STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL
Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@ct.gov
www.ct.gov/csc

VIA ELECTRONIC MAIL

May 30, 2018

Paul F. Sagristano
Cherundolo Consulting
4 Davis Road West, Suite 5
Old Lyme, CT 06371

RE: **EM-SPRINT-013-180509** - Sprint Spectrum Realty Company, L.P. notice of intent to modify an existing telecommunications facility located at 3 Polly Lane, Bozrah, Connecticut.

Dear Mr. Sagristano:

The Connecticut Siting Council (Council) is in receipt of your correspondence of May 29, 2018 submitted in response to the Council's May 22, 2018 notification of an incomplete request for exempt modification with regard to the above-referenced matter.

The antenna mount structural analysis conclusion section states "the existing antenna support mount has **INADEQUATE** structural capacity to support the proposed loading. The existing antennas support mount has been determined to be stressed to a maximum of 180.0%....." The Council recommends that Cherundolo Consulting provide a passing mount analysis for the proposed equipment that is stamped and signed by a professional engineer duly licensed in the State of Connecticut and an updated Structural Analysis Report accounting for any required antenna mount modifications on or before July 9, 2018. If additional time is needed to gather the requested information, please submit a written request for an extension of time prior to July 9, 2018.

This second notice of incompletion shall have the effect of tolling the Federal Communications Commission (FCC) 60-day timeframe in accordance with Paragraph 217 of the FCC Wireless Infrastructure Report and Order issued on October 21, 2014 (FCC 14-153).

Thank you for your attention to this matter. Should you have any questions, please feel free to contact me at 860-827-2951.

Sincerely,

Melanie A. Bachman
Executive Director

MB/FC

CONNECTICUT SITING COUNCIL
Affirmative Action / Equal Opportunity Employer

Cunliffe, Fred

From: Paul Sagristano <psagristano@lrivassoc.com>
Sent: Tuesday, May 29, 2018 1:30 PM
To: Cunliffe, Fred
Subject: RE: Council Incomplete Letter for EM-SPRINT-013-180509- PollyLn-Bozrah
Attachments: CT33XC570.Bozrah.MA.Rev 0.180529.pdf

Fred: Attached hereto is the Mount Analysis we discussed last week. Please advise if you require anything else as regards the Mount Analysis. Thank you!

Best,

Paul F. Sagristano
917-841-0247

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Engineers Planners Surveyors Landscape Architects Environmental Scientists

MASER CONSULTING
— CONNECTICUT —

Antenna Mount Structural Analysis

FOR

CT33XC570- Bozrah

12 Polly Lane
Bozrah, CT 06334
New London County

Mount Utilization: 180.0%

May 29, 2018

Prepared For

Sprint
201 State Route 17 North
Rutherford, NJ 07070

Prepared By

Maser Consulting Connecticut
331 Newman Springs Road, Suite 203
Red Bank, NJ 07701
T: 732.383.1950

Petros E. Tsoukalas, P.E.
Geographic Discipline Leader
Connecticut License No. 32557

MC Project No. 17924005A

www.maserconsulting.com

Objective:

The objective of this report is to determine the capacity of the existing antenna support mount at the subject facility for the final wireless telecommunications configuration, per the applicable codes and standards.

Introduction:

Maser Consulting Connecticut has performed limited field observations on August 14, 2017 to verify the existing condition of the structure and to locate and quantify the existing wireless appurtenances where possible, from ground level. Maser Consulting Connecticut has reviewed the following documents in completing this report:

- Mount Mapping Report prepared by TEP, dated May 11, 2018
- RFDS 45850 provided by Cherundolo Consulting, dated April 11, 2017.
- Construction Drawings prepared by Maser Consulting Connecticut, dated April 17, 2018

The proposed **SPRINT** equipment is to be supported on existing antenna support mounts constructed of structural steel antenna support pipes supported by pipes at a centerline of approximately 150'-0" above ground level. This report is based only upon this information.

Codes, Standards and Loading:

Maser Consulting Connecticut utilized the following codes and standards:

- 2016 Connecticut State Building Code, Incorporating the 2012 International Building Code
- Structural Standards for Antenna Supporting Structures and Antennas ANSI/TIA-222-G
  - Nominal Wind Speed – 105 mph (3 Second Gust)
  - Ultimate Wind Speed– 135 mph (3 Second Gust)
  - Exposure Category – B
  - Structural Class – II
  - Topographic Category – 1
  - Ice Wind – 50 mph
  - Ice Thickness – ¾"
- Specification for Structural Steel Buildings ANSI/AISC 360-10, American Institute of Steel Construction (AISC)

Loading used in this analysis is found in Appendix A of this report.

Analysis Approach & Assumptions:

The analysis approach used in this structural analysis is based on the premise that if the existing antenna support mount is structurally adequate to support the proposed equipment per the aforementioned codes and standards, or if the increase in the forces in the structure is deemed to be negligible or acceptable, then the proposed equipment can be installed as intended.

The existing antenna mount in all sectors has been modeled in RISA-3D, a comprehensive structural analysis program. The program performs design checks of structures under user specified loads. The user specified loads have been calculated separately based on the requirements of the above referenced codes. The program performs an analysis based on the steel code to determine the adequacy of the members, and produces the reactions at the connection points of the mounts to the existing structure. Additional calculations were then prepared to analyze the mount connection points with the proposed loading conditions.

General Site Design Assumption:

- All engineering services are performed on the basis that the information used is current and correct.
- It is assumed that the telecommunication equipment supports, antenna supports, and existing structure have been designed by a registered licensed professional engineer for the existing loads acting on the structure, as required by all applicable codes, prior to the proposed modifications listed within this report, if any.
- It is assumed that information provided by the client regarding the structure itself, the antenna models, feed lines, and other relevant information is current and correct.
- It is the responsibility of the client to ensure that the information provided to Maser Consulting Connecticut and used in the performance of our engineering services is correct and complete. In the absence of information to the contrary, we assume that the original design, material production, fabrication, and erection of the existing structure was performed in accordance with accepted industry design standards and in accordance with all applicable codes. Further, it is assumed that the existing structure and appurtenances have been properly maintained in accordance with all applicable codes and manufacturer's specifications and no structural defects and/or deterioration to the structural members has occurred.
- It is assumed all other existing appurtenances, antennas, cables, etc. belonging to others have been installed and supported per code and per specifications so as not to damage any existing structural support members, and that any contributing loads from adjacent equipment has been taken into consideration for their design.
- All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. Maser Consulting Connecticut is not responsible for the conclusion, opinions, and recommendations made by others based on the information we supply.

Site Specific Design Parameters:

The following design parameters have been utilized in this report:

- *Structural Steel Angles are constructed of A36 Steel*
- *Structural Steel Pipes are constructed of A53 Grade B Steel*
- *The proposed CommScope DT465B-2XR antenna shall be mounted in position 1 in all sectors on the proposed 6'-0" long 2.0 STD pipe antenna mast connected to the existing pipe mast using pipe to pipe connections*
- *The pipe to pipe connections shall use CommScope MTC33262DHD Dual Bracket*
- *The proposed ALU RRH-2x50-800 shall be mounted on existing pipe mast in position 1 behind the proposed antenna in all sectors*
- *The proposed ALU TD-RRH8x20-25 shall be mounted on the existing L4x4x5/16 standoff arm in all sectors*

Calculations:
The calculations are found in Appendix A of this report

Conclusion:
Maser Consulting Connecticut has determined the existing antenna support mount has **INADEQUATE** structural capacity to support the proposed loading. The existing antenna support mount has been determined to be stressed to a maximum of **180.0%** of its structural capacity with the maximum usage occurring at the horizontal L2.5x2.5x3/16 support angles. Therefore, the proposed **SPRINT** installation **CANNOT** be installed as intended. Reinforcement will be needed for this mount and can be prepared by Maser Consulting Connecticut under a separate contract.

The conclusions reached by Maser Consulting Connecticut in this evaluation are only applicable for the proposed structural members supporting the proposed SPRINT telecommunications installation described herein. Further, no structural qualifications are made or implied by this document for the existing structure.

Maser Consulting Connecticut reserves the right to amend this report if additional information about the existing members is provided. The conclusions reached by Maser Consulting Connecticut in this report are only valid for the appurtenances listed in this report. Any change to the installation will require a revision to this structural analysis.

We appreciate the opportunity to be of service on this project. If you should have any questions or require any additional information, please do not hesitate to call our office.
Sincerely,

Maser Consulting Connecticut

Petros E. Tsoukalas, P.E.
Geographic Discipline Leader

Anthony Bassett
Engineer

MASER
CONSULTING P.A.

APPENDIX A

Client:	Sprint	Computed By:	AB
Site Name:	CT33XC570-Bozrah	Date:	5/29/2018
Project No.	17924005A	Verified By:	PET
Title:	Antenna Mount Design	Page:	1

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Version 4.0

LOADING SUMMARY

Quantity	Manufacturer	Antenna/ Appurtenance	Status	Sector
3	RFS	APXV9ERR18-C-A20	Existing	Alpha, Beta, & Gamma
3	**Commscope**	**DT465B-2XR-V2**	**Proposed**	**Alpha, Beta, & Gamma**
6	ALCATEL-LUCENT	RRH-2x50-800	Existing/Proposed	Alpha, Beta, & Gamma
3	**ALCATEL-LUCENT**	**TD-RRH 8x20**	**Proposed**	**Alpha, Beta, & Gamma**
3	ALCATEL-LUCENT	RRH4x45-1900	Existing	Alpha, Beta, & Gamma

The worst case loading occurs in the Alpha Sector

Quantity	Manufacturer	Antenna/ Appurtenance	Status
1	RFS	APXV9ERR18-C-A20	Existing
1	Commscope	DT465B-2XR-V2	Proposed
2	ALCATEL-LUCENT	RRH-2x50-800	Existing/Proposed
1	ALCATEL-LUCENT	TD-RRH 8x20	Proposed
1	ALCATEL-LUCENT	RRH4x45-1900	Existing

Client:	Sprint	Computed By:	AB
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Title:	Antenna Mount Design	Page:	3

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I. DESIGN INPUTS

Calculations for gravity and lateral loading on equipment and support mounts are determined as per the ANSI/TIA-222-G Code, Addendum 2

Wind Load Inputs Parameters

				Reference	Equation
Antenna Centerline	z	150	ft		
Ultimate Wind Speed	V_U	135	mph		
Nominal Wind Speed (3 sec. Gust):	V	105	mph	Ref. 1, Eqn. 16-33	
Nominal Wind Speed with Ice (3 sec. gust):	V_i	50.0	mph	(Figure a5-2a, p. 233)	
Maintenance Wind Speed:	V_m	30.0	mph		
Service Wind Speed:	V_s	60.0	mph	(Figure a5-2a, p. 233)	
Design Ice Thickness:	t_i	0.75	in	(Figure A1-2a, p. 233)	
Exposure Category:		B		Ref. 3, Section 2.6.5.1	
Structure Class:		II		Ref. 3, Table 2-1	
Gust Effect Factor:	G_h	0.85		Ref. 3, Section 2.6.7	
Wind Directionality Factor:	K_d	0.85		Ref. 3, Table 2-2	
Topographic Category:		1		Ref. 3, Section 2.6.6.2	

Wind Load Coefficients

Importance Factors:

Non-Iced:	I	1		Ref. 3, Table 2-3	
Iced:	I_{ice}	1		(Table 2-3, P. 39)	

Exposure Category Coefficients:

3-s Gust-Speed Power Law Exponent:	α	7.0		Ref. 3, Table 2-4	
Nominal Height of the Atmospheric Boundary Layer:	Z_g	1200	ft	Ref. 3, Table 2-4	
Min. Value for k_z:	Kz_{min}	0.70		Ref. 3, Table 2-4	
Terrain Constant:	K_e	0.90		Ref. 3, Table 2-4	
Velocity Pressure Exposure Coefficient:	K_z	1.110		Ref. 3, Section 2.6.5.2	$=2.01\cdot(z/z_g)^{2/\alpha}$

Topographic Category Coefficients:

Topographic Constant:	K_t	N/A		Ref. 3, Table 2-5	
Height Attenuation Factor:	f	N/A		Ref. 3, Table 2-5	
Height Reduction Factor:	K_h	N/A		Ref. 3, Section 2.6.6.4	$=e^{(f\cdot z/H)}$
Topographic Factor:	K_{zt}	1.00		Ref.3, Section 2.6.6.4	$=[1+(K_e\cdot K_t/K_h)]^2$

Ice Accumulation:

Ice Velocity Pressure Exposure Coefficient:	K_{iz}	1.16			$=(z/33)^{0.10}$
Factored Ice Thickness:	t_{iz}	1.75	in	(Section 2.6.8, p. 16)	$=2.0\cdot t_i\cdot I\cdot K_{iz}\cdot K_{zt}$
Ice Density:	ρ_i	56.00	pcf		

Design Wind Pressures:

Velocity Pressure:	q_z	26.62	psf	Ref. 3, Section 2.6.9.6	$=0.00256\cdot K_z\cdot K_{zt}\cdot K_d\cdot V^2\cdot I$
Velocity Pressure (With Ice):	q_{zi}	6.04	psf	(Section 2.6.9.6, P. 25)	$=.00256\cdot K_z\cdot K_{zt}\cdot K_d\cdot V_i^2\cdot I$
Velocity Pressure (Maintenance):	q_{zm}	2.17	psf	(Section 2.6.9.6, P. 25)	$=.00256\cdot K_z\cdot K_{zt}\cdot K_d\cdot V_m^2\cdot I$
Velocity Pressure (Service):	q_{zs}	8.69	psf	(Section 2.6.9.6, P. 25)	$=.00256\cdot K_z\cdot K_{zt}\cdot K_d\cdot V_i^2\cdot I$

II. CALCULATIONS

- ***Wind Load on Appurtenances***

Dimensions and Force Coefficients

Antenna/ Appurtenance	Non-Iced Condition								Iced Condition							
	Mounting Pipe			Equipment					Mounting Pipe			Equipment				
	Length (in)	Diameter (in)	Force Coefficient C_a	Height (in)	Width (in)	Depth (in)	Force Coefficient $C_{a\,Front}$	$C_{a\,Side}$	Length (in)	Diameter (in)	Force Coefficient C_a	Height (in)	Width (in)	Depth (in)	Force Coefficient $C_{a\,Front}$	$C_{a\,Side}$
APXV9ERR18-C-A20	60.0	2.375	1.200	72.00	11.80	7.90	1.36	1.47	63.5	5.9	0.885	75.49	15.29	11.39	1.31	1.38
DT465B-2XR-V2	72.0	2.375	1.200	71.90	13.80	8.20	1.32	1.46	75.5	5.9	0.930	75.39	17.29	11.69	1.28	1.38
RRH-2x50-800	0.0	0.000	0.000	16.00	13.00	10.00	1.20	1.20	0.0	0.0	0.000	19.49	16.49	13.49	1.20	1.20
TD-RRH 8x20	0.0	0.000	0.000	26.10	18.60	6.70	1.20	1.26	0.0	0.0	0.000	29.59	22.09	10.19	1.20	1.22
RRH4x45-1900	0.0	0.000	0.000	25.00	12.00	12.00	1.20	1.20	0.0	0.0	0.000	28.49	15.49	15.49	1.20	1.20

Antenna/ Appurtenance	# of Brackets	Non-Iced Condition			Iced Condition		
		Wind Force (lbs.)		Gravity (lbs.)	Wind Force (lbs.)		Gravity (lbs.)
		F_N	F_T		F_N	F_T	
APXV9ERR18-C-A20	2	90.8	79.1	**34.8**	26.9	27.1	**106.9**
DT465B-2XR-V2	2	102.9	83.7	**35.9**	29.8	28.9	**119.2**
RRH-2x50-800	1	39.2	30.2	**69.1**	13.7	11.2	**62.8**
TD-RRH 8x20	1	91.5	34.7	**70.0**	27.9	13.1	**113.1**
RRH4x45-1900	1	56.6	56.6	**84.6**	18.9	18.9	**94.7**

** ALL CALCULATED LOADS ARE PER MOUNTING BRACKET. TO GET THE TOTAL EQUIPMENT LOAD, MULTIPLY THE INDIVIDUAL LOADS BY THE NUMBER OF BRACKETS*

- ***Wind Load on Framing Members***

Member Category	Member Shape	Length (in)	Member Surface	Non-Iced Condition			Iced Condition					
				Exposed Wind Height (in)	Force Coefficient C_a	Wind Load (plf)	Exposed Wind Height (in)	Depth (in)	Length (in)	Force Coefficient C_a	Wind Load (plf)	Ice Weight (plf)
Equal Angle	L2.5x2.5	144	Square	2.50	2.00	9.43	5.99	5.99	147.49	1.99	5.09	11.26
Equal Angle	L4x4	108	Square	4.00	2.00	15.08	7.49	7.49	111.49	1.66	5.32	15.78
Pipe	Pipe 2.0	96	Round	2.38	1.20	5.37	5.87	5.87	99.49	1.02	2.56	8.79
Pipe	Pipe 2.0	46.5	Round	2.38	1.08	4.83	5.87	5.87	49.99	0.83	2.09	8.79
Pipe	Pipe 1.5	108	Round	1.90	1.20	4.30	5.39	5.39	111.49	1.10	2.54	7.77
Unequal Angle	L3X2	19	Square	3.00	1.37	7.75	6.49	5.49	22.49	1.24	3.45	11.41
Pipe	Pipe 2.5	48	Round	2.88	1.02	5.50	6.37	6.37	51.49	0.82	2.24	9.85
Pipe	Pipe 2.0	60	Round	2.38	1.20	5.37	5.87	5.87	63.49	0.88	2.22	8.79

BASIC EQUATIONS

ANSI/TIA-222-G Reference

Importance Factor:

$$I := \begin{cases} 1.0 & \text{if } Class = "II" \\ 1.15 & \text{if } Class = "III" \end{cases}$$

Table 2-3, Pg. 39

Force Coefficient:
(Square)

$$C_{f\_square}(h,w) := \begin{cases} 1.2 & \text{if } \frac{h}{w} \le 2.5 \\ \left[1.2 + \frac{0.2}{4.5}\cdot\left(\frac{h}{w} - 2.5\right)\right] & \text{if } \frac{h}{w} > 2.5 \wedge \frac{h}{w} \le 7 \\ \left[1.4 + \frac{0.6}{18}\cdot\left(\frac{h}{w} - 7\right)\right] & \text{if } \frac{h}{w} > 7 \wedge \frac{h}{w} \le 25 \\ 2.0 & \text{otherwise} \end{cases}$$

'able 2-8, P. 42

Force Coefficient:
(Round)

$$C_{f\_round}(h,w) := \begin{cases} 0.7 & \text{if } \frac{h}{w} \le 2.5 \\ \left[0.7 + \frac{0.1}{4.5}\cdot\left(\frac{h}{w} - 2.5\right)\right] & \text{if } \frac{h}{w} > 2.5 \wedge \frac{h}{w} \le 7 \\ \left[0.8 + \frac{0.4}{18}\cdot\left(\frac{h}{w} - 7\right)\right] & \text{if } \frac{h}{w} > 7 \wedge \frac{h}{w} \le 25 \\ 1.2 & \text{otherwise} \end{cases}$$

Table 2-8, P. 42

Terrain Exposure Constants:

Table 2-4, P. 40

$$\alpha := \begin{cases} 7.0 & \text{if } Exp = "B" \\ 9.5 & \text{if } Exp = "C" \\ 11.5 & \text{if } Exp = "D" \end{cases} \quad Z_g := \begin{cases} 1200ft & \text{if } Exp = "B" \\ 900ft & \text{if } Exp = "C" \\ 700ft & \text{if } Exp = "D" \end{cases} \quad K_{zmin} := \begin{cases} 0.70 & \text{if } Exp = "B" \\ 0.85 & \text{if } Exp = "C" \\ 1.03 & \text{if } Exp = "D" \end{cases}$$

BASIC EQUATIONS

ANSI/TIA-222-G Reference

Velocity Pressure Coefficient:

$$Kz(z) := \left| \begin{array}{l} K_z \leftarrow \max\left[2.01\cdot\left(\frac{z}{Z_g}\right)^{\frac{2}{\alpha}}, K_{zmin}\right] \\ K_z \leftarrow \min(K_z, 2.01) \end{array} \right.$$

$K_z := Kz(z)$ — Section 2.6.5, P. 13

$$Kzt(z) := K_{zt} \leftarrow \left| \begin{array}{l} 1.0 \text{ if } Topo = "1" \\ \text{otherwise} \\ \quad \left| \begin{array}{l} K_e \leftarrow \left| \begin{array}{l} 0.90 \text{ if } Exp = "B" \\ 1.00 \text{ if } Exp = "C" \\ 1.10 \text{ if } Exp = "D" \end{array} \right. \\ K_t \leftarrow \left| \begin{array}{l} 0.43 \text{ if } Topo = "2" \\ 0.53 \text{ if } Topo = "3" \\ 0.72 \text{ if } Topo = "4" \end{array} \right. \\ f \leftarrow \left| \begin{array}{l} 1.25 \text{ if } Topo = "2" \\ 2.00 \text{ if } Topo = "3" \\ 1.50 \text{ if } Topo = "4" \end{array} \right. \\ K_h \leftarrow e^{\left(\frac{f\cdot z}{CH}\right)} \\ \left(1 + \frac{K_e\cdot K_t}{K_h}\right)^2 \end{array} \right. \end{array} \right.$$

- Section 2.6.6.4, p. 14
- K_e: Table 2-4 p. 40
- K_t: Table 2-5 p. 40
- f: Table 2-5 p. 40
- K_h: Section 2.6.6.4, P. 14
- $\left(1 + \frac{K_e\cdot K_t}{K_h}\right)^2$: Section 2.6.6.4, P. 14

$K_{zt} := Kzt(z)$

Velocity Pressure: — Section 2.6.9.6, P. 25

$$q_z := 0.00256\cdot K_z\cdot K_{zt}\cdot K_d\cdot V^2\cdot I\cdot psf$$

LOAD EQUATIONS

WIND LOAD

Area (Normal):	$AN_{area} = H_{ant} \cdot Want$
Area (Side):	$AT_{area} = H_{ant} \cdot Dant$
Force Coefficient (Normal):	$C_{fn} = C_{fsquare}(H_{ant}, Want)$
Force Coefficient (Side):	$C_{fs} = C_{fsquare}(H_{ant}, Dant)$
Pipe Area (Normal):	$AN_p = \max[(L_p - H_{ant}) * Dp , 0]$
Pipe Area (Side):	$AT_p = L_p \cdot Dp$
Force Coefficient (Normal):	$C_{fp} = C_{fround}(Lp, Dp)$
Normal Effective Projected Area:	$E_{pan} = (C_{fn} \cdot ANarea) + (Cfp \cdot ANp)$
Side Effective Projected Area:	$E_{pat} = (C_{fs} \cdot ATarea) + (Cfp \cdot ATp)$
Effective Projected Area:	$EPA = max(E_{pan}, Epat)$
Wind Force:	$F_{ant} = q_z \cdot Gh \cdot EPA$

ICE DEAD LOAD

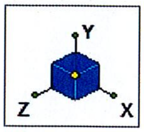
Largest Out-to-Out Dimension:	$D_{ant} = \sqrt{D_{ant}^2 + W_{ant}^2}$
Cross Sectional Area of Ice:	$A_{ice\_ant} = \pi \cdot tiz \cdot (Dant + tiz)$
Total Ice Dead Load:	$DL_{ice\_ant} = \rho_i \cdot (Aice_{\_ant} \cdot Hant)$

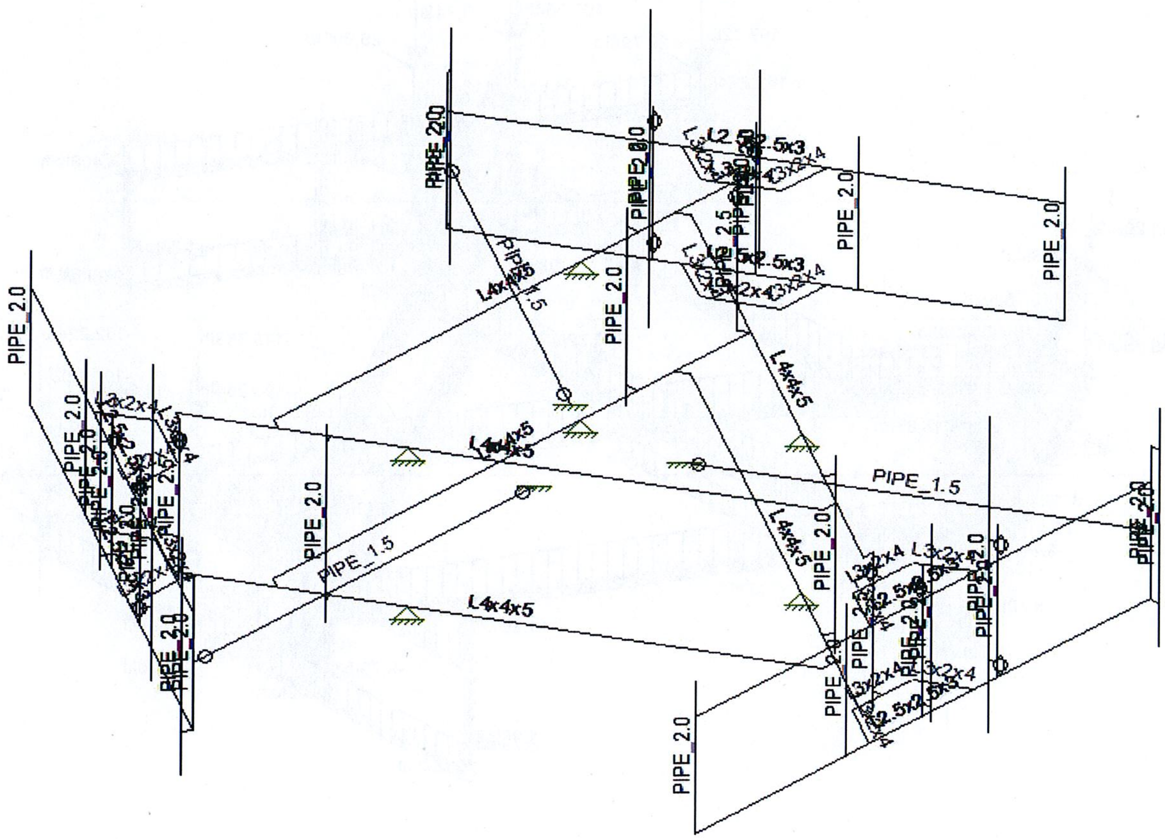
ICE WIND LOAD

Dimensions:	$H_{i_{ant}} = H_{ant} + 2tiz$
	$W_{i_{ant}} = W_{ant} + 2tiz$
	$D_{i_{ant}} = D_{ant} + 2tiz$
Area (Normal):	$AIN_{area} = H_{i\_ant} \cdot W_{i\_ant}$
Area (Side):	$AIT_{area} = H_{i\_ant} \cdot D_{i\_ant}$
Force Coefficient (Normal):	$Ci_{fn} = C_{fsquare}(H_{i\_ant}, W_{i\_ant})$
Force Coefficient (Side):	$Ci_{fs} = C_{fsquare}(H_{i\_ant}, D_{i\_ant})$
Pipe Area (Normal):	$AN_p = \max[(L_{ip} - H_{i\_ant}) * D_{ip} , 0]$
Pipe Area (Side):	$AT_p = L_{ip} \cdot Dip$
Force Coefficient (Normal):	$C_{fp} = C_{fround}(L_{ip}, D_{ip})$
Normal Effective Projected Area:	$E_{pain} = (Ci_{fn} \cdot ANarea) + (Cfp \cdot ANp)$
Side Effective Projected Area:	$E_{pait} = (Ci_{fs} \cdot ATarea) + (Cfp \cdot ATp)$
Effective Projected Area:	$EPA_i = max(E_{pain}, Epait)$
Wind Force:	$F_{i\_ant} = q_z \cdot Gh \cdot EPAi$

III. ATTACHMENTS

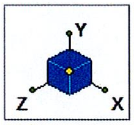
RISA MODEL

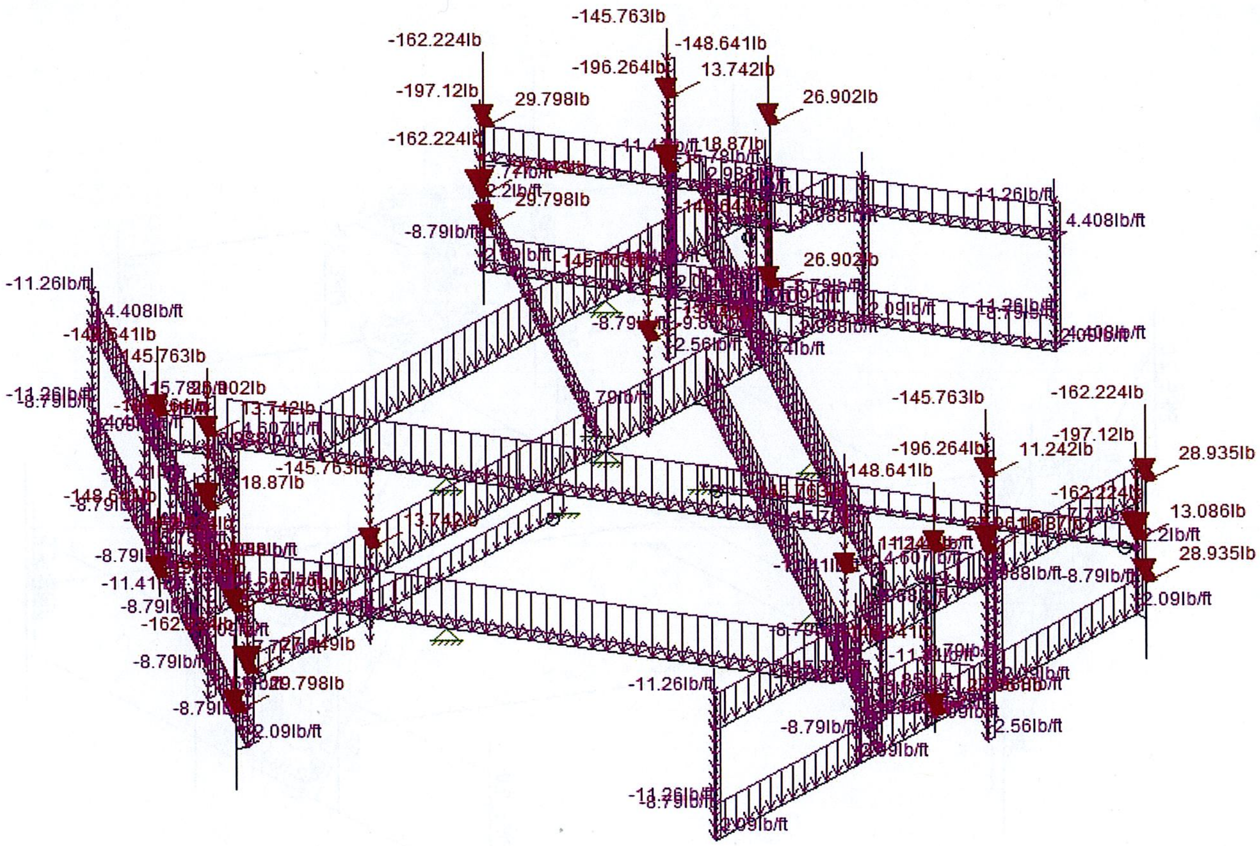




Client:	Sprint	Computed By:	AB
Site Name:	CT33XC570-Bozrah	Date:	5/29/2018
Project No.	17924005A	Verified By:	PET
Title:	Antenna Mount Design	Page:	10

RISA WORST CASE LOADING





Loads: LC 24, 1.2D+1.0ICE+1.0W10ICE
Envelope Only Solution

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Client:	Sprint	Computed By:	AB
Site Name:	CT33XC570-Bozrah	Date:	5/29/2018
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RISA CODE CHECK