERMIT	05/23/18	ETC	0

SITE NAME:

**(R2E) CT4995 TO CT33-578
SALEM/AMERICAN
TOWER**

SITE NUMBER:

CT33XC578

SITE ADDRESS:

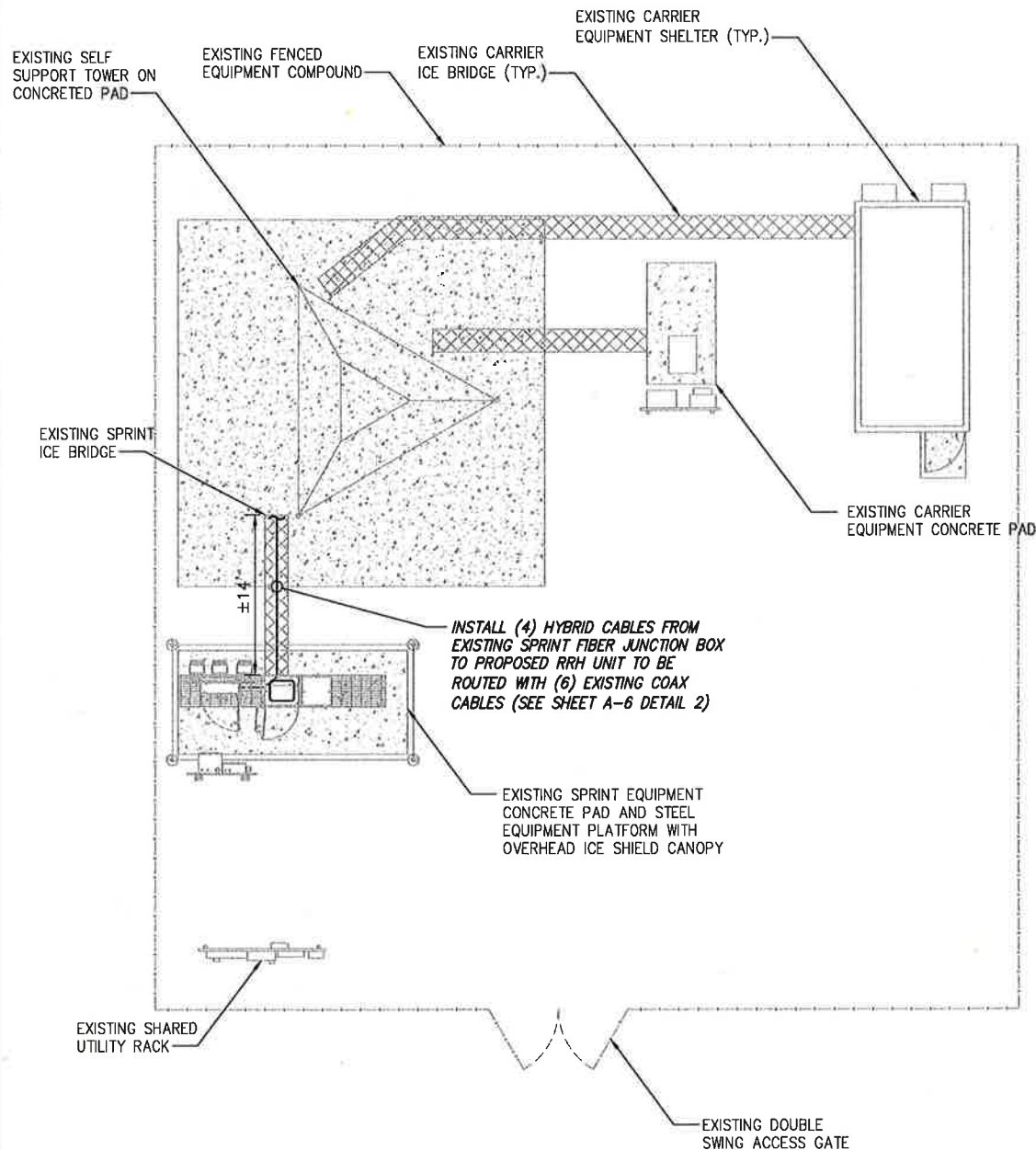
**153 EAST HADDAM RD
SALEM, CT 06420**

SHEET DESCRIPTION:

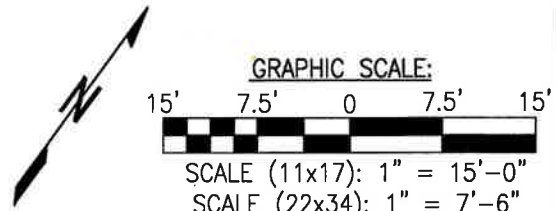
SPRINT SPECIFICATIONS

SHEET NUMBER:

SP-2

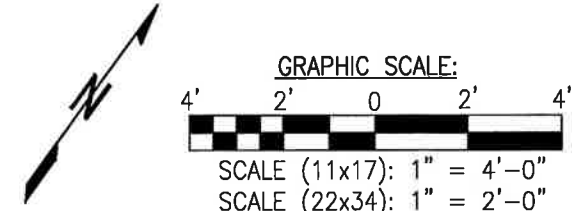
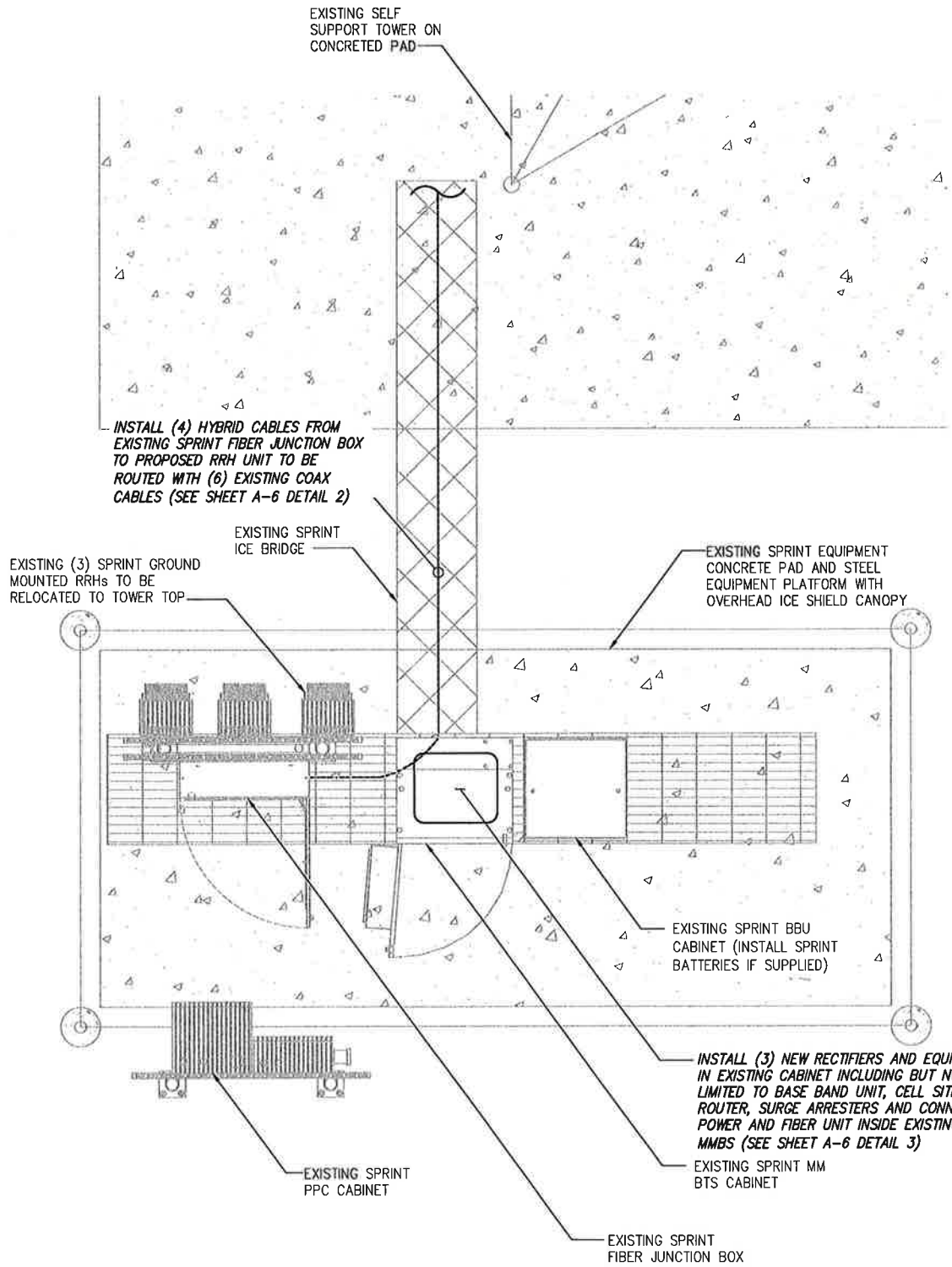


INFORMATION CONTAINED WITHIN DRAWINGS ARE BASED ON PROVIDED INFORMATION AND ARE NOT THE RESULT OF A FIELD SURVEY.



OVERALL SITE PLAN

SCALE: AS NOTED 1



SPRINT EQUIPMENT PLAN

SCALE: AS NOTED 2

PLANS PREPARED FOR:



PLANS PREPARED BY:

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Phone: 518-690-0790 | Fax: 518-690-0793
www.infinigy.com
JOB NUMBER 526-104

PROJECT MANAGER:

AIRSMITH
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32 CLINTON ST.
SARATOGA SPRINGS, NY 12888
OFFICE# (518) 306-3740

ENGINEERING LICENSE:



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ISSUED FOR PERMIT		05/23/18	ETC	0

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**(R2E) CT4995 TO CT33-578
SALEM/AMERICAN
TOWER**

SITE NUMBER:
CT33XC578

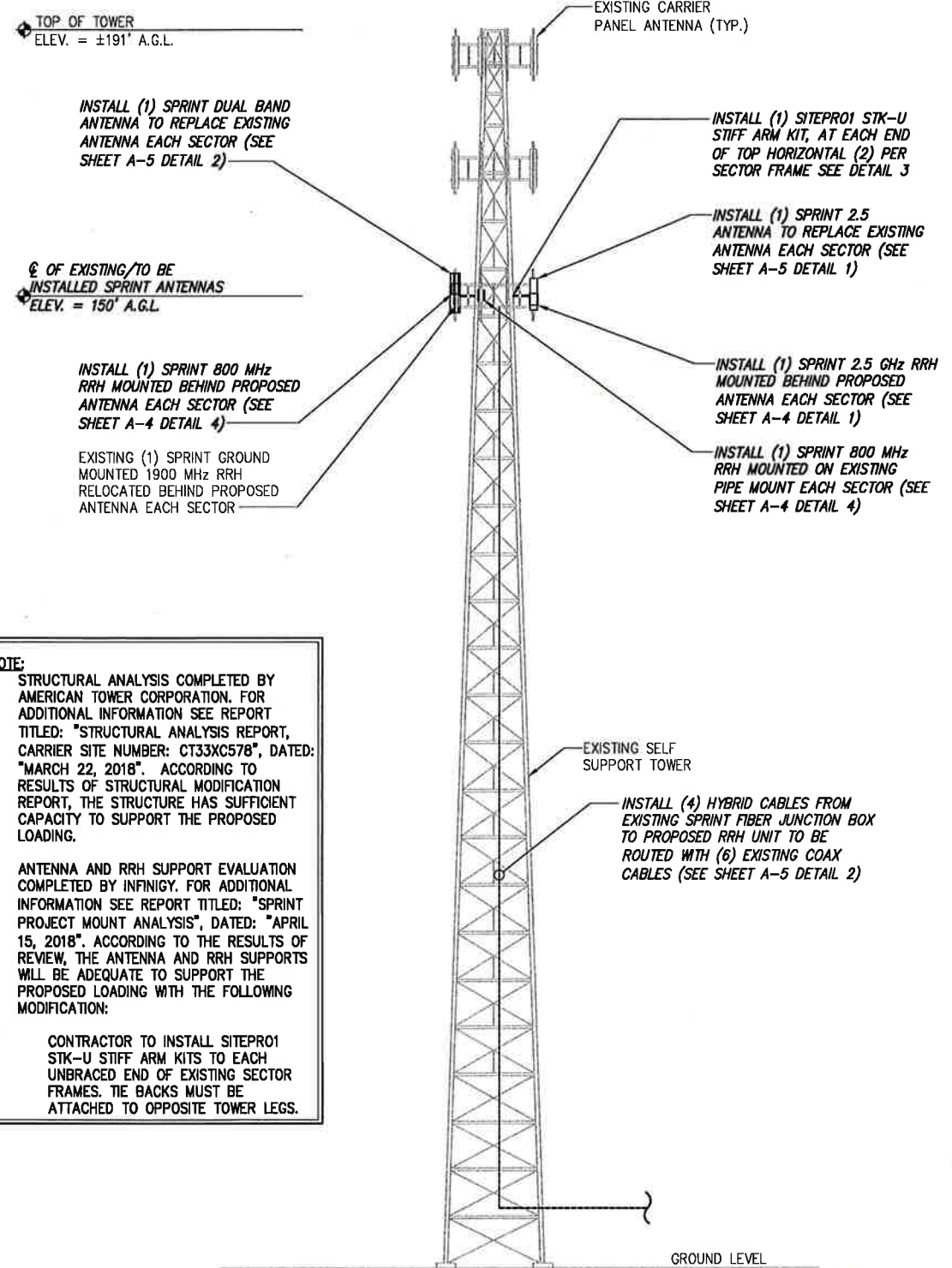
SITE ADDRESS:
**153 EAST HADDAM RD
SALEM, CT 06420**

SHEET DESCRIPTION:
SITE PLAN

SHEET NUMBER:
A-1

NOTE:
 INFINIGY ENGINEERING HAS NOT EVALUATED THE EXISTING STRUCTURE FOR THIS SITE, AND ASSUMES NO RESPONSIBILITY FOR ITS STRUCTURAL INTEGRITY. REFER TO STRUCTURAL ANALYSIS BY OTHERS PRIOR TO ANY CONSTRUCTION.

NOTE:
 SEE DETAIL 2 ON A-3 FOR ANTENNA LAYOUT



NOTE:

- STRUCTURAL ANALYSIS COMPLETED BY AMERICAN TOWER CORPORATION. FOR ADDITIONAL INFORMATION SEE REPORT TITLED: "STRUCTURAL ANALYSIS REPORT, CARRIER SITE NUMBER: CT33XC578", DATED: "MARCH 22, 2018". ACCORDING TO RESULTS OF STRUCTURAL MODIFICATION REPORT, THE STRUCTURE HAS SUFFICIENT CAPACITY TO SUPPORT THE PROPOSED LOADING.
- ANTENNA AND RRH SUPPORT EVALUATION COMPLETED BY INFINIGY. FOR ADDITIONAL INFORMATION SEE REPORT TITLED: "SPRINT PROJECT MOUNT ANALYSIS", DATED: "APRIL 15, 2018". ACCORDING TO THE RESULTS OF REVIEW, THE ANTENNA AND RRH SUPPORTS WILL BE ADEQUATE TO SUPPORT THE PROPOSED LOADING WITH THE FOLLOWING MODIFICATION:
 CONTRACTOR TO INSTALL SITEPRO1 STK-U STIFF ARM KITS TO EACH UNBRACED END OF EXISTING SECTOR FRAMES. TIE BACKS MUST BE ATTACHED TO OPPOSITE TOWER LEGS.

TOWER ELEVATION NO SCALE 1

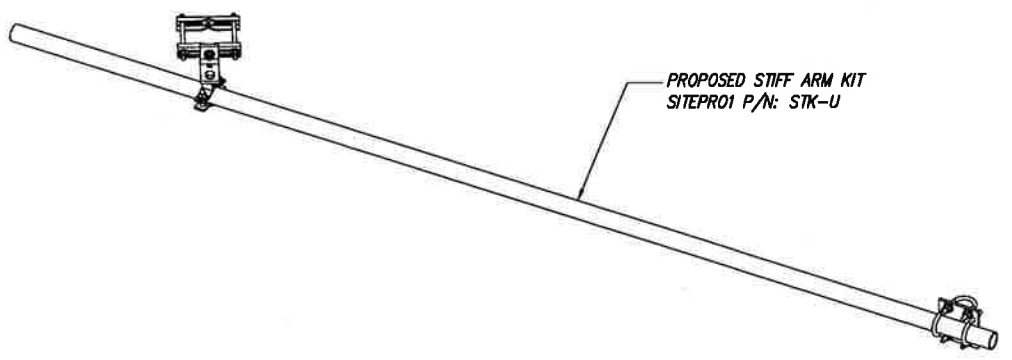
SITE LOADING CHART

SECTOR	EXISTING/PROPOSED	ANTENNA MODEL #	VENDOR	AZIMUTH	QTY.	REMAIN/REMOVED	RRH (QTY/MODEL)	CABLE	CABLE LENGTH	RAD CENTER
ALPHA	PROPOSED	APXVTM14-ALU-120	RFS	0°	1	-	(2) 800 MHz 2X50W RRH W/ FILTER	SEE SHEET A-5 DETAIL 1	±150' AGL	±150'*
	PROPOSED	NNVV-65B-R4	COMMSCOPE	0°	1	-	(1) TD-RRHBX20-25 W/ SOLAR SHIELD	SEE SHEET A-5 DETAIL 1		
	EXISTING	DB980F65E-M	DECIBEL	0°	2	REMOVE	(1) 1900 MHz 4X45 RRH	EXISTING COAX		
BETA	PROPOSED	APXVTM14-ALU-120	RFS	105°	1	-	(2) 800 MHz 2X50W RRH W/ FILTER	SEE SHEET A-5 DETAIL 1	±190'*	±150' AGL
	PROPOSED	NNVV-65B-R4	COMMSCOPE	105°	1	-	(1) TD-RRHBX20-25 W/ SOLAR SHIELD	SEE SHEET A-5 DETAIL 1		
	EXISTING	DB980F65E-M	DECIBEL	105°	2	REMOVE	(1) 1900 MHz 4X45 RRH	EXISTING COAX		
BETA	PROPOSED	APXVTM14-ALU-120	RFS	240°	1	-	(2) 800 MHz 2X50W RRH W/ FILTER	SEE SHEET A-5 DETAIL 1	±150' AGL	±150' AGL
	PROPOSED	NNVV-65B-R4	COMMSCOPE	240°	1	-	(1) TD-RRHBX20-25 W/ SOLAR SHIELD	SEE SHEET A-5 DETAIL 1		
	EXISTING	DB980F65E-M	DECIBEL	240°	2	REMOVE	(1) 1900 MHz 4X45 RRH	EXISTING COAX		

PROJECT SCOPE:
 REMOVE: (6) PANEL ANTENNAS INSTALL: (6) PANEL ANTENNAS AND (9) RRH'S RELOCATE: (3) EXISTING RRH'S

* PROPOSED CABLE LENGTH WAS DETERMINED USING THE SUM OF THE RAD CENTER OF ANTENNAS, AND DISTANCE FROM EXISTING EQUIPMENT AREA TO TOWER BASE WITH AN ADDITIONAL 20' BUFFER. LENGTH TO BE VERIFIED IN FIELD PRIOR TO ORDERING MATERIALS.

SITE LOADING CHART NO SCALE 2



STIFF ARM KIT DETAIL NO SCALE 3

PLANS PREPARED FOR:

PLANS PREPARED BY:

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PROJECT MANAGER:

32 CLINTON ST.
 SARATOGA SPRINGS, NY 12866
 OFFICE#: (518) 308-3740

ENGINEERING LICENSE:

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REVISIONS:

DESCRIPTION	DATE	BY	REV

ISSUED FOR PERMIT: 05/23/18 ETC 0

SITE NAME:
 (R2E) CT4995 TO CT33-578
 SALEM/AMERICAN
 TOWER

SITE NUMBER:
 CT33XC578

SITE ADDRESS:
 153 EAST HADDAM RD
 SALEM, CT 06420

SHEET DESCRIPTION:
 TOWER ELEVATION

SHEET NUMBER:
 A-2



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SALEM/AMERICAN
TOWER**

SITE NUMBER:
CT33XC578

SITE ADDRESS:
**153 EAST HADDAM RD
SALEM, CT 06420**

SHEET DESCRIPTION:
**ANTENNA LAYOUT
& MOUNTING DETAILS**

SHEET NUMBER:
A-3

THE CONFIGURATION PLANS ARE BASED ON PROVIDED INFORMATION AND ARE FOR CONCEPTUAL PURPOSES ONLY. CONTRACTOR TO VERIFY FIELD CONDITIONS PRIOR TO CONSTRUCTION.

INSTALL (1) SPRINT 2.5 ANTENNA TO REPLACE EXISTING ANTENNA EACH SECTOR (SEE SHEET A-5 DETAIL 1)

INSTALL (1) SPRINT 2.5 GHz RRH MOUNTED BEHIND PROPOSED ANTENNA EACH SECTOR (SEE SHEET A-4 DETAIL 1)

EXISTING (1) SPRINT GROUND MOUNTED 1900 MHz RRH RELOCATED BEHIND PROPOSED ANTENNA EACH SECTOR

INSTALL (1) SITEPRO1 STK-U STIFF ARM KIT, AT EACH END OF TOP HORIZONTAL (2) PER SECTOR FRAME SEE DETAIL 3

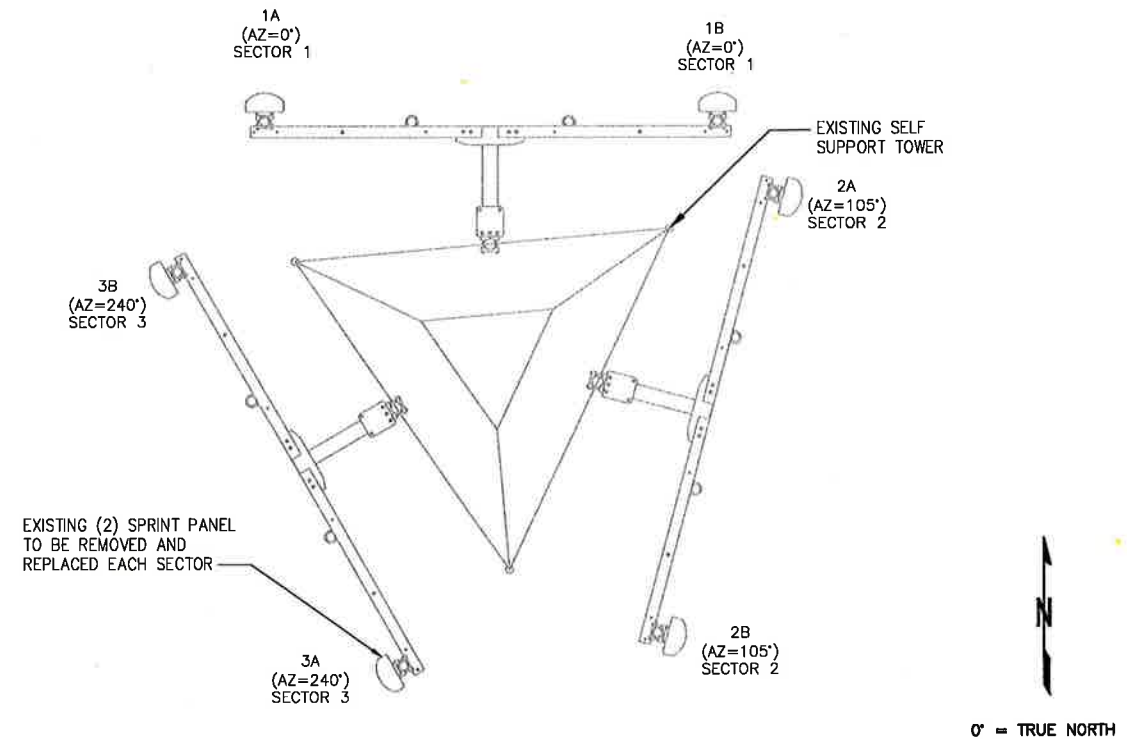
NOTE: JUMPERS FROM 2.5 RRH TO THE 2.5 ANTENNA CANNOT EXCEED 15 FEET

INSTALL (1) SPRINT 800 MHz RRH MOUNTED ON EXISTING PIPE MOUNT EACH SECTOR (SEE SHEET A-4 DETAIL 4)

INSTALL FIBER AND POWER CABLES FROM FIBER JUNCTION BOX TO RRH'S

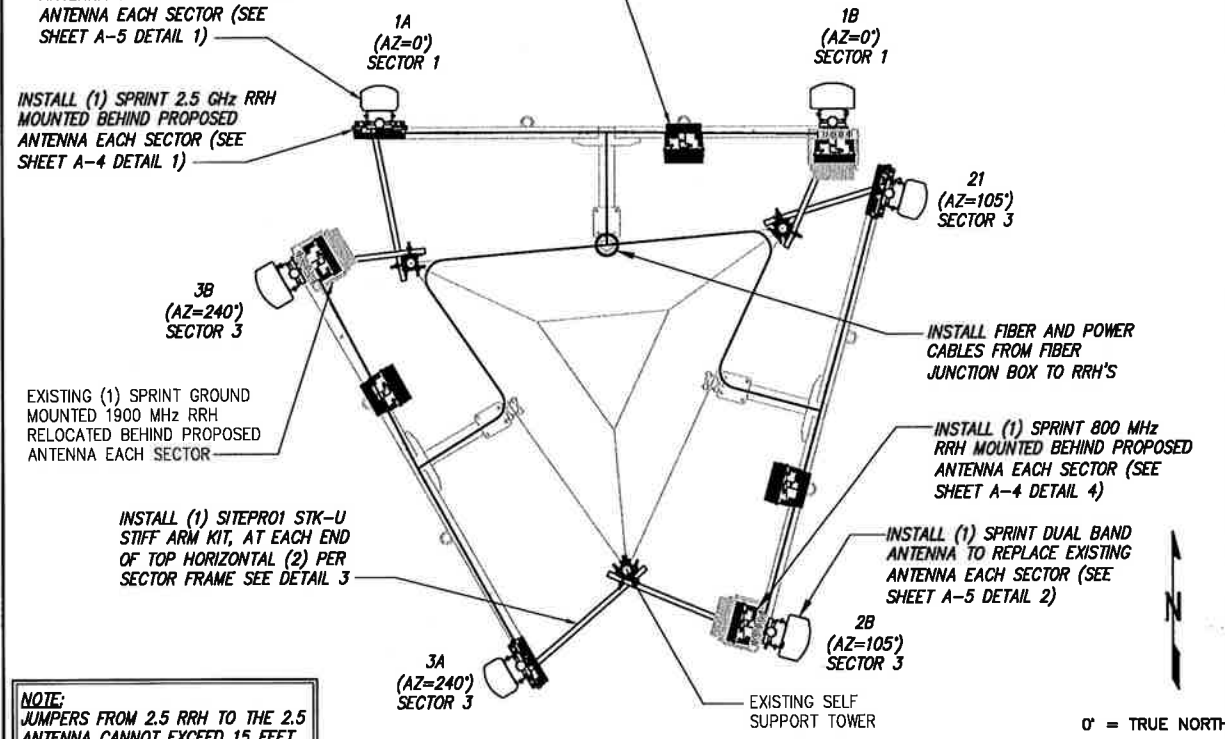
INSTALL (1) SPRINT 800 MHz RRH MOUNTED BEHIND PROPOSED ANTENNA EACH SECTOR (SEE SHEET A-4 DETAIL 4)

INSTALL (1) SPRINT DUAL BAND ANTENNA TO REPLACE EXISTING ANTENNA EACH SECTOR (SEE SHEET A-5 DETAIL 2)



EXISTING ANTENNA LAYOUT

NO SCALE 1



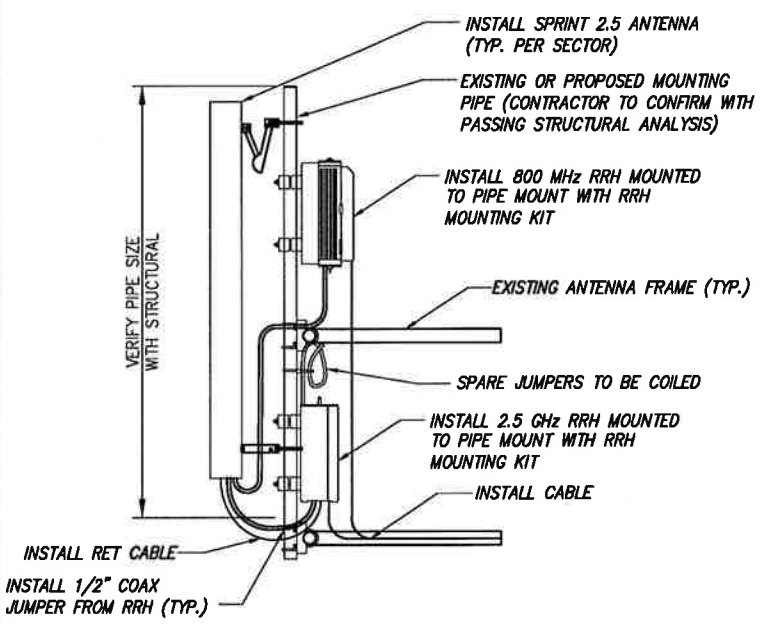
FINAL ANTENNA & RRH LAYOUT

NO SCALE 2

NOTE: CONTRACTOR TO POSITION RRH ON MOUNT BEHIND ANTENNA SUCH THAT THE RRH DOES NOT INTERFERE WITH THE EXISTING PLATFORM/T-ARM MOUNTING HARDWARE.

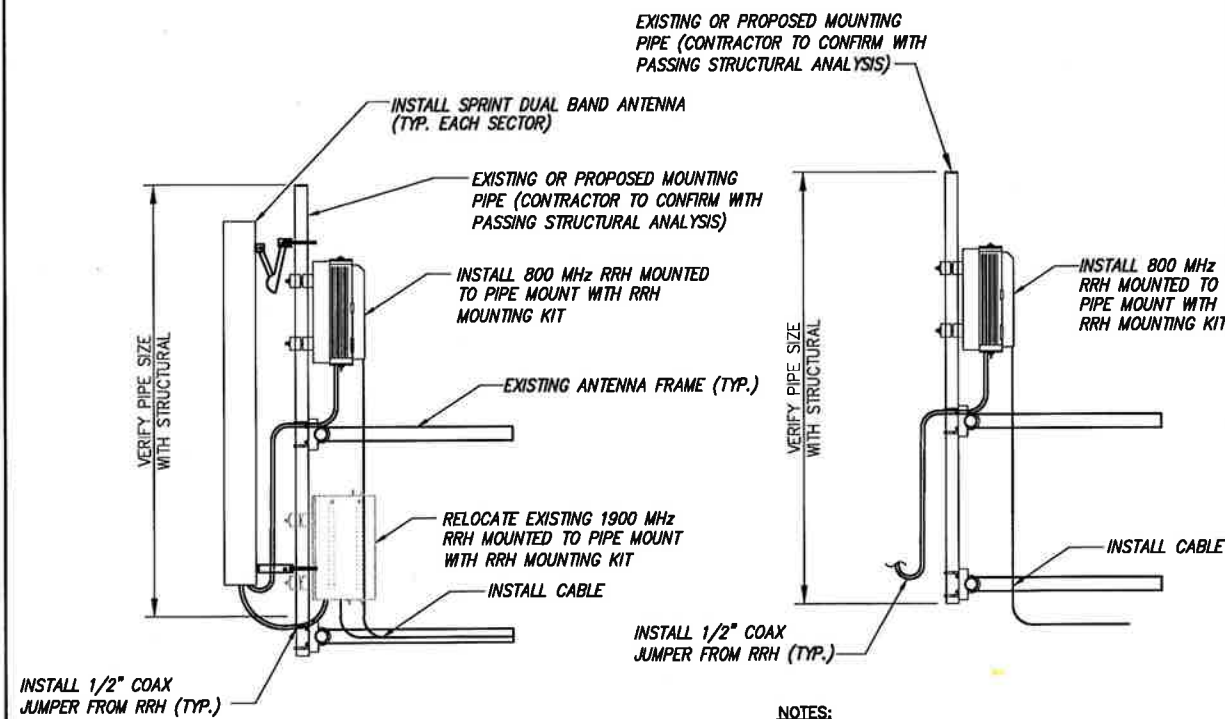
NOTE: THE DIAGRAM IS FOR CONCEPTUAL PURPOSES ONLY. CONTRACTOR IS TO REFER TO PASSING STRUCTURAL ANALYSIS FOR ANTENNA AND RRH MOUNTING DETAILS

- NOTES:
1. CUT DC CONDUCTORS TO LENGTH.
 2. COIL FIBER CABLE AND SECURE AT SIDE OF RRH.
 3. DO NOT EXCEED BEND RADIUS.



TYPICAL 2.5 ANTENNA & RRH MOUNTING DETAILS

NO SCALE 3

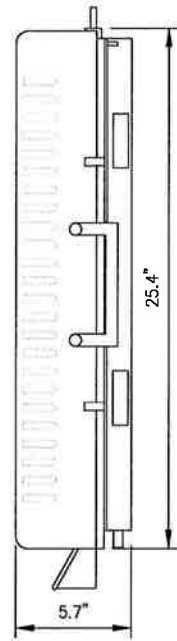


TYPICAL DUAL BAND & RRH MOUNTING DETAIL

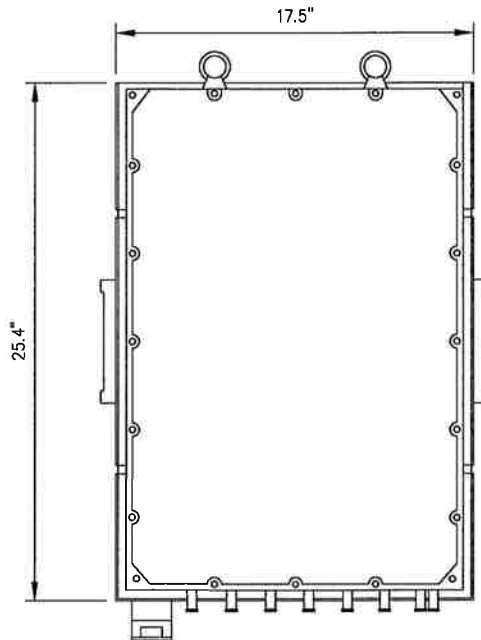
NO SCALE 4

RRH: ALCATEL LUCENT TD-RRH8X20

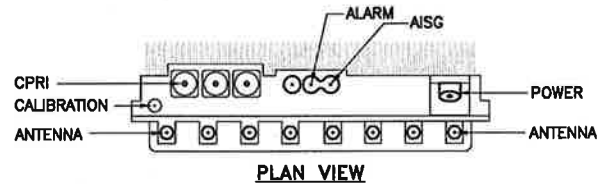
COLOR: LIGHT GREY
WEIGHT: 70 LBS.



SIDE VIEW



FRONT VIEW



PLAN VIEW

NOTES

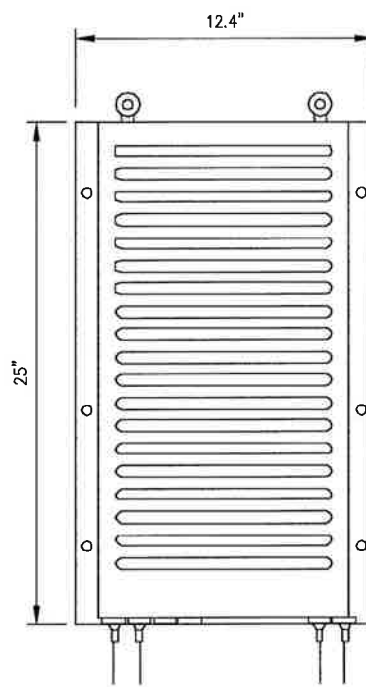
COMPLY WITH MANUFACTURERS INSTRUCTIONS TO ENSURE THAT ALL RRH'S RECEIVE ELECTRICAL POWER WITHIN 24 HOURS OF BEING REMOVED FROM THE MANUFACTURER'S PACKAGING. DO NOT OPEN RRH PACKAGES IN THE RAIN.

2.5 RRH'S

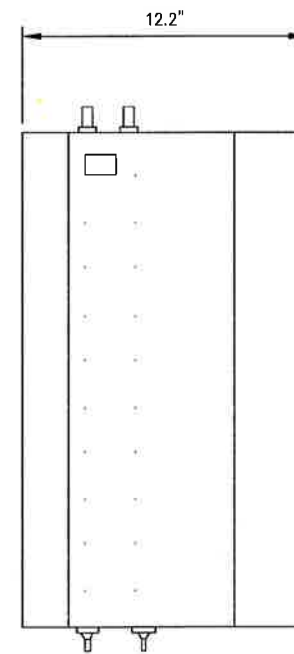
NO SCALE

1

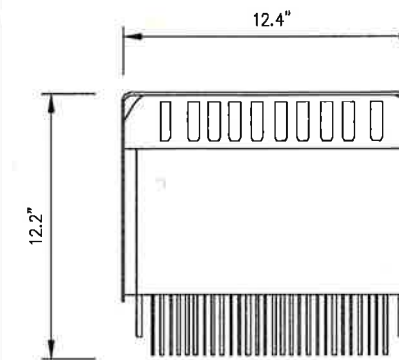
RRH: ALCATEL LUCENT 1900 MHz
COLOR: LIGHT GREY
WEIGHT: 70 LBS.
(INCLUDING OPTIONAL SOLAR SHIELD)



FRONT VIEW



SIDE VIEW



TOP VIEW

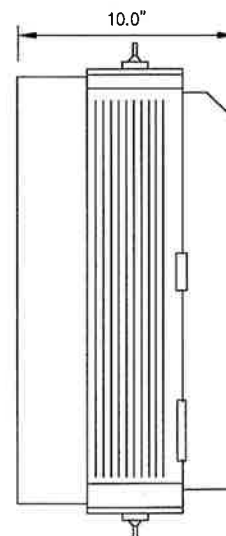
EXISTING 1900 MHz RRH

NO SCALE

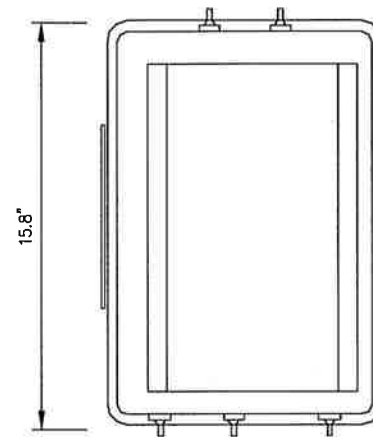
2

RRH: ALCATEL LUCENT RRH 800 MHz 2x50W

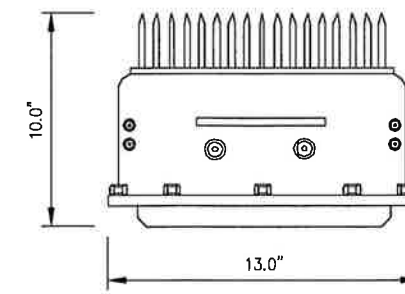
COLOR: LIGHT GREY
WEIGHT: 53 LBS.



SIDE VIEW



FRONT VIEW



PLAN VIEW

NOTES

COMPLY WITH MANUFACTURERS INSTRUCTIONS TO ENSURE THAT ALL RRH'S RECEIVE ELECTRICAL POWER WITHIN 24 HOURS OF BEING REMOVED FROM THE MANUFACTURER'S PACKAGING. DO NOT OPEN RRH PACKAGES IN THE RAIN.

DETAIL NOT USED

NO SCALE

3

800 MHz RRH

NO SCALE

4

PLANS PREPARED FOR:



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JOB NUMBER 526-104

PROJECT MANAGER:



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**(R2E) CT4995 TO CT33-578
SALEM/AMERICAN
TOWER**

SITE NUMBER:
CT33XC578

SITE ADDRESS:
**153 EAST HADDAM RD
SALEM, CT 06420**

SHEET DESCRIPTION:
**EQUIPMENT &
MOUNTING DETAILS**

SHEET NUMBER:
A-4

PLANS PREPARED FOR:



PLANS PREPARED BY:

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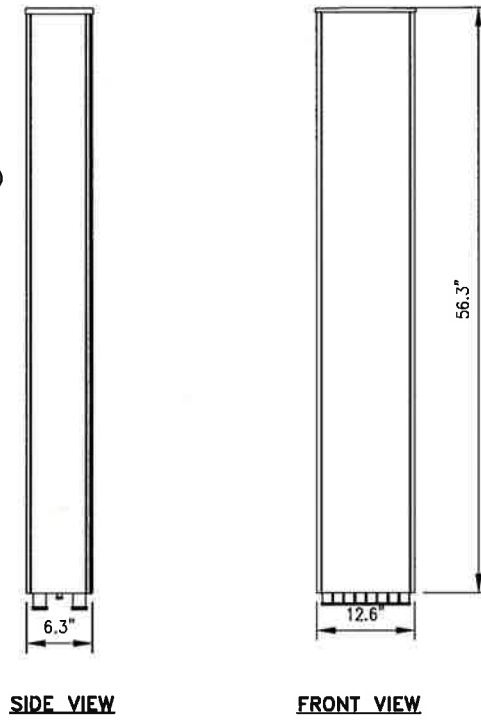
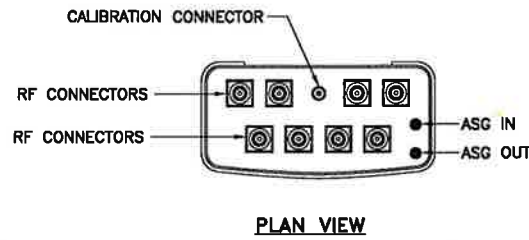
SITE ADDRESS:
 153 EAST HADDAM RD
 SALEM, CT 06420

SHEET DESCRIPTION:
 EQUIPMENT &
 MOUNTING DETAILS

SHEET NUMBER:
 A-5

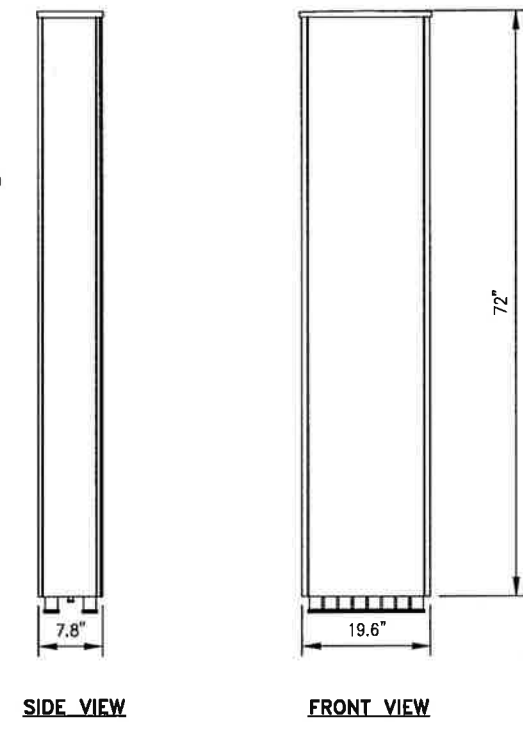
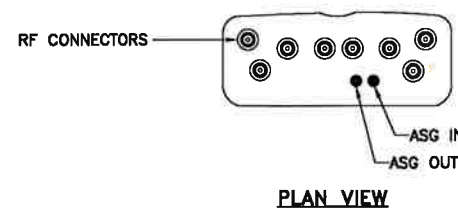
ANTENNA RFS APXVTM14-ALU-I20

RADOME MATERIAL: ASA
 RADOME COLOR: LIGHT GREY
 DIMENSIONS, HxWxD.in(mim): 56.3"x12.6"x6.3" (1549x439x300mm)
 WEIGHT: 56.2 lbs
 CONNECTORS: (8) 4.1/9.5 DIN FEMALE
 (1) NF - CALIBRATION CONNECTOR



ANTENNA COMMSCOPE NNVV-65B-R4

RADOME MATERIAL: FIBERGLASS
 RADOME COLOR: LIGHT GREY
 DIMENSIONS, HxWxD.in(mim): 72"x19.6"x7.8" (1829x498x198mm)
 WEIGHT: 77.4 lbs
 CONNECTORS: (8) PIN DIN FEMALE
 (8) 8 PIN DIN MALE



2.5 ANTENNA DETAIL

NO SCALE 1

DUAL BAND ANTENNA DETAIL

NO SCALE 2

DETAIL NOT USED

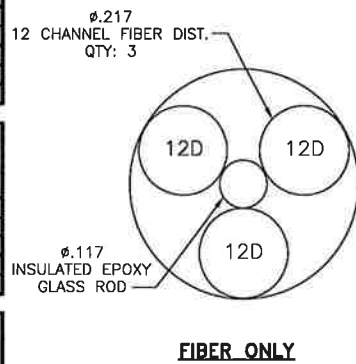
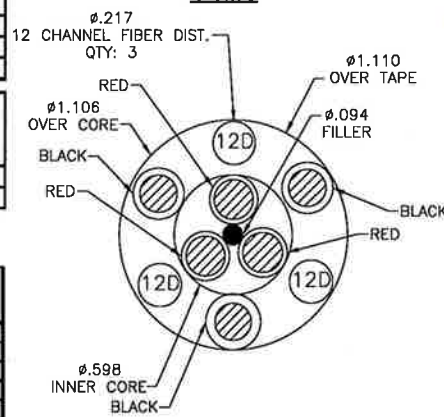
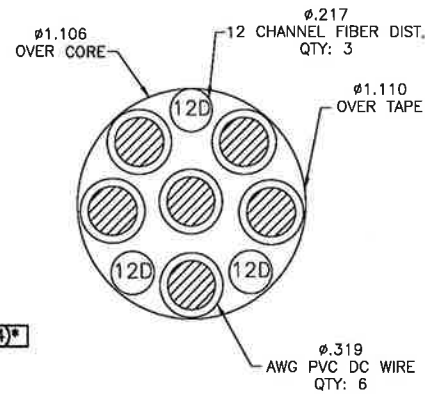
NO SCALE 3

DETAIL NOT USED

NO SCALE 4

RFS HYBRIFLEX RISER CABLE SCHEDULE

Fiber Only (Existing DC Power)	Hybrid cable MN: HB058-M12-050F 12x multi-mode fiber pairs, Top: Outdoor protected connectors, Bottom: LC Connectors, 5/8 cable, 50 ft	50 ft
	MN: HB058-M12-075F	75 ft
	MN: HB058-M12-100F	100 ft
	MN: HB058-M12-125F	125 ft
	MN: HB058-M12-150F	150 ft
	MN: HB058-M12-175F	175 ft
8 AWG Power	Hybrid cable MN: HB114-08U3M12-050F 3x 8 AWG power pairs, 12x multi-mode fiber pairs, Outdoor rated connectors & LC Connectors, 1 1/4 cable, 50 ft	50 ft
	MN: HB114-08U3M12-075F	75 ft
	MN: HB114-08U3M12-100F	100 ft
	MN: HB114-08U3M12-125F	125 ft
	MN: HB114-08U3M12-150F	150 ft
	MN: HB114-08U3M12-175F	175 ft
6 AWG Power	Hybrid cable MN: HB114-13U3M12-225F 3x 6 AWG power pair, 12x multi-mode fiber pairs, Outdoor rated connectors & LC Connectors, 1 1/4 cable, 225 ft	225 ft
	MN: HB114-13U3M12-250F	250 ft
	MN: HB114-13U3M12-275F	300 ft
4 AWG Power	Hybrid cable MN: HB114-21U3M12-325F 3x 4 AWG power pair, 12x multi-mode fiber pairs, Outdoor rated connectors & LC Connectors, 1 1/4 cable, 325 ft	325 ft
	MN: HB114-21U3M12-350F	350 ft
	MN: HB114-21U3M12-375F	375 ft



RFS HYBRIFLEX JUMPER CABLE SCHEDULE

Fiber Only	Hybrid Jumper cable MN: HBF012-M3-SF1 5 ft, 3x multi-mode fiber pairs, Outdoor & LC connectors, 1/2 cable	5 ft
	MN: HBF012-M3-10F1	10 ft
	MN: HBF012-M3-15F1	15 ft
	MN: HBF012-M3-20F1	20 ft
	MN: HBF012-M3-25F1	25 ft
	MN: HBF012-M3-30F1	30 ft
8 AWG Power	Hybrid Jumper cable MN: HBF058-08U1M3-SF1 5 ft, 1x 8 AWG power pair, 3x multi-mode fiber pairs, Outdoor & LC Connectors, 5/8 cable	5 ft
	MN: HBF058-08U1M3-10F1	10 ft
	MN: HBF058-08U1M3-15F1	15 ft
	MN: HBF058-08U1M3-20F1	20 ft
	MN: HBF058-08U1M3-25F1	25 ft
	MN: HBF058-08U1M3-30F1	30 ft
6 AWG Power	Hybrid Jumper cable MN: HBF058-13U1M3-SF1 5 ft, 1x 6 AWG power pair, 3x multi-mode fiber pairs, Outdoor & LC Connectors, 5/8 cable	5 ft
	MN: HBF058-13U1M3-10F1	10 ft
	MN: HBF058-13U1M3-15F1	15 ft
	MN: HBF058-13U1M3-20F1	20 ft
	MN: HBF058-13U1M3-25F1	25 ft
	MN: HBF058-13U1M3-30F1	30 ft
4 AWG Power	Hybrid Jumper cable MN: HBF078-21U1M3-SF1 5 ft, 1x 4 AWG power pair, 3x multi-mode fiber pairs, Outdoor & LC Connectors, 7/8 cable	5 ft
	MN: HBF078-21U1M3-10F1	10 ft
	MN: HBF078-21U1M3-15F1	15 ft
	MN: HBF078-21U1M3-20F1	20 ft
	MN: HBF078-21U1M3-25F1	25 ft
	MN: HBF078-21U1M3-30F1	30 ft

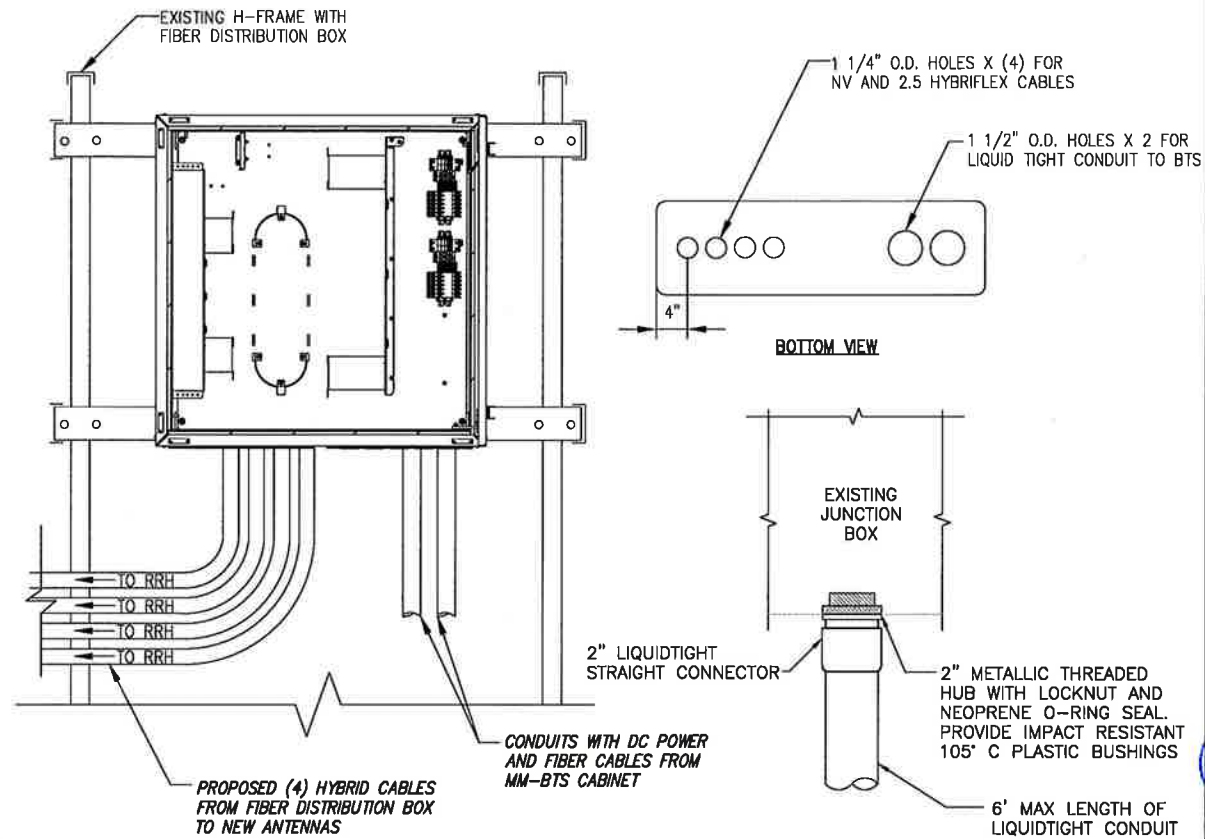
NOTE:
SPRINT CM TO CONFIRM HYBRID OR FIBER RISER CABLE AND HYBRID OR FIBER JUMPER CABLE MODEL NUMBERS IF HYBRID CABLES ARE REQUIRED BEFORE PREPARING BOM.

* PROPOSED CABLE LENGTH WAS DETERMINED USING THE SUM OF THE RAD CENTER OF ANTENNAS, AND DISTANCE FROM EXISTING EQUIPMENT AREA TO TOWER BASE WITH AN ADDITIONAL 20' BUFFER. LENGTH TO BE VERIFIED IN FIELD PRIOR TO ORDERING MATERIALS.

800/1900/2500 CROSS SECTION DATA

NO SCALE

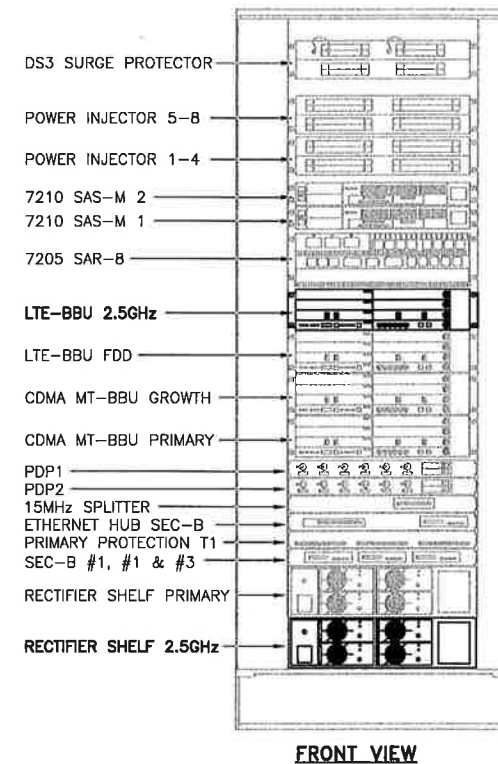
1



FIBER JUNCTION BOX PENETRATION

NO SCALE

2



FRONT VIEW

NEW EQUIPMENT IN EXISTING CABINET

NO SCALE

3

PLANS PREPARED FOR:



PLANS PREPARED BY:



PROJECT MANAGER:



ENGINEERING LICENSE:



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REVISIONS:

DESCRIPTION	DATE	BY	REV.
ISSUED FOR PERMIT	05/23/18	ETC	0

SITE NAME:

(R2E) CT4995 TO CT33-578
SALEM/AMERICAN
TOWER

SITE NUMBER:

CT33XC578

SITE ADDRESS:

153 EAST HADDAM RD
SALEM, CT 06420

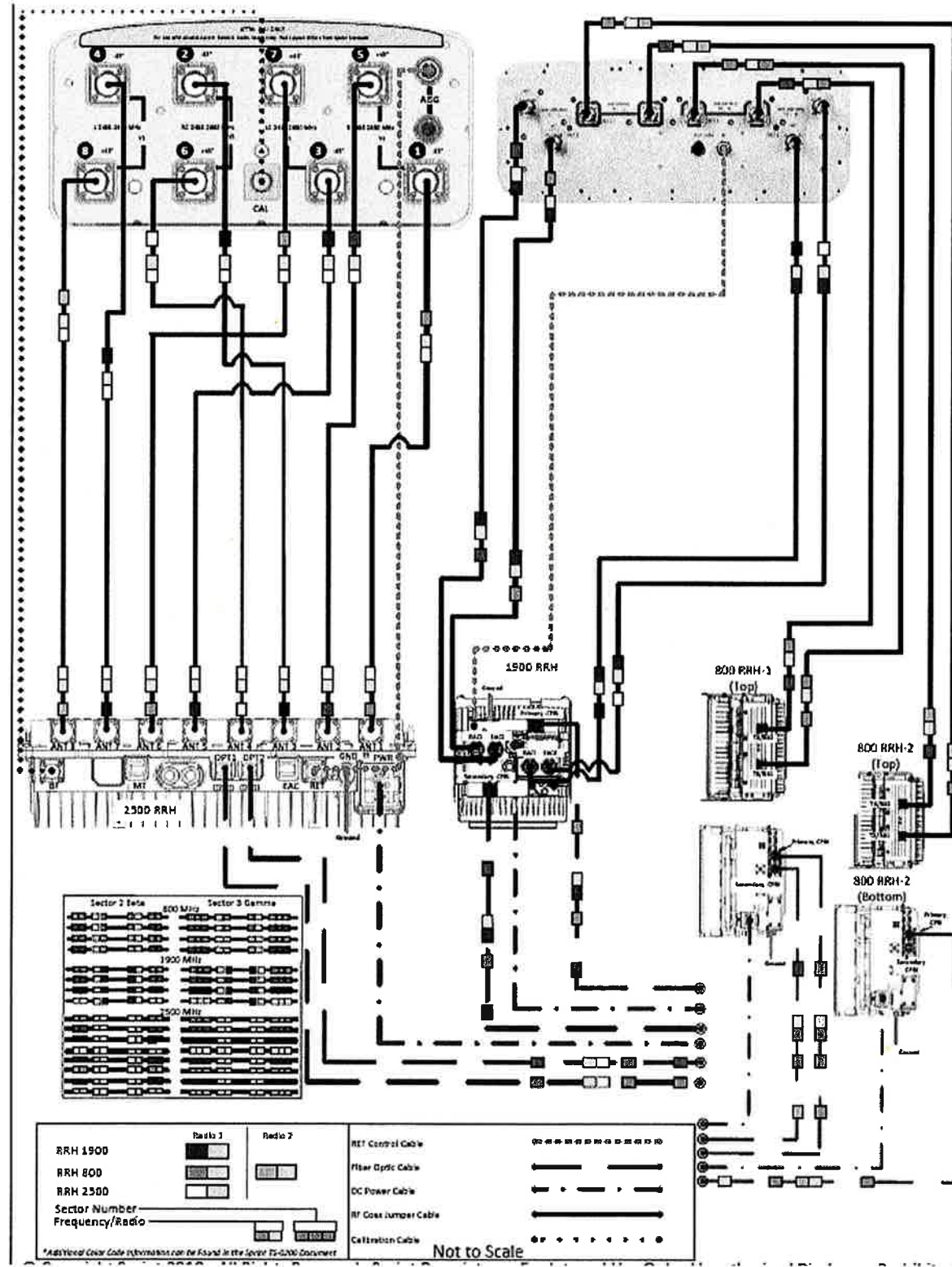
SHEET DESCRIPTION:

CIVIL DETAILS

SHEET NUMBER:

A-6

ALU-NSN 211 APXVTM14-ALU-I20 & NNVV-65B-R4 wo Filters



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PLANS PREPARED BY:

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 Phone: 518-690-0790 | Fax: 518-690-0793
 www.Infinigy.com
 JOB NUMBER 526-104

PROJECT MANAGER:

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 32 CLINTON ST.
 SARATOGA SPRINGS, NY 12886
 OFFICE# (518) 306-3740

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ISSUED FOR PERMIT		05/23/18	ETC	0

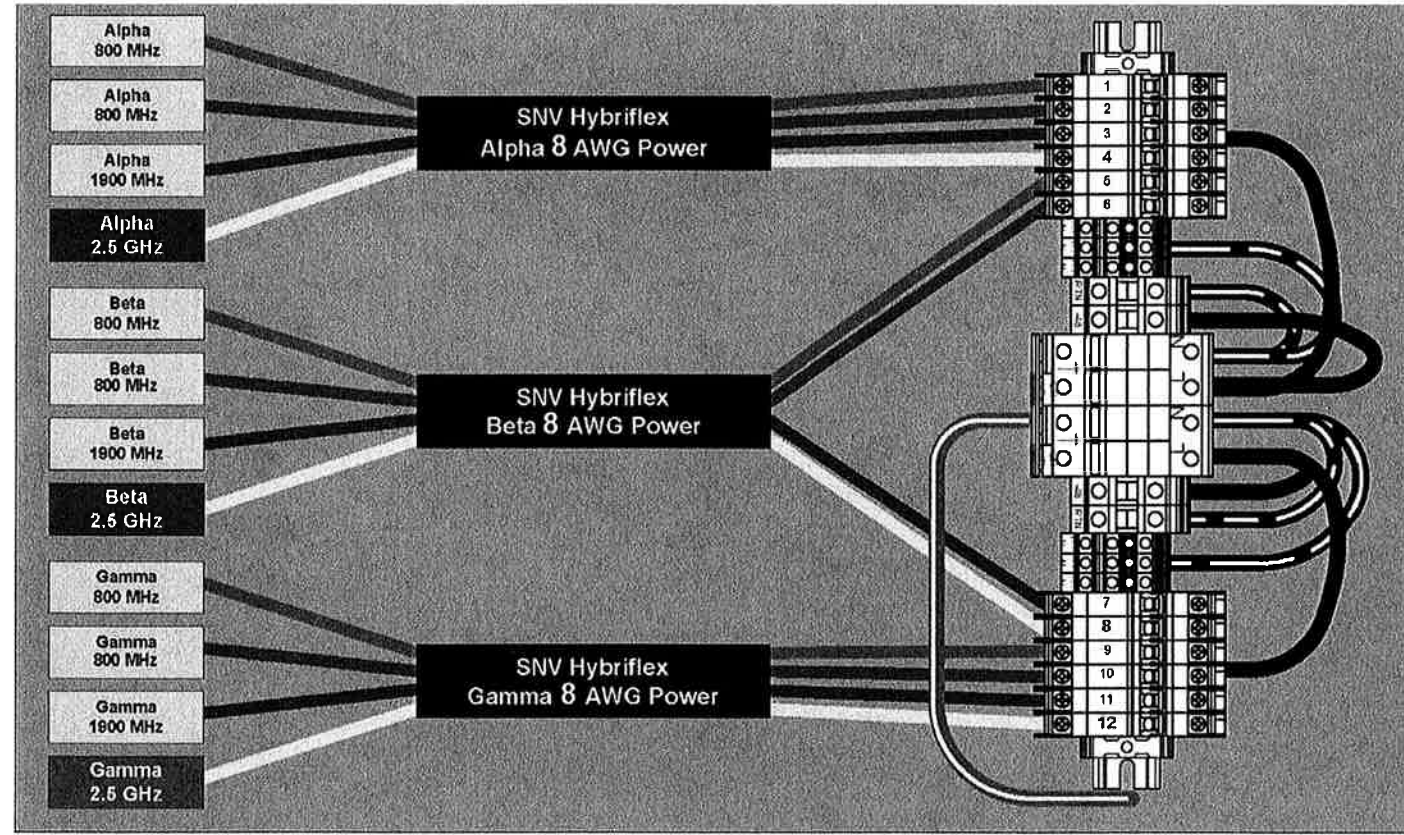
SITE NAME:
 (R2E) CT4995 TO CT33-578
 SALEM/AMERICAN
 TOWER

SITE NUMBER:
 CT33XC578

SITE ADDRESS:
 153 EAST HADDAM RD
 SALEM, CT 06420

SHEET DESCRIPTION:
 PLUMBING DIAGRAM

SHEET NUMBER:
 A-7



RRH TO DISTRIBUTION BOX POWER CONNECTIVITY

NO SCALE 1

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ISSUED FOR PERMIT	05/23/18	ETC	0

SITE NAME:
**(R2E) CT4995 TO CT33-578
SALEM/AMERICAN
TOWER**

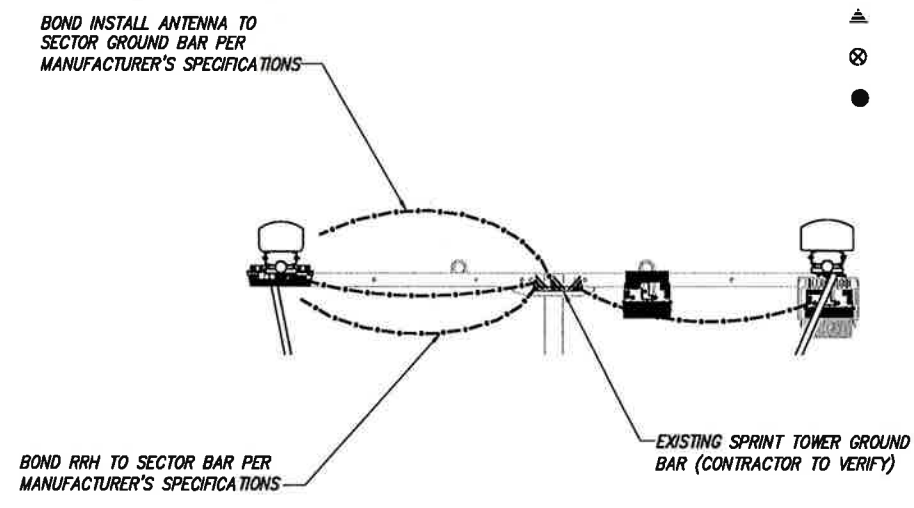
SITE NUMBER:
CT33XC578

SITE ADDRESS:
**153 EAST HADDAM RD
SALEM, CT 06420**

SHEET DESCRIPTION:
**ELECTRICAL &
GROUNDING PLAN**

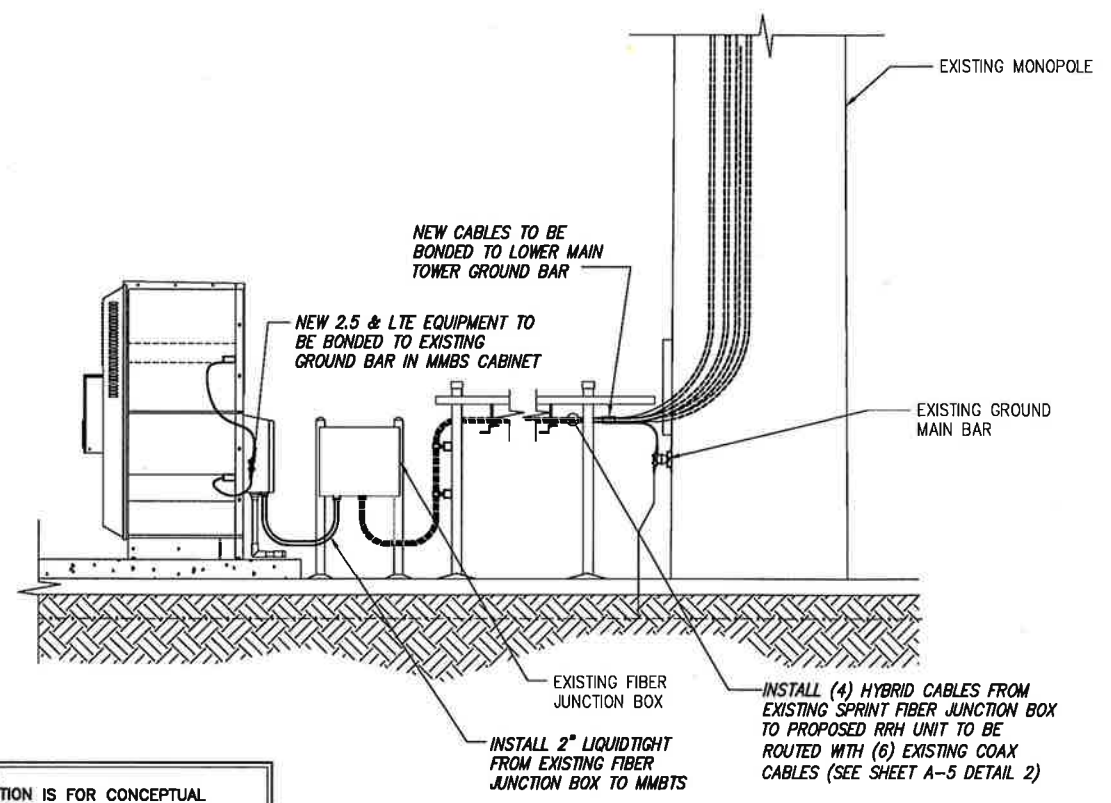
SHEET NUMBER:
E-1

- LEGEND:**
- — — — — EXISTING GROUND RING
 - CADWELD CONNECTION (EXOTHERMIC WELD)
 - ▲ MECHANICAL CONNECTION
 - ⊗ GROUND ROD
 - CABLE GROUND KIT



TYPICAL ANTENNA GROUNDING PLAN

NO SCALE 2

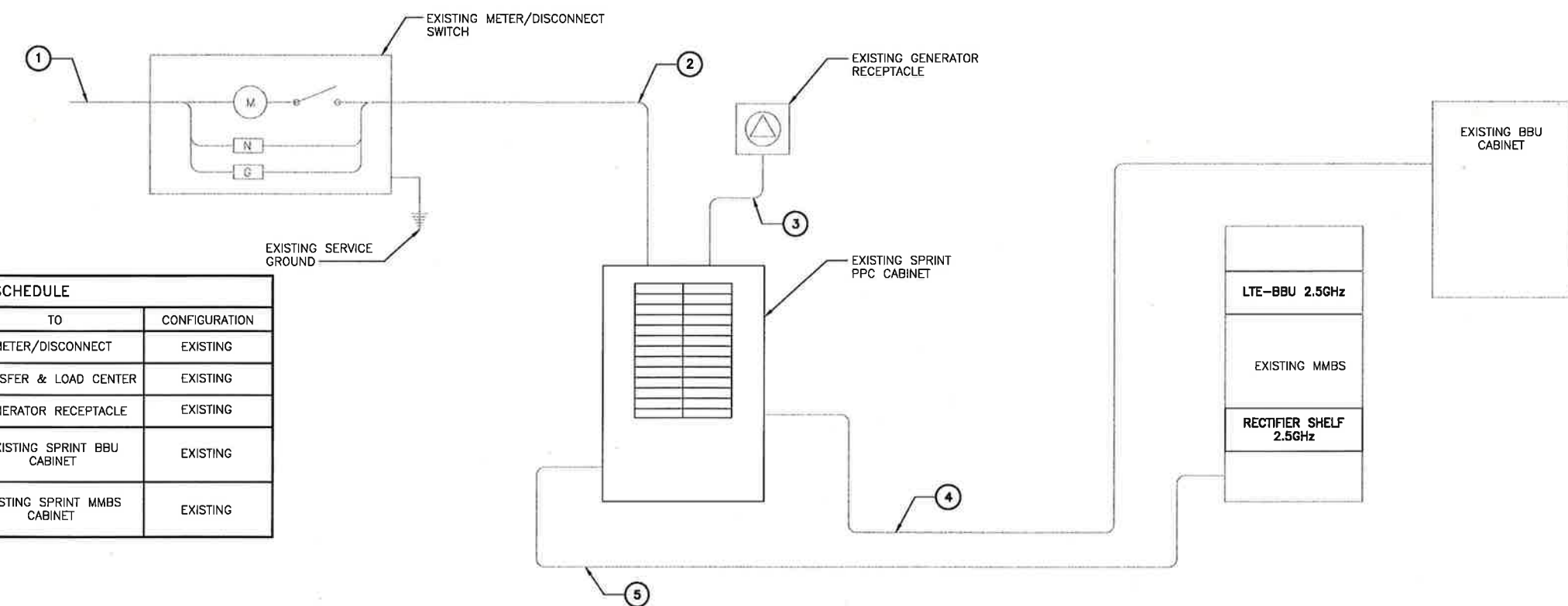


NOTE:
DEPICTION IS FOR CONCEPTUAL PURPOSES ONLY. CONTRACTOR IS TO FIELD VERIFY PRIOR TO CONSTRUCTION

TYPICAL EQUIPMENT GROUNDING PLAN (ELEVATION)

NO SCALE 3

NOTES
 CG SHALL REFERENCE ALL SPECS FOR "CONNECTING THE POWER SUPPLY" OF THE NEW INSTALLATION DOCUMENTS, FOR ALL CONNECTION SPECIFICATIONS.



CIRCUIT SCHEDULE			
NO	FROM	TO	CONFIGURATION
①	UTILITY SOURCE	METER/DISCONNECT	EXISTING
②	METER/DISCONNECT	TRANSFER & LOAD CENTER	EXISTING
③	TRANSFER & LOAD CENTER	GENERATOR RECEPTACLE	EXISTING
④	TRANSFER & LOAD CENTER	EXISTING SPRINT BBU CABINET	EXISTING
⑤	TRANSFER & LOAD CENTER	EXISTING SPRINT MMBS CABINET	EXISTING



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REVISIONS:			
DESCRIPTION	DATE	BY	REV
ISSUED FOR PERMIT	05/23/18	ETC	0

SITE NAME:
 (R2E) CT4995 TO CT33-578
 SALEM/AMERICAN TOWER

SITE NUMBER:
 CT33XC578

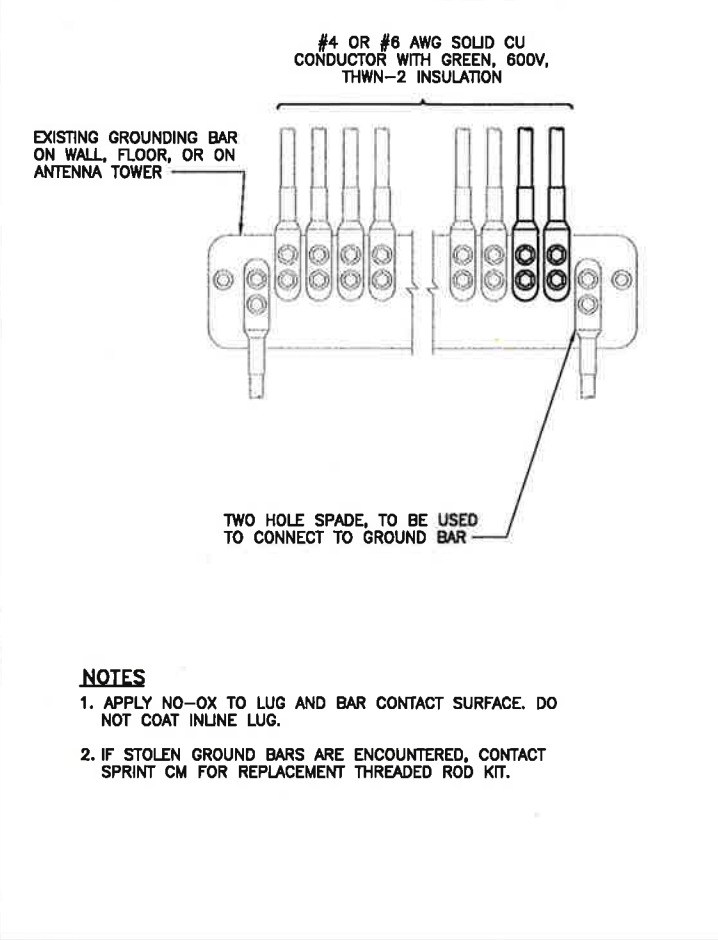
SITE ADDRESS:
 153 EAST HADDAM RD
 SALEM, CT 06420

SHEET DESCRIPTION:
 ELECTRICAL & GROUNDING DETAILS

SHEET NUMBER:
 E-2

ELECTRICAL ONE-LINE DIAGRAM

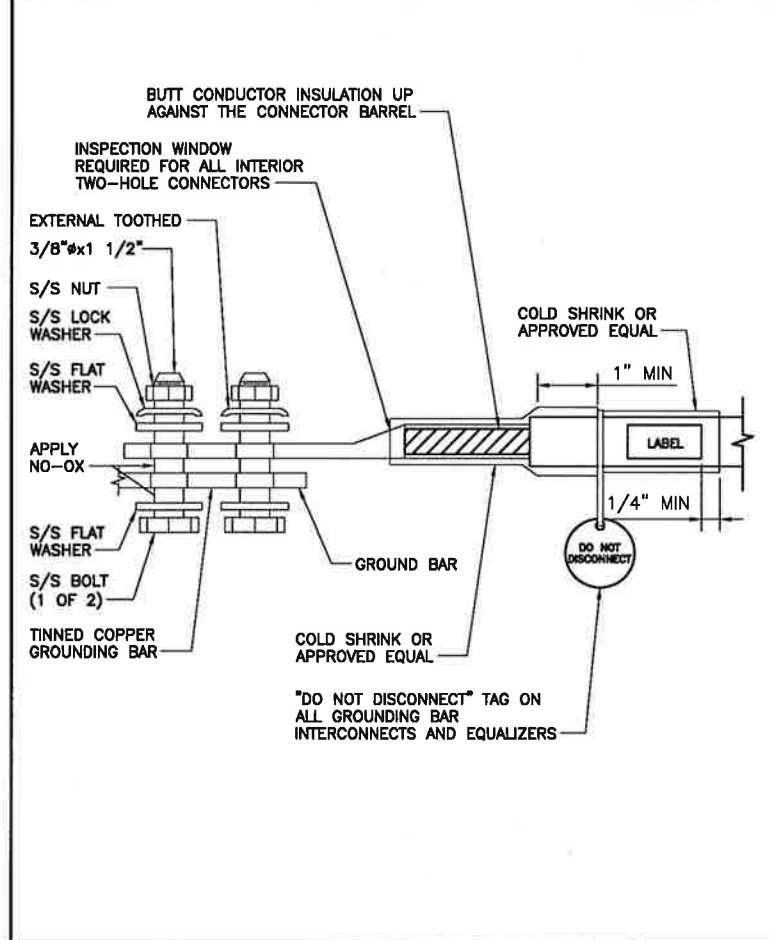
NO SCALE 1



NOTES
 1. APPLY NO-OX TO LUG AND BAR CONTACT SURFACE. DO NOT COAT INLINE LUG.
 2. IF STOLEN GROUND BARS ARE ENCOUNTERED, CONTACT SPRINT CM FOR REPLACEMENT THREADED ROD KIT.

INSTALLATION OF GROUNDING CONDUCTOR TO GROUNDING BAR

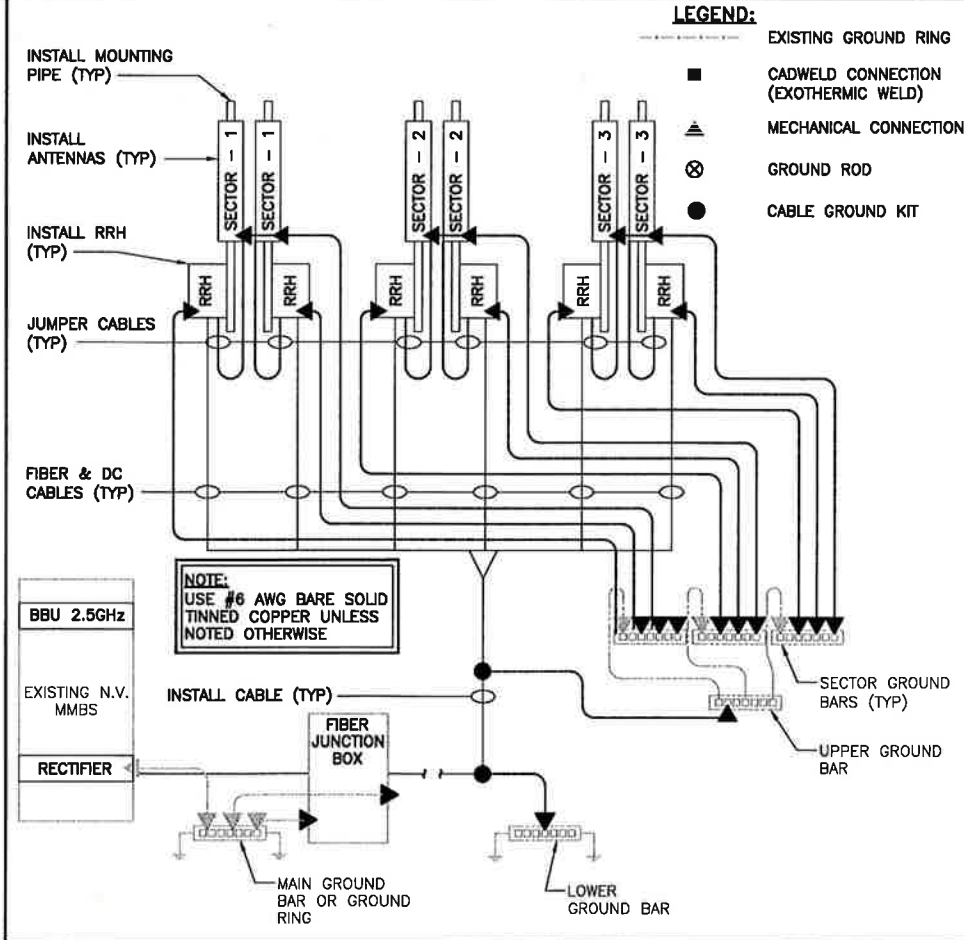
NO SCALE 2



"DO NOT DISCONNECT" TAG ON ALL GROUNDING BAR INTERCONNECTS AND EQUALIZERS

TWO HOLE LUG

NO SCALE 3



NOTE: USE #6 AWG BARE SOLID TINNED COPPER UNLESS NOTED OTHERWISE

GROUNDING RISER DIAGRAM

NO SCALE 4