48 Spruce Street
Oakland, NJ 07436
Phone: (201)-951-3869
Tom Kincaid
Real Estate Consultant

March 28, 2014

Hand Delivered

Ms. Melanie A. Bachman
Acting Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

RE: Sprint Spectrum L.P. notice of intent to modify an existing telecommunications facility located at 168 Catoona Lane, Stamford, CT 06901. Known to Sprint Spectrum L.P. as site CT03XC337.

Dear Ms. Roberts:

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

CDMA employs Spread-Spectrum technology and special coding scheme to allow multiple users to be multiplexed over the same physical channel.

LTE is a new high-performance air interface for cellular mobile communications. It is designed to increase the capacity and speed of mobile telephone networks.

Attached is a summary of the planned modifications, including power density calculations reflecting the change in Sprint's operations at the site. Also included is documentation of the structural sufficiency of the tower to accommodate the revised antenna configuration.

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

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

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

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

Sincerely,

Jennifer Palumbo
Real Estate Consultant

EBI Consulting
environmental | engineering | due diligence

RADIO FREQUENCY FCC REGULATORY COMPLIANCE MAXIMUM PERMISSIBLE EXPOSURE (MPE) ASSESSMENT

Sprint Existing Facility

Site ID: CT03XC337

ATC Tower

168 Catoona Lane
Stamford, CT 06901

March 5, 2014

EBI Project Number: 62140941

21 B Street · Burlington, MA 01803 · Tel: (781) 273.2500 · Fax: (781) 273.3311

EBI Consulting
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March 5, 2014

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

Re: Radio Frequency Maximum Permissible Exposure (MPE) Assessment for Site:
CT03XC337 - ATC Tower

Site Total: 67.793% - MPE% in full compliance

EBI Consulting was directed to analyze the proposed upgrades to the existing Sprint facility located at 168 Catoona Lane, Stamford, CT, for the purpose of determining whether the radio frequency (RF) exposure levels from the proposed Sprint equipment upgrades on this property are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter (µW/cm2). The number of µW/cm2 calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

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

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

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu W/cm^2$). The general population exposure limit for the cellular band (850 MHz Band) is approximately 567 $\mu W/cm^2$, and the general population exposure limit for the 1900 MHz and 2500 MHz bands band is 1000 $\mu W/cm^2$. Because each carrier will be using different frequency bands, and each

frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

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

Additional details can be found in FCC OET 65.

CALCULATIONS

Calculations were done for the proposed upgrades to the existing Sprint Wireless antenna facility located at 168 Catoona Lane, Stamford, CT, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. All calculations were performed assuming the main lobe of the antenna was focused at the base of the tower to present a worst case scenario. Actual values seen from this site will be dramatically less than those shown in this report. For this report the sample point is the top of a 6 foot person standing at the base of the tower.

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

1) 6 channels in the 1900 MHz Band were considered for each sector of the proposed installation.
2) 1 channel in the 800 MHz Band was considered for each sector of the proposed installation
3) 2 channels in the 2500 MHz Band were considered for each sector of the proposed installation.
4) 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.
5) For the following calculations the sample point was the top of a six foot person standing at the base of the tower. The maximum gain of the antenna per the antenna manufactures supplied specifications was used in this direction.

6) The antennas used in this modeling are the RFS APXVSPP18-C-A20 and the RFS APXVTMM-C-120. This is based on feedback from the carrier with regards to anticipated antenna selection. The RFS APXVSPP18-C-A20 has a 15.9 dBd gain value at its main lobe at 1900 MHz and 13.4 dBd at its main lobe for 850 MHz. The RFS APXVTMM-C-120 has a 15.9 dBd gain value at its main lobe at 2500 MHz. All calculations were performed assuming the main lobe of the antenna was focused at the base of the tower to present a worst case scenario.
7) The antenna mounting height centerline for the proposed antennas is **150 feet** above ground level (AGL).
8) Emissions values for additional carriers were taken from the Connecticut Siting Council active database. Values in this database are provided by the individual carriers themselves.

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

Site ID	CT03XC337 - ATC Tower
Site Addresss	168 Catoona Lane, Stamford, CT 06901
Site Type	Self Support Tower

Sector 1

Antenna Number	Antenna Make	Antenna Model	Radio Type	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain in direction of sample point (dBd)	Antenna Height (ft)	analysis height	Antenna Height Meters	Cable Size	Cable Loss (dB)	Additional Loss	Gain Factor	ERP	Power Density Value	Power Density Percentage
1a	RFS	APXVSPP18-C-A20	RRH	1900 MHz	CDMA / LTE	20	6	120	15.9	150	144	43.89173	1/2 "	0.5	0	34.673685	4160.8422	72.13769	7.21377%
1a	RFS	APXVSPP18-C-A20	RRH	850 MHz	CDMA / LTE	20	1	20	13.4	150	144	43.89173	1/2 "	0.5	0	19.498446	389.96892	6.761001	1.19242%
1B	RFS	APXVTMM14-C-120	RRH	2500 MHz	CDMA / LTE	20	2	40	13.4	150	144	43.89173	1/2 "	0.5	0	19.498446	779.93784	13.522	2.38483%
																Sector total Power Density Value:		10.791%	

Sector 2

Antenna Number	Antenna Make	Antenna Model	Radio Type	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain in direction of sample point (dBd)	Antenna Height (ft)	analysis height	Antenna Height Meters	Cable Size	Cable Loss (dB)	Additional Loss	Gain Factor	ERP	Power Density Value	Power Density Percentage
2a	RFS	APXVSPP18-C-A20	RRH	1900 MHz	CDMA / LTE	20	6	120	15.9	150	144	43.89173	1/2 "	0.5	0	34.673685	4160.8422	72.13769	7.21377%
2a	RFS	APXVSPP18-C-A20	RRH	850 MHz	CDMA / LTE	20	1	20	13.4	150	144	43.89173	1/2 "	0.5	0	19.498446	389.96892	6.761001	1.19242%
2B	RFS	APXVTMM14-C-120	RRH	2500 MHz	CDMA / LTE	20	2	40	13.4	150	144	43.89173	1/2 "	0.5	0	19.498446	779.93784	13.522	2.38483%
																Sector total Power Density Value:		10.791%	

Sector 3

Antenna Number	Antenna Make	Antenna Model	Radio Type	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain in direction of sample point (dBd)	Antenna Height (ft)	analysis height	Antenna Height Meters	Cable Size	Cable Loss (dB)	Additional Loss	Gain Factor	ERP	Power Density Value	Power Density Percentage
3a	RFS	APXVSPP18-C-A20	RRH	1900 MHz	CDMA / LTE	20	6	120	15.9	150	144	43.89173	1/2 "	0.5	0	34.673685	4160.8422	72.13769	7.21377%
3a	RFS	APXVSPP18-C-A20	RRH	850 MHz	CDMA / LTE	20	1	20	13.4	150	144	43.89173	1/2 "	0.5	0	19.498446	389.96892	6.761001	1.19242%
3B	RFS	APXVTMM14-C-120	RRH	2500 MHz	CDMA / LTE	20	2	40	13.4	150	144	43.89173	1/2 "	0.5	0	19.498446	779.93784	13.522	2.38483%
																Sector total Power Density Value:		10.791%	

Site Composite MPE %	
Carrier	MPE %
Sprint	32.373%
XM Sat Radio	0.410%
Sensus (CL&P)	0.570%
MediaFLO	4.200%
AT&T	10.700%
T-Mobile	0.050%
Nextel	1.500%
Marcus	4.420%
Clearwire	0.480%
SNET Paging	1.750%
Rescue 21	4.120%
MetroPCS	7.220%
Total Site MPE %	**67.793%**

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Summary

All calculations performed for this analysis yielded results that were well within the allowable limits for general public Maximum Permissible Exposure (MPE) to radio frequency energy.

The anticipated Maximum Composite contributions from the Sprint facility are **32.373% (10.791% from each sector)** of the allowable FCC established general public limit considering all three sectors simultaneously sampled at the ground level.

The anticipated composite MPE value for this site assuming all carriers present is **67.793%** of the allowable FCC established general public limit sampled at 6 feet above ground level. This total composite site value is based upon MPE values listed in the Connecticut Siting Council database for existing carrier emissions.

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

Scott Heffernan
RF Engineering Director

EBI Consulting
21 B Street
Burlington, MA 01803

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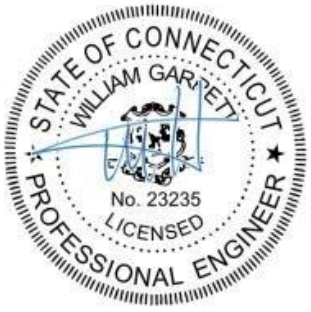
Structural Analysis Report

Structure	:	**300 ft Self Supported Tower**
ATC Site Name	:	**Stamford (Katoona), CT**
ATC Site Number	:	**88018**
Engineering Number	:	**55472021**
Proposed Carrier	:	**Sprint Nextel**
Carrier Site Name	:	**ATC Tower**
Carrier Site Number	:	**CT03XC337**
Site Location	:	**Intersection of Catoona Lane and Myano Lane Stamford, CT 06902-4573 41.052825,-73.563047**
County	:	**Fairfield**
Date	:	**January 14, 2014**
Max Usage	:	**99%**
Result	:	**Pass**

Michael B. Davenport
Structural Engineer III



Jan 15 2014 5:17 PM

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Table of Contents

Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 300 ft self supported tower to reflect the change in loading by Sprint Nextel.

Supporting Documents

Tower Drawings	CSEI Analysis, ATC Eng. #73123451, dated September 29, 2005
Foundation Drawing	Rose, Chulkoff, and Rose Job #C67229, dated August 9, 1967
Geotechnical Report	Rose, Chulkoff, and Rose Job #C67229, dated August 9, 1967
Modifications	ATC Eng. #42439132, dated September 26, 2008 ATC Eng. #44209632, dated December 2, 2009

Analysis

The tower was analyzed using Power Line Systems tower analysis software. This program considers an elastic three-dimensional model and second-order effects per ANSI/EIA-222.

Basic Wind Speed:	85 mph (Fastest Mile)
Basic Wind Speed w/ Ice:	74 mph (Fastest Mile)w/ 1/2" radial ice concurrent
Code:	ANSI/TIA/EIA-222-F / 2003 IBC , Sec. 1609.1.1, Exception (5) & Sec. 3108.4 w/ 2005 CT Supplement & 2009 CT Amendment

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 me via email at scott.wirgau@americantower.com or call 919-466-5086.

Existing and Reserved Equipment

Mount Elev.[1] (ft)	Qty.	Antenna	Mount Type	Lines	Carrier
300.0	1	Radio/ODU	Platform w/ Handrails	(2) 1 1/4" Coax	Marcus Comm.
	1	TX RX Systems 101-68-10-X-03N			
	1	4' Standard Dish			
	3	DragonWave Horizon Compact		(3) 1/2" Coax	Clearwire
	3	DragonWave A-ANT-18G-2-C			
	1	RFS 200		(1) 1 5/8" Coax	Lojack
	1	3' HP Dish		(1) 1/2" Coax	-
289.0	1	Dielectric TLP-08M-2E	Side Arm	(1) 3 1/8" HL	Qualcomm
269.0	1	Rohde & Schwarz ADD090	Side Arm	(2) 7/8" Coax	US Treasury
265.0	3	RFS ATMAA1412D-1A20	Sector Frame	(12) 1 5/8" Coax (1) 1 1/4" (1.25") Fiber	T-Mobile
	3	Ericsson AIR 21, 1.3 M, B2A B4P			
	3	Ericsson AIR 21, 1.3M, B4A B2P			
	2	Til-Tek TA-2350-DAB		(1) EW20 (1) 1 5/8" Coax	XM Satellite
240.0	1	Sinclair SC381-HL	Sector Frame	(2) 7/8" Coax	US Treasury
	1	Sinclair SC281-L			
235.0	6	LGP Allgon LGP21903	Sector Frame	(12) 1 5/8" Coax (2) 0.74" 8 AWG 7 (1) 2" conduit (1) 0.28" RG-6	AT&T Mobility
	3	Raycap DC2-48-60-0-9E			
	6	Powerwave LGP21401			
	1	Raycap FC12-PC6-10E			
	6	Ericsson RRUS 11 (Band 12)			
	3	KMW AM-X-CD-14-65-00T-RET			
	6	Powerwave 7770.00			
218.0	12	Decibel DB844H90E-XY	Sector Frame	(15) 1 5/8" Coax	Sprint Nextel
200.0	-	-	Side Arm	-	-
	2	TX RX Systems 101-68-10-X-03N		(2) 1 1/4" Coax	Marcus Comm.
	1	Sinclair SC281-L		(1) 7/8" Coax	US Treasury
189.0	1	30" x 30" Reflector	Side Arm	-	Town Of Stanford
178.0	3	Antel BCD-87010	Side Arm	(3) 7/8" Coax	USA Mobility
171.0	3	NextNet BTS-2500	T-Arm	(6) 5/16" (0.31") Coax (2) 2" conduit	Clearwire
	3	Argus LLPX310R			
	1	24" x 24" Junction Box			
160.0	18	RCU	Leg	(12) 1 5/8" Coax (2) 3/8" Coax	Metro PCS
	6	Kathrein Scala 800 10504			
150.0	3	Alcatel-Lucent ALU 800MHz External Notch Filter	Sector Frame	(3) 1 1/4" Hybriflex	Sprint Nextel
	3	RFS IBC1900HB-2			
	3	Alcatel-Lucent 800 MHz RRH			
	6	Alcatel-Lucent 1900MHz RRH			
	3	RFS APXVSPP18-C-A20			
	1	Channel Master Type 120	Leg	(1) 1/2" Coax	USA Mobility
137.0	1	Antel BCD-87010 ___ 4°	Stand-Off	(1) 7/8" Coax	Sensus Metering Systems
100.0	1	TX RX Systems 101-68-10-X-03N	Side Arm	(1) 1 1/4" Coax	Marcus Comm.

24.0	1	Til-Tek TA-2324-LHCP	Leg	(1) 7/8" Coax	XM Satellite
10.0	1	GPS	Leg	(1) 3/8" Coax	Lojack
6.0	1	Trimble Acutime 2000	Leg	(1) 1/4" Coax (1) 1/2" Coax	USA Mobility
	1	Channel Master Type 120			

Proposed Equipment

Elevation[1] (ft)		Qty.	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
150.0	150.0	3	Alcatel-Lucent TD-RRH8x20-25 w/ Solar Shield	Sector Frame	(1) 1 1/4" Hybriflex	Sprint Nextel
		3	RFS APXVTM14-C-I20			

[1]Mount 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 in same location as existing.

Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Legs	90%	Pass
Diagonals	99%	Pass
Horizontals	97%	Pass
Anchor Bolts	87%	Pass

Foundations

Reaction Component	Analysis Reactions
Uplift (Kips)	396.9
Axial (Kips)	494.6

The structure base reactions resulting from this analysis were found to be acceptable through analysis based on geotechnical and foundation information, therefore no modification or reinforcement of the foundation will be required.

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Standard Conditions

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

-- Information supplied by the client regarding the structure itself, antenna, mounts and feed line loading on the structure and its components, or other relevant information.

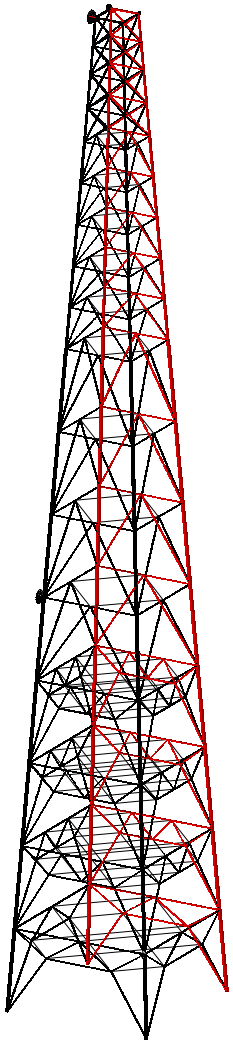
-- Information from drawings in the possession of American Tower Corporation, or generated by field inspections or measurements of the structure.

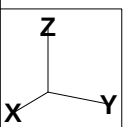
It is the responsibility of the client to ensure that the information provided to ATC Engineering Services and used in the performance of our engineering services is correct and complete. In the absence of information to the contrary, we assume that all structures were constructed in accordance with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

Unless explicitly agreed by both the client and American Tower Corporation, all services will be performed in accordance with the current revision of ANSI/TIA -222. The design basic wind speed will be determined based on the minimum basic wind speed as prescribed in ANSI/TIA-222. Although every effort is taken to ensure that the loading considered is adequate to meet the requirements of all applicable regulatory entities, we can provide no assurance to meet any other local and state codes or requirements. If wind and ice loads or other relevant parameters are to be different from the minimum values recommended by the codes, the client shall specify the exact requirement.

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

American Tower Corp., Project: "88018-L2-Sprint Nextel-1_14_14"
Tower Version 12.30, 4:45:39 PM Tuesday, January 14, 2014
Undeformed geometry displayed





Project Name : 88018 Stamford (Katoona), CT
Project Notes: 300' Type 'H' AT&T Tag Tower
Project File : C:\Users\michael.davenport\Desktop\88018-L2-Sprint Nextel-1_14_14.tow
Date run   : 4:39:48 PM Tuesday, January 14, 2014
by   : Tower Version 12.30
Licensed to : American Tower Corp.

Successfully performed nonlinear analysis

The model has 0 warnings.

Member check option: TIA/EIA 222-F
Connection rupture check: Not Checked
Crossing diagonal check: Fixed
Included angle check: None
Climbing load check: None
Redundant members checked with: Actual Force
Loads from file: c:\users\michael.davenport\desktop\88018-loads-sprint nextel-1_14_14.eia

*** Analysis Results:

Maximum element usage is 98.60% for Angle "D 2X" in load case "W -90"

Summary of Joint Support Reactions For All Load Cases:

Load Case	Joint Label	Long. Force (kips)	Tran. Force (kips)	Vert. Force (kips)	Shear Force (kips)	Tran. Moment (ft-k)	Long. Moment (ft-k)	Vert. Moment (ft-k)	Bending Moment (ft-k)	Found. Usage %
W 0	0P	-44.13	-23.50	-323.08	50.00	-0.41	-5.41	-2.18	5.43	0.00
W 0	0X	-42.30	24.27	-316.32	48.77	0.05	-5.08	2.19	5.08	0.00
W 0	0XY	-35.65	-16.70	227.12	39.37	0.57	-5.54	2.03	5.57	0.00
W 0	0Y	-37.13	15.88	229.10	40.39	-0.33	-5.87	-1.99	5.88	0.00
W 180	0P	37.20	15.68	226.57	40.37	-0.32	5.92	2.00	5.93	0.00
W 180	0X	35.67	-16.56	224.94	39.33	0.57	5.59	-2.03	5.62	0.00
W 180	0XY	42.31	24.13	-314.13	48.71	0.05	5.13	-2.20	5.13	0.00
W 180	0Y	44.03	-23.30	-320.55	49.82	-0.41	5.45	2.19	5.47	0.00
W 45	0P	-52.18	-52.46	-494.60	73.99	4.36	-4.29	-0.00	6.11	0.00
W 45	0X	-19.85	-12.78	-41.60	23.61	4.72	-4.11	3.39	6.26	0.00
W 45	0XY	-45.58	-45.49	396.83	64.40	4.87	-4.90	-0.01	6.91	0.00
W 45	0Y	-12.32	-19.92	-43.80	23.42	4.09	-4.64	-3.39	6.18	0.00
W -45	0P	-21.25	13.22	-47.85	25.03	-4.95	-4.34	-3.37	6.58	0.00
W -45	0X	-50.80	52.76	-488.15	73.24	-4.59	-4.06	0.01	6.12	0.00
W -45	0XY	-11.41	19.29	-44.12	22.41	-3.92	-4.41	3.41	5.91	0.00
W -45	0Y	-46.52	44.83	396.94	64.61	-4.70	-5.12	0.03	6.95	0.00
W 90	0P	-23.50	-44.46	-324.80	50.28	5.46	0.44	2.18	5.48	0.00
W 90	0X	15.91	-37.48	230.89	40.72	5.92	0.30	1.99	5.93	0.00
W 90	0XY	-16.88	-35.67	228.11	39.46	5.52	-0.60	-2.03	5.55	0.00
W 90	0Y	24.48	-42.32	-317.38	48.89	5.07	-0.02	-2.20	5.07	0.00
W -90	0P	15.71	37.44	228.01	40.60	-5.95	0.30	-1.99	5.95	0.00
W -90	0X	-23.30	44.26	-321.92	50.01	-5.49	0.44	-2.19	5.50	0.00
W -90	0XY	24.30	42.29	-314.99	48.78	-5.11	-0.02	2.21	5.11	0.00
W -90	0Y	-16.70	35.65	225.72	39.37	-5.57	-0.60	2.04	5.60	0.00
W 0 Ice	0P	-41.05	-22.31	-317.24	46.72	-1.52	-3.72	-1.95	4.02	0.00
W 0 Ice	0X	-39.24	23.04	-309.98	45.51	1.17	-3.40	1.96	3.60	0.00
W 0 Ice	0XY	-31.72	-14.67	187.73	34.95	1.66	-6.12	1.83	6.34	0.00
W 0 Ice	0Y	-33.06	13.89	188.73	35.86	-1.44	-6.44	-1.79	6.60	0.00
W 180 Ice	0P	33.11	13.63	185.24	35.81	-1.43	6.50	1.80	6.66	0.00
W 180 Ice	0X	31.75	-14.47	184.70	34.89	1.66	6.20	-1.84	6.42	0.00
W 180 Ice	0XY	39.26	22.84	-306.95	45.43	1.17	3.47	-1.97	3.66	0.00
W 180 Ice	0Y	40.94	-22.04	-313.75	46.50	-1.54	3.78	1.96	4.08	0.00
W 45 Ice	0P	-48.62	-48.86	-473.69	68.93	2.82	-2.76	-0.00	3.95	0.00
W 45 Ice	0X	-18.82	-10.91	-58.99	21.75	5.45	-2.61	3.13	6.05	0.00
W 45 Ice	0XY	-41.00	-40.92	342.48	57.93	5.59	-5.61	-0.01	7.92	0.00
W 45 Ice	0Y	-10.54	-18.86	-60.57	21.60	2.59	-5.39	-3.13	5.98	0.00
W -45 Ice	0P	-20.21	11.36	-65.67	23.19	-5.70	-2.83	-3.12	6.36	0.00
W -45 Ice	0X	-47.25	49.17	-466.85	68.20	-3.06	-2.54	0.00	3.98	0.00
W -45 Ice	0XY	-9.72	18.28	-60.09	20.70	-2.46	-5.17	3.16	5.73	0.00
W -45 Ice	0Y	-41.84	40.31	341.84	58.10	-5.45	-5.83	0.03	7.98	0.00
W 90 Ice	0P	-22.29	-41.32	-318.62	46.95	3.76	1.56	1.95	4.07	0.00
W 90 Ice	0X	13.91	-33.33	190.01	36.12	6.48	1.42	1.79	6.64	0.00
W 90 Ice	0XY	-14.81	-31.73	188.48	35.01	6.11	-1.68	-1.83	6.34	0.00
W 90 Ice	0Y	23.21	-39.24	-310.63	45.59	3.39	-1.14	-1.96	3.57	0.00
W -90 Ice	0P	13.64	33.31	186.40	35.99	-6.53	1.42	-1.79	6.68	0.00
W -90 Ice	0X	-22.03	41.13	-315.01	46.66	-3.80	1.56	-1.96	4.11	0.00
W -90 Ice	0XY	22.99	39.23	-307.59	45.47	-3.45	-1.14	1.97	3.63	0.00
W -90 Ice	0Y	-14.59	31.72	185.44	34.92	-6.18	-1.68	1.84	6.40	0.00

Summary of Joint Support Reactions For All Load Cases in Direction of Leg:

Load Case	Support Joint	Origin Joint	Leg Force In Member	Leg Dir.	Residual Shear Perpendicular To Leg (kips)	Residual Shear Horizontal To Leg - Res. (kips)	Residual Shear Horizontal To Leg - Long. (kips)	Residual Shear Horizontal To Leg - Tran. (kips)	Total Long. Force (kips)	Total Tran. Force (kips)	Total Vert. Force (kips)
W 0	0P	1P	L 1P	326.009	24.409	24.469	24.206	3.574	-44.13	-23.50	-323.08
W 0	0X	1X	L 1X	319.212	23.221	23.283	22.790	-4.767	-42.30	24.27	-316.32
W 0	0XY	1XY	L 1XY	-229.480	21.764	21.816	21.648	2.696	-35.65	-16.70	227.12
W 0	0Y	1Y	L 1Y	-231.487	23.022	23.073	23.006	-1.749	-37.13	15.88	229.10
W 180	0P	1P	L 1P	-228.960	23.239	23.290	-23.227	-1.709	37.20	15.68	226.57
W 180	0X	1X	L 1X	-227.295	21.916	21.967	-21.802	2.688	35.67	-16.56	224.94
W 180	0XY	1XY	L 1XY	317.025	23.367	23.429	-22.941	-4.760	42.31	24.13	-314.13
W 180	0Y	1Y	L 1Y	323.474	24.462	24.522	-24.266	3.535	44.03	-23.30	-320.55
W 45	0P	1P	L 1P	499.160	30.738	30.854	21.676	21.958	-52.18	-52.46	-494.60
W 45	0X	1X	L 1X	41.877	23.112	23.113	17.285	15.343	-19.85	-12.78	-41.60
W 45	0XY	1XY	L 1XY	-400.920	29.679	29.792	21.111	21.021	-45.58	-45.49	396.83
W 45	0Y	1Y	L 1Y	44.100	22.852	22.852	15.023	17.220	-12.32	-19.92	-43.80
W -45	0P	1P	L 1P	48.160	24.424	24.425	18.302	-16.174	-21.25	13.22	-47.85
W -45	0X	1X	L 1X	492.666	30.572	30.688	20.699	-22.655	-50.80	52.76	-488.15
W -45	0XY	1XY	L 1XY	44.435	21.776	21.776	14.127	-16.572	-11.41	19.29	-44.12
W -45	0Y	1Y	L 1Y	-401.051	29.888	30.002	22.047	-20.348	-46.52	44.83	396.94
W 90	0P	1P	L 1P	327.744	24.613	24.673	3.468	24.428	-23.50	-44.46	-324.80
W 90	0X	1X	L 1X	-233.298	23.251	23.301	-1.669	23.241	15.91	-37.48	230.89
W 90	0XY	1XY	L 1XY	-230.476	21.736	21.787	2.810	21.605	-16.88	-35.67	228.11
W 90	0Y	1Y	L 1Y	320.283	23.207	23.270	-4.907	22.746	24.48	-42.32	-317.38
W -90	0P	1P	L 1P	-230.415	23.387	23.437	-1.644	-23.379	15.71	37.44	228.01
W -90	0X	1X	L 1X	324.853	24.587	24.647	3.444	-24.405	-23.30	44.26	-321.92
W -90	0XY	1XY	L 1XY	317.886	23.322	23.384	-4.878	-22.870	24.30	42.29	-314.99
W -90	0Y	1Y	L 1Y	-228.080	21.855	21.907	2.780	-21.730	-16.70	35.65	225.72
W 0 Ice	0P	1P	L 1P	319.933	21.610	21.661	21.487	2.744	-41.05	-22.31	-317.24
W 0 Ice	0X	1X	L 1X	312.633	20.451	20.505	20.125	-3.929	-39.24	23.04	-309.98
W 0 Ice	0XY	1XY	L 1XY	-189.867	20.328	20.378	20.142	3.094	-31.72	-14.67	187.73
W 0 Ice	0Y	1Y	L 1Y	-190.898	21.488	21.537	21.418	-2.257	-33.06	13.89	188.73
W 180 Ice	0P	1P	L 1P	-187.406	21.753	21.802	-21.691	-2.203	33.11	13.63	185.24
W 180 Ice	0X	1X	L 1X	-186.838	20.538	20.589	-20.357	3.078	31.75	-14.47	184.70
W 180 Ice	0XY	1XY	L 1XY	309.601	20.656	20.709	-20.336	-3.915	39.26	22.84	-306.95
W 180 Ice	0Y	1Y	L 1Y	316.434	21.710	21.761	-21.594	2.691	40.94	-22.04	-313.75
W 45 Ice	0P	1P	L 1P	477.886	27.520	27.624	19.413	19.653	-48.62	-48.86	-473.69
W 45 Ice	0X	1X	L 1X	59.249	21.025	21.025	15.182	14.545	-18.82	-10.91	-58.99
W 45 Ice	0XY	1XY	L 1XY	-346.216	27.953	28.059	19.880	19.802	-41.00	-40.92	342.48
W 45 Ice	0Y	1Y	L 1Y	60.851	20.797	20.797	14.277	15.122	-10.54	-18.86	-60.57
W -45 Ice	0P	1P	L 1P	65.965	22.332	22.332	16.164	-15.409	-20.21	11.36	-65.67
W -45 Ice	0X	1X	L 1X	471.005	27.398	27.502	18.463	-20.383	-47.25	49.17	-466.85
W -45 Ice	0XY	1XY	L 1XY	60.388	19.814	19.815	13.427	-14.572	-9.72	18.28	-60.09
W -45 Ice	0Y	1Y	L 1Y	-345.595	28.193	28.300	20.761	-19.231	-41.84	40.31	341.84
W 90 Ice	0P	1P	L 1P	321.324	21.785	21.837	2.646	21.676	-22.29	-41.32	-318.62
W 90 Ice	0X	1X	L 1X	-192.194	21.676	21.726	-2.189	21.615	13.91	-33.33	190.01
W 90 Ice	0XY	1XY	L 1XY	-190.622	20.305	20.355	3.187	20.104	-14.81	-31.73	188.48
W 90 Ice	0Y	1Y	L 1Y	313.294	20.436	20.489	-4.052	20.085	23.21	-39.24	-310.63
W -90 Ice	0P	1P	L 1P	-188.581	21.870	21.919	-2.149	-21.813	13.64	33.31	186.40
W -90 Ice	0X	1X	L 1X	317.702	21.814	21.865	2.607	-21.709	-22.03	41.13	-315.01
W -90 Ice	0XY	1XY	L 1XY	310.253	20.607	20.661	-4.023	-20.265	22.99	39.23	-307.59
W -90 Ice	0Y	1Y	L 1Y	-187.584	20.480	20.531	3.157	-20.287	-14.59	31.72	185.44

Overturning Moment Summary For All Load Cases:

Load Case	Transverse Moment (ft-k)	Longitudinal Moment (ft-k)	Resultant Moment (ft-k)
W 0	110.027	25199.121	25199.361
W 180	110.103	-24982.276	24982.518
W 45	20553.413	20452.245	28995.467
W -45	-20271.248	20442.852	28789.472
W 90	25327.103	106.651	25327.327
W -90	-25084.619	106.724	25084.846
W 0 Ice	144.037	23084.499	23084.949
W 180 Ice	144.135	-22784.484	22784.939
W 45 Ice	18808.226	18735.424	26547.419
W -45 Ice	-18471.475	18728.132	26304.720
W 90 Ice	23178.013	148.429	23178.488
W -90 Ice	-22872.295	148.525	22872.777

EIA Sections Information:

Section Label	Top Z (ft)	Bottom Z (ft)	Joint Count	Member Count	Top Width (ft)	Bottom Width (ft)	Gross Face Area (ft^2)	Af Adjust Factor	Ar Adjust Factor	Dead Load Factor
291.42-300	300.000	291.420	8	20	9.00	10.06	81.76	1.1670	1.1670	1.167

282.84-291.42	291.420	282.840	8	16	10.06	11.12	90.84	1.2150	1.2150	1.215
272.67-282.84	282.840	272.670	8	16	11.12	12.37	119.43	1.1960	1.1960	1.196
262.5-272.67	272.670	262.500	12	24	12.37	13.63	132.19	1.2030	1.2030	1.203
250-262.5	262.500	250.000	16	24	13.63	15.17	179.95	1.2010	1.2010	1.201
237.5-250	250.000	237.500	16	24	15.17	16.71	199.22	1.2070	1.2070	1.207
225-237.5	237.500	225.000	16	24	16.71	18.25	218.49	1.2130	1.2130	1.213
212.5-225	225.000	212.500	16	24	18.25	19.79	237.76	1.2190	1.2190	1.219
200-212.5	212.500	200.000	16	24	19.79	21.33	257.03	1.2250	1.2250	1.225
175-200	200.000	175.000	16	24	21.33	24.42	571.87	1.2540	1.2540	1.254
150-175	175.000	150.000	16	24	24.42	27.50	648.96	1.2570	1.2570	1.257
125-150	150.000	125.000	16	24	27.50	30.58	726.04	1.2660	1.2660	1.266
100-125	125.000	100.000	20	32	30.58	33.67	803.13	1.2790	1.2790	1.279
75-100	100.000	75.000	36	76	33.67	36.75	880.21	1.2320	1.2320	1.232
50-75	75.000	50.000	36	76	36.75	39.83	957.29	1.2320	1.2320	1.232
25-50	50.000	25.000	32	68	39.83	42.92	1034.38	1.2340	1.2340	1.234
0-25	25.000	0.000	20	40	42.92	46.00	1111.46	1.2520	1.2520	1.252

*** Overall summary for all load cases - Usage = Maximum Stress / Allowable Stress
Printed capacities do not include EIA allowable stress increase for wind load cases.
Printed capacities do not include the strength factor entered for each load case.
The Group Summary reports on the member and load case that resulted in maximum usage
which may not necessarily be the same as that which produces maximum force.

Group Summary (Compression Portion):

Group Label	Group Desc.	Angle Type	Angle Size	Steel Strength (ksi)	Max Usage %	Usage Control	Max Use In Comp. %	Comp. Control Member	Comp. Force (kips)	Comp. Control Load Case	L/R Capacity (kips)	Comp. Connect. Shear Capacity (kips)	Comp. Connect. Bearing Capacity (kips)	RLX	RLY	RLZ	L/R	KL/R	Length Comp. Member (ft)	Curve No.	No. Of Bolts Comp.
Leg S1	L 8" x 8" x 1.125"	SAE	8X8X1.13	36.0	89.67	Comp	89.67	L 1P	-424.562	W 45	300.572	0.000	0.000	0.281	0.281	0.281	54.28	54.28	25.095	1	0
Leg S2	L 8" x 8" x 1.125"	SAE	8X8X1.13	36.0	86.17	Comp	86.17	L 2P	-368.101	W 45	300.572	0.000	0.000	0.281	0.281	0.281	54.28	54.28	25.095	1	0
Leg S3	L 8" x 8" x 1.125"	SAE	8X8X1.13	36.0	78.76	Comp	78.76	L 3P	-315.644	W 45	300.572	0.000	0.000	0.281	0.281	0.281	54.28	54.28	25.095	1	0
Leg S4	L 8" x 8" x 1"	SAE	8X8X1	36.0	72.93	Comp	72.93	L 4P	-262.031	W 45	269.490	0.000	0.000	0.281	0.281	0.281	54.28	54.28	25.095	1	0
Leg S5	L 8" x 8" x 0.875"	SAE	8X8X0.88	36.0	82.99	Comp	82.99	L 5P	-249.549	W 45	225.521	0.000	0.000	0.333	0.333	0.333	63.93	63.93	25.095	1	0
Leg S6	L 8" x 8" x 0.875"	SAE	8X8X0.88	36.0	66.85	Comp	66.85	L 6P	-201.002	W 45	225.521	0.000	0.000	0.333	0.333	0.333	63.93	63.93	25.095	1	0
Leg S7	L 8" x 8" x 0.75"	SAE	8X8X0.75	36.0	59.96	Comp	59.96	L 7P	-156.258	W 45	195.467	0.000	0.000	0.333	0.333	0.333	63.53	63.53	25.095	1	0
Leg S8	L 8" x 8" x 0.625"	SAE	8X8X0.63	36.0	52.67	Comp	52.67	L 8P	-115.310	W 45	164.199	0.000	0.000	0.333	0.333	0.333	63.53	63.53	25.095	1	0
Leg S9	L 6" x 6" x 0.75"	SAE	6X6X0.75	36.0	49.78	Comp	49.78	L 9P	-95.249	W 45	143.521	0.000	0.000	0.500	0.500	0.500	64.35	64.35	12.547	1	0
Leg S10	L 6" x 6" x 0.75"	SAE	6X6X0.75	36.0	39.76	Comp	39.76	L 10P	-76.087	W 45	143.521	0.000	0.000	0.500	0.500	0.500	64.35	64.35	12.547	1	0
Leg S11	L 6" x 6" x 0.5625"	SAE	6X6X0.56	36.0	40.51	Comp	40.51	L 11P	-59.241	W 45	109.689	0.000	0.000	0.500	0.500	0.500	63.80	63.80	12.547	1	0
Leg S12	L 6" x 6" x 0.5625"	SAE	6X6X0.56	36.0	30.42	Comp	30.42	L 12P	-44.487	W 45	109.689	0.000	0.000	0.500	0.500	0.500	63.80	63.80	12.547	1	0
Leg S13	L 6" x 6" x 0.4375"	SAE	6X6X0.44	36.0	26.64	Comp	26.64	L 13P	-30.760W	45 Ice	86.587	0.000	0.000	0.500	0.500	0.500	63.26	63.26	12.547	1	0
Leg S14	L 5" x 5" x 0.4375"	SAE	5X5X0.44	36.0	24.68	Comp	24.68	L 14P	-23.696	W 45	71.997	0.000	0.000	0.500	0.500	0.500	62.12	62.12	10.209	1	0
Leg S15	L 5" x 5" x 0.4375"	SAE	5X5X0.44	36.0	16.45	Comp	16.45	L 15P	-15.792W	45 Ice	71.997	0.000	0.000	0.500	0.500	0.500	62.12	62.12	10.209	1	0
Leg S16	L 5" x 5" x 0.3125"	SAE	5X5X0.31	36.0	12.00	Comp	12.00	L 16P	-8.786W	45 Ice	54.905	0.000	0.000	0.500	0.500	0.500	51.99	51.99	8.613	1	0
Leg S17	L 5" x 5" x 0.3125"	SAE	5X5X0.31	36.0	5.54	Comp	5.54	L 17P	-4.058W	45 Ice	54.905	0.000	0.000	0.500	0.500	0.500	51.99	51.99	8.613	1	0
Diag S1	B/B L3"x4"x0.3125"	DAS	4X3X0.31	36.0	98.60	Comp	98.60	D 2X	-47.219	W -90	35.918	0.000	0.000	0.333	1.000	0.333	135.47	131.83	21.788	5	0
Diag S2	B/B L3"x3.5"x0.25"	DAS	3.5X3X0.25	36.0	97.93	Comp	97.93	D 4X	-52.271	W -90	40.032	0.000	0.000	0.333	0.667	0.333	101.48	101.48	20.919	1	0
Diag S3	B/B L2.5"x3.5"x0.25"	DAS	3.5X2.5X0.25	36.0	62.58	Comp	62.58	D 6X	-52.401	W -90	32.896	0.000	0.000	0.333	0.667	0.333	111.84	111.84	20.553	1	0
Diag S4	B/B L2.5"x3.5"x0.25"	DAS	3.5X2.5X0.25	36.0	62.15	Comp	62.15	D 8X	-53.118	W -90	33.631	0.000	0.000	0.333	0.667	0.333	109.96	109.96	20.207	1	0
Diag S5	B/B L3"x4"x0.25"	DAS	4X3X0.25	36.0	87.90	Comp	87.90	D 9P	-35.523	W 90	30.309	0.000	0.000	0.333	0.667	0.333	134.71	129.05	30.178	6	0
Diag S6	B/B L3"x4"x0.25"	DAS	4X3X0.25	36.0	84.61	Comp	84.61	D 11X	-35.434	W -90	31.411	0.000	0.000	0.333	0.667	0.333	131.00	126.76	29.346	6	0
Diag S7	B/B L3"x4"x0.25"	DAS	4X3X0.25	36.0	71.03	Comp	71.03	D 13X	-30.753	W -90	32.473	0.000	0.000	0.333	0.667	0.333	127.55	124.64	28.573	6	0
Diag S8	B/B L3.5"x3.5"x0.25"	DAE	3.5X3.5X0.25	36.0	64.98	Comp	64.98	D 15X	-29.049	W -90	33.531	0.000	0.000	0.320	0.590	0.320	124.08	122.51	27.864	6	0
Diag S9	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	75.06	Comp	75.06	D 17X	-16.190	W -90	16.177	0.000	0.000	0.500	1.000	0.500	165.89	148.22	16.451	6	0
Diag S10	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	66.42	Comp	66.42	D 19X	-14.931	W -90	16.860	0.000	0.000	0.500	1.000	0.500	160.96	145.19	15.962	6	0
Diag S11	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	89.57	Comp	89.57	D 21X	-13.377	W -90	11.202	0.000	0.000	0.500	1.000	0.500	198.87	168.51	15.495	6	0
Diag S12	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	68.38	Comp	68.38	D 23X	-10.649	W -90	11.680	0.000	0.000	0.500	1.000	0.500	193.21	165.03	15.054	6	0
Diag S13	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	65.99	Comp	65.99	D 25X	-10.696	W -90	12.156	0.000	0.000	0.500	1.000	0.500	187.90	161.76	14.641	6	0
Diag S14	L 3.5" x 3.5" x 0.25"	SAE	3.5X3.5X0.25	36.0	30.56	Comp	30.56	D 28X	-5.117	W -90	12.559	0.000	0.000	0.520	0.750	0.520	148.50	141.76	16.516	5	0
Diag S15	L 3.5" x 3.5" x 0.25"	SAE	3.5X3.5X0.25	36.0	23.60	Comp	23.60	D 30X	-4.349	W -90	13.822	0.000	0.000	0.520	0.750	0.520	139.80	135.12	15.548	5	0
Diag S16	L 3" x 3" x 0.25"	SAE	3X3X0.25	36.0	22.08	Comp	22.08	D 32X	-3.318	W -90	11.269	0.000	0.000	0.520	0.750	0.520	143.75	138.14	13.638	5	0
Diag S17	L 3" x 3" x 0.25"	SAE	3X3X0.25	36.0	14.35	Comp	14.35	D 34X	-2.372	W -90	12.402	0.000	0.000	0.520	0.750	0.520	135.27	131.68	12.834	5	0
Horiz 1	B/B L3.5"x2.5"x0.25"	DAL	3.5X2.5X0.25	36.0	96.27	Comp	96.27	H 2Y	-40.228	W -45	31.342	0.000	0.000	0.490	0.490	0.490	115.76	115.76	21.458	1	0
Horiz 2	B/B L3.5"x2.5"x0.25"	DAL	3.5X2.5X0.25	36.0	65.40	Comp	65.40	H 4Y	-40.449	W -45	46.387	0.000	0.000	0.500	0.500	0.500	73.09	73.09	13.278	1	0
Horiz 3	B/B L3.5"x2.5"x0.25"	DAL	3.5X2.5X0.25	36.0	60.97	Comp	60.97	H 6Y	-39.082	W -45	48.080	0.000	0.000	0.500	0.500	0.500	67.43	67.43	12.250	1	0
Horiz 4	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	36.0	97.22	Comp	97.22	H 7P	-35.457	W -90	27.353	0.000	0.000	0.500	1.000	0.500	119.17	119.17	11.222	1	0
Horiz 5	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	36.0	94.44	Comp	94.44	H 9X	-18.028	W 90	14.318	0.000	0.000	1.000	1.000	1.000	194.18	165.62	15.292	6	0
Horiz 6	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	36.0	74.57	Comp	74.57	H 11P	-16.555	W -90	16.651	0.000	0.000	1.000	1.000	1.000	174.60	153.58	13.750	6	0
Horiz 7	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	73.92	Comp	73.92	H 13P	-13.126	W -90	13.318	0.000	0.000	1.000	1.000	1.000	190.51	163.36	12.208	6	0
Horiz 8	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	56.10	Comp	56.10	H 15P	-12.044	W -90	16.102	0.000	0.000	1.000	1.000	1.000	166.45	148.57	10.667	6	0
Horiz 9	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	40.94	Comp	40.94	H 17P	-9.736	W -90	17.834	0.000	0.000	1.000	1.000	1.000	154.42	141.17	9.896	6	0
Horiz 10	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	32.20	Comp	32.20	H 19P	-8.527	W -90	19.861	0.000	0.000	1.000	1.000	1.000	142.39	133.77	9.125	6	0
Horiz 11	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	26.06	Comp	26.06	H 21P	-7.732	W -90	22.254	0.000	0.000	1.000	1.000	1.000	130.36	126.37	8.354	6	0
Horiz 12	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	16.06	Comp	16.06	H 23P	-5.363	W -90	25.037	0.000	0.000	1.000	1.000	1.000	118.34	118.34	7.583	1	0
Horiz 13	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	13.07	Comp	13.07	H 25P	-5.045	W -90	28.949	0.000	0.000	1.000	1.000	1.000	106.31	106.31	6.813	1	0
Horiz 14	L 3" x 2.5" x 0.25"	SAU	3X2.5X0.25	36.0	10.46	Comp	10.46	H 28X	-0.973	W 90	6.977	0.000	0.000	0.500	1.000	0.500	197.14	167.44	12.371	6	0

Horiz 15	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	36.0	1.62	Tens	1.43	H 30X	-0.529	W 90	27.773	0.000	0.000	0.500	1.000	0.500	118.05	118.05	11.116	1	0
Horiz 16	L 3" x 2.5" x 0.25"	SAU	3X2.5X0.25	36.0	2.44	Tens	1.20	H 32X	-0.149	W 90	9.333	0.000	0.000	0.500	1.000	0.500	160.29	144.78	10.058	6	0
Horiz 17	C8x11.5	CHN	C8x11.5	36.0	0.97	Comp	0.97	H 34P	-0.279	W 180	21.711	0.000	0.000	0.500	1.000	0.500	172.80	152.47	9.000	6	0
LD 1	B/B L3"x2"x0.25"	DAL	3X2X0.25	36.0	97.22	Comp	97.22	LD 1X	-23.588	W -45	18.198	0.000	0.000	0.880	0.880	0.880	152.11	139.75	12.834	6	0
LD 2	B/B L4"x3"x0.25"	DAL	4X3X0.25	36.0	84.41	Comp	84.41	LD 3X	-50.008	W -90	44.434	0.000	0.000	0.820	0.820	0.820	98.67	98.67	12.834	1	0
LD 4	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	56.13	Comp	56.13	LD 7X	-26.641	W -45	16.111	0.000	0.000	0.870	0.870	0.870	153.35	140.51	11.516	6	0
LD 5	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	96.77	Comp	96.77	LD 9X	-34.267	W -90	26.560	0.000	0.000	0.830	0.830	0.830	103.97	103.97	8.184	1	0
LD 6	B/B L3"x3"x0.25"	DAE	3X3X0.25	36.0	80.04	Comp	80.04	LD 11P	-37.950	W -90	35.559	0.000	0.000	0.840	0.840	0.840	104.91	104.91	9.679	1	0
LD 7	B/B L3"x3"x0.25"	DAE	3X3X0.25	36.0	70.16	Comp	70.16	LD 13X	-27.199	W -45	29.075	0.000	0.000	0.865	0.865	0.865	122.11	121.30	10.941	6	0
LD 8	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	94.91	Comp	94.91	LD 15X	-34.244	W -90	27.060	0.000	0.000	0.830	0.830	0.830	102.15	102.15	8.040	1	0
LD 9	B/B L3"x2"x0.25"	DAL	3X2X0.25	36.0	96.47	Comp	96.47	LD 17P	-37.522	W -90	29.171	0.000	0.000	0.840	0.840	0.840	105.60	105.60	9.334	1	0
LD 10	B/B L3"x3"x0.25"	DAE	3X3X0.25	36.0	65.91	Comp	65.91	LD 19X	-27.721	W -45	31.544	0.000	0.000	0.860	0.860	0.860	115.25	115.25	10.386	1	0
LD 11	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	95.29	Comp	95.29	LD 21X	-34.557	W -90	27.199	0.000	0.000	0.840	0.840	0.840	101.64	101.64	7.905	1	0
LD 12	B/B L2.5"x2.5"x0.375"	DAE	2.5X2.5X0.38	36.0	79.22	Comp	79.22	LD 23P	-37.045	W -90	35.071	0.000	0.000	0.850	0.850	0.850	121.98	121.22	9.005	6	0
LH 1	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	52.18	Comp	52.18	LH 2P	-11.312	W 90	16.260	0.000	0.000	0.500	1.000	0.500	177.59	155.42	21.458	6	0
LH 2	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	64.48	Comp	64.48	LH 3X	-30.347	W -45	16.097	0.000	0.000	1.000	2.000	1.000	178.86	156.20	10.806	6	0
LH 3	B/B L2.5"x3"x0.375"	DAS	3X2.5X0.38	36.0	84.51	Comp	84.51	LH 5X	-30.049	W -45	26.667	0.000	0.000	1.000	2.000	1.000	163.32	146.64	10.003	6	0
LH 4	B/B L3.5"x3.5"x0.25"	DAE	3.5X3.5X0.25	36.0	75.46	Comp	75.46	LH 7X	-29.415	W -45	29.236	0.000	0.000	0.998	1.995	0.998	138.53	131.39	9.200	6	0
DUM 1	Dummy Bracing Member	DUM	0.1X0.1X1	36.0	0.00		0.00	BR 11XY	-1.288	W 45	0.215	0.000	0.000	1.000	1.000	1.000	2.33	2.33	19.445	1	0

Group Summary (Tension Portion):

Group Label	Group Desc.	Angle Type	Angle Size	Steel Strength (ksi)	Max Usage %	Usage Cont-rol	Max Use In Tens. %	Tension Control Member	Tension Force (kips)	Tension Control Load Case	Net Section Capacity (kips)	Tension Connect. Shear Capacity (kips)	Tension Connect. Bearing Capacity (kips)	Tension Connect. Rupture Capacity (kips)	Length Tens. Member (ft)	No. Of Bolts Tens.	No. Of Holes	Hole Diameter (in)
Leg S1	L 8" x 8" x 1.125"	SAE	8X8X1.13	36.0	89.67	Comp	69.64	L 1XY	335.526	W 45	361.367	0.000	0.000	0.000	25.095	0	0.000	0
Leg S2	L 8" x 8" x 1.125"	SAE	8X8X1.13	36.0	86.17	Comp	60.58	L 2XY	291.867	W 45	361.367	0.000	0.000	0.000	25.095	0	0.000	0
Leg S3	L 8" x 8" x 1.125"	SAE	8X8X1.13	36.0	78.76	Comp	51.96	L 3XY	250.331	W 45	361.367	0.000	0.000	0.000	25.095	0	0.000	0
Leg S4	L 8" x 8" x 1"	SAE	8X8X1	36.0	72.93	Comp	48.36	L 4XY	208.931	W 45	323.999	0.000	0.000	0.000	25.095	0	0.000	0
Leg S5	L 8" x 8" x 0.875"	SAE	8X8X0.88	36.0	82.99	Comp	53.00	L 5XY	201.941	W 45	285.768	0.000	0.000	0.000	25.095	0	0.000	0
Leg S6	L 8" x 8" x 0.875"	SAE	8X8X0.88	36.0	66.85	Comp	42.58	L 6XY	162.226	W 45	285.768	0.000	0.000	0.000	25.095	0	0.000	0
Leg S7	L 8" x 8" x 0.75"	SAE	8X8X0.75	36.0	59.96	Comp	38.14	L 7XY	125.664	W 45	247.104	0.000	0.000	0.000	25.095	0	0.000	0
Leg S8	L 8" x 8" x 0.625"	SAE	8X8X0.63	36.0	52.67	Comp	32.69	L 8XY	90.479	W 45	207.576	0.000	0.000	0.000	25.095	0	0.000	0
Leg S9	L 6" x 6" x 0.75"	SAE	6X6X0.75	36.0	49.78	Comp	30.50	L 9XY	74.123	W 45	182.304	0.000	0.000	0.000	12.547	0	0.000	0
Leg S10	L 6" x 6" x 0.75"	SAE	6X6X0.75	36.0	39.76	Comp	23.98	L 10XY	58.288	W 45	182.304	0.000	0.000	0.000	12.547	0	0.000	0
Leg S11	L 6" x 6" x 0.5625"	SAE	6X6X0.56	36.0	40.51	Comp	23.58	L 11XY	43.671	W 45	138.888	0.000	0.000	0.000	12.547	0	0.000	0
Leg S12	L 6" x 6" x 0.5625"	SAE	6X6X0.56	36.0	30.42	Comp	16.59	L 12XY	30.715	W 45	138.888	0.000	0.000	0.000	12.547	0	0.000	0
Leg S13	L 6" x 6" x 0.4375"	SAE	6X6X0.44	36.0	26.64	Comp	12.89	L 13XY	18.783	W 45	109.296	0.000	0.000	0.000	12.547	0	0.000	0
Leg S14	L 5" x 5" x 0.4375"	SAE	5X5X0.44	36.0	24.68	Comp	12.35	L 14Y	14.869	W -45	90.288	0.000	0.000	0.000	10.209	0	0.000	0
Leg S15	L 5" x 5" x 0.4375"	SAE	5X5X0.44	36.0	16.45	Comp	6.72	L 15Y	8.095	W -45	90.288	0.000	0.000	0.000	10.209	0	0.000	0
Leg S16	L 5" x 5" x 0.3125"	SAE	5X5X0.31	36.0	12.00	Comp	3.92	L 16Y	3.416	W -45	65.448	0.000	0.000	0.000	8.613	0	0.000	0
Leg S17	L 5" x 5" x 0.3125"	SAE	5X5X0.31	36.0	5.54	Comp	0.33	L 17XY	0.291	W 45	65.448	0.000	0.000	0.000	8.613	0	0.000	0
Diag S1	B/B L3"x4"x0.3125"	DAS	4X3X0.31	36.0	98.60	Comp	35.69	D 2P	42.963	W -90	90.288	0.000	0.000	0.000	21.788	0	0.000	0
Diag S2	B/B L3"x3.5"x0.25"	DAS	3.5X3X0.25	36.0	97.93	Comp	51.70	D 4P	46.599	W -90	67.608	0.000	0.000	0.000	20.919	0	0.000	0
Diag S3	B/B L2.5"x3.5"x0.25"	DAS	3.5X2.5X0.25	36.0	62.58	Comp	56.74	D 6P	47.064	W -90	62.208	0.000	0.000	0.000	20.553	0	0.000	0
Diag S4	B/B L2.5"x3.5"x0.25"	DAS	3.5X2.5X0.25	36.0	62.15	Comp	56.87	D 8X	47.166	W 90	62.208	0.000	0.000	0.000	20.207	0	0.000	0
Diag S5	B/B L3"x4"x0.25"	DAS	4X3X0.25	36.0	87.90	Comp	34.50	D 9X	33.578	W 90	73.008	0.000	0.000	0.000	30.178	0	0.000	0
Diag S6	B/B L3"x4"x0.25"	DAS	4X3X0.25	36.0	84.61	Comp	34.39	D 11P	33.472	W -90	73.008	0.000	0.000	0.000	29.346	0	0.000	0
Diag S7	B/B L3"x4"x0.25"	DAS	4X3X0.25	36.0	71.03	Comp	29.85	D 13P	29.056	W -90	73.008	0.000	0.000	0.000	28.573	0	0.000	0
Diag S8	B/B L3.5"x3.5"x0.25"	DAE	3.5X3.5X0.25	36.0	64.98	Comp	28.67	D 15P	27.908	W -90	73.008	0.000	0.000	0.000	27.864	0	0.000	0
Diag S9	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	75.06	Comp	22.38	D 17P	15.337	W -90	51.408	0.000	0.000	0.000	16.451	0	0.000	0
Diag S10	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	66.42	Comp	20.70	D 19P	14.189	W -90	51.408	0.000	0.000	0.000	15.962	0	0.000	0
Diag S11	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	89.57	Comp	20.77	D 21P	12.743	W -90	46.008	0.000	0.000	0.000	15.495	0	0.000	0
Diag S12	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	68.38	Comp	16.44	D 23P	10.085	W -90	46.008	0.000	0.000	0.000	15.054	0	0.000	0
Diag S13	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	65.99	Comp	16.60	D 25P	10.180	W -90	46.008	0.000	0.000	0.000	14.641	0	0.000	0
Diag S14	L 3.5" x 3.5" x 0.25"	SAE	3.5X3.5X0.25	36.0	30.56	Comp	9.09	D 28X	4.426	W 90	36.504	0.000	0.000	0.000	16.516	0	0.000	0
Diag S15	L 3.5" x 3.5" x 0.25"	SAE	3.5X3.5X0.25	36.0	23.60	Comp	7.69	D 30X	3.741	W 90	36.504	0.000	0.000	0.000	15.548	0	0.000	0
Diag S16	L 3" x 3" x 0.25"	SAE	3X3X0.25	36.0	22.08	Comp	6.89	D 32X	2.857	W 90	31.104	0.000	0.000	0.000	13.638	0	0.000	0
Diag S17	L 3" x 3" x 0.25"	SAE	3X3X0.25	36.0	14.35	Comp	4.69	D 34X	1.946	W 90	31.104	0.000	0.000	0.000	12.834	0	0.000	0
Horiz 1	B/B L3.5"x2.5"x0.25"	DAL	3.5X2.5X0.25	36.0	96.27	Comp	51.69	H 1X	42.874	W -45	62.208	0.000	0.000	0.000	21.458	0	0.000	0
Horiz 2	B/B L3.5"x2.5"x0.25"	DAL	3.5X2.5X0.25	36.0	65.40	Comp	52.85	H 3X	43.835	W -45	62.208	0.000	0.000	0.000	13.278	0	0.000	0
Horiz 3	B/B L3.5"x2.5"x0.25"	DAL	3.5X2.5X0.25	36.0	60.97	Comp	51.77	H 5X	42.940	W -45	62.208	0.000	0.000	0.000	12.250	0	0.000	0
Horiz 4	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	36.0	97.22	Comp	50.08	H 7P	37.931	W 90	56.808	0.000	0.000	0.000	11.222	0	0.000	0
Horiz 5	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	36.0	94.44	Comp	24.40	H 9X	18.478	W -90	56.808	0.000	0.000	0.000	15.292	0	0.000	0
Horiz 6	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	36.0	74.57	Comp	22.09	H 11P	16.730	W 90	56.808	0.000	0.000	0.000	13.750	0	0.000	0
Horiz 7	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	73.92	Comp	19.24	H 13P	13.186	W 90	51.408	0.000	0.000	0.000	12.208	0	0.000	0
Horiz 8	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	56.10	Comp	17.89	H 15P	12.259	W 90	51.408	0.000	0.000	0.000	10.667	0	0.000	0
Horiz 9	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	40.94	Comp	14.40	H 17P	9.869	W 90	51.408	0.000	0.000	0.000	9.896	0	0.000	0
Horiz 10	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	32.20	Comp	12.72	H 19X	8.718	W -90	51.408	0.000	0.000	0.000	9.125	0	0.000	0
Horiz 11	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	26.06	Comp	11.34	H 21P	7.775	W 90	51.408	0.000	0.000	0.000	8.354	0	0.000	0
Horiz 12	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	16.06	Comp	8.06	H 23X	5.522	W -90	51.408	0.000	0.000	0.000	7.583	0	0.000	0
Horiz 13	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	36.0	13.07	Comp	7.84	H 25P	5.371	W 90	51.408	0.000	0.000	0.000	6.813	0	0.000	0
Horiz 14	L 3" x 2.5" x 0.25"	SAU	3X2.5X0.25	36.0	10.46	Comp	5.05	H 28P	1.905W 90 Ice		28.296	0.000	0.000	0.000	12.371	0	0.000	0
Horiz 15	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	36.0	1.62	Tens	1.62	H 30P	1.224W 90 Ice		56.808	0.000	0.000	0.000	11.116	0	0.000	0
Horiz 16	L 3" x 2.5" x 0.25"	SAU	3X2.5X0.25	36.0	2.44	Tens	2.44	H 31P	0.922W 45 Ice		28.296	0.000	0.000	0.000	10.058	0	0.000	0
Horiz 17	C8x11.5	CHN	C8x11.5	36.0	0.97	Comp	0.43	H 34P	0.417 W 0 Ice		73.008	0.000	0.000	0.000	9.000	0	0.000	0

LD 1	B/B L3"x2"x0.25"	DAL	3X2X0.25	36.0	97.22	Comp 34.31	LD 2Y	23.517W	-45 Ic	51.408	0.000	0.000	0.000	12.834	0	0.000	0
LD 2	B/B L4"x3"x0.25"	DAL	4X3X0.25	36.0	84.41	Comp 48.46	LD 3P	47.174	W -90	73.008	0.000	0.000	0.000	12.834	0	0.000	0
LD 4	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	56.13	Comp 40.78	LD 8Y	25.015	W -45	46.008	0.000	0.000	0.000	11.516	0	0.000	0
LD 5	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	96.77	Comp 50.27	LD 9P	30.834	W -90	46.008	0.000	0.000	0.000	8.184	0	0.000	0
LD 6	B/B L3"x3"x0.25"	DAE	3X3X0.25	36.0	80.04	Comp 46.76	LD 11X	38.786	W -90	62.208	0.000	0.000	0.000	9.679	0	0.000	0
LD 7	B/B L3"x3"x0.25"	DAE	3X3X0.25	36.0	70.16	Comp 30.44	LD 14Y	25.249	W -45	62.208	0.000	0.000	0.000	10.941	0	0.000	0
LD 8	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	94.91	Comp 50.86	LD 15P	31.198	W -90	46.008	0.000	0.000	0.000	8.040	0	0.000	0
LD 9	B/B L3"x2"x0.25"	DAL	3X2X0.25	36.0	96.47	Comp 55.80	LD 17X	38.248	W -90	51.408	0.000	0.000	0.000	9.334	0	0.000	0
LD 10	B/B L3"x3"x0.25"	DAE	3X3X0.25	36.0	65.91	Comp 30.64	LD 20Y	25.415	W -45	62.208	0.000	0.000	0.000	10.386	0	0.000	0
LD 11	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	36.0	95.29	Comp 50.79	LD 21P	31.156	W -90	46.008	0.000	0.000	0.000	7.905	0	0.000	0
LD 12	B/B L2.5"x2.5"x0.375"	DAE	2.5X2.5X0.38	36.0	79.22	Comp 37.73	LD 23X	37.705	W -90	74.952	0.000	0.000	0.000	9.005	0	0.000	0
LH 1	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	52.18	Comp 17.10	LH 2X	12.955W	90 Ice	56.808	0.000	0.000	0.000	21.458	0	0.000	0
LH 2	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	36.0	64.48	Comp 36.90	LH 4Y	27.948	W -45	56.808	0.000	0.000	0.000	10.806	0	0.000	0
LH 3	B/B L2.5"x3"x0.375"	DAS	3X2.5X0.38	36.0	84.51	Comp 24.83	LH 6Y	27.456	W -45	82.944	0.000	0.000	0.000	10.003	0	0.000	0
LH 4	B/B L3.5"x3.5"x0.25"	DAE	3.5X3.5X0.25	36.0	75.46	Comp 27.29	LH 8Y	26.568	W -45	73.008	0.000	0.000	0.000	9.200	0	0.000	0
DUM 1	Dummy Bracing Member	DUM	0.1X0.1X1	36.0	0.00	0.00	BR 11X	1.092	W -45	0.216	0.000	0.000	0.000	19.445	0	0.000	0

*** Maximum Stress Summary for Each Load Case

Summary of Maximum Usages by Load Case:

Load Case	Maximum Usage %	Element Label	Element Type
W 0	97.50	D 1P	Angle
W 180	98.02	D 1Y	Angle
W 45	94.72	LD 1P	Angle
W -45	97.22	LD 1X	Angle
W 90	98.43	D 2P	Angle
W -90	98.60	D 2X	Angle
W 0 Ice	90.91	D 3P	Angle
W 180 Ice	91.61	D 3Y	Angle
W 45 Ice	88.01	H 2XY	Angle
W -45 Ice	91.42	H 2Y	Angle
W 90 Ice	91.80	D 4P	Angle
W -90 Ice	92.19	D 4X	Angle

*** Weight of structure (lbs):

Weight of Angles*Section DLF:	119944.4
Weight of Equipment:	570.0
Total:	120514.4

*** End of Report

Site #:	68018
Name:	Cranford (Kelsorosa), CT

Engineer:	RD
Date:	01/14/14

Windspeed:	No Ice	85 mph	Ice	76 mph
Carrier:	Sprint Nextel			

Taper:	-0.123333
FW @ Base:	46 ft

Taper Change:	300 ft
FW @ Top:	9 ft

Spreadsheet Version Last Updated: 7/27/2012

Joint Label	Symmetry Code	X Coord. (ft)	Y Coord. 494.6	Z Coord. (ft)	X Disp. Rest.	Y Disp. Fixed	Z Disp. Fixed	X Rot. Rest.	Y Rot. Rest.	Z Rot. Rest.	Drop Sub-Brace (# or Blank)	# Vert.	Drop (ft)	Height (ft)	Type	Count	Z-Elev. (ft)	FW (ft)	# Sub-Brace
0	XY-Symmetry	21	396.9	0	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed			7.03	21	1	1	0	46	3
1	XY-Symmetry	21.45833333	21.45833333	21	Free	Free	Free	Free	Free	Free			7.03	21	2	2	21	42.91666667	3
2	XY-Symmetry	19.91666667	19.91666667	50	Free	Free	Free	Free	Free	Free			7.03	21	2	3	50	39.83333333	3
3	XY-Symmetry	18.375	18.375	75	Free	Free	Free	Free	Free	Free			7.03	21	2	4	75	36.75	3
4	XY-Symmetry	16.83333333	16.83333333	100	Free	Free	Free	Free	Free	Free				21	A	5	100	33.66666667	2
5	XY-Symmetry	15.29166667	15.29166667	125	Free	Free	Free	Free	Free	Free				21	A	6	125	30.58333333	2
6	XY-Symmetry	13.75	13.75	150	Free	Free	Free	Free	Free	Free				21	A	7	150	27.5	2
7	XY-Symmetry	12.20833333	12.20833333	175	Free	Free	Free	Free	Free	Free				21	A	8	175	24.41666667	2
8	XY-Symmetry	10.66666667	10.66666667	200	Free	Free	Free	Free	Free	Free				12.5	A	9	200	21.33333333	1
9	XY-Symmetry	9.895833333	9.895833333	212.5	Free	Free	Free	Free	Free	Free				12.5	A	10	212.5	19.79166667	1
10	XY-Symmetry	9.125	9.125	225	Free	Free	Free	Free	Free	Free				12.5	A	11	225	18.25	1
11	XY-Symmetry	8.354166667	8.354166667	237.5	Free	Free	Free	Free	Free	Free				12.5	A	12	237.5	16.70833333	1
12	XY-Symmetry	7.583333333	7.583333333	250	Free	Free	Free	Free	Free	Free				12.5	A	13	250	15.16666667	1
13	XY-Symmetry	6.8125	6.8125	262.5	Free	Free	Free	Free	Free	Free		1		10.17	X	14	262.5	13.625	1
14	XY-Symmetry	6.18535	6.18535	272.67	Free	Free	Free	Free	Free	Free		1		10.17	X	15	272.67	12.2707	1
15	XY-Symmetry	5.5582	5.5582	282.84	Free	Free	Free	Free	Free	Free		1		8.58	X	16	282.84	11.1164	1
16	XY-Symmetry	5.0291	5.0291	291.42	Free	Free	Free	Free	Free	Free		1		8.58	X	17	291.42	10.0582	1
17	XY-Symmetry	4.5	4.5	300	Free	Free	Free	Free	Free	Free						18	300	9	

NOTES

Types:

1: Built up Horizs. w/ A

2: Built up Horizs. w/ M

A: Typical A brace

X: Typical X brace

Drop: Use only for types 1 & 2

Sections: 17

A1	Y-Symmetry	21.45833333	0	21	Free	Free	Free	Free	Free	Free	
A2	X-Symmetry	0	21.45833333	21	Free	Free	Free	Free	Free	Free	
A3	XY-Symmetry	19.91666667	6.638888889	50	Free	Free	Free	Free	Free	Free	
A4	XY-Symmetry	6.638888889	19.91666667	50	Free	Free	Free	Free	Free	Free	
A5	XY-Symmetry	18.375	6.125	75	Free	Free	Free	Free	Free	Free	
A6	XY-Symmetry	6.125	18.375	75	Free	Free	Free	Free	Free	Free	
A7	XY-Symmetry	16.83333333	5.611111111	100	Free	Free	Free	Free	Free	Free	
A8	XY-Symmetry	5.611111111	16.83333333	100	Free	Free	Free	Free	Free	Free	
A9	Y-Symmetry	15.29166667	0	125	Free	Free	Free	Free	Free	Free	
A10	X-Symmetry	0	15.29166667	125	Free	Free	Free	Free	Free	Free	
A11	Y-Symmetry	13.75	0	150	Free	Free	Free	Free	Free	Free	
A12	X-Symmetry	0	13.75	150	Free	Free	Free	Free	Free	Free	
A13	Y-Symmetry	12.20833333	0	175	Free	Free	Free	Free	Free	Free	
A14	X-Symmetry	0	12.20833333	175	Free	Free	Free	Free	Free	Free	
A15	Y-Symmetry	10.66666667	0	200	Free	Free	Free	Free	Free	Free	
A16	X-Symmetry	0	10.66666667	200	Free	Free	Free	Free	Free	Free	
A17	Y-Symmetry	9.895833333	0	212.5	Free	Free	Free	Free	Free	Free	
A18	X-Symmetry	0	9.895833333	212.5	Free	Free	Free	Free	Free	Free	
A19	Y-Symmetry	9.125	0	225	Free	Free	Free	Free	Free	Free	
A20	X-Symmetry	0	9.125	225	Free	Free	Free	Free	Free	Free	
A21	Y-Symmetry	8.354166667	0	237.5	Free	Free	Free	Free	Free	Free	
A22	X-Symmetry	0	8.354166667	237.5	Free	Free	Free	Free	Free	Free	
A23	Y-Symmetry	7.583333333	0	250	Free	Free	Free	Free	Free	Free	
A24	X-Symmetry	0	7.583333333	250	Free	Free	Free	Free	Free	Free	
A25	Y-Symmetry	6.8125	0	262.5	Free	Free	Free	Free	Free	Free	
A26	X-Symmetry	0	6.8125	262.5	Free	Free	Free	Free	Free	Free	

H1	XY-Symmetry	21.89185	10.72916667	17.97	Free	Free	Free	Free	Free	Free	
H2	XY-Symmetry	10.72916667	21.89185	17.97	Free	Free	Free	Free	Free	Free	
H5	XY-Symmetry	20.35018333	10.80611667	42.97	Free	Free	Free	Free	Free	Free	
H6	XY-Symmetry	10.80611667	20.35018333	42.97	Free	Free	Free	Free	Free	Free	
H7	Y-Symmetry	20.35018333	0	42.97	Free	Free	Free	Free	Free	Free	
H8	X-Symmetry	0	20.35018333	42.97	Free	Free	Free	Free	Free	Free	
H9	XY-Symmetry	18.80851667	10.00321667	67.97	Free	Free	Free	Free	Free	Free	
H10	XY-Symmetry	10.00321667	18.80851667	67.97	Free	Free	Free	Free	Free	Free	
H11	Y-Symmetry	18.80851667	0	67.97	Free	Free	Free	Free	Free	Free	
H12	X-Symmetry	0	18.80851667	67.97	Free	Free	Free	Free	Free	Free	
H13	XY-Symmetry	17.26685	9.200316667	92.97	Free	Free	Free	Free	Free	Free	
H14	XY-Symmetry	9.200316667	17.26685	92.97	Free	Free	Free	Free	Free	Free	
H15	Y-Symmetry	17.26685	0	92.97	Free	Free	Free	Free	Free	Free	
H16	X-Symmetry	0	17.26685	92.97	Free	Free	Free	Free	Free	Free	

Legs

Site No.:	88018
Engineer:	BD
Date:	01/14/2014
Carrier:	Sprint Nextel

When inputting thickness values, include a 494.6
396.9

Tower Section #	Section Elevations *(ft)*	Type of Shape [1]	Diameter or Length *(in)*	Thickness [2] *(in)*	F_Y *(ksi)*
1	0.000-25.00	L	8	1.125	36
2	25.00-50.00	L	8	1.125	36
3	50.00-75.00	L	8	1.125	36
4	75.00-100.0	L	8	1	36
5	100.0-125.0	L	8	0.875	36
6	125.0-150.0	L	8	0.875	36
7	150.0-175.0	L	8	0.75	36
8	175.0-200.0	L	8	0.625	36
9	200.0-212.5	L	6	0.75	36
10	212.5-225.0	L	6	0.75	36
11	225.0-237.5	L	6	0.5625	36
12	237.5-250.0	L	6	0.5625	36
13	250.0-262.5	L	6	0.4375	36
14	262.5-272.7	L	5	0.4375	36
15	272.7-282.8	L	5	0.4375	36
16	282.8-291.4	L	5	0.3125	36
17	291.4-300.0	L	5	0.3125	36

Notes:

[1] Type of Leg Shape: **R** = Round or **P** = Bent Plate or **S** = Schifflerized Angle. **L** = Even Leg

[2] For Solid Round Leg Shapes Thickness Equals Zero.

[3] Adjust for Bent Plate Leg Shapes.

Diagonals

Site No.:	88018
Engineer:	BD
Date:	01/14/2014
Carrier:	Sprint Nextel

When inputting thickness values, includ 494.6
396.9

Tower Section #	Section Elevations (ft)	Type of Shape [1]	Diameter [2] (in)	Web Length [3] (in)	Flange Length [3] (in)	Thickness (in)	F_y (ksi)	Is Diag. Tension Only? (Y/N)
1	0.000-25.00	2L		3	4	0.3125	36	
2	25.00-50.00	2L		3	3.5	0.25	36	
3	50.00-75.00	2L		2.5	3.5	0.25	36	
4	75.00-100.0	2L		2.5	3.5	0.25	36	
5	100.0-125.0	2L		3	4	0.25	36	
6	125.0-150.0	2L		3	4	0.25	36	
7	150.0-175.0	2L		3	4	0.25	36	
8	175.0-200.0	2L		3.5	3.5	0.25	36	
9	200.0-212.5	2L		2.5	2.5	0.25	36	
10	212.5-225.0	2L		2.5	2.5	0.25	36	
11	225.0-237.5	2L		2.5	2	0.25	36	
12	237.5-250.0	2L		2.5	2	0.25	36	
13	250.0-262.5	2L		2.5	2	0.25	36	
14	262.5-272.7	L		3.5	3.5	0.25	36	
15	272.7-282.8	L		3.5	3.5	0.25	36	
16	282.8-291.4	L		3	3	0.25	36	
17	291.4-300.0	L		3	3	0.25	36	

Notes:

[1] Type of Diagonal Shape: **R** = Round, **L** = Single-Angle or **2L** = Double-Angle.

[2] Applies to Pipes and Solid Round Shapes only. For Solid Round Shapes Thickness Equals Zero.

[3] Applies to Single-Angle and Double-Angle Shapes only.

[4] Applies to Double-Angle Shapes only.

[5] Applies to Single-Angle Shapes only.

Horizontals

Site No.:	88018
Engineer:	BD
Date:	01/14/2014
Carrier:	Sprint Nextel

When inputting thickness values, includ 494.6
396.9

Tower Section #	Section Elevations (ft)	Type of Shape [1]	Diameter [2] (in)	Web Length [3] (in)	Flange Length [3] (in)	Thickness (in)	F_y (ksi)	
1	0.000-25.00	2L		3.5	2.5	0.25	36	
2	25.00-50.00	2L		3.5	2.5	0.25	36	
3	50.00-75.00	2L		3.5	2.5	0.25	36	
4	75.00-100.0	2L		3	2.5	0.25	36	
5	100.0-125.0	2L		3	2.5	0.25	36	
6	125.0-150.0	2L		3	2.5	0.25	36	
7	150.0-175.0	2L		2.5	2.5	0.25	36	
8	175.0-200.0	2L		2.5	2.5	0.25	36	
9	200.0-212.5	2L		2.5	2.5	0.25	36	
10	212.5-225.0	2L		2.5	2.5	0.25	36	
11	225.0-237.5	2L		2.5	2.5	0.25	36	
12	237.5-250.0	2L		2.5	2.5	0.25	36	
13	250.0-262.5	2L		2.5	2.5	0.25	36	
14	262.5-272.7	L		3	2.5	0.25	36	
15	272.7-282.8	2L		3	2.5	0.25	36	
16	282.8-291.4	L		3	2.5	0.25	36	
17	291.4-300.0	C		8	11.5		36	

Notes:

[1] Type of Horizontal Shape: **R** = Round, **L** = Single-Angle, **2L** = Double-Angle, **C** = Channel, **W** = W Shape

[2] Applies to Pipes and Solid Round Shapes only. For Solid Round Shapes Thickness Equals Zero.

[3] Applies to Single-Angle and Double-Angle Shapes only.

[4] Applies to Double-Angle Shapes only.

[5] Applies to Single-Angle Shapes only.

Built-up Diagonals

Site No.:	88018
Engineer:	BD
Date:	01/14/2014
Carrier:	Sprint Nextel

When inputting thickness values, inclu 494.6
Input diags. from left to center & from 396.9

Tower Built-up Diag. #	Section Elevations *(ft)*	Type of Shape [1]	Diameter [2] *(in)*	Web Length [3] *(in)*	Flange Length [3] *(in)*	Thickness *(in)*	F_y *(ksi)*
1	0.000-25.00	2L		3	2	0.25	36
2	0.000-25.00	2L		4	3	0.25	36
3	25.00-50.00	2L		2.5	2	0.25	36
4	25.00-50.00	2L		2.5	2	0.25	36
5	25.00-50.00	2L		3	3	0.25	36
6	50.00-75.00	2L		3	3	0.25	36
7	50.00-75.00	2L		2.5	2	0.25	36
8	50.00-75.00	2L		3	2	0.25	36
9	75.00-100.0	2L		3	3	0.25	36
10	75.00-100.0	2L		2.5	2	0.25	36
11	75.00-100.0	2L		2.5	2.5	0.375	36

Notes:

[1] Type of Diagonal Shape: **R** = Round, **L** = Single-Angle or **2L** = Double-Angle.

[2] Applies to Pipes and Solid Round Shapes only. For Solid Round Shapes Thickness Equals Zero.

[3] Applies to Single-Angle and Double-Angle Shapes only.

[4] Applies to Double-Angle Shapes only.

[5] Applies to Single-Angle Shapes only.

Built-up Horizontals

Site No.:	88018
Engineer:	BD
Date:	01/14/2014
Carrier:	Sprint Nextel

When inputting thickness values, inclu 494.6
396.9

Tower Section #	Section Elevations (ft)	Type of Shape [1]	Diameter [2] (in)	Web Length [3] (in)	Flange Length [3] (in)	Thickness (in)	F_y (ksi)	Is Horiz. Tension Only? (Y/N)
1	0.000-25.00	2L		2.5	3	0.25	36	Y
2	25.00-50.00	2L		2.5	3	0.25	36	
3	50.00-75.00	2L		2.5	3	0.375	36	
4	75.00-100.0	2L		3.5	3.5	0.25	36	

Notes:

[1] Type of Horizontal Shape: **R** = Round, **L** = Single-Angle or **2L** = Double-Angle.

[2] Applies to Pipes and Solid Round Shapes only. For Solid Round Shapes Thickness Equals Zero.

[3] Applies to Single-Angle and Double-Angle Shapes only.

[4] Applies to Double-Angle Shapes only.

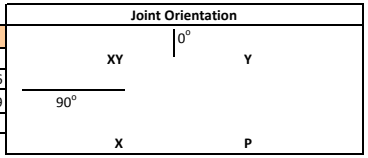
[5] Applies to Single-Angle Shapes only.

Coax & Dishes

Site No.:	88018
Engineer:	BD
Date:	01/14/14
Carrier:	Sprint Nextel

Dish Types		
S	Standard	
R	Standard w/ Radome	494.6
H	High Performance	396.9
G	Grid	

Joint Orientation



Dish Elevation (ft)	Dish Dia. (ft)	Dish Angle (deg)	Dish Type	Joint Orientation
311	4	90	R	X
25	2	180	R	P
158	4	90	S	X
300	2	90	H	XY
300	2	0	H	Y
300	2	270	H	X
300	3	180	H	P
6	4	180	S	P

Description	From (ft)	To (ft)	Quantity	Shape	Width or Diameter (in)	Perimeter (in)	Unit Weight (lb/ft)	Part of Face Solidity Ratio (Yes/No)	Include in Wind Load (Yes/No)
Marcus-311	265	300	1	Round	1.55	4.87	0.66	Yes	Yes
Bell-303	265	300	1	Round	1.11	3.49	0.33	Yes	Yes
Lojack-302	265	300	1	Round	1.98	6.22	0.82	Yes	Yes
Marcus-300	265	300	1	Round	1.55	4.87	0.66	Yes	Yes
Qualcomm-289	265	289	1	Round	4	12.57	5.39	No	No
USCG-269	265	269	2	Round	1.11	3.49	0.33	No	No
XM-263	265	269	1	Round	5.02	15.77	5.39	No	No
Weight-265	5	265	20	Round	1.98	6.22	0.82	No	No
T-Mobile-265	5	265	12	Round	1.98	6.22	2.16	Yes	Yes
T-Mobile-265b	5	265	1	Round	1.55	4.87	1.00	No	No
USCG-240	5	240	2	Round	1.11	3.49	0.33	No	No
AT&T-235	5	235	12	Round	1.98	6.22	0.82	No	No
AT&T-235B	5	235	1	Round	0.28	0.88	0.03	No	No
AT&T-235C	5	235	2	Round	0.74	2.32	0.49	No	No
Sprint-224	5	218	12	Round	1.98	6.22	0.82	Yes	Yes
Lojack-216	5	216	1	Round	0.44	1.38	0.08	No	No
USCG-200	5	200	1	Round	1.11	3.49	0.33	No	No
Marcus-200	5	200	2	Round	1.55	4.87	0.66	No	No
USA Mob-178	5	178	3	Round	1.11	3.49	0.33	Yes	Yes
Metro-160	5	160	12	Round	1.98	6.22	0.82	No	No
MetroB-160	5	160	2	Round	0.44	1.38	0.08	No	No
Clearwire-171A	5	171	6	Round	0.3125	0.98	0.06	No	No
Sprint-150B	5	150	4	Round	1.55	4.87	0.66	No	No
Sensus-137	5	137	1	Round	1.11	3.49	0.33	No	No
Marcus-100	5	100	1	Round	1.55	4.87	0.66	No	No
XM-25	5	25	1	Round	1.11	3.49	0.33	No	No
Lojack-10	5	10	1	Round	0.44	1.38	0.08	No	No
USA Mob-150	5	150	1	Round	0.63	1.98	0.14	No	No
Clearwire-171	5	171	2	Round	2.375	7.46	3.65	No	No
Clearwire-300	5	300	3	Round	0.63	1.98	0.14	Yes	Yes
Unk-300	5	300	1	Round	0.63	1.98	0.14	No	No
AT&T-235D	5	235	1	Round	2.38	7.48	3.65	No	No
USA Mob-6b	3	6	1	Round	0.63	1.98	0.14	No	No
USA Mob-6	3	6	1	Round	0.3	0.94	0.06	No	No

Equipment Label	Attach Label	Equipment Property Set	EIA Antenna Orientation Angle (deg)
4' RAD 1 @ 311'	17X	4 ft RAD Dish	90
2' RAD 2 @ 25'	1P	2 ft RAD Dish	180
4' STD 3 @ 158'	6X	4 ft STD Dish	90
2' HP 4 @ 300'	17XY	2 ft HP Dish	90
2' HP 6 @ 300'	17Y	2 ft HP Dish	0
2' HP 7 @ 300'	17X	2 ft HP Dish	270
3' HP 8 @ 300'	17P	3 ft HP Dish	180
4' STD 9 @ 6'	0P	4 ft STD Dish	180

Coax	Dia. (in)	Weight(lb/ft)
1/4"	0.3	0.064
3/8"	0.44	0.084
1/2"	0.63	0.144
7/8"	1.09	0.33
7/8"	1.11	0.33
EW90	1.32	0.32
1-1/4"	1.55	0.664
1-5/8"	1.98	0.82
EW63	2.01	0.51
EW52	2.25	0.59
Ladder	3	6

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Section Label	Section Color	Joint Defining Bottom Section	Dead 494.6 396.9 Factor					Adj. Factor Flat	Adj. Factor Round	Area Multiplier	Weight Multiplier
0.000-25.00		0P	1.252247635					1.252247635	1.252247635	1	1
25.00-50.00		1P	1.234111691					1.234111691	1.234111691	1	1
50.00-75.00		2P	1.229416005					1.229416005	1.229416005	1	1
75.00-100.0		3P	1.223885326					1.223885326	1.223885326	1	1
100.0-125.0		4P	1.27902213					1.27902213	1.27902213	1	1
125.0-150.0		5P	1.265796191					1.265796191	1.265796191	1	1
150.0-175.0		6P	1.257221541					1.257221541	1.257221541	1	1
175.0-200.0		7P	1.232462312					1.232462312	1.232462312	1	1
200.0-212.5		8P	1.224988662					1.224988662	1.224988662	1	1
212.5-225.0		9P	1.219135835					1.219135835	1.219135835	1	1
225.0-237.5		10P	1.213172057					1.213172057	1.213172057	1	1
237.5-250.0		11P	1.20711155					1.20711155	1.20711155	1	1
250.0-262.5		12P	1.200971445					1.200971445	1.200971445	1	1
262.5-272.7		13P	1.203142146					1.203142146	1.203142146	1	1
272.7-282.8		14P	1.196497816					1.196497816	1.196497816	1	1
282.8-291.4		15P	1.214686271					1.214686271	1.214686271	1	1
291.4-300.0		16P	1.167358428					1.167358428	1.167358428	1	1

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Group Label	Group Description	Angle Type	Angle 494.6	Material Type	Element Type	Group Type	Optimize Group
Leg S1	L 8" x 8" x 1.125"	SAE	396.9	A 36	Beam	Leg	None
Leg S2	L 8" x 8" x 1.125"	SAE	8X8X1.13	A 36	Beam	Leg	None
Leg S3	L 8" x 8" x 1.125"	SAE	8X8X1.13	A 36	Beam	Leg	None
Leg S4	L 8" x 8" x 1"	SAE	8X8X1	A 36	Beam	Leg	None
Leg S5	L 8" x 8" x 0.875"	SAE	8X8X0.88	A 36	Beam	Leg	None
Leg S6	L 8" x 8" x 0.875"	SAE	8X8X0.88	A 36	Beam	Leg	None
Leg S7	L 8" x 8" x 0.75"	SAE	8X8X0.75	A 36	Beam	Leg	None
Leg S8	L 8" x 8" x 0.625"	SAE	8X8X0.63	A 36	Beam	Leg	None
Leg S9	L 6" x 6" x 0.75"	SAE	6X6X0.75	A 36	Beam	Leg	None
Leg S10	L 6" x 6" x 0.75"	SAE	6X6X0.75	A 36	Beam	Leg	None
Leg S11	L 6" x 6" x 0.5625"	SAE	6X6X0.56	A 36	Beam	Leg	None
Leg S12	L 6" x 6" x 0.5625"	SAE	6X6X0.56	A 36	Beam	Leg	None
Leg S13	L 6" x 6" x 0.4375"	SAE	6X6X0.44	A 36	Beam	Leg	None
Leg S14	L 5" x 5" x 0.4375"	SAE	5X5X0.44	A 36	Beam	Leg	None
Leg S15	L 5" x 5" x 0.4375"	SAE	5X5X0.44	A 36	Beam	Leg	None
Leg S16	L 5" x 5" x 0.3125"	SAE	5X5X0.31	A 36	Beam	Leg	None
Leg S17	L 5" x 5" x 0.3125"	SAE	5X5X0.31	A 36	Beam	Leg	None
Diag S1	B/B L3"x4"x0.3125"	DAS	4X3X0.31	A 36	Beam	Other	None
Diag S2	B/B L3"x3.5"x0.25"	DAS	3.5X3X0.25	A 36	Beam	Other	None
Diag S3	B/B L2.5"x3.5"x0.25"	DAS	3.5X2.5X0.25	A 36	Beam	Other	None
Diag S4	B/B L2.5"x3.5"x0.25"	DAS	3.5X2.5X0.25	A 36	Beam	Other	None
Diag S5	B/B L3"x4"x0.25"	DAS	4X3X0.25	A 36	Beam	Other	None
Diag S6	B/B L3"x4"x0.25"	DAS	4X3X0.25	A 36	Beam	Other	None
Diag S7	B/B L3"x4"x0.25"	DAS	4X3X0.25	A 36	Beam	Other	None
Diag S8	B/B L3.5"x3.5"x0.25"	DAE	3.5X3.5X0.25	A 36	Beam	Other	None
Diag S9	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	A 36	Beam	Other	None
Diag S10	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	A 36	Beam	Other	None
Diag S11	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	A 36	Beam	Other	None
Diag S12	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	A 36	Beam	Other	None
Diag S13	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	A 36	Beam	Other	None
Diag S14	L 3.5" x 3.5" x 0.25"	SAE	3.5X3.5X0.25	A 36	Beam	Other	None
Diag S15	L 3.5" x 3.5" x 0.25"	SAE	3.5X3.5X0.25	A 36	Beam	Other	None
Diag S16	L 3" x 3" x 0.25"	SAE	3X3X0.25	A 36	Beam	Other	None
Diag S17	L 3" x 3" x 0.25"	SAE	3X3X0.25	A 36	Beam	Other	None
Horiz 1	B/B L3.5"x2.5"x0.25"	DAL	3.5X2.5X0.25	A 36	Beam	Other	None
Horiz 2	B/B L3.5"x2.5"x0.25"	DAL	3.5X2.5X0.25	A 36	Beam	Other	None
Horiz 3	B/B L3.5"x2.5"x0.25"	DAL	3.5X2.5X0.25	A 36	Beam	Other	None
Horiz 4	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	A 36	Beam	Other	None
Horiz 5	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	A 36	Beam	Other	None
Horiz 6	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	A 36	Beam	Other	None
Horiz 7	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	A 36	Beam	Other	None
Horiz 8	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	A 36	Beam	Other	None
Horiz 9	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	A 36	Beam	Other	None
Horiz 10	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	A 36	Beam	Other	None
Horiz 11	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	A 36	Beam	Other	None
Horiz 12	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	A 36	Beam	Other	None
Horiz 13	B/B L2.5"x2.5"x0.25"	DAE	2.5X2.5X0.25	A 36	Beam	Other	None
Horiz 14	L 3" x 2.5" x 0.25"	SAU	3X2.5X0.25	A 36	Beam	Other	None
Horiz 15	B/B L3"x2.5"x0.25"	DAL	3X2.5X0.25	A 36	Beam	Other	None
Horiz 16	L 3" x 2.5" x 0.25"	SAU	3X2.5X0.25	A 36	Beam	Other	None
Horiz 17	C8x11.5	CHN	C8x11.5	A 36	Beam	Other	None
LD 1	B/B L3"x2"x0.25"	DAL	3X2X0.25	A 36	Beam	Other	None
LD 2	B/B L4"x3"x0.25"	DAL	4X3X0.25	A 36	Beam	Other	None
LD 4	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	A 36	Beam	Other	None
LD 5	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	A 36	Beam	Other	None
LD 6	B/B L3"x3"x0.25"	DAE	3X3X0.25	A 36	Beam	Other	None
LD 7	B/B L3"x3"x0.25"	DAE	3X3X0.25	A 36	Beam	Other	None
LD 8	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	A 36	Beam	Other	None
LD 9	B/B L3"x2"x0.25"	DAL	3X2X0.25	A 36	Beam	Other	None
LD 10	B/B L3"x3"x0.25"	DAE	3X3X0.25	A 36	Beam	Other	None
LD 11	B/B L2.5"x2"x0.25"	DAL	2.5X2X0.25	A 36	Beam	Other	None
LD 12	B/B L2.5"x2.5"x0.375"	DAE	2.5X2.5X0.38	A 36	Beam	Other	None
LH 1	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	A 36	T-Only	Other	None
LH 2	B/B L2.5"x3"x0.25"	DAS	3X2.5X0.25	A 36	Beam	Other	None

Group Label	Group Description	Angle Type	Angle 494.6	Material Type	Element Type	Group Type	Optimize Group
LH 3	B/B L2.5"x3"x0.375"	DAS	3X2.5X0.38	A 36	Beam	Other	None
LH 4	B/B L3.5"x3.5"x0.25"	DAE	3.5X3.5X0.25	A 36	Beam	Other	None
DUM 1	Dummy Bracing Member	DUM	0.1X0.1X1	A 36	Beam	Fictitious	None

Group Label	Group Description	Angle Type	Angle 494.6	Material Type	Element Type	Group Type	Optimize Group

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Member Label	Group Label	Section Label	Symmetry 494.6	Origin Joint	End Joint	Ecc. Code	Rest. Code	Ratio RLX	Ratio RLY	Ratio RLZ
L 1	Leg S1		396.9	0P	1P	1	4	0.2812	0.2812	0.2812
L 2	Leg S2		XY-Symmetry	1P	2P	1	4	0.2812	0.2812	0.2812
L 3	Leg S3		XY-Symmetry	2P	3P	1	4	0.2812	0.2812	0.2812
L 4	Leg S4		XY-Symmetry	3P	4P	1	4	0.2812	0.2812	0.2812
L 5	Leg S5		XY-Symmetry	4P	5P	1	4	0.333333333	0.333333333	0.333333333
L 6	Leg S6		XY-Symmetry	5P	6P	1	4	0.333333333	0.333333333	0.333333333
L 7	Leg S7		XY-Symmetry	6P	7P	1	4	0.333333333	0.333333333	0.333333333
L 8	Leg S8		XY-Symmetry	7P	8P	1	4	0.333333333	0.333333333	0.333333333
L 9	Leg S9		XY-Symmetry	8P	9P	1	4	0.5	0.5	0.5
L 10	Leg S10		XY-Symmetry	9P	10P	1	4	0.5	0.5	0.5
L 11	Leg S11		XY-Symmetry	10P	11P	1	4	0.5	0.5	0.5
L 12	Leg S12		XY-Symmetry	11P	12P	1	4	0.5	0.5	0.5
L 13	Leg S13		XY-Symmetry	12P	13P	1	4	0.5	0.5	0.5
L 14	Leg S14		XY-Symmetry	13P	14P	1	4	0.5	0.5	0.5
L 15	Leg S15		XY-Symmetry	14P	15P	1	4	0.5	0.5	0.5
L 16	Leg S16		XY-Symmetry	15P	16P	1	4	0.5	0.5	0.5
L 17	Leg S17		XY-Symmetry	16P	17P	1	4	0.5	0.5	0.5
D 1	Diag S1		XY-Symmetry	0P	H2P	1	5	0.333333333	1	0.333333333
D 2	Diag S1		XY-Symmetry	0P	H1P	1	5	0.333333333	1	0.333333333
D 3	Diag S2		XY-Symmetry	1P	H6P	1	5	0.333333333	0.667	0.333333333
D 4	Diag S2		XY-Symmetry	1P	H5P	1	5	0.333333333	0.667	0.333333333
D 5	Diag S3		XY-Symmetry	2P	H10P	1	5	0.333333333	0.667	0.333333333
D 6	Diag S3		XY-Symmetry	2P	H9P	1	5	0.333333333	0.667	0.333333333
D 7	Diag S4		XY-Symmetry	3P	H14P	1	5	0.333333333	0.667	0.333333333
D 8	Diag S4		XY-Symmetry	3P	H13P	1	5	0.333333333	0.667	0.333333333
D 9	Diag S5		XY-Symmetry	4P	A9P	1	6	0.333333333	0.666666667	0.333333333
D 10	Diag S5		XY-Symmetry	4P	A10P	1	6	0.333333333	0.666666667	0.333333333
D 11	Diag S6		XY-Symmetry	5P	A11P	1	6	0.333333333	0.666666667	0.333333333
D 12	Diag S6		XY-Symmetry	5P	A12P	1	6	0.333333333	0.666666667	0.333333333
D 13	Diag S7		XY-Symmetry	6P	A13P	1	6	0.333333333	0.666666667	0.333333333
D 14	Diag S7		XY-Symmetry	6P	A14P	1	6	0.333333333	0.666666667	0.333333333
D 15	Diag S8		XY-Symmetry	7P	A15P	1	6	0.32	0.59	0.32
D 16	Diag S8		XY-Symmetry	7P	A16P	1	6	0.32	0.59	0.32
D 17	Diag S9		XY-Symmetry	8P	A17P	1	6	0.5	1	0.5
D 18	Diag S9		XY-Symmetry	8P	A18P	1	6	0.5	1	0.5
D 19	Diag S10		XY-Symmetry	9P	A19P	1	6	0.5	1	0.5
D 20	Diag S10		XY-Symmetry	9P	A20P	1	6	0.5	1	0.5
D 21	Diag S11		XY-Symmetry	10P	A21P	1	6	0.5	1	0.5
D 22	Diag S11		XY-Symmetry	10P	A22P	1	6	0.5	1	0.5

Member Label	Group Label	Section Label	Symmetry 494.6	Origin Joint	End Joint	Ecc. Code	Rest. Code	Ratio RLX	Ratio RLY	Ratio RLZ
D 23	Diag S12		XY-Symmetry	11P	A23P	1	6	0.5	1	0.5
D 24	Diag S12		XY-Symmetry	11P	A24P	1	6	0.5	1	0.5
D 25	Diag S13		XY-Symmetry	12P	A25P	1	6	0.5	1	0.5
D 26	Diag S13		XY-Symmetry	12P	A26P	1	6	0.5	1	0.5
D 27	Diag S14		XY-Symmetry	13P	14Y	1	5	0.52	0.75	0.52
D 28	Diag S14		XY-Symmetry	13P	14X	1	5	0.52	0.75	0.52
D 29	Diag S15		XY-Symmetry	14P	15Y	1	5	0.52	0.75	0.52
D 30	Diag S15		XY-Symmetry	14P	15X	1	5	0.52	0.75	0.52
D 31	Diag S16		XY-Symmetry	15P	16Y	1	5	0.52	0.75	0.52
D 32	Diag S16		XY-Symmetry	15P	16X	1	5	0.52	0.75	0.52
D 33	Diag S17		XY-Symmetry	16P	17Y	1	5	0.52	0.75	0.52
D 34	Diag S17		XY-Symmetry	16P	17X	1	5	0.52	0.75	0.52
H 1	Horiz 1		XY-Symmetry	1P	A1P	1	6	0.49	0.49	0.49
H 2	Horiz 1		XY-Symmetry	1P	A2P	1	6	0.49	0.49	0.49
H 3	Horiz 2		XY-Symmetry	2P	A3P	1	6	0.5	0.5	0.5
H 4	Horiz 2		XY-Symmetry	2P	A4P	1	6	0.5	0.5	0.5
H 5	Horiz 3		XY-Symmetry	3P	A5P	1	6	0.5	0.5	0.5
H 6	Horiz 3		XY-Symmetry	3P	A6P	1	6	0.5	0.5	0.5
H 7	Horiz 4		XY-Symmetry	4P	A7P	1	6	0.5	1	0.5
H 8	Horiz 4		XY-Symmetry	4P	A8P	1	6	0.5	1	0.5

Member Label	Group Label	Section Label	Symmetry 494.6	Origin Joint	End Joint	Ecc. Code	Rest. Code	Ratio RLX	Ratio RLY	Ratio RLZ
H 9	Horiz 5		XY-Symmetry	5P	A9P	1	6	1	1	1
H 10	Horiz 5		XY-Symmetry	5P	A10P	1	6	1	1	1
H 11	Horiz 6		XY-Symmetry	6P	A11P	1	6	1	1	1
H 12	Horiz 6		XY-Symmetry	6P	A12P	1	6	1	1	1
H 13	Horiz 7		XY-Symmetry	7P	A13P	1	6	1	1	1
H 14	Horiz 7		XY-Symmetry	7P	A14P	1	6	1	1	1
H 15	Horiz 8		XY-Symmetry	8P	A15P	1	6	1	1	1
H 16	Horiz 8		XY-Symmetry	8P	A16P	1	6	1	1	1
H 17	Horiz 9		XY-Symmetry	9P	A17P	1	6	1	1	1
H 18	Horiz 9		XY-Symmetry	9P	A18P	1	6	1	1	1
H 19	Horiz 10		XY-Symmetry	10P	A19P	1	6	1	1	1
H 20	Horiz 10		XY-Symmetry	10P	A20P	1	6	1	1	1
H 21	Horiz 11		XY-Symmetry	11P	A21P	1	6	1	1	1
H 22	Horiz 11		XY-Symmetry	11P	A22P	1	6	1	1	1
H 23	Horiz 12		XY-Symmetry	12P	A23P	1	6	1	1	1
H 24	Horiz 12		XY-Symmetry	12P	A24P	1	6	1	1	1
H 25	Horiz 13		XY-Symmetry	13P	A25P	1	6	1	1	1
H 26	Horiz 13		XY-Symmetry	13P	A26P	1	6	1	1	1
H 27	Horiz 14		Y-Symmetry	14P	14X	1	6	0.5	1	0.5
H 28	Horiz 14		X-Symmetry	14P	14Y	1	6	0.5	1	0.5
H 29	Horiz 15		Y-Symmetry	15P	15X	1	6	0.5	1	0.5
H 30	Horiz 15		X-Symmetry	15P	15Y	1	6	0.5	1	0.5
H 31	Horiz 16		Y-Symmetry	16P	16X	1	6	0.5	1	0.5
H 32	Horiz 16		X-Symmetry	16P	16Y	1	6	0.5	1	0.5
H 33	Horiz 17		Y-Symmetry	17P	17X	1	6	0.5	1	0.5
H 34	Horiz 17		X-Symmetry	17P	17Y	1	6	0.5	1	0.5

Member Label	Group Label	Section Label	Symmetry 494.6	Origin Joint	End Joint	Ecc. Code	Rest. Code	Ratio RLX	Ratio RLY	Ratio RLZ
H 37	Horiz 2		Y-Symmetry	A3P	A3X	1	5	1	1	1
H 38	Horiz 2		X-Symmetry	A4P	A4Y	1	5	1	1	1
H 39	Horiz 3		Y-Symmetry	A5P	A5X	1	5	1	1	1
H 40	Horiz 3		X-Symmetry	A6P	A6Y	1	5	1	1	1
H 41	Horiz 4		Y-Symmetry	A7P	A7X	1	5	1	1	1
H 42	Horiz 4		X-Symmetry	A8P	A8Y	1	5	1	1	1
LH 1	LH 1		Y-Symmetry	H1P	H1X	1	6	0.5	1	0.5
LH 2	LH 1		X-Symmetry	H2P	H2Y	1	6	0.5	1	0.5
LH 3	LH 2		XY-Symmetry	H5P	H7P	1	6	1	2	1
LH 4	LH 2		XY-Symmetry	H6P	H8P	1	6	1	2	1
LH 5	LH 3		XY-Symmetry	H9P	H11P	1	6	1	2	1
LH 6	LH 3		XY-Symmetry	H10P	H12P	1	6	1	2	1
LH 7	LH 4		XY-Symmetry	H13P	H15P	1	6	0.998	1.995	0.998
LH 8	LH 4		XY-Symmetry	H14P	H16P	1	6	0.998	1.995	0.998

Member Label	Group Label	Section Label	Symmetry 494.6	Origin Joint	End Joint	Ecc. Code	Rest. Code	Ratio RLX	Ratio RLY	Ratio RLZ
LD 1	LD 1		XY-Symmetry	H1P	1P	1	6	0.88	0.88	0.88
LD 2	LD 1		XY-Symmetry	H2P	1P	1	6	0.88	0.88	0.88
LD 3	LD 2		XY-Symmetry	H1P	A1P	1	6	0.82	0.82	0.82
LD 4	LD 2		XY-Symmetry	H2P	A2P	1	6	0.82	0.82	0.82
LD 7	LD 4		XY-Symmetry	H5P	2P	1	6	0.87	0.87	0.87
LD 8	LD 4		XY-Symmetry	H6P	2P	1	6	0.87	0.87	0.87
LD 9	LD 5		XY-Symmetry	H5P	A3P	1	6	0.83	0.83	0.83
LD 10	LD 5		XY-Symmetry	H6P	A4P	1	6	0.83	0.83	0.83
LD 11	LD 6		XY-Symmetry	A3P	H7P	1	6	0.84	0.84	0.84
LD 12	LD 6		XY-Symmetry	A4P	H8P	1	6	0.84	0.84	0.84
LD 13	LD 7		XY-Symmetry	H9P	3P	1	6	0.865	0.865	0.865
LD 14	LD 7		XY-Symmetry	H10P	3P	1	6	0.865	0.865	0.865
LD 15	LD 8		XY-Symmetry	H9P	A5P	1	6	0.83	0.83	0.83
LD 16	LD 8		XY-Symmetry	H10P	A6P	1	6	0.83	0.83	0.83
LD 17	LD 9		XY-Symmetry	A5P	H11P	1	6	0.84	0.84	0.84
LD 18	LD 9		XY-Symmetry	A6P	H12P	1	6	0.84	0.84	0.84
LD 19	LD 10		XY-Symmetry	H13P	4P	1	6	0.86	0.86	0.86
LD 20	LD 10		XY-Symmetry	H14P	4P	1	6	0.86	0.86	0.86
LD 21	LD 11		XY-Symmetry	H13P	A7P	1	6	0.84	0.84	0.84
LD 22	LD 11		XY-Symmetry	H14P	A8P	1	6	0.84	0.84	0.84
LD 23	LD 12		XY-Symmetry	A7P	H15P	1	6	0.85	0.85	0.85
LD 24	LD 12		XY-Symmetry	A8P	H16P	1	6	0.85	0.85	0.85

Member Label	Group Label	Section Label	Symmetry 494.6	Origin Joint	End Joint	Ecc. Code	Rest. Code	Ratio RLX	Ratio RLY	Ratio RLZ
BR 1	DUM 1		XY-Symmetry	A1P	A2P	1	4	1	1	1
BR 3	DUM 1		XY-Symmetry	A3P	A4P	1	4	1	1	1
BR 4	DUM 1		XY-Symmetry	A3P	A4XY	1	4	1	1	1
BR 5	DUM 1		XY-Symmetry	A5P	A6P	1	4	1	1	1
BR 6	DUM 1		XY-Symmetry	A5P	A6XY	1	4	1	1	1
BR 7	DUM 1		XY-Symmetry	A7P	A8P	1	4	1	1	1
BR 8	DUM 1		XY-Symmetry	A7P	A8XY	1	4	1	1	1
BR 9	DUM 1		XY-Symmetry	A9P	A10P	1	4	1	1	1
BR 11	DUM 1		XY-Symmetry	A11P	A12P	1	4	1	1	1
BR 13	DUM 1		XY-Symmetry	A13P	A14P	1	4	1	1	1
BR 15	DUM 1		XY-Symmetry	A15P	A16P	1	4	1	1	1
BR 17	DUM 1		XY-Symmetry	A17P	A18P	1	4	1	1	1
BR 19	DUM 1		XY-Symmetry	A19P	A20P	1	4	1	1	1
BR 21	DUM 1		XY-Symmetry	A21P	A22P	1	4	1	1	1
BR 23	DUM 1		XY-Symmetry	A23P	A24P	1	4	1	1	1
BR 25	DUM 1		XY-Symmetry	A25P	A26P	1	4	1	1	1

Member Label	Group Label	Section Label	Symmetry 494.6	Origin Joint	End Joint	Ecc. Code	Rest. Code	Ratio RLX	Ratio RLY	Ratio RLZ
BR 61	DUM 1		XY-Symmetry	H1P	H2P	1	4	1	1	1
BR 62	DUM 1		XY-Symmetry	H1P	H2XY	1	4	1	1	1
BR 64	DUM 1		XY-Symmetry	H5P	H6P	1	4	1	1	1
BR 65	DUM 1		XY-Symmetry	H5P	H6XY	1	4	1	1	1
BR 66	DUM 1		XY-Symmetry	H7P	H8P	1	4	1	1	1
BR 67	DUM 1		XY-Symmetry	H9P	H10P	1	4	1	1	1
BR 68	DUM 1		XY-Symmetry	H9P	H10XY	1	4	1	1	1
BR 69	DUM 1		XY-Symmetry	H11P	H12P	1	4	1	1	1
BR 70	DUM 1		XY-Symmetry	H13P	H14P	1	4	1	1	1
BR 71	DUM 1		XY-Symmetry	H13P	H14XY	1	4	1	1	1
BR 72	DUM 1		XY-Symmetry	H15P	H16P	1	4	1	1	1

Member Label	Group Label	Section Label	Symmetry 494.6	Origin Joint	End Joint	Ecc. Code	Rest. Code	Ratio RLX	Ratio RLY	Ratio RLZ

Point Loads

Tower Height:	300	ft	
Gh:	1.09		
Wind Speed:	85.00		494.6
Wind Speed (Ice):	73.61		396.9
Radial Ice Diameter:	0.5	in	

Site No.:	88018
Engineer:	BD
Date:	01/14/2014
Carrier:	Sprint Nextel

KS-15676 Horn Antennas: ~128 ft^2

No.	Carrier	Elevation (ft)	Quantity	Number of Azimuths	Model	Height (in)	Width (in)	Depth (in)	Weight (lbs/ea)	Flat/Round (F/R)	Reduction Factor	C_AA_C (ft^2/ea)	Weight (k/ea)	H/W	C_A	q_z (psf)	q_z (Ice) (psf)
1		300	2	2	15' Omni & 16' Grid Omni	186	4	4	50	R	1.000			46.50	1.20	34.75	26.06
			1	4	Platform						1.000	55.00	4.00	-	-		
2		283	1	4	-	0.01	0.01	0.01	0.01	R	0.001			1.00	0.80	34.18	25.63
			1	4	Catwalk						1.000	40.00	2.75	-	-		
3		212.5	1	3	-	0.01	0.01	0.01	0.01	R	0.001			1.00	0.80	31.49	23.62
			1	3	Platform						1.000	50.00	3.00	-	-		
4		100	1	3	-	0.01	0.01	0.01	0.01	R	0.001			1.00	0.80	25.39	19.04
			1	3	Platform						1.000	50.00	3.00	-	-		
5		303	1	1	-	0.01	0.01	0.01	0.01	R	1.000			1.00	0.80	34.85	26.14
			1	1	-						1.000	0.00	0.00	-	-		
6	Lojack	302	1	1	RFS 200	249.6	2.4	2.4	20	R	1.000			104.00	1.20	34.82	26.11
	Lojack		1	1	Side Arm						1.000	3.00	0.20	-	-		
7	Marcus Comm.	300	1	1	TX RX 101-68-10-X-03N	189.6	3.5	3.5	70	R	1.000			54.17	1.20	34.75	26.06
	Marcus Comm.		1	1	Side Arm						1.000	3.00	0.20	-	-		
8	Marcus Comm.	311	1	1	ODU	16	12	8	30	F	0.500			1.33	1.40	35.11	26.33
	Marcus Comm.		1	1	-						1.000	0.00	0.00	-	-		
9	Qualcomm	289	1	1	-	0.01	0.01	0.01	0.01	R	0.001			1.00	0.80	34.38	25.78
	Qualcomm		1	1	Dielectric TLP						1.000	22.75	0.23	-	-		
10	USCG	269	1	1	-	0.01	0.01	0.01	0.01	R	0.001			1.00	0.80	33.68	25.26
	USCG		1	1	Rohde & Schwarz ADD090						1.000	20.76	0.20	-	-		
11	XM Satellite	262.5	2	1	Til Tek TA-2350-DAB	70	2.3	2.3	15	R	1.000			30.43	1.20	33.45	25.09
	XM Satellite		2	1	Side Arm						1.000	3.00	0.20	-	-		
12	T-Mobile	265	3	3	RFS ATMAA1412D-1A20	12	10	4	13	F	0.500			1.20	1.40	33.54	25.15
	T-Mobile		3	3	Sector Frame						0.750	17.90	0.40	-	-		
13	XM Satellite	265	2	2	Til-Tek TA-2350-DAB	70	2.3	2.3	15	R	1.000			30.43	1.20	33.54	25.15
	XM Satellite		1	3	Same Mounts as Above						1.000	0.00	0.00	-	-		
14	USCG	240	1	1	Sinclair SC381-HL	148.3	4.5	4.5	47	R	1.000			32.96	1.20	32.60	24.45
	USCG		1	1	Side Arm						1.000	3.00	0.20	-	-		
15	USCG	240	1	1	Sinclair SC281-L	251	5	5	79	R	1.000			50.20	1.20	32.60	24.45
	USCG		1	1	Side Arm						1.000	3.00	0.20	-	-		
16	Sprint Nextel	150	3	3	Alcatel-Lucent TD-RRH8x20-25 w/ SS	26.1	18.6	6.7	70	F	0.670			1.40	1.40	28.51	21.38
	Sprint Nextel		3	3							0.750	0.00	0.00	-	-		
17	Sprint Nextel	150	3	3	RFS APXVTM14-C-I20	56.3	12.6	6.3	52.9	F	0.780			4.47	1.40	28.51	21.38
	Sprint Nextel		3	3							1.000	0.00	0.00	-	-		
18	Sprint Nextel	218	12	3	Decibel DB844H90E-XY	48	8.5	6	10	F	0.860			5.65	1.40	31.72	23.79
	Sprint Nextel		3	3	Sector Frame						0.750	17.90	0.40	-	-		
19	Lojack	215.5	1	1	8' Omni	96	3	3	30	R	1.000			32.00	1.20	31.62	23.71
	Lojack		1	1	Side Arm						1.000	3.00	0.20	-	-		
20	USCG	200	1	1	Sinclair SC281-L	251	5	5	79	R	1.000			50.20	1.20	30.95	23.21
	USCG		1	1	Side Arm						1.000	3.00	0.20	-	-		
21	Marcus Comm.	200	2	2	TX RX 101-68-10-X-03N	189.6	3.5	3.5	70	R	1.000			54.17	1.20	30.95	23.21
	Marcus Comm.		2	2	Side Arm						1.000	3.00	0.20	-	-		
22	USA Mobility	178	3	3	Antel BCD-87010	134	2.6	2.6	26.5	R	1.000			51.54	1.20	29.94	22.45
	USA Mobility		3	3	Side Arm						1.000	3.00	0.20	-	-		
23	Metro PCS	160	6	3	Kathrein 800 10504	54	6.1	2.7	17.6	F	0.780			8.85	1.46	29.04	21.78
	Metro PCS		3	3	Sector Frame						0.750	17.90	0.40	-	-		
24																	
25	Sensus Metering	137	1	1	Antel BCD-87010_4	134	2.6	2.6	26.5	R	1.000			51.54	1.20	27.78	20.83
	Sensus Metering		1	1	Side Arm						1.000	3.00	0.20	-	-		
26	Marcus Comm.	100	1	1	TX RX 101-68-10-X-03N	189.6	3.5	3.5	70	R	1.000			54.17	1.20	25.39	19.04
	Marcus Comm.		1	1	Side Arm						1.000	3.00	0.20	-	-		
27	Lojack	10	1	1	GPS Unit	12	6	6	10	R	1.000			2.00	0.80	18.50	13.87
	Lojack		1	1	Pipe						1.000	0.00	0.00	-	-		
28	USCG	271	1	1	TTA	12	6	6	20	F	1.000			2.00	1.40	33.76	25.32
	USCG		1	1	-						1.000	0.00	0.00	-	-		
29	AT&T Mobility	235	6	3	Powerwave LGP21903	4.4	6.3	3	25	F	0.670			0.70	1.40	32.41	24.31
	AT&T Mobility		3	3	Sector Frame						0.750	14.40	0.40	-	-		
30	AT&T Mobility	235	6	3	Ericsson RRUS 11 (Band 12)	17.8	17	7.2	55	F	0.670			1.05	1.40	32.41	24.31
	AT&T Mobility		1	1	Raycap FC12-PC6-10E						1.000	2.46	0.03	-	-		

No.	Elevation (ft)	C_AA_C (ft^2)	C_AA_C (Ice) (ft^2)	Force (k)	Force (Ice) (k)	Weight (k)	Weight (Ice) (k)	Σ Force (k)	Σ Force (Ice) (k)	Σ Weight (k)	Σ Weight (Ice) (k)
1	300	12.40	15.58	0.469	0.442	0.100	0.210	2.55	2.55	4.10	5.41
		55.00	74.25	2.079	2.105	4.000	5.200				
2	283	0.00	0.00	0.000	0.000	0.000	0.000	1.49	1.51	2.75	3.58
		40.00	54.00	1.487	1.505	2.750	3.575				
3	212.5	0.00	0.00	0.000	0.000	0.000	0.000	1.71	1.73	3.00	3.90
		50.00	67.50	1.713	1.734	3.000	3.900				
4	100	0.00	0.00	0.000	0.000	0.000	0.000	1.38	1.40	3.00	3.90
		50.00	67.50	1.381	1.398	3.000	3.900				
5	303	0.00	0.01	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00
		0.00	0.00	0.000	0.000	0.000	0.000				
6	302	4.99	7.10	0.189	0.202	0.020	0.067	0.30	0.32	0.22	0.33
		3.00	4.05	0.114	0.115	0.200	0.260				
7	300	5.53	7.15	0.209	0.203	0.070	0.120	0.32	0.32	0.27	0.38
		3.00	4.05	0.113	0.115	0.200	0.260				
8	311	0.93	1.07	0.036	0.031	0.030	0.045	0.04	0.03	0.03	0.04
		0.00	0.00	0.000	0.000	0.000	0.000				
9	289	0.00	0.00	0.000	0.000	0.000	0.000	0.85	0.86	0.23	0.30
		22.75	30.71	0.851	0.861	0.230	0.299				
10	269	0.00	0.00	0.000	0.000	0.000	0.000	0.76	0.77	0.20	0.26
		20.76	28.03	0.761	0.770	0.200	0.260				
11	262.5	2.68	3.91	0.098	0.107	0.030	0.056	0.32	0.33	0.43	0.58
		6.00	8.10	0.218	0.221	0.400	0.520				
12	265	1.75	2.09	0.064	0.057	0.039	0.062	1.53	1.54	1.24	1.62
		40.28	54.37	1.469	1.488	1.200	1.560				
13	265	2.68	3.91	0.098	0.107	0.030	0.056	0.10	0.11	0.03	0.06
		0.00	0.00	0.000	0.000	0.000	0.000				
14	240	5.56	6.84	0.197	0.182	0.047	0.096	0.30	0.29	0.25	0.36
		3.00	4.05	0.106	0.108	0.200	0.260				
15	240	10.46	12.60	0.371	0.335	0.079	0.170	0.48	0.44	0.28	0.43
		3.00	4.05	0.106	0.108	0.200	0.260				
16	150	9.49	10.38	0.294	0.241	0.210	0.291	0.29	0.24	0.21	0.29
		0.00	0.00	0.000	0.000	0.000	0.000				
17	150	16.14	17.73	0.500	0.412	0.159	0.277	0.50	0.41	0.16	0.28
		0.00	0.00	0.000	0.000	0.000	0.000				
18	218	40.94	46.71	1.412	1.209	0.120	0.435	2.80	2.62	1.32	2.00
		40.28	54.37	1.390	1.407	1.200	1.560				
19	215.5	2.40	3.23	0.083	0.083	0.030	0.052	0.19	0.19	0.23	0.31
		3.00	4.05	0.103	0.104	0.200	0.260				
20	200	10.46	12.60	0.352	0.318	0.079	0.170	0.45	0.42	0.28	0.43
		3.00	4.05	0.101	0.102	0.200	0.260				
21	200	11.06	14.30	0.372	0.361	0.140	0.240	0.57	0.57	0.54	0.76
		6.00	8.10	0.202	0.205	0.400	0.520				
22	178	8.71	12.15	0.284	0.297	0.080	0.162	0.58	0.59	0.68	0.94
		9.00	12.15	0.293	0.297	0.600	0.780				
23	160	15.65	18.55	0.494	0.439	0.106	0.214	1.77	1.73	1.31	1.77
		40.28	54.37	1.272	1.288	1.200	1.560				
24											
25	137	2.90	4.05	0.088	0.092	0.027	0.054	0.18	0.18	0.23	0.31
		3.00	4.05	0.091	0.092	0.200	0.260				
26	100	5.53	7.15	0.153	0.148	0.070	0.120	0.24	0.23	0.27	0.38
		3.00	4.05	0.083	0.084	0.200	0.260				
27	10	0.40	0.51	0.008	0.008	0.010	0.017	0.01	0.01	0.01	0.02
		0.00	0.00	0.000	0.000	0.000	0.000				
28	271	0.70	0.88	0.026	0.024	0.020	0.027	0.03	0.02	0.02	0.03
		0.00	0.00	0.000	0.000	0.000	0.000				
29	235	1.08	1.54	0.038	0.041	0.150	0.164	1.18	1.20	1.35	1.72
		32.40	43.74	1.142	1.156	1.200	1.560				
30	235	11.83	13.23	0.417	0.350	0.330	0.446	0.50	0.44	0.36	0.48
		2.46	3.32	0.087	0.088	0.025	0.033				

Site:	88018
Carrier:	Sprint Nextel

Engineer:	BD
Date:	01/14/14

Load Case Description	Dead Load Factor	Wind Load Factor	494.6 396.9	Strength Factor	Allowable Stress Inc. Factor	Basic Wind Speed	Wind Dir.	Ice Thick.	Ice Density	Temp.	Point Loads
W 0	1.1	1	1	1	1.333333333	85	0	0	56	50	
W 180	1.1	1	1	1	1.333333333	85	180	0	56	50	
W 45	1.1	1	1	1	1.333333333	85	45	0	56	50	
W -45	1.1	1	1	1	1.333333333	85	-45	0	56	50	
W 90	1.1	1	1	1	1.333333333	85	90	0	56	50	
W -90	1.1	1	1	1	1.333333333	85	-90	0	56	50	
W 0 Ice	1.1	1	1	1	1.333333333	73.61	0	0.5	56	10	
W 180 Ice	1.1	1	1	1	1.333333333	73.61	180	0.5	56	10	
W 45 Ice	1.1	1	1	1	1.333333333	73.61	45	0.5	56	10	
W -45 Ice	1.1	1	1	1	1.333333333	73.61	-45	0.5	56	10	
W 90 Ice	1.1	1	1	1	1.333333333	73.61	90	0.5	56	10	
W -90 Ice	1.1	1	1	1	1.333333333	73.61	-90	0.5	56	10	

Angle:	-90

No Ice

Joint Label	Force X-Dir (lbs)	Force Y-Dir (lbs)	Force Vertical (lbs)	Moment X-Axis (ft-lbs)	Moment Y-Axis (ft-lbs)	Moment Z-Axis (ft-lbs)
17P	0.00	-754.10	1050			
17X	0.00	-754.10	1050			
17Y	0.00	-519.74	1000			
17XY	0.00	-519.74	1000			
15P	0.00	-371.75	687.5025			
15X	0.00	-371.75	687.5025			
15Y	0.00	-371.75	687.5025			
15XY	0.00	-371.75	687.5025			
9P	0.00	-570.88	1000.003333			
9X	0.00	-570.88	1000.003333			
9Y	0.00	-570.88	1000.003333			
9XY	0.00	0.00	0			
4P	0.00	-460.27	1000.003333			
4X	0.00	-460.27	1000.003333			
4Y	0.00	-460.27	1000.003333			
4XY	0.00	0.00	0			
17P	0.00	0.00	0.01			
17X	0.00	0.00	0			
17Y	0.00	0.00	0			
17XY	0.00	0.00	0			
17P	0.00	-302.67	220			
17X	0.00	0.00	0			
17Y	0.00	0.00	0			
17XY	0.00	0.00	0			
17P	0.00	-322.43	270			
17X	0.00	0.00	0			
17Y	0.00	0.00	0			
17XY	0.00	0.00	0			
17P	0.00	-35.64	30			
17X	0.00	0.00	0			
17Y	0.00	0.00	0			
17XY	0.00	0.00	0			
16P	0.00	-850.81	230.01			
16X	0.00	0.00	0			
16Y	0.00	0.00	0			
16XY	0.00	0.00	0			
14P	0.00	-760.64	200.01			
14X	0.00	0.00	0			
14Y	0.00	0.00	0			
14XY	0.00	0.00	0			
13P	0.00	-315.94	430			
13X	0.00	0.00	0			
13Y	0.00	0.00	0			
13XY	0.00	0.00	0			
13P	0.00	-511.07	413			
13X	0.00	-511.07	413			
13Y	0.00	-511.07	413			
13XY	0.00	0.00	0			
13P	0.00	-48.95	15			
13X	0.00	-48.95	15			
13Y	0.00	0.00	0			
13XY	0.00	0.00	0			
11P	0.00	-303.62	247			
11X	0.00	0.00	0			
11Y	0.00	0.00	0			
11XY	0.00	0.00	0			
11P	0.00	-477.30	279			
11X	0.00	0.00	0			
11Y	0.00	0.00	0			
11XY	0.00	0.00	0			
6P	0.00	-98.06	70			
6X	0.00	-98.06	70			
6Y	0.00	-98.06	70			
6XY	0.00	0.00	0			
6P	0.00	-166.81	52.9			
6X	0.00	-166.81	52.9			
6Y	0.00	-166.81	52.9			
6XY	0.00	0.00	0			
10P	0.00	-934.03	440			
10X	0.00	-934.03	440			
10Y	0.00	-934.03	440			
10XY	0.00	0.00	0			
9P	0.00	-185.71	230			
9X	0.00	0.00	0			
9Y	0.00	0.00	0			
9XY	0.00	0.00	0			
8P	0.00	-453.07	279			
8X	0.00	0.00	0			
8Y	0.00	0.00	0			
8XY	0.00	0.00	0			
8P	0.00	-287.16	270			
8X	0.00	-287.16	270			
8Y	0.00	0.00	0			
8XY	0.00	0.00	0			
7P	0.00	-192.23	226.5			
7X	0.00	-192.23	226.5			
7Y	0.00	-192.23	226.5			
7XY	0.00	0.00	0			
6P	0.00	-588.79	435.2			
6X	0.00	-588.79	435.2			
6Y	0.00	-588.79	435.2			
6XY	0.00	0.00	0			
6P	0.00	-178.37	226.5			
6X	0.00	0.00	0			
6Y	0.00	0.00	0			
6XY	0.00	0.00	0			
4P	0.00	-235.57	270			
4X	0.00	0.00	0			
4Y	0.00	0.00	0			
4XY	0.00	0.00	0			
0P	0.00	-8.05	10			
0X	0.00	0.00	0			
0Y	0.00	0.00	0			
0XY	0.00	0.00	0			
14P	0.00	-25.70	20			
14X	0.00	0.00	0			
14Y	0.00	0.00	0			
14XY	0.00	0.00	0			
11P	0.00	-393.45	450			
11X	0.00	-393.45	450			
11Y	0.00	-393.45	450			
11XY	0.00	0.00	0			
11P	0.00	-225.69	135			
11X	0.00	-138.97	110			
11Y	0.00	-138.97	110			
11XY	0.00	0.00	0			

With Ice

Joint Label	Force X-Dir (lbs)	Force Y-Dir (lbs)	Force Vertical (lbs)
17P	0.00	-747.09	1405.060185
17X	0.00	-747.09	1405.060185
17Y	0.00	-526.21	1300
17XY	0.00	-526.21	1300
15P	0.00	-376.37	893.7608473
15X	0.00	-376.37	893.7608473
15Y	0.00	-376.37	893.7608473
15XY	0.00	-376.37	893.7608473
9P	0.00	-577.98	1300.014463
9X	0.00	-577.98	1300.014463
9Y	0.00	-577.98	1300.014463
9XY	0.00	0.00	0
4P	0.00	-466.00	1300.014463
4X	0.00	-466.00	1300.014463
4Y	0.00	-466.00	1300.014463
4XY	0.00	0.00	0
17P	0.00	-0.16	0.043389352
17X	0.00	0.00	0
17Y	0.00	0.00	0
17XY	0.00	0.00	0
17P	0.00	-316.69	327.2901852
17X	0.00	0.00	0
17Y	0.00	0.00	0
17XY	0.00	0.00	0
17P	0.00	-317.43	379.8118056
17X	0.00	0.00	0
17Y	0.00	0.00	0
17XY	0.00	0.00	0
17P	0.00	-30.77	44.68055556
17X	0.00	0.00	0
17Y	0.00	0.00	0
17XY	0.00	0.00	0
16P	0.00	-861.40	299.0433894
16X	0.00	0.00	0
16Y	0.00	0.00	0
16XY	0.00	0.00	0
14P	0.00	-770.11	260.0433894
14X	0.00	0.00	0
14Y	0.00	0.00	0
14XY	0.00	0.00	0
13P	0.00	-327.58	576.1132407
13X	0.00	0.00	0
13Y	0.00	0.00	0
13XY	0.00	0.00	0
13P	0.00	-514.90	540.6157407
13X	0.00	-514.90	540.6157407
13Y	0.00	-514.90	540.6157407
13XY	0.00	0.00	0
13P	0.00	-53.42	28.05662037
13X	0.00	-53.42	28.05662037
13Y	0.00	0.00	0
13XY	0.00	0.00	0
11P	0.00	-289.72	356.0405093
11X	0.00	0.00	0
11Y	0.00	0.00	0
11XY	0.00	0.00	0
11P	0.00	-442.84	429.6435185
11X	0.00	0.00	0
11Y	0.00	0.00	0
11XY	0.00	0.00	0
6P	0.00	-80.46	97.13634259
6X	0.00	-80.46	97.13634259
6Y	0.00	-80.46	97.13634259
6XY	0.00	0.00	0
6P	0.00	-137.43	92.42569444
6X	0.00	-137.43	92.42569444
6Y	0.00	-137.43	92.42569444
6XY	0.00	0.00	0
10P	0.00	-871.83	665.0648148
10X	0.00	-871.83	665.0648148
10Y	0.00	-871.83	665.0648148
10XY	0.00	0.00	0
9P	0.00	-187.85	312.2962963
9X	0.00	0.00	0
9Y	0.00	0.00	0
9XY	0.00	0.00	0
8P	0.00	-420.36	429.6435185
8X	0.00	0.00	0
8Y	0.00	0.00	0
8XY	0.00	0.00	0
8P	0.00	-282.70	379.8118056
8X	0.00	-282.70	379.8118056
8Y	0.00	0.00	0
8XY	0.00	0.00	0
7P	0.00	-197.80	313.8440741
7X	0.00	-197.80	313.8440741
7Y	0.00	-197.80	313.8440741
7XY	0.00	0.00	0
6P	0.00	-575.79	591.2026852
6X	0.00	-575.79	591.2026852
6Y	0.00	-575.79	591.2026852
6XY	0.00	0.00	0
6P	0.00	-183.55	313.8440741
6X	0.00	0.00	0
6Y	0.00	0.00	0
6XY	0.00	0.00	0
4P	0.00	-231.91	379.8118056
4X	0.00	0.00	0
4Y	0.00	0.00	0
4XY	0.00	0.00	0
0P	0.00	-7.63	16.64351852
0X	0.00	0.00	0
0Y	0.00	0.00	0
0XY	0.00	0.00	0
14P	0.00	-24.36	26.64351852
14X	0.00	0.00	0
14Y	0.00	0.00	0
14XY	0.00	0.00	0
11P	0.00	-399.04	574.83
11X	0.00	-399.04	574.83
11Y	0.00	-399.04	574.83
11XY	0.00	0.00	0
11P	0.00	-204.35	181.14
11X	0.00	-116.55	148.64
11Y	0.00	-116.55	148.64
11XY	0.00	0.00	0

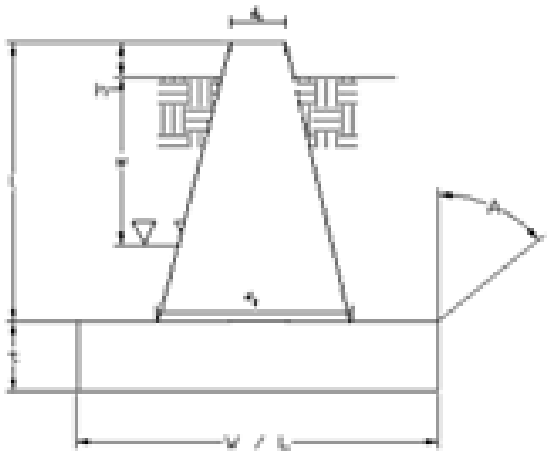
Foundation

Site No.:	88018
Engineer:	BD
Date:	01/14/14
Carrier:	Sprint Nextel

Design Loads (Unfactored)

Compression/Leg:	494.60	k
Uplift/Leg:	396.90	k

Face Width @ Top of Pier (d_1):	4.00	ft
Face Width @ Bottom of Pier (d_2):	8.00	ft
Total Length of Pier (l):	8.00	ft
Height of Pedestal Above Ground (h):	0.50	ft
Width of Pad (W):	18.00	ft
Length of Pad (L):	18.00	ft
Thickness of Pad (t):	3.00	ft
Water Table Depth (w):	99	ft
Unit Weight of Concrete:	150.0	pcf
Unit Weight of Soil (Above Water Table):	100.0	pcf
Unit Weight of Soil (Below Water Table):	50.0	pcf
Friction Angle of Uplift (A):	20	°
Allowable Compressive Bearing Pressure:	20000	psf
Cohesion:	3000	



Volume Pier (Total):	298.67	ft³
Volume Pad (Total):	972.00	ft³
Volume Soil (Total):	2935.41	ft³
Volume Pier (Buoyant):	0.00	ft³
Volume Pad (Buoyant):	0.00	ft³
Volume Soil (Buoyant):	0.00	ft³
Weight Pier:	44.80	k
Weight Pad:	145.80	k
Weight Soil:	293.54	k

Uplift Check

TIA Case 1: $\frac{\text{Wt. Soil + Wt. Concrete}}{1.5}$

TIA Case 2: $\frac{\text{Wt. Soil}}{2.0} + \frac{\text{Wt. Concrete}}{1.25}$

	Allowable Uplift (k)	Ratio	Result
TIA Case 1:	432.11	0.92	**OK**
TIA Case 2:	408.60	0.97	**OK**

Axial Check

Allowable Axial: Allowable Bearing Pressure * W * L

	Allowable Axial (k)	Ratio	Result
	6480.00	0.08	**OK**

Anchor Bolt Check

Bolt Description	Allowable Uplift (k)	Ratio	Result
(6) 2 1/4" A36	456.61	0.87	**OK**

Sprint

AMERICAN TOWER CORPORATION

PROJECT:	2.5 EQUIPMENT DEPLOYMENT
SITE NAME:	ATC TOWER
SITE CASCADE:	CT03XC337
SITE NUMBER:	88018
SITE ADDRESS:	168 CATOONA LANE STAMFORD, CT 06901
SITE TYPE:	SELF SUPPORT TOWER
MARKET:	SOUTHERN CONNECTICUT

SITE INFORMATION

TOWER OWNER:
AMERICAN TOWER
116 HUNTINGTON AVE, 11th FLOOR
BOSTON, MA 02116

LATITUDE (NAD83):
41° 03' 10.18" N
41.05283°

LONGITUDE (NAD83):
73° 33' 46.95" W
-73.56304°

COUNTY:
FAIRFIELD

ZONING JURISDICTION:
CITY OF STAMFORD

ZONING DISTRICT:
R5

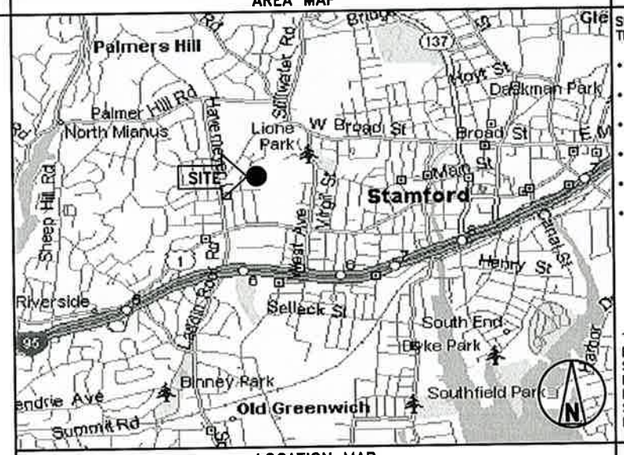
POWER COMPANY:
CONNECTICUT LIGHT & POWER
(800) 286-2000

AAV PROVIDER:
AT&T
(800) 246-2020

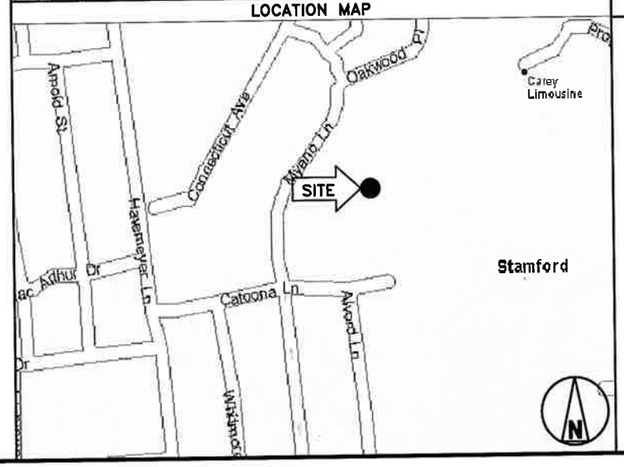
SPRINT CM:
GARY WOOD
(860) 940-9168
GARY.WOOD@SPRINT.COM

AMERICAN TOWER CM:
JON RODGERS
OFFICE: (781) 926-7855
MOBILE: (617) 839-5143
jon.rodgers@americantower.com

AREA MAP



LOCATION MAP



PROJECT DESCRIPTION

SPRINT PROPOSES TO MODIFY AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY.

- INSTALL (1) 9929 EQUIPMENT CABINET IN EXISTING LEASE SPACE
- INSTALL (3) PANEL ANTENNAS
- INSTALL (3) RRU'S TO TOWER
- INSTALL (27) JUMPER CABLES
- INSTALL (1) HYBRID CABLE
- INSTALL (8) BATTERIES IN EXISTING BATTERY 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.

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.

1. INTERNATIONAL BUILDING CODE (2012 IBC)
2. TIA-EIA-222-G OR LATEST EDITION
3. NFPA 780 – LIGHTNING PROTECTION CODE
4. 2011 NATIONAL ELECTRIC CODE OR LATEST EDITION
5. ANY OTHER NATIONAL OR LOCAL APPLICABLE CODES, MOST RECENT EDITIONS
6. CT BUILDING CODE
7. LOCAL BUILDING CODE
8. CITY/COUNTY ORDINANCES

811 Know what's **below.** **Call** before you dig. www.call811.com

DRAWING INDEX

SHEET NO.	SHEET TITLE	REV.
T-1	TITLE SHEET & PROJECT DATA	0
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 & CABLE PLAN	0
A-3	ANTENNA LAYOUT & MOUNTING DETAILS	0
A-4	COLOR CODING & NOTES	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

PLANS PREPARED FOR:
Sprint
6580 Sprint Parkway
Overland Park, Kansas 66251

PLANS PREPARED BY:
INFINIGY Design. Build. Deliver.
1033 Watervliet Shaker Rd
Albany, NY 12205
Office # (518) 690-0790
Fax # (518) 690-0793
JOB NUMBER 340-000

MLA PARTNER:
AMERICAN TOWER CORPORATION
116 HUNTINGTON AVENUE, 11TH FLOOR
BOSTON, MA 02116

ENGINEERING LICENSE:
STATE OF CONNECTICUT
JOHN S. STEVENS
No. 24705
LICENSED PROFESSIONAL ENGINEER

DRAWING NOTICE:

REVISIONS:

DESCRIPTION	DATE	BY	REV
ISSUED FOR CONSTRUCTION	02/21/14	JDV	0

SITE NAME:
ATC TOWER

SITE CASCADE:
CT03XC337

SITE ADDRESS:
168 CATOONA LANE
STAMFORD, CT 06901

SHEET DESCRIPTION:
TITLE SHEET
& PROJECT DATA

SHEET NUMBER:
T-1

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:

Sprint

6580 Sprint Parkway
Overland Park, Kansas 66251

PLANS PREPARED BY:

INFINIGY Design. Build. Deliver.

1033 Watervliet Shaker Rd
Albany, NY 12205
Office # (518) 690-0790
Fax # (518) 690-0793

JOB NUMBER 340-000

MLA PARTNER:

AMERICAN TOWER CORPORATION

116 HUNTINGTON AVENUE, 11TH FLOOR
BOSTON, MA 02116

ENGINEERING LICENSE:

STATE OF CONNECTICUT · JOHN S. STEVENS · No. 24705 · LICENSED PROFESSIONAL ENGINEER

DRAWING NOTICE:

REVISIONS:

DESCRIPTION	DATE	BY	REV
ISSUED FOR CONSTRUCTION	02/21/14	JDV	0

SITE NAME:

ATC TOWER

SITE CASCADE:

CT03XC337

SITE ADDRESS:

168 CATOONA LANE
STAMFORD, CT 06901

SHEET DESCRIPTION:

SPRINT SPECIFICATIONS

SHEET NUMBER:

SP-1

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:
Sprint
6580 Sprint Parkway
Overland Park, Kansas 66251

PLANS PREPARED BY:
INFINIGY Design. Build. Deliver.
1033 Watervliet Shaker Rd
Albany, NY 12205
Office # (518) 690-0790
Fax # (518) 690-0793
JOB NUMBER 340-000

MLA PARTNER:
AMERICAN TOWER CORPORATION
116 HUNTINGTON AVENUE, 11TH FLOOR
BOSTON, MA 02116

ENGINEERING LICENSE:

STATE OF CONNECTICUT
JOHN S. STEVENS
No. 24705
LICENSED PROFESSIONAL ENGINEER

REVISIONS:

DESCRIPTION	DATE	BY	REV
ISSUED FOR CONSTRUCTION	02/21/14	JDV	0

SITE NAME:
ATC TOWER

SITE CASCADE:
CT03XC337

SITE ADDRESS:
168 CATOONA LANE
STAMFORD, CT 06901

SHEET DESCRIPTION:
SPRINT SPECIFICATIONS

SHEET NUMBER:
SP-2

CONTINUE FROM SP-2

7. VERIFICATION DOCUMENTED WITH THE ANTENNA CHECKLIST REPORT, BY A&E, SITE DEVELOPMENT REP, OR RF REP.
8. FINAL INSPECTION CHECKLIST AND HANDOFF WALK (HOC.). SIGNED FORM SHOWING ACCEPTANCE BY FIELD OPS IS TO BE UPLOADED INTO SMS.
9. COAX SWEEP AND FIBER TESTING DOCUMENTS SUBMITTED VIA SMS FOR RF APPROVAL.
10. SCAN-ABLE BARCODE PHOTOGRAPHS OF TOWER TOP AND INACCESSIBLE SERIALIZED EQUIPMENT
11. ALL AVAILABLE JURISDICTIONAL INFORMATION
12. PDF SCAN OF REDLINES PRODUCED IN FIELD

C. THE 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.

D. CONSTRUCTION INSPECTIONS AND CORRECTIVE MEASURES SHALL BE DOCUMENTED BY THE CONTRACTOR WITH WRITTEN REPORTS AND PHOTOGRAPHS. PHOTOGRAPHS MUST BE DIGITAL AND OF SUFFICIENT QUALITY TO CLEARLY SHOW THE SITE CONSTRUCTION. PHOTOGRAPHS MUST CLEARLY IDENTIFY THE PHOTOGRAPHED ITEM AND BE LABELED WITH THE SITE CASCADE NUMBER, SITE NAME, DESCRIPTION, AND DATE.

3.4 DELIVERABLES: TEST AND INSPECTION REPORTS AND CLOSEOUT DOCUMENTATION SHALL BE UPLOADED TO THE SMS AND/OR FORWARDED TO SPRINT FOR INCLUSION INTO THE PERMANENT SITE FILES.

A. THE FOLLOWING TEST AND INSPECTION REPORTS SHALL BE PROVIDED AS APPLICABLE.

1. CONCRETE MIX AND CYLINDER BREAK REPORTS.
2. STRUCTURAL BACKFILL COMPACTION REPORTS.
3. SITE RESISTANCE TO EARTH TEST.
4. ANTENNA AZIMUTH AND DOWN TILT VERIFICATION
5. TOWER ERECTION INSPECTIONS AND MEASUREMENTS DOCUMENTING TOWER INSTALLED PER SUPPLIER'S REQUIREMENTS AND THE APPLICABLE SECTIONS HEREIN.
6. COAX CABLE SWEEP TESTS PER COMPANY'S "ANTENNA LINE ACCEPTANCE STANDARDS".

B. REQUIRED CLOSEOUT DOCUMENTATION INCLUDES THE FOLLOWING;

1. TEST WELLS AND TRENCHES: PHOTOGRAPHS OF ALL TEST WELLS; PHOTOGRAPHS SHOWING ALL OPEN EXCAVATIONS AND TRENCHING PRIOR TO BACKFILLING SHOWING A TAPE MEASURE VISIBLE IN THE EXCAVATIONS INDICATING DEPTH.
2. CONDUITS, CONDUCTORS AND GROUNDING: PHOTOGRAPHS SHOWING TYPICAL INSTALLATION OF CONDUCTORS AND CONNECTORS; PHOTOGRAPHS SHOWING TYPICAL BEND RADIUS OF INSTALLED GROUND WIRES AND GROUND ROD SPACING;
3. CONCRETE FORMS AND REINFORCING: CONCRETE FORMING AT TOWER AND EQUIPMENT/SHELTER PAD/FOUNDATIONS – PHOTOGRAPHS SHOWING ALL REINFORCING STEEL, UTILITY AND CONDUIT STUB OUTS; PHOTOGRAPHS SHOWING CONCRETE POUR OF SHELTER SLAB/FOUNDATION, TOWER FOUNDATION AND GUY ANCHORS WITH VIBRATOR IN USE; PHOTOGRAPHS SHOWING EACH ANCHOR ON GUYED TOWERS, BEFORE CONCRETE POUR.
4. TOWER, ANTENNAS AND MAINLINE: INSPECTION AND PHOTOGRAPHS OF SECTION STACKING; INSPECTION AND PHOTOGRAPHS OF PLATFORM COMPONENT ATTACHMENT POINTS; PHOTOGRAPHS OF TOWER TOP GROUNDING; PHOTOS OF TOWER COAX LINE COLOR CODING AT THE TOP AND AT GROUND LEVEL; INSPECTION AND PHOTOGRAPHS OF OPERATIONAL OF TOWER LIGHTING, AND PLACEMENT OF FAA REGISTRATION SIGN; PHOTOGRAPHS SHOWING ADDITIONAL GROUNDING POINTS FOR TOWERS GREATER THAN 200 FEET.; PHOTOS OF ANTENNA GROUND BAR, EQUIPMENT GROUND BAR, AND MASTER GROUND BAR; PHOTOS OF GPS ANTENNA(S); PHOTOS OF EACH SECTOR OF ANTENNAS; ONE PHOTOGRAPH LOOKING AT THE SECTOR AND ONE FROM BEHIND SHOWING THE PROJECTED COVERAGE AREA; PHOTOS OF COAX WEATHERPROOFING – TOP AND BOTTOM; PHOTOS OF COAX GROUNDING--TOP AND BOTTOM; PHOTOS OF ANTENNA AND MAST GROUNDING; PHOTOS OF COAX CABLE ENTRY INTO SHELTER; PHOTOS OF PLATFORM MECHANICAL CONNECTIONS TO TOWER/MONOPOLE.
5. ROOF TOPS: PRE-CONSTRUCTION AND POST-CONSTRUCTION VISUAL INSPECTION AND PHOTOGRAPHS OF THE ROOF AND INTERIOR TO DETERMINE AND DOCUMENT CONDITIONS; ROOF TOP CONSTRUCTION INSPECTIONS AS REQUIRED BY THE JURISDICTION; PHOTOGRAPHS OF CABLE TRAY AND/OR ICE BRIDGE; PHOTOGRAPHS OF DOGHOUSE/CABLE EXIT FROM ROOF;
6. SITE LAYOUT – PHOTOGRAPHS OF THE OVERALL COMPOUND, INCLUDING EQUIPMENT PLATFORM FROM ALL FOUR CORNERS.
7. FINISHED UTILITIES: CLOSE-UP PHOTOGRAPHS OF THE PPC BREAKER PANEL; CLOSE-UP PHOTOGRAPH OF THE INSIDE OF THE TELCO PANEL AND NIU; CLOSE-UP PHOTOGRAPH OF THE POWER METER AND DISCONNECT; PHOTOS OF POWER AND TELCO ENTRANCE TO COMPANY ENCLOSURE; PHOTOGRAPHS AT METER BOX AND/OR FACILITY DISTRIBUTION PANEL.
8. REQUIRED MATERIALS CERTIFICATIONS: CONCRETE MIX DESIGNS; MILL CERTIFICATION FOR ALL REINFORCING AND STRUCTURAL STEEL; AND ASPHALT PAVING MIX DESIGN.
9. ANY AND ALL SUBMITTALS BY THE JURISDICTION OR COMPANY.

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.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.1 WEEKLY REPORTS:

A. CONTRACTOR SHALL PROVIDE SPRINT WITH WEEKLY REPORTS SHOWING PROJECT STATUS. THIS STATUS REPORT FORMAT WILL BE PROVIDED TO THE CONTRACTOR BY SPRINT. THE REPORT WILL CONTAIN SITE ID NUMBER, THE MILESTONES FOR EACH SITE, INCLUDING THE BASELINE DATE, ESTIMATED COMPLETION DATE AND ACTUAL COMPLETION DATE.

B. REPORT INFORMATION WILL BE TRANSMITTED TO SPRINT VIA ELECTRONIC MEANS AS REQUIRED. THIS INFORMATION WILL PROVIDE A BASIS FOR PROGRESS MONITORING AND PAYMENT.

3.2 PROJECT CONFERENCE CALLS:

A. SPRINT MAY HOLD WEEKLY PROJECT CONFERENCE CALLS. CONTRACTOR WILL BE REQUIRED TO COMMUNICATE SITE STATUS, MILESTONE COMPLETIONS AND UPCOMING MILESTONE PROJECTIONS, AND ANSWER ANY OTHER SITE STATUS QUESTIONS AS NECESSARY.

3.3 PROJECT TRACKING IN SMS:

A. CONTRACTOR SHALL PROVIDE SCHEDULE UPDATES AND PROJECTIONS IN THE SMS SYSTEM ON A WEEKLY BASIS.

3.4 ADDITIONAL REPORTING:

A. ADDITIONAL OR ALTERNATE REPORTING REQUIREMENTS MAY BE ADDED TO THE REPORT AS DETERMINED TO BE REASONABLY NECESSARY BY COMPANY.

3.5 PROJECT PHOTOGRAPHS:

A. FILE DIGITAL PHOTOGRAPHS OF COMPLETED SITE IN JPEG FORMAT IN THE SMS PHOTO LIBRARY FOR THE RESPECTIVE SITE. PHOTOGRAPHS SHALL BE CLEARLY LABELED WITH SITE NUMBER, NAME AND DESCRIPTION, AND SHALL INCLUDE AT A MINIMUM THE FOLLOWING AS APPLICABLE:

1. 1SHELTER AND TOWER OVERVIEW.
2. TOWER FOUNDATION(S) – FORMS AND STEEL BEFORE POUR (EACH ANCHOR ON GUYED TOWERS).
3. TOWER FOUNDATION(S) POUR WITH VIBRATOR IN USE (EACH ANCHOR ON GUYED TOWERS).
4. TOWER STEEL AS BEING INSTALLED INTO HOLE (SHOW ANCHOR STEEL ON GUYED TOWERS).
5. PHOTOS OF TOWER SECTION STACKING.
6. CONCRETE TESTING / SAMPLES.
7. PLACING OF ANCHOR BOLTS IN TOWER FOUNDATION.
8. BUILDING/WATER TANK FROM ROAD FOR TENANT IMPROVEMENTS OR COMMENTS.
9. SHELTER FOUNDATION--FORMS AND STEEL BEFORE POURING.
10. SHELTER FOUNDATION POUR WITH VIBRATOR IN USE.
11. COAX CABLE ENTRY INTO SHELTER.
12. PLATFORM MECHANICAL CONNECTIONS TO TOWER/MONOPOLE.
13. ROOFTOP PRE AND POST CONSTRUCTION PHOTOS TO INCLUDE PENETRATIONS AND INTERIOR CEILING.
14. PHOTOS OF TOWER TOP COAX LINE COLOR CODING AND COLOR CODING AT GROUND LEVEL.
15. PHOTOS OF ALL APPROPRIATE COMPANY OR REGULATORY SIGNAGE.
16. PHOTOS OF EQUIPMENT BOLT DOWN INSIDE SHELTER.
17. POWER AND TELCO ENTRANCE TO COMPANY ENCLOSURE AND POWER AND TELCO SUPPLY LOCATIONS INCLUDING METER/DISCONNECT.
18. ELECTRICAL TRENCH(S) WITH ELECTRICAL / CONDUIT BEFORE BACKFILL.
19. ELECTRICAL TRENCH(S) WITH FOIL-BACKED TAPE BEFORE FURTHER BACKFILL.
20. TELCO TRENCH WITH TELEPHONE / CONDUIT BEFORE BACKFILL.
21. TELCO TRENCH WITH FOIL-BACKED TAPE BEFORE FURTHER BACKFILL.
22. SHELTER GROUND-RING TRENCH WITH GROUND-WIRE BEFORE BACKFILL (SHOW ALL CAD WELDS AND BEND RADII).
23. TOWER GROUND-RING TRENCH WITH GROUND-WIRE BEFORE BACKFILL (SHOW ALL CAD WELDS AND BEND RADII).
24. FENCE GROUND-RING TRENCH WITH GROUND-WIRE BEFORE BACKFILL (SHOW ALL CAD WELDS AND BEND RADII).
25. ALL BTS GROUND CONNECTIONS.
26. ALL GROUND TEST WELLS.
27. ANTENNA GROUND BAR AND EQUIPMENT GROUND BAR.
28. ADDITIONAL GROUNDING POINTS ON TOWERS ABOVE 200'.
29. HVAC UNITS INCLUDING CONDENSERS ON SPLIT SYSTEMS.
30. GPS ANTENNAS.
31. CABLE TRAY AND/OR WAVEGUIDE BRIDGE.
32. DOGHOUSE/CABLE EXIT FROM ROOF.
33. EACH SECTOR OF ANTENNAS; ONE PHOTOGRAPH LOOKING AT THE SECTOR AND ONE FROM BEHIND SHOWING THE PROJECTED COVERAGE AREA.
34. MASTER BUS BAR.
35. TELCO BOARD AND NIU.
36. ELECTRICAL DISTRIBUTION WALL.
37. CABLE ENTRY WITH SURGE SUPPRESSION.
38. ENTRANCE TO EQUIPMENT ROOM.
39. COAX WEATHERPROOFING--TOP AND BOTTOM OF TOWER.
40. COAX GROUNDING –TOP AND BOTTOM OF TOWER.
41. ANTENNA AND MAST GROUNDING.
42. LANDSCAPING – WHERE APPLICABLE.

3.6 FINAL PROJECT ACCEPTANCE: COMPLETE ALL REQUIRED REPORTING TASKS PER CONTRACT, CONTRACT DOCUMENTS OR THE SPRINT INTEGRATED CONSTRUCTION STANDARDS FOR WIRELESS SITES AND UPLOAD INTO SITERRA.

PLANS PREPARED FOR:

Sprint
6580 Sprint Parkway
Overland Park, Kansas 66251

PLANS PREPARED BY:

INFINIGY Design. Build. Deliver.
1033 Watervliet Shaker Rd
Albany, NY 12205
Office # (518) 690-0790
Fax # (518) 690-0793

JOB NUMBER 340-000

MLA PARTNER:

AMERICAN TOWER CORPORATION
116 HUNTINGTON AVENUE, 11TH FLOOR
BOSTON, MA 02116

ENGINEERING LICENSE:

STATE OF CONNECTICUT
JOHN S. STEVENS
No. 24705
LICENSED PROFESSIONAL ENGINEER

REVISIONS:

DESCRIPTION	DATE	BY	REV
ISSUED FOR CONSTRUCTION	02/21/14	JDV	0

SITE NAME:

ATC TOWER

SITE CASCADE:

CT03XC337

SITE ADDRESS:

168 CATOONA LANE
STAMFORD, CT 06901

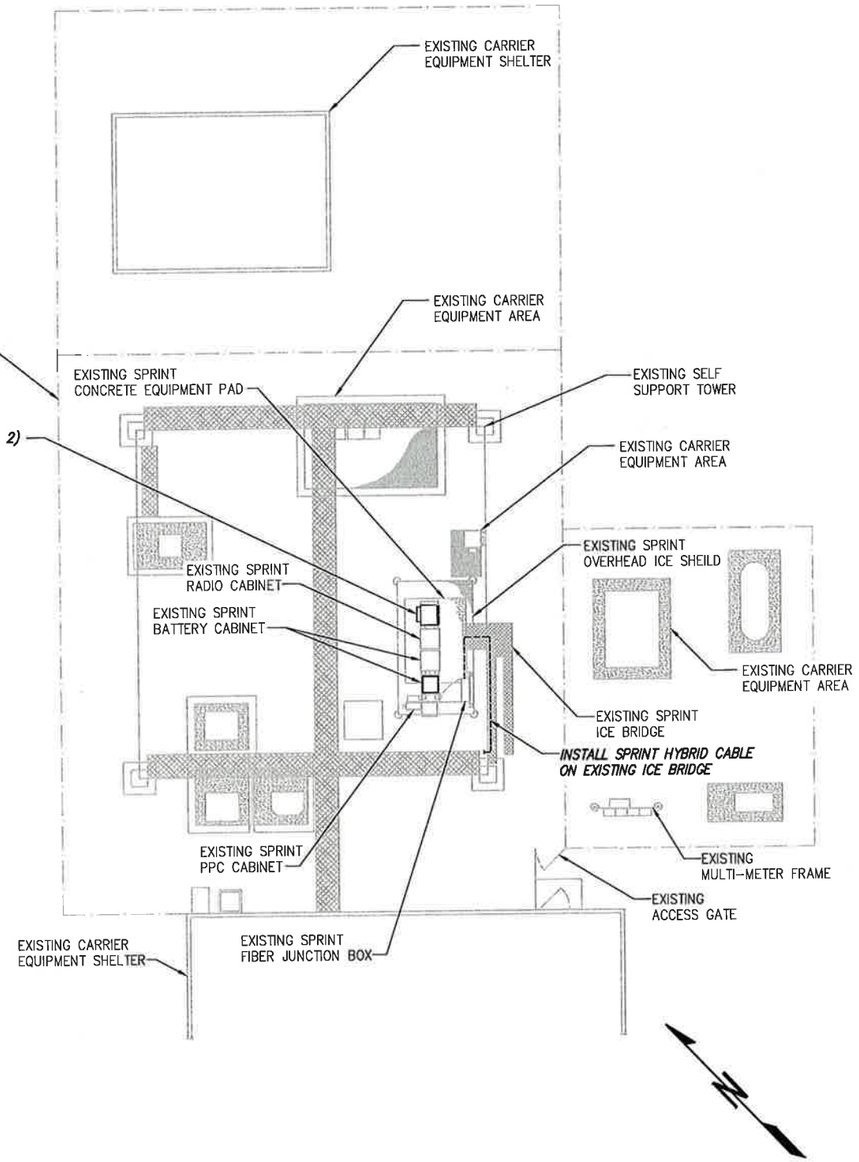
SHEET DESCRIPTION:

SPRINT SPECIFICATIONS

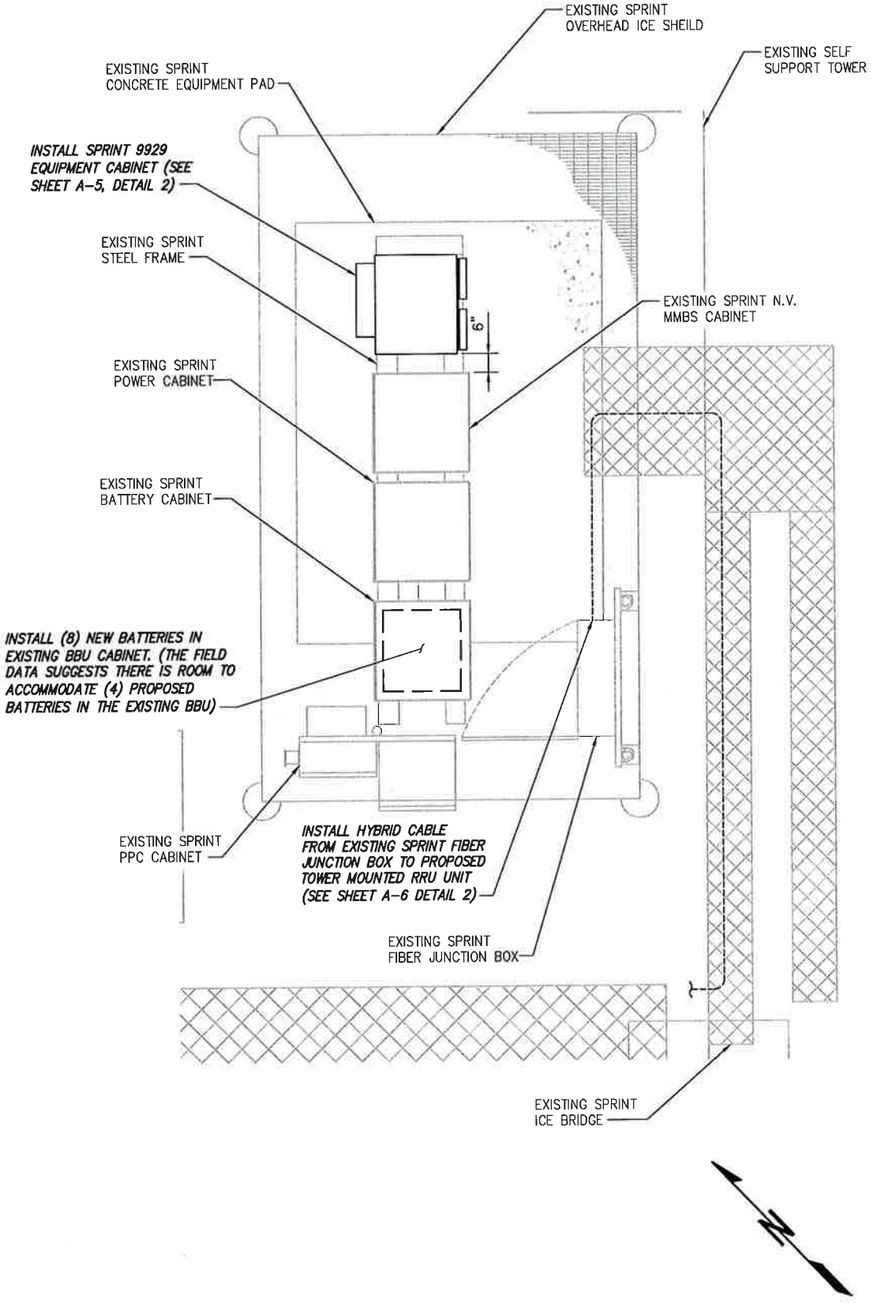
SHEET NUMBER:

SP-1

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:

Sprint

6580 Sprint Parkway
Overland Park, Kansas 66251

PLANS PREPARED BY:

INFINIGY Design. Build. Deliver.

1033 Watervliet Shaker Rd
Albany, NY 12205
Office # (518) 690-0790
Fax # (518) 690-0793

JOB NUMBER 340-000

MLA PARTNER:

AMERICAN TOWER CORPORATION

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BOSTON, MA 02116

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JOHN S. STEVENS
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LICENSED PROFESSIONAL ENGINEER

DRAWING NOTICE:

REVISIONS:

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ISSUED FOR CONSTRUCTION	02/21/14	JDV	0

SITE NAME:

ATC TOWER

SITE CASCADE:

CT03XC337

SITE ADDRESS:

168 CATOONA LANE
STAMFORD, CT 06901

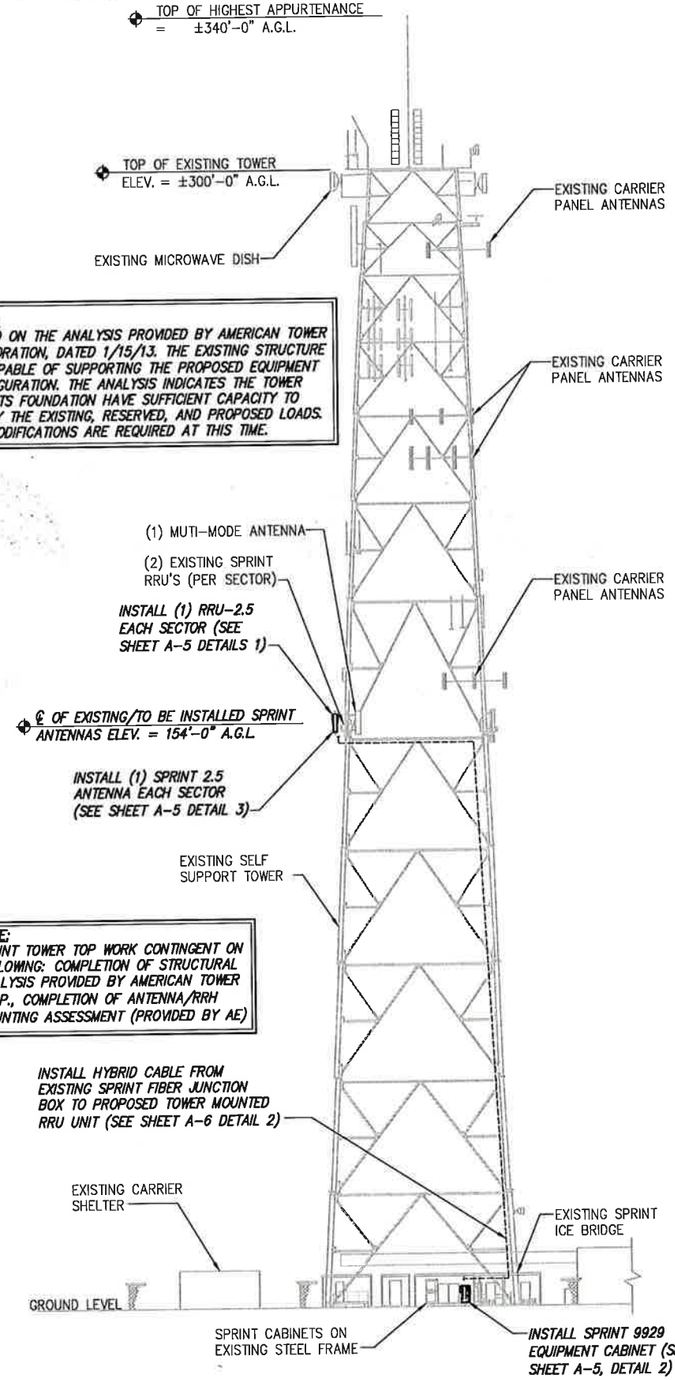
SHEET DESCRIPTION:

SITE PLAN

SHEET NUMBER:

A-1

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



NOTE:
BASED ON THE ANALYSIS PROVIDED BY AMERICAN TOWER CORPORATION, DATED 1/15/13. THE EXISTING STRUCTURE IS CAPABLE OF SUPPORTING THE PROPOSED EQUIPMENT CONFIGURATION. THE ANALYSIS INDICATES THE TOWER AND ITS FOUNDATION HAVE SUFFICIENT CAPACITY TO CARRY THE EXISTING, RESERVED, AND PROPOSED LOADS. NO MODIFICATIONS ARE REQUIRED AT THIS TIME.

NOTE:
SPRINT TOWER TOP WORK CONTINGENT ON FOLLOWING: COMPLETION OF STRUCTURAL ANALYSIS PROVIDED BY AMERICAN TOWER CORP., COMPLETION OF ANTENNA/RRH MOUNTING ASSESSMENT (PROVIDED BY AE)

TOWER ELEVATION | NO SCALE | 1

DETAIL NOT USED | NO SCALE | 2

DETAIL NOT USED | NO SCALE | 3

DETAIL NOT USED | NO SCALE | 4

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Overland Park, Kansas 66251

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BOSTON, MA 02116

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LICENSED PROFESSIONAL ENGINEER

DRAWING NOTICE:

REVISIONS:

DESCRIPTION	DATE	BY	REV
ISSUED FOR CONSTRUCTION	02/21/14	JDV	0

SITE NAME:

ATC TOWER

SITE CASCADE:

CT03XC337

SITE ADDRESS:

168 CATOONA LANE
STAMFORD, CT 06901

SHEET DESCRIPTION:

TOWER ELEVATION & CABLE PLAN

SHEET NUMBER:

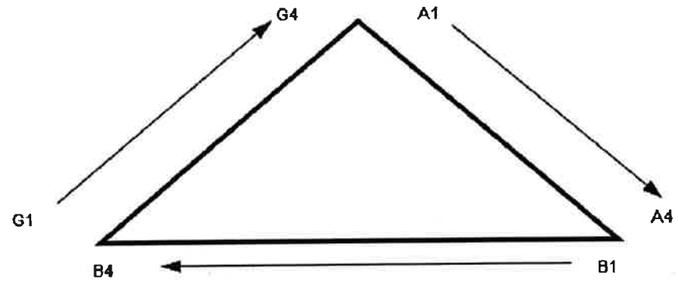
A-2

NV CABLES				
BAND	INDICATOR		PORT	COLOR
800-1	YEL	GRN	NV-1	GRN
1900-1	YEL	RED	NV-2	BLU
1900-2	YEL	BRN	NV-3	BRN
1900-3	YEL	BLU	NV-4	WHT
1900-4	YEL	SLT	NV-5	RED
800-2	YEL	ORG	NV-6	SLT
SPARE	YEL	WHT	NV-7	PPL
2500	YEL	PPL	NV-8	ORG

HYBRID	
HYBRID	COLOR
1	GRN
2	BLU
3	BRN
4	WHT
5	RED
6	SLT
7	PPL
8	ORG

2.5 Band		
2500 Radio 1		COLOR
YEL	WHT	GRN
YEL	WHT	BLU
YEL	WHT	BRN
YEL	WHT	WHT
YEL	WHT	RED
YEL	WHT	SLT
YEL	WHT	PPL
YEL	WHT	ORG

Figure 1: Antenna Orientation



NOTES:

1. ALL CABLES SHALL BE MARKED WITH 2" WIDE, UV STABILIZED, UL APPROVED TAPE.

2. THE FIRST RING SHALL BE CLOSEST TO THE END OF THE CABLE AND SPACED APPROXIMATELY 2" FROM THE END CONNECTOR, WEATHERPROOFING, OR BREAK-OUT CYLINDER. THERE SHALL BE A 1" SPACE BETWEEN EACH RING FOR THE CABLE IDENTIFIER, AND NO SPACES BETWEEN THE FREQUENCY BANDS.

3. A 2" GAP SHALL SEPARATE THE CABLE COLOR CODE FROM THE FREQUENCY COLOR CODE. THE 2" COLOR RINGS FOR THE FREQUENCY CODE SHALL BE PLACED NEXT TO EACH OTHER WITH NO SPACES.

4. THE 2" COLORED TAPE(S) SHALL EACH BE WRAPPED A MINIMUM OF 3 TIMES AROUND THE INDIVIDUAL CABLES, AND THE TAPE SHALL BE KEPT IN THE SAME LOCATION AS MUCH AS POSSIBLE.

5. SITES WITH MORE THAN FOUR (4) SECTORS WILL REQUIRE ADDITIONAL RINGS FOR EACH SECTOR, FOLLOWING THE PATTERN. HIGH CAPACITY SITES WILL USE THE NEXT COLOR IN THE SEQUENCE FOR ADDITIONAL CABLES IN EACH SECTOR.

6. HYBRID FIBER CABLE SHALL BE SECTOR IDENTIFIED INSIDE THE CABINET ON FREQUENCY BUNDLES, ON THE SEALTITE, ON THE MAIN LINE UPON EXIT OF SEALTITE, AND BEFORE AND AFTER THE BREAKOUT UNIT (MEDUSA), AS WELL AS BEFORE AND AFTER ANY ENTRANCE OR EXIT.

7. HFC "MAIN TRUNK" WILL NOT BE MARKED WITH THE FREQUENCY CODES, AS IT CONTAINS ALL FREQUENCIES.

8. INDIVIDUAL POWER PAIRS AND FIBER BUNDLES SHALL BE LABELED WITH BOTH THE CABLE AND FREQUENCY.

Sector	Cable	First Ring	Second Ring	Third Ring
1 Alpha	1	Green	No Tape	No Tape
1	2	Blue	No Tape	No Tape
1	3	Brown	No Tape	No Tape
1	4	White	No Tape	No Tape
1	5	Red	No Tape	No Tape
1	6	Grey	No Tape	No Tape
1	7	Purple	No Tape	No Tape
1	8	Orange	No Tape	No Tape
2 Beta	1	Green	Green	No Tape
2	2	Blue	Blue	No Tape
2	3	Brown	Brown	No Tape
2	4	White	White	No Tape
2	5	Red	Red	No Tape
2	6	Grey	Grey	No Tape
2	7	Purple	Purple	No Tape
2	8	Orange	Orange	No Tape
3 Gamma	1	Green	Green	Green
3	2	Blue	Blue	Blue
3	3	Brown	Brown	Brown
3	4	White	White	White
3	5	Red	Red	Red
3	6	Grey	Grey	Grey
3	7	Purple	Purple	Purple
3	8	Orange	Orange	Orange

NV FREQUENCY	INDICATOR	ID
800-1	YEL	GRN
1900-1	YEL	RED
1900-2	YEL	BRN
1900-3	YEL	BLU
1900-4	YEL	SLT
800-1	YEL	ORG
RESERVED	YEL	WHT
RESERVED	YEL	PPL

2.5 FREQUENCY	INDICATOR		ID
2500 -1	YEL	WHT	GRN
2500 -2	YEL	WHT	RED
2500 -3	YEL	WHT	BRN
2500 -4	YEL	WHT	BLU
2500 -5	YEL	WHT	SLT
2500 -6	YEL	WHT	ORG
2500 -7	YEL	WHT	WHT
2500 -8	YEL	WHT	PPL

Example – Sector 2, Cable 2, 800mhz Radio #1

Example – Sector 3, Cable 1, 1900mhz Radio #1

Example – Sector 1, Cable 4, 800 mhz Radio #1 and 1900mhz Radio #1

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MLA PARTNER:

AMERICAN TOWER CORPORATION

116 HUNTINGTON AVENUE, 11TH FLOOR
BOSTON, MA 02116

ENGINEERING LICENSE:

STATE OF CONNECTICUT
JOHN S. STEVENS
No. 24705
LICENSED PROFESSIONAL ENGINEER

DRAWING NOTICE:

REVISIONS:

DESCRIPTION	DATE	BY	REV
ISSUED FOR CONSTRUCTION	02/21/14	JDV	0

SITE NAME:

ATC TOWER

SITE CASCADE:

CT03XC337

SITE ADDRESS:

168 CATOONA LANE
STAMFORD, CT 06901

SHEET DESCRIPTION:

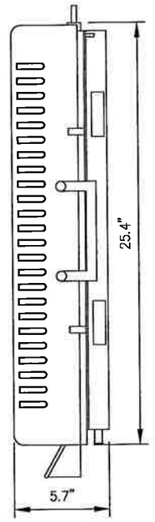
COLOR CODING AND NOTES

SHEET NUMBER:

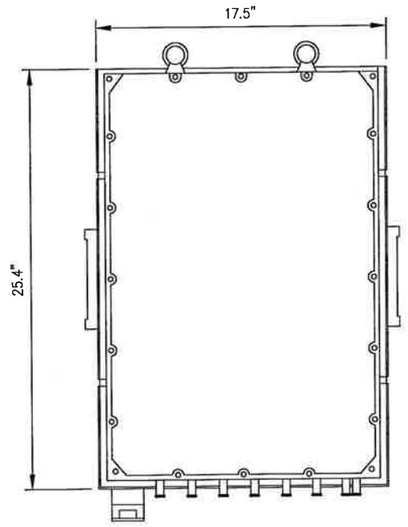
A-4

RRU: ALCATEL LUCENT TD-RRH8X20

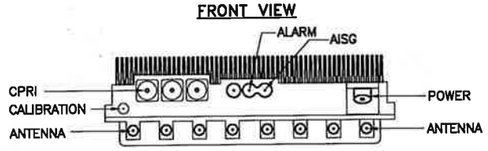
COLOR: LIGHT GREY
WEIGHT: 70 LBS.



SIDE VIEW



FRONT VIEW

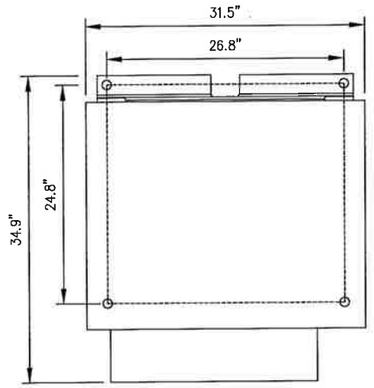


PLAN VIEW

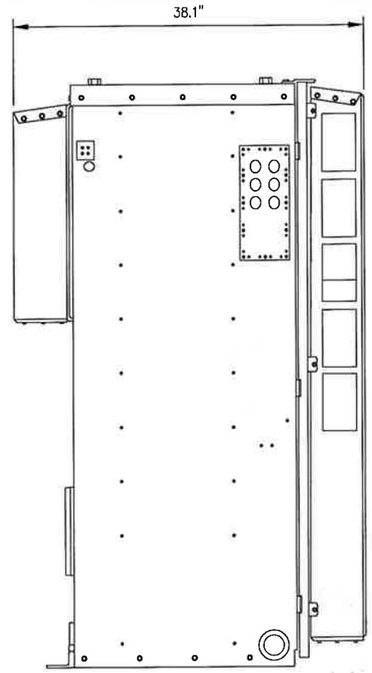
NOTES

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

2.5 RRU'S | NO SCALE | 1



BOTTOM VIEW

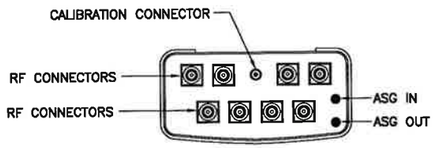


SIDE VIEW

2.5 9929 GROWTH CABINET | NO SCALE | 2

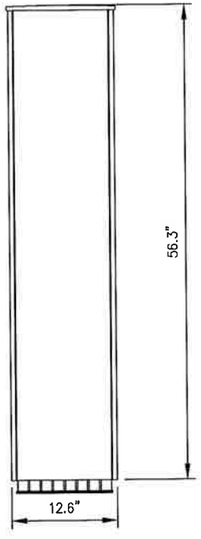
ANTENNA RFS APXVTM14-C-I20

RADOME MATERIAL:	ASA
RADOME COLOR:	LIGHT GREY
DIMENSIONS, HxWxD.in(mim):	56.3"x12.6"x6.3" (1430x320x160mm)
WEIGHT:	52.9 lbs
CONNECTORS:	(8) 4.1/9.5 DIN FEMALE (1) NF – CALIBRATION CONNECTOR



PLAN VIEW

SIDE VIEW



FRONT VIEW

2.5 ANTENNA | NO SCALE | 3

DETAIL NOT USED | NO SCALE | 4

PLANS PREPARED FOR:

Sprint
6580 Sprint Parkway
Overland Park, Kansas 66251

PLANS PREPARED BY:

INFINIGY Design. Build. Deliver.
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ENGINEERING LICENSE:

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JOHN S. STEVENS
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LICENSED
PROFESSIONAL ENGINEER

DRAWING NOTICE:

REVISIONS:

DESCRIPTION	DATE	BY	REV
ISSUED FOR CONSTRUCTION	02/21/14	JOV	0

SITE NAME:

ATC TOWER

SITE CASCADE:

CT03XC337

SITE ADDRESS:

168 CATOONA LANE
STAMFORD, CT 06901

SHEET DESCRIPTION:

EQUIPMENT & MOUNTING DETAILS

SHEET NUMBER:

A-5

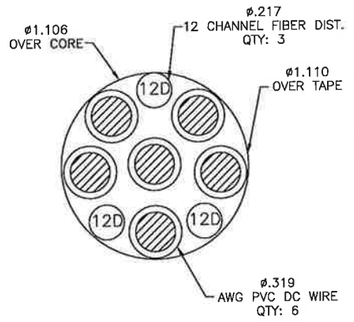
RFS HYBRIFLEX RISER CABLE SCHEDULE

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
	MN: HB058-M12-200F	200 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
	MN: HB114-08U3M12-200F	200 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	275 ft
	MN: HB114-13U3M12-300F	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

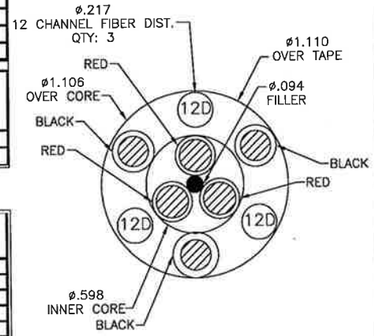
RFS HYBRIFLEX JUMPER CABLE SCHEDULE

Fiber Only	**Hybrid Jumper cable** MN: HBF012-M3-5F1 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: HBF058-08U1M3-5F1 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: HBF058-13U1M3-5F1 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: HBF078-21U1M3-5F1 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

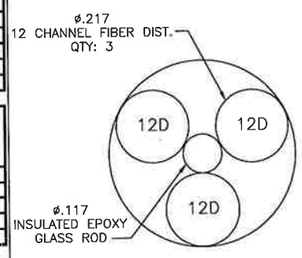
NOTE:
SPRINT CM TO CONFIRM HYBRID OR FIBER RISER CABLE AND HYBRID OR FIBER JUMPER CABLE MODEL NUMBERS IF HYBRID CABLES ARE REQUIRED BEFORE PREPARING BOM.



4 AWG

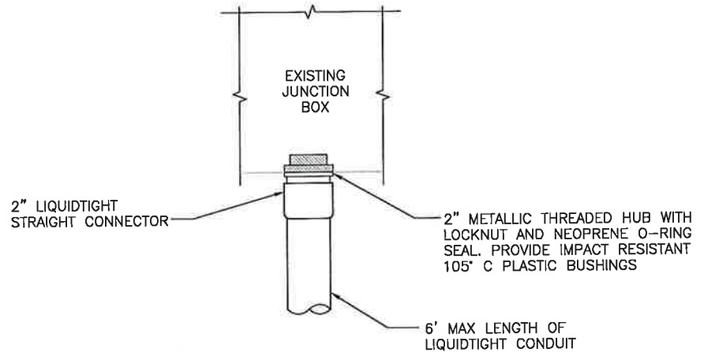


8 & 6 AWG

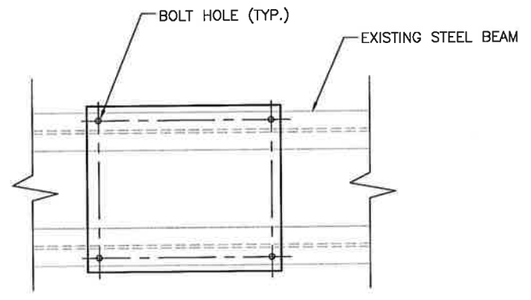


FIBER ONLY

2.5 CABLE CROSS SECTION DATA | NO SCALE | 1



FIBER JUNCTION BOX PENETRATION | NO SCALE | 2



1. VERIFY BOLT HOLE SPACING WITH EQUIPMENT CUT SHEETS.
2. NEW EQUIPMENT CABINET TO BE MOUNTED TO EXISTING SUPPORT SURFACE WITH BOLT-DOWN SYSTEM PER MANUFACTURER'S SPECIFICATION AND FIELD DRILL HOLES THROUGH EXISTING STEEL BEAMS AS REQUIRED.
3. MAINTAIN A MINIMUM OF 1" DISTANCE FROM CENTER OF BOLT HOLE TO EDGE OF FLANGE.

DETAIL NOT USED | NO SCALE | 3

PLANS PREPARED FOR:

Sprint
6580 Sprint Parkway
Overland Park, Kansas 66251

PLANS PREPARED BY:

INFINIGY Design. Build. Deliver.
1033 Watervliet Shaker Rd
Albany, NY 12205
Office # (518) 690-0790
Fax # (518) 690-0793

JOB NUMBER 340-000

MLA PARTNER:

AMERICAN TOWER CORPORATION
116 HUNTINGTON AVENUE, 11TH FLOOR
BOSTON, MA 02116

ENGINEERING LICENSE:

STATE OF CONNECTICUT
JOHN S. STEVENS
No. 24705
LICENSED PROFESSIONAL ENGINEER

REVISIONS:

DESCRIPTION	DATE	BY	REV
ISSUED FOR CONSTRUCTION	02/21/14	JDV	0

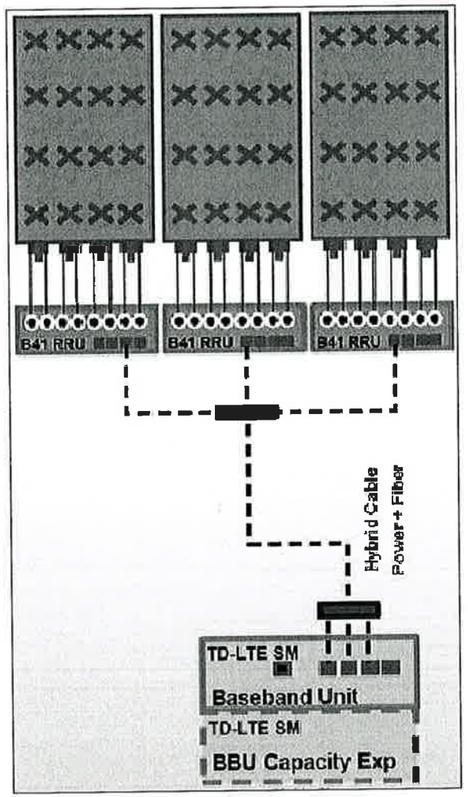
SITE NAME:
ATC TOWER

SITE CASCADE:
CT03XC337

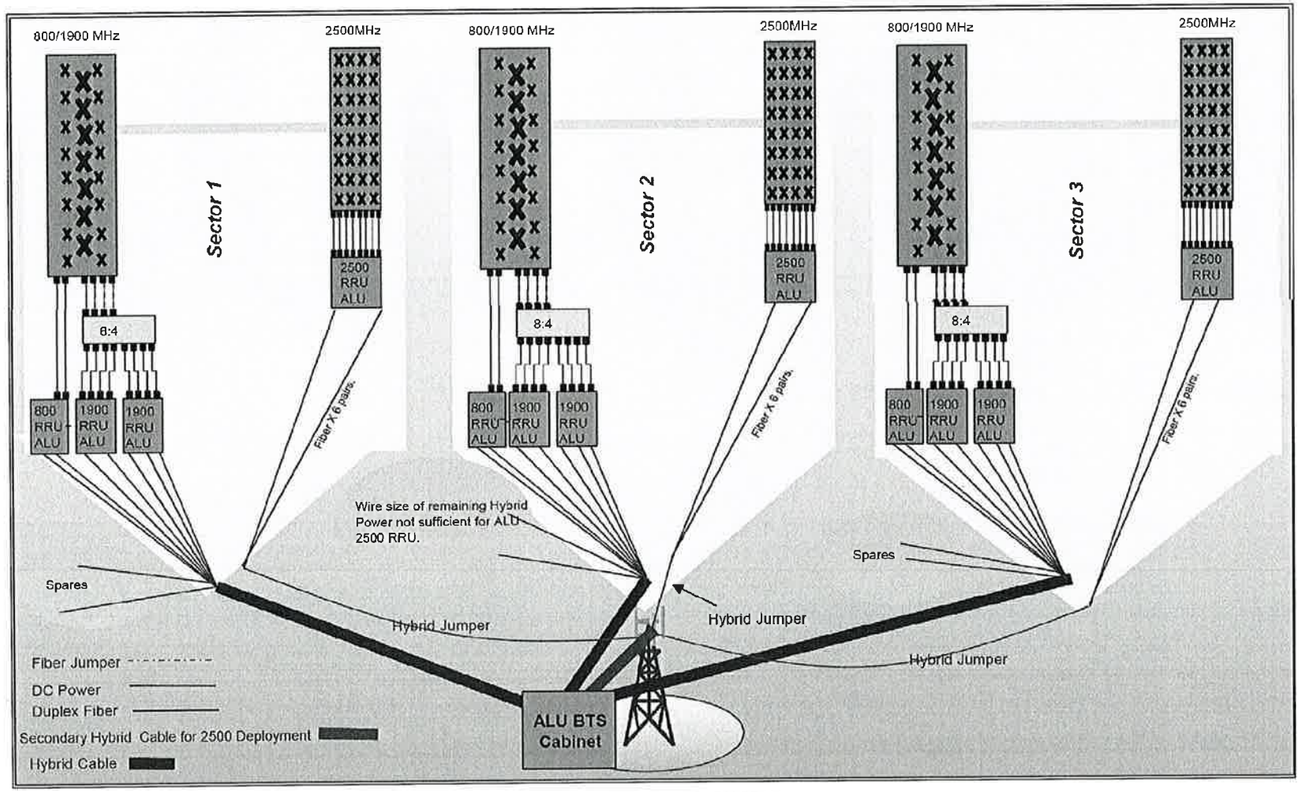
SITE ADDRESS:
168 CATOONA LANE
STAMFORD, CT 06901

SHEET DESCRIPTION:
CIVIL DETAILS

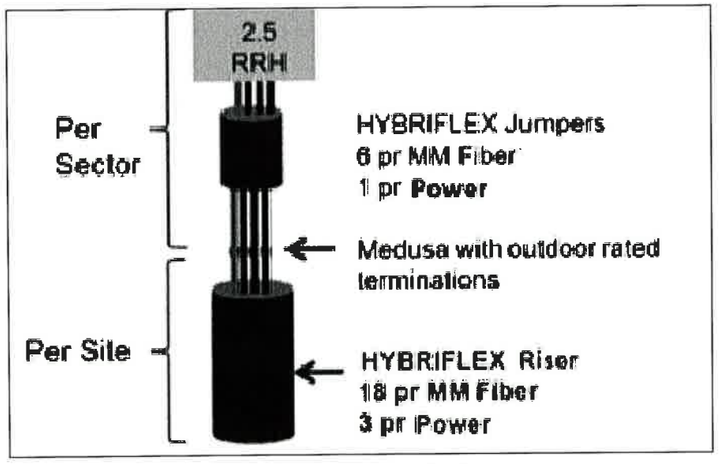
SHEET NUMBER:
A-6



ALU 2.5 ALU SCENARIO 1



RAN WIRING DIAGRAM



RF 2.5 ALU SCENARIO 1

PLUMBING DIAGRAM | NO SCALE | 1

PLANS PREPARED FOR:

Sprint
6580 Sprint Parkway
Overland Park, Kansas 66251

PLANS PREPARED BY:

INFINIGY Design. Build. Deliver.
1033 Watervliet Shaker Rd
Albany, NY 12205
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Fax # (518) 690-0793

JOB NUMBER 340-000

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BOSTON, MA 02116

ENGINEERING LICENSE:

STATE OF CONNECTICUT
JOHN S. STEVENS
No. 24705
LICENSED
PROFESSIONAL ENGINEER

DRAWING NOTICE:

REVISIONS:

DESCRIPTION	DATE	BY	REV
ISSUED FOR CONSTRUCTION	02/21/14	JDV	0

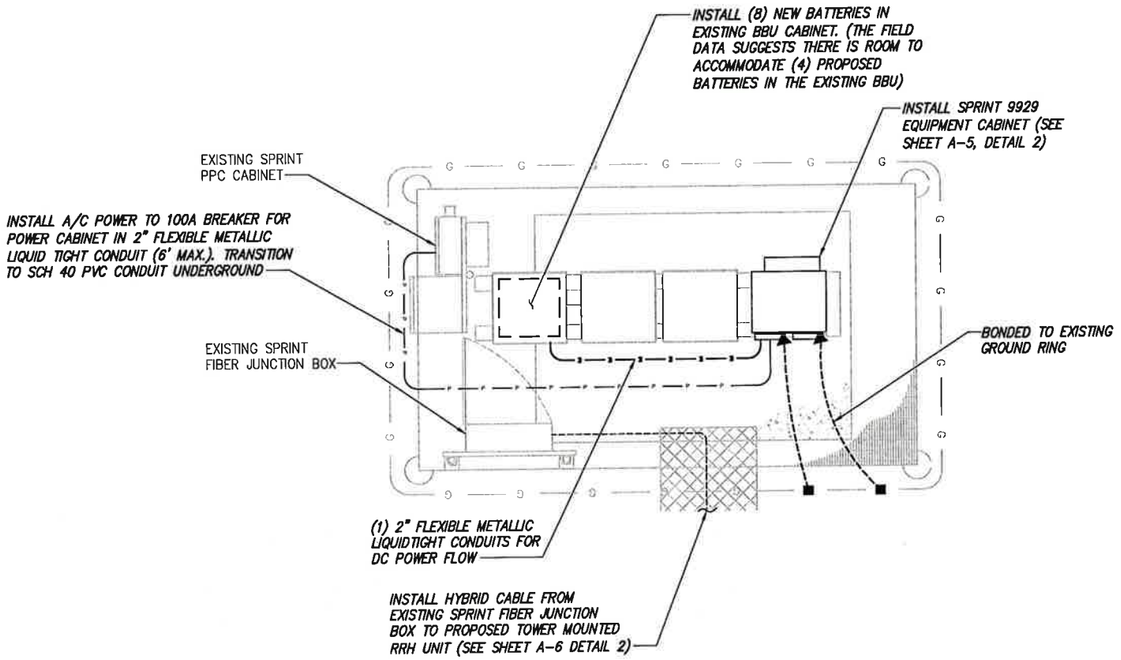
SITE NAME:
ATC TOWER

SITE CASCADE:
CT03XC337

SITE ADDRESS:
168 CATOONA LANE
STAMFORD, CT 06901

SHEET DESCRIPTION:
PLUMBING DIAGRAM

SHEET NUMBER:
A-7

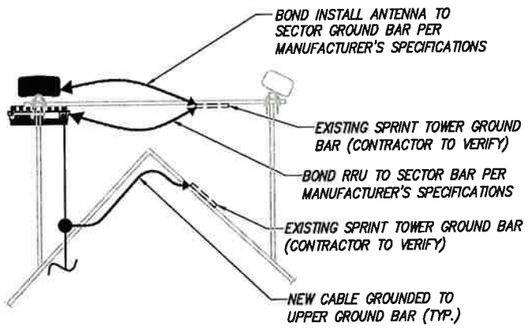


NOTE:
CONTRACTOR IS TO ENSURE THE INSTALLATION INSTRUCTIONS FOR EACH CABINET ARE FOLLOWED AND THAT THE MANUFACTURER'S REQUIREMENTS ARE MET.

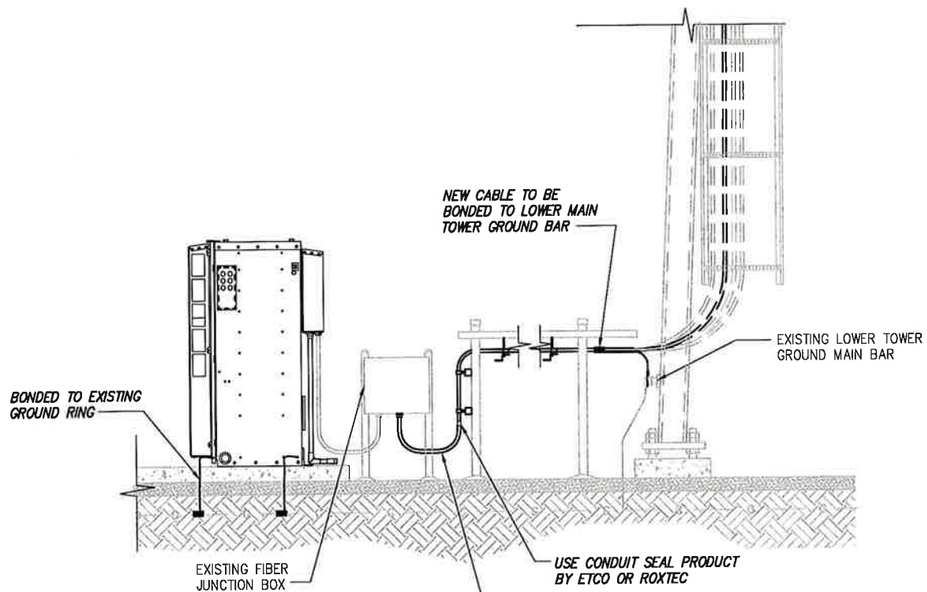
LEGEND:

- EXISTING GROUND RING
- CADWELD CONNECTION (EXOTHERMIC WELD)
- MECHANICAL CONNECTION
- GROUND ROD
- CABLE GROUND KIT

ELECTRICAL AND GROUNDING PLAN | NO SCALE | 1



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

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ENGINEERING LICENSE:

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REVISIONS:

DESCRIPTION	DATE	BY	REV
ISSUED FOR CONSTRUCTION	02/21/14	JDV	0

SITE NAME:
ATC TOWER

SITE CASCADE:
CT03XC337

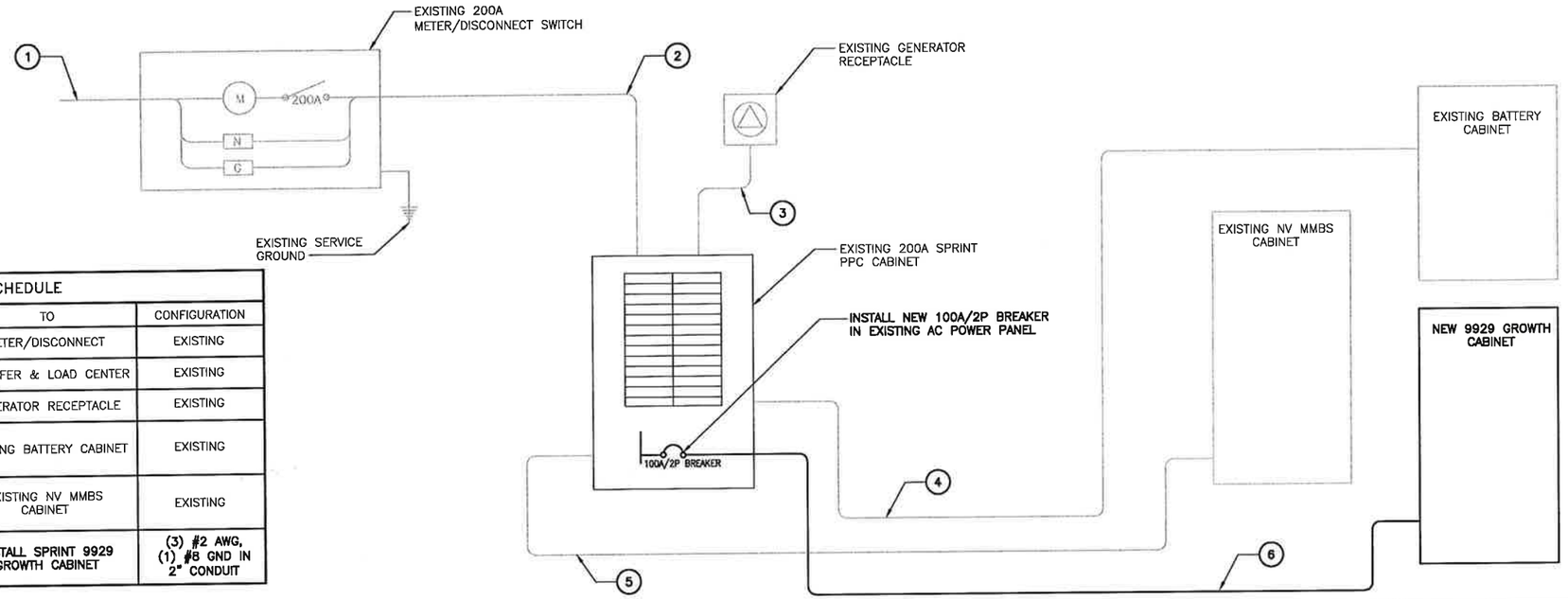
SITE ADDRESS:
168 CATOONA LANE
STAMFORD, CT 06901

SHEET DESCRIPTION:
ELECTRICAL & GROUNDING PLAN

SHEET NUMBER:
E-1

NOTES

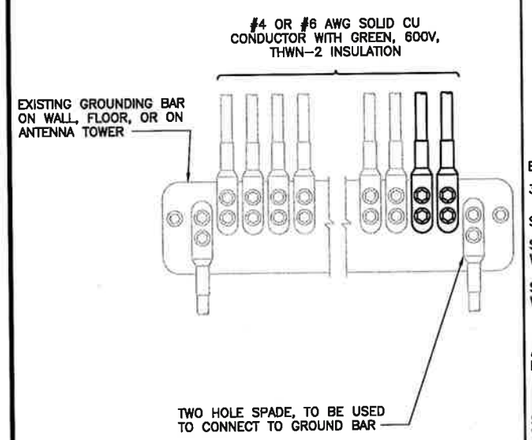
GC SHALL REFERENCE ALL SPECS FOR "CONNECTING THE POWER SUPPLY" OF THE NEW INSTALLATION DOCUMENTS, FOR ALL CONNECTION SPECIFICATIONS.



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 BATTERY CABINET	EXISTING
5	TRANSFER & LOAD CENTER	EXISTING NV MMBS CABINET	EXISTING
6	TRANSFER & LOAD CENTER	INSTALL SPRINT 9929 GROWTH CABINET	(3) #2 AWG, (1) #8 GND IN 2" CONDUIT

ELECTRICAL ONE-LINE DIAGRAM

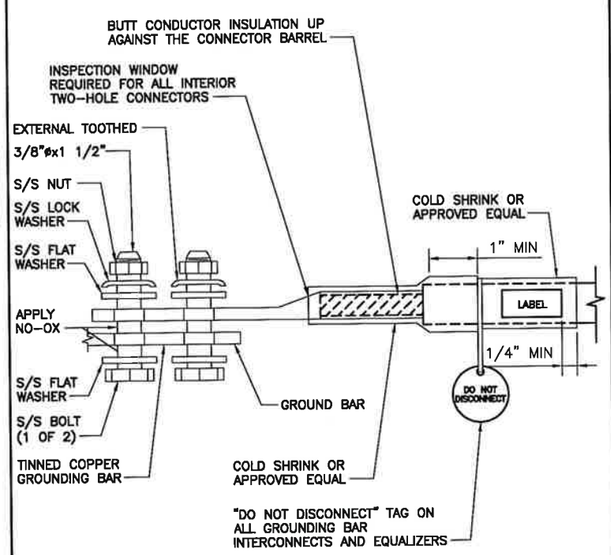
NO SCALE | 1



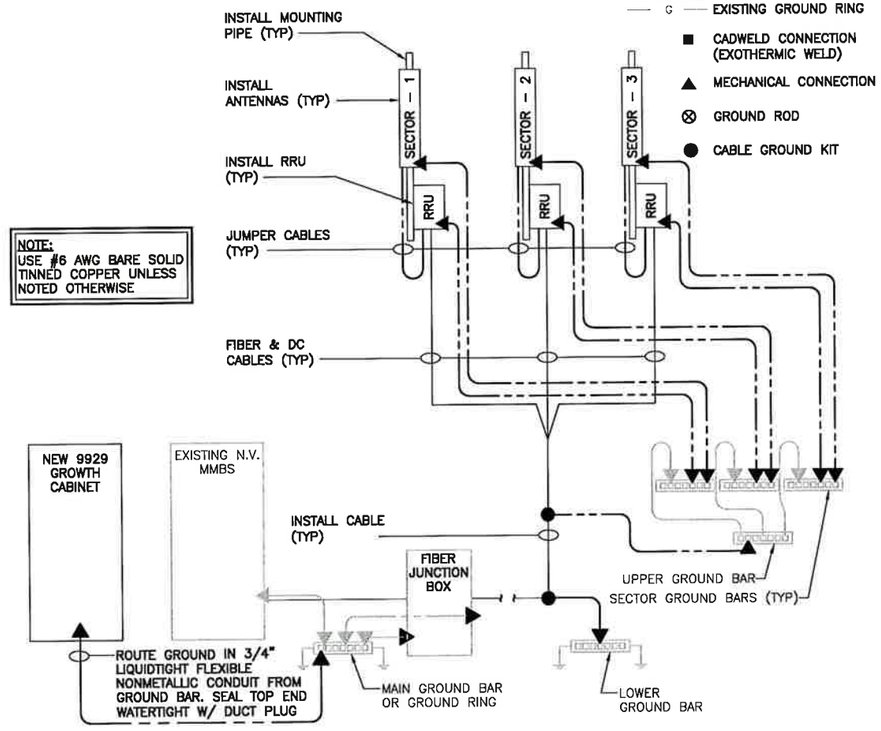
NOTES

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



TWO HOLE LUG | NO SCALE | 3



LEGEND:

- G — EXISTING GROUND RING
- ■ CADWELD CONNECTION (EXOTHERMIC WELD)
- ▲ MECHANICAL CONNECTION
- ⊗ GROUND ROD
- ● CABLE GROUND KIT

NO SCALE | 4

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REVISIONS:

DESCRIPTION	DATE	BY	REV
ISSUED FOR CONSTRUCTION	02/21/14	JDV	0

SITE NAME: ATC TOWER

SITE CASCADE: CT03XC337

SITE ADDRESS: 168 CATOONA LANE STAMFORD, CT 06901

SHEET DESCRIPTION: ELECTRICAL & GROUNDING DETAILS

SHEET NUMBER: E-2