

KENNETH C. BALDWIN

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Also admitted in Massachusetts
and New York

December 7, 2021

Via Electronic Mail

Melanie A. Bachman, Esq.
Executive Director/Staff Attorney
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: **Notice of Exempt Modification – Facility Modification
705 West Johnson Avenue, Cheshire, Connecticut**

Dear Attorney Bachman:

Cellco Partnership d/b/a Verizon Wireless (“Cellco”) currently maintains an existing wireless telecommunications facility at the above-referenced property address (the “Property”). The facility consists of antennas and remote radio heads attached to the existing tower and associated equipment on the ground adjacent to the tower. The tower was approved by the Town of Cheshire in November of 2004. Cellco’s use of the tower was approved by the Siting Council (“Council”) in September of 2007 (Petition No. 827). A copy of the Town’s approval and the Petition No. 827 Staff Report are included in Attachment 1.

Cellco now intends to modify its facility by replacing three (3) existing antennas with three (3) new Samsung MT6407-77A antennas on its existing antenna platform. A set of project plans showing Cellco’s proposed facility modifications and specifications for Cellco’s new antennas are included in Attachment 2.

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to the Town’s Chief Elected Official and Land Use Officer.

Melanie A. Bachman, Esq.
December 7, 2021
Page 2

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

1. The proposed modifications will not result in an increase in the height of the existing tower. The new antennas will be installed on Cellco's existing antenna platform.
2. The proposed modifications will not involve any change to ground-mounted equipment and, therefore, will not require the extension of the site boundary.
3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
4. The installation of Cellco's new antennas will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. A cumulative General Power Density table for Cellco's modified facility is included in Attachment 3. The modified facility will be capable of providing Cellco's 5G wireless service.
5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
6. According to the attached Structural Analysis ("SA") and Mount Analysis ("MA"), the existing tower, tower foundation and antenna mounts, with certain modifications, can support Cellco's proposed modifications. Copies of the SA and MA are included in Attachment 4.

A copy of the parcel map and Property owner information is included in Attachment 5. A Certificate of Mailing verifying that this filing was sent to municipal officials and the property owner is included in Attachment 6.

For the foregoing reasons, Cellco respectfully submits that the proposed modifications to the above-referenced telecommunications facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Melanie A. Bachman, Esq.
December 7, 2021
Page 3

Sincerely,

A handwritten signature in black ink, appearing to read "Kenneth C. Baldwin". The signature is fluid and cursive, with the first name "Kenneth" being more prominent and the last name "Baldwin" following in a similar style.

Kenneth C. Baldwin

Enclosures

Copy to:

Sean M. Kimball, Cheshire Town Manager
William Voelker, Cheshire Town Planner
Connecticut Light and Power Company, Property Owner
Karla Hanna, Verizon Wireless

ATTACHMENT 1

Building 705 West Johnson Avenue Date Nov 5, 2004

Plumbing
Heating/AC
Electric 18454
Oil Tank
Water
Septic
Sewer

BUILDING PERMIT

24212

Estimated Cost \$ 107,000⁰⁰
Fee \$ 1177⁰⁰
Zoning Fee \$ —
Total Cost \$ 1177⁰⁰

TO BUILDING DEPARTMENT, TOWN OF CHESHIRE, CONN.

The undersigned, hereby applies for a permit to do work according to the following specifications:

No. 705 W. Johnson Ave Lot No. Zone

Owner of building CT Light & Power Co. Address 1075 Selden St, Berlin

Builder Construction Services of Branford Address 63-3 No. Branford Rd, Branford

Architect URS Address Rocky Hill

Size Main Bldg.: Ft. Front Overall 11'-6" Ft. Deep Overall 20' Net Area 480⁰ Garages

No. of Families No. of Stories 1 Construction Type 1 No. of rooms: 1st 2nd 3rd

Purpose of this Permit To Construct a replacement lattice style Cell

Use group U Tower, 100' Tall and install 2 Precast Concrete
Equipment Buildings 11'-6" x 20' Each

MCO# 900576

Per Plans

Dist. from lot line E., W., S., N., Dist. nearest bldg. ft.
 Height of stories—cellar 1st 10' 2nd 3rd 4th 5th
 Found. depth below grade Above grade Material for footing Conc.
 Size footing Material for found. Found. thickness
 Roof Outside studs Dist. centers Size sill Size of plate
 No. of Stairways Piers Dist. apart No. of rows Size of pier found.
 Materials for Exterior Walls Interior Walls Ceiling
 Size of girders
 Species of lumber—Floor joists Framing Sheath. R. Fl. Fin. Fl.
 Floor joists, size: 1st 2nd 3rd stories. Dist. on center
 Longest span of floor joist: 1st 2nd 3rd If not wood joist const. what type of floor?
 Size of studs carrying partitions Size of Roof Rafters Longest span on center
 Chimney Size of Flue How many? Tile stark

I hereby agree to conform to all the requirements of the Laws of the State of Connecticut and the Ordinances of the Town of Cheshire, and to notify the Building Inspector of any alteration in the plans or specifications of the Building for which this permit is asked. And agree that this building is to be located the proper distance from all street lines, side yard lines and required distances from all other zones and is located in a zone in which this building and its use is allowed.

Signed

Timothy M. Burlo ^{CINCINNATI} ^{WIRELESS}

Address

500 Enterprise Dr Ste 3A ^{Rocky Hill} ^{CT 06067}

Telephone

860 513 7218

Town of Cheshire
Application for Building Permit

The undersigned hereby applies for permission to construct Wireless Tower Facility
The same to be in all respects in accordance with the laws and building regulations of the
State of Connecticut and the Town of Cheshire and as set forth in the accompanying
drawings and specifications in so far as the same shall be found not to conflict with the
aforesaid State and Town laws and building regulations.

PERMIT NO. 24212 DATE 10-15-2004 ESTIMATED COST \$107,000
LOCATION 705 WEST JOHNSON AVENUE LOT NO. 16 - MAP 2
Owner of Land CT LIGHT + POWER Address 107 SELDEN ST BERLIN, CT 06037
Builder CONSTRUCTION SERVICES Address 633 NORTH BRANFORD RD, BRANFORD, CT 06405
Architect URS - DOUG ROBERTS Address 715 BROOK ST. BLDG 5, ROCKY HILL, CT 06067
Use of Building EQUIPMENT YARD Zone I 2 Lot Area 19.96 Acres

Remarks or Description: Construction of new, replacement self supporting lattice
wireless communications tower with antennas, coaxial cables and equipment
shelters.

Dimensions of Building: Front Overall 11' 6" Side Overall 20'

Dimensions of Garage: NA Attached NA Detached NA

Net Area: 1st Floor 230 # 2nd Floor NA Total 230 sq feet each

Type of Construction pre-cast concrete for shelters, steel for tower

Material of Footing NA Depth NA Size NA

Material of Foundation concrete Thickness 4' Above Grade 6"

Height of Stories: Basement NA 1st 10' 2nd NA

Type of Heat NA No. of Chimneys NA Type NA

Size of Flue NA How Many NA Size of Col. Footings NA

No. of Columns NA Distance Apart NA Rows NA

Size of Girders NA Longest Span NA Size of Sill NA

Floor Joists: 1st NA 2nd NA Ceiling Joists NA on center NA

Span of Joists: 1st NA 2nd NA Span of Rafters NA

Size of Rafters NA Plyscore NA Roofing NA

Species of Lumber NA

No. of Staircases NA Width NA Headroom NA

Siding for Exterior Walls NA Interior Walls NA

Sanitary Sewer NA Septic NA Water NA

The granting of a permit for the proposed work shall not be assumed or construed any
right or permission to do anything contrary to the laws and regulations aforesaid, under
any circumstances whatsoever.

See attached authorization

Signature of Owner
Mike Green - CL+P

Address
860 665-6926

Phone No.

Timothy M. Bunk - Cingular
WIRELESS

Signature of Applicant
500 Enterprise Drive Suite 3A

Address
Rocky Hill, CT 06067
860 513 7218

Phone No.

CT. Registration #

No 24212

TOWN OF CHESHIRE, CONN.

Total Estimated Cost \$107,000.00

BUILDING PERMIT

Fee \$ 1,177.00

Nov. 5, 2004

Permission is hereby granted to Cingular Wireless

to erect a replace cell tower

Address: 705 WEST JOHNSON AVENUE

as follows:—Size 11'6" ft. long, 20 ft. wide, stories high;

supported on walls to be

roof covered with

E. feet; W. feet; S. feet; N. feet.

Owner CL & P

Footings forms must be inspected before pouring of concrete.

All sewage systems, rough electrical and rough plumbing must be inspected before covered.

Certificate of Occupancy must be obtained before building is occupied.

BUILDING DEPARTMENT, TOWN OF CHESHIRE, CONN.

Ralph E. H.

Building Inspector

Permission must be obtained from the Office of the Town Engineer before Building Material can be placed in the highway. Surface and roof water must not be connected with the sewer.

12-28-04 Footing OK KWM

1-4-05 Chk Progress OK KWM

6-20-05 Final OK KWM

Petition No. 827
Cellco partnership d/b/a Verizon Wireless
705 West Johnson Avenue, Cheshire, Connecticut
Staff Report
September 25, 2007

On July 27, 2007, the Connecticut Siting Council (Council) received a petition from Cellco partnership d/b/a Verizon Wireless (Verizon) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the extension of an existing telecommunications tower at 705 West Johnson Avenue, Cheshire, Connecticut. The petition was field reviewed by Council member Edward Wilensky and Council staff member Robert Mercier on August 20, 2007.

Verizon proposes to install a 40-foot extension on an existing 100-foot self-supporting lattice tower owned by Northeast Utilities (NU). The existing tower was originally a 100-foot light duty lattice tower located adjacent to an existing maintenance building at the NU complex on the property. On August 12, 2004, the Council approved an Exempt Modification to rebuild and relocate the tower approximately 100 feet to the southeast, near the south property line and adjacent to the limit of development on the parcel.

The tower currently supports Cingular antennas at the 98-foot level, a dish antenna at the 78-foot level, and a whip antenna at the 98-foot level that extends to a height of 110 feet. A fenced compound is located at the base of the tower. The existing tower and foundation were designed to support the extension and proposed antenna loading.

Verizon would install the 40-foot extension and place 12 antennas on an antenna frame at the 138-foot level of the tower. The height of the tower with antennas would be 142 feet above ground level. Verizon would install a 12-foot by 30-foot equipment shelter within the existing compound.

The current tower radius extends onto the abutting property to the south (Erikson Metals Corporation [EMC]) by approximately 15 feet. The tower radius of the 140-foot tower would extend onto EMC property by 55 feet but would not include the existing EMC building on the property. The EMC building is approximately 182 feet from the tower.

Verizon would provide both 850 MHz and 1900 MHz services from the site. Currently, Cellco has gaps in cellular coverage along I-84 and gaps in PCS coverage along I-84, I-691, and Route 322. The proposed extension would provide seamless coverage on I-84 and improve PCS coverage on the aforementioned routes. Gaps in PCS coverage would remain on I-84 and Route 322 west of the site. The site would provide 9.6 square miles of cellular coverage and 3.8 square miles of PCS coverage. Lowering the height of the tower to 130 feet would cause a <0.1 mile gap on I-84 west of the site and reduce the cellular and PCS coverage footprint to 7.4 square miles and 3.0 square miles, respectively.

The property is in a commercial/industrial area of Cheshire. I-84 is a quarter-mile northwest of the site. The extended tower would be visible from the surrounding commercial/ industrial area and a residential area 0.4 miles northwest of the site, beyond I-84. This residential area, along Upton Place, has no or limited visibility of the existing tower, depending on the vantage point.

EMC is opposed to the extension, stating the existing tower and compound is already a visual detriment to its property.

ATTACHMENT 2



WIRELESS COMMUNICATIONS FACILITY

SITE NAME:
CHESHIRE NORTH 2 CT

EVERSOURCE TOWER
705 W. JOHNSON AVE.
CHESHIRE, CT 06410

ANTENNA MODIFICATION

PROJECT SUMMARY

SITE NAME:	CHESHIRE NORTH 2 CT
SITE ADDRESS:	705 W. JOHNSON AVE. CHESHIRE, CT 06410
PROPERTY OWNER:	CONN LIGHT & POWER CO. P.O. BOX 270 HARTFORD, CT 06141
TOWER OWNER/MGMT:	EVERSOURCE
PARCEL ID:	2-16
COORDINATES:	41° 33' 21.0708" N 72° 55' 01.8804" W
VERIZON CONSTRUCTION:	WALTER CHARCZYNSKI (860) 306-1806
VERIZON REAL ESTATE:	ALEX TYURIN (860) 550-3195

AERIAL MAP



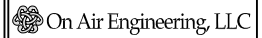
SHEET INDEX

DE-1	TITLE SHEET
DE-2	COMPOUND PLAN & ELEVATION
DE-3	ANTENNA PLANS & ELEVATION
DE-4	RF PLUMBING DIAGRAM & B.O.M.
DE-5	GENERAL CONSTRUCTION NOTES



WIRELESS COMMUNICATIONS FACILITY

20 ALEXANDER DRIVE
WALLINGFORD, CT 06492



88 Foundry Pond Road
Cold Spring, NY 10516
201-456-4624
onair@optonline.net

LICENSURE



DAVID WEINPAHL, P.E.
CT LIC NO. 22144

SUBMITTALS

0	01.28.21	REVIEW
1	04.15.21	PERMITTING/CONSTRUCTION
2	10.04.21	REVISED PER NEW RFDS

NO. DATE DESCRIPTION

DRAWN BY:	MF
CHECKED BY:	DW

PROJECT NAME:

ANTMO
MT6407
DESIGN EXHIBITS

SITE NAME:

CHESHIRE NORTH 2 CT

SITE ADDRESS:

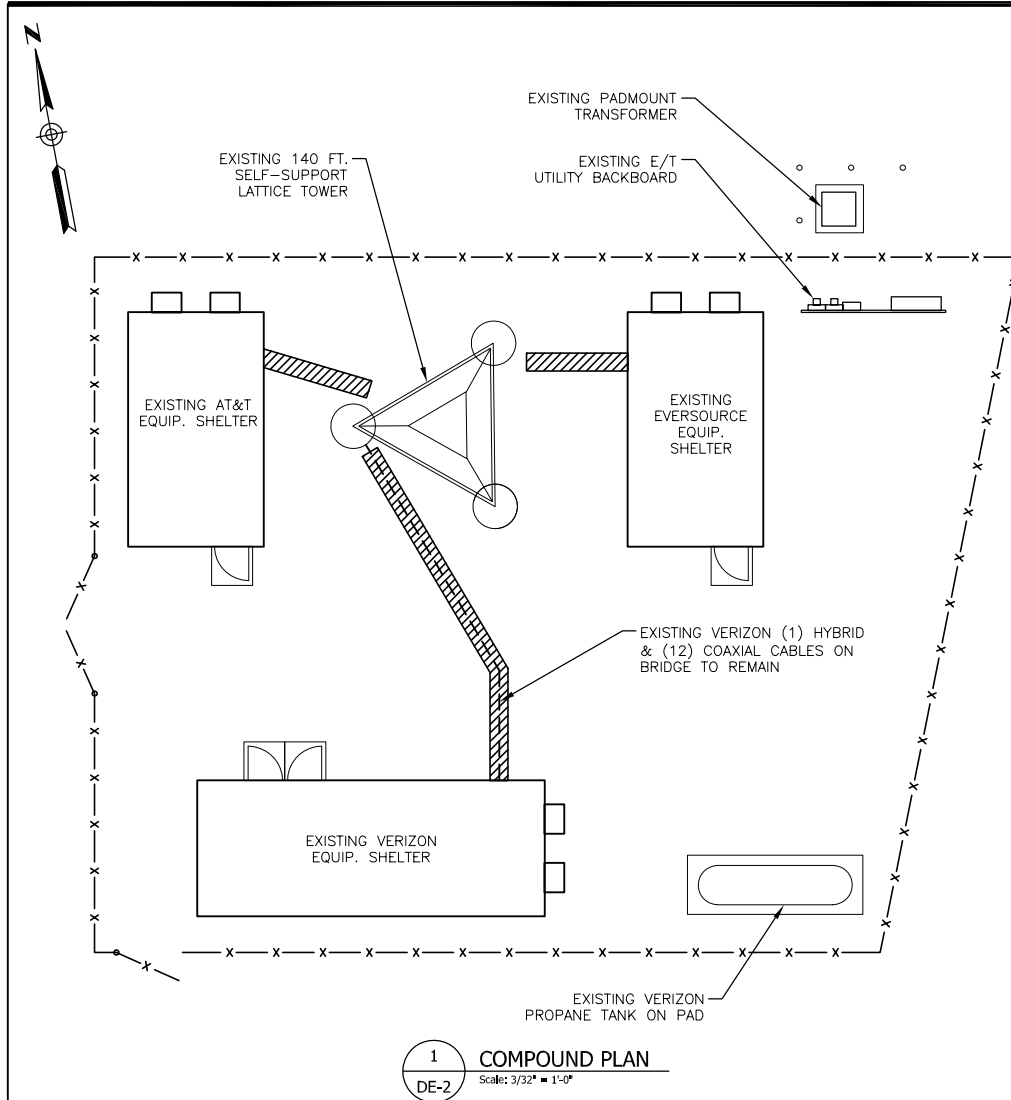
EVERSOURCE TOWER
705 W. JOHNSON AVE.
CHESHIRE, CT 06410

SHEET TITLE:

TITLE SHEET

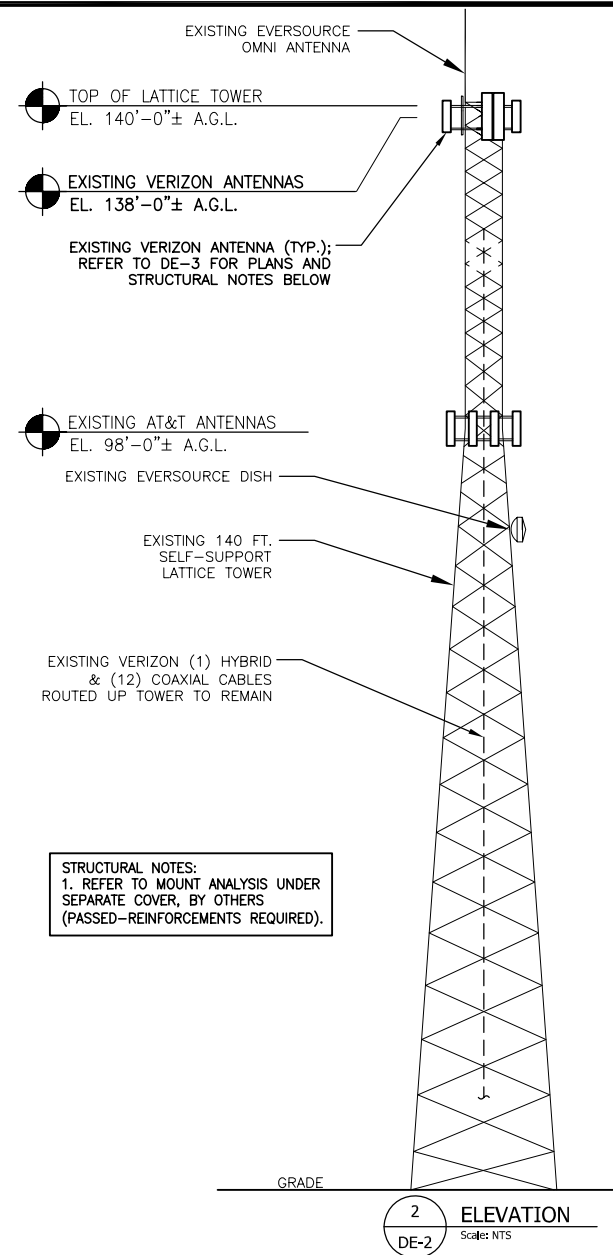
SHEET NUMBER:

DE-1



NOTES:

1. SITE LAYOUT IS COMPILED FROM EXISTING DRAWINGS ON FILE WITH THE CT SITING COUNCIL AND A LIMITED DESIGN VISIT ON 12-09-20 FOR A PROPOSED VERIZON ANTENNA MODIFICATION.
2. PLANS ARE DIAGRAMMATIC ONLY AND NOT TO BE SCALED.
3. REFER TO STRUCTURAL TOWER AND MOUNT ANALYSIS REPORTS, BY OTHERS UNDER SEPARATE COVER, FOR ANY REQUIRED TOWER & MOUNT REINFORCEMENTS, WHICH MUST BE PERFORMED PRIOR TO ANY OTHER VERIZON ANTENNA MODIFICATIONS.



WIRELESS COMMUNICATIONS FACILITY

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CHECKED BY:	DW	

PROJECT NAME:

**ANTMO
MT6407
DESIGN EXHIBITS**

SITE NAME:

CHESHIRE NORTH 2 CT

SITE ADDRESS:

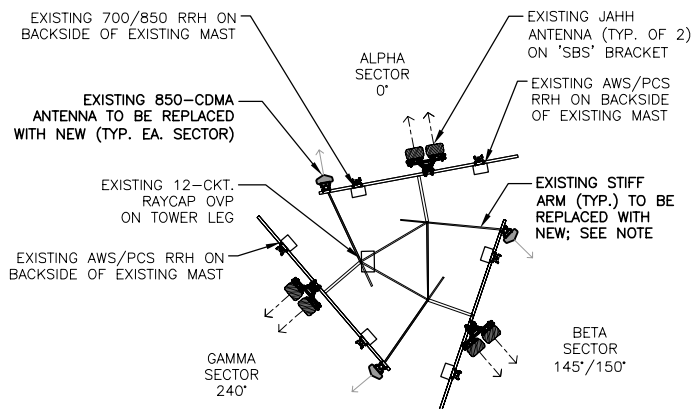
**EVERSOURCE TOWER
705 W. JOHNSON AVE.
CHESHIRE, CT 06410**

SHEET TITLE:

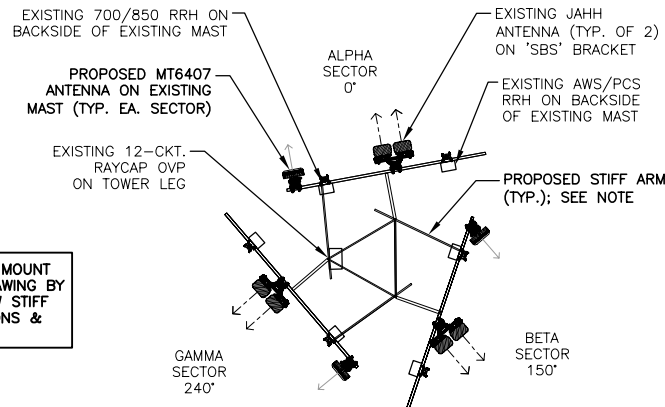
**COMPOUND PLAN
& ELEVATION**

SHEET NUMBER:

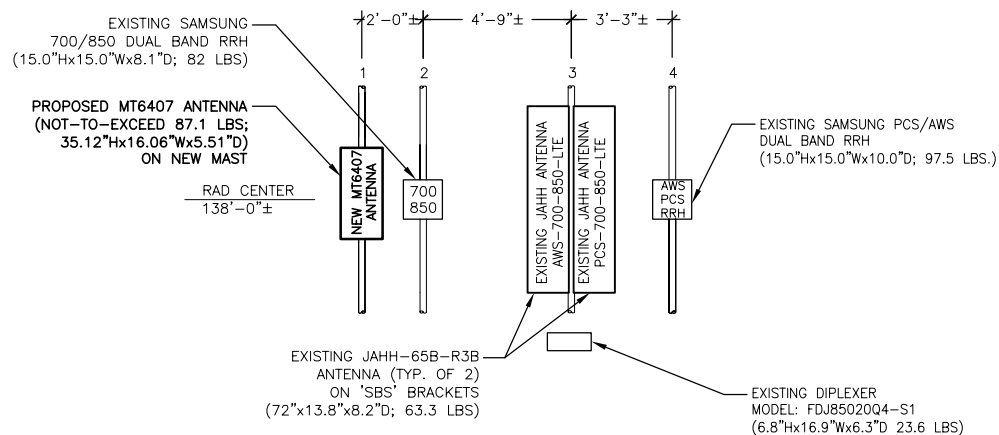
DE-2



1 ANTENNA PLAN @ 138 FT. - EXISTING
DE-3 Scale: 1/8" = 1'-0"



2 ANTENNA PLAN @ 138 FT. - PROPOSED
DE-3 Scale: 1/8" = 1'-0"

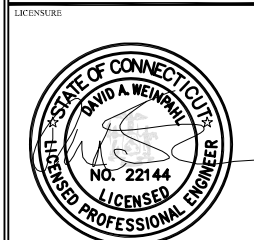


(VIEWED FROM BEHIND SECTOR)
3 ANTENNA ELEVATION (TYP.) - PROPOSED
DE-3 Scale: 1/4" = 1'-0"

verizon
WIRELESS COMMUNICATIONS FACILITY

20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

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PROJECT NAME:
**ANTMO
MT6407
DESIGN EXHIBITS**

SITE NAME:
CHESHIRE NORTH 2 CT

SITE ADDRESS:
**EVERSOURCE TOWER
705 W. JOHNSON AVE.
CHESHIRE, CT 06410**

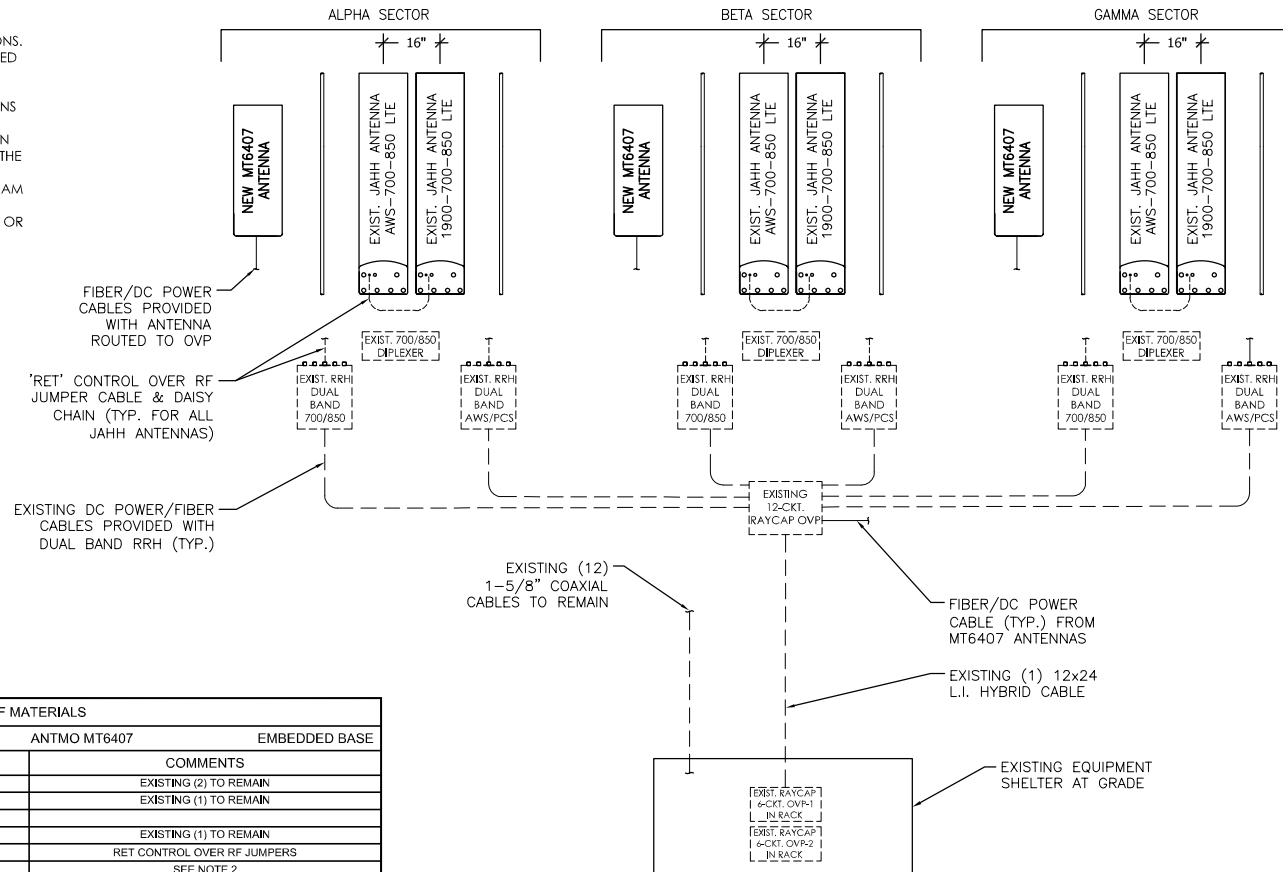
SHEET TITLE:
**ANTENNA PLANS
& ELEVATION**

SHEET NUMBER:
DE-3

GENERAL NOTES:

1. CONTRACTOR SHALL REFER TO THE LATEST VERIZON WIRELESS RFDS WHICH MAY INCLUDE ANTENNA SECTOR AZIMUTHS/ANTENNA CHANGES, ETC. THAT ARE REQUIRED AS PART OF THE PROJECT.
2. CONTRACTOR SHALL SECURE ALL CONTROL CABLES IN ACCORDANCE WITH INDUSTRY STANDARDS AND MANUFACTURERS INSTRUCTIONS. EXTERIOR CABLES MAY BE TAPED OR TIE-WRAPPED TO EXISTING SUPPORTS EVERY 4 FT. MAX. FOR HORIZONTAL RUNS. CONTRACTOR MAY USE HOISTING GRIPS AT TOP OF VERTICAL CABLE RUNS WHEN REQUIRED.
3. ALL CABLES SHALL BE ROUTED AND SECURED ON STRUCTURAL MEMBERS ONLY - DO NOT "LOOP" THE CABLES IN MID-AIR BETWEEN ANTENNAS
4. REFER TO RFDS FOR DETAILED PLUMBING DIAGRAM SHOWING ALL JUMPER AND OTHER CABLEING CONNECTIONS AT ANTENNAS, RRH's, DIPLEXERS OR OTHER DEVICES.

NOTE: ALL ANTENNAS VIEWED FROM REAR

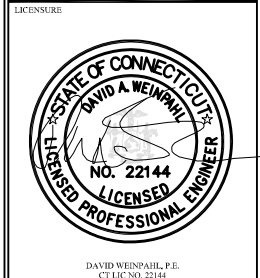


BILL OF MATERIALS			
SITE NAME: CHESHIRE NORTH 2 CT	ANTMO MT6407		EMBEDDED BASE
DESCRIPTION	QTY	LENGTH	COMMENTS
6-CKT. LOWER OVP	-	-	EXISTING (2) TO REMAIN
12-CKT. UPPER OVP	-	-	EXISTING (1) TO REMAIN
12x24 HYBRID CABLE	-	-	EXISTING (1) TO REMAIN
RET CONTROL CABLE	-	-	RET CONTROL OVER RF JUMPERS
1/2" JUMPERS	-	-	SEE NOTE 2
AWS/PCS DUAL BAND RRH	-	-	EXISTING TO REMAIN - 1 PER SECTOR
700/850 DUAL BAND RRH	-	-	EXISTING TO REMAIN - 1 PER SECTOR
700/850 DIPLEXER	-	-	EXISTING TO REMAIN - 1 PER SECTOR
MT6407 ANTENNA	3	-	SAMSUNG INTEGRATED - REFER TO RFDS
JAHH ANTENNA AWS-700-850-LTE	-	-	EXISTING TO REMAIN - 1 PER SECTOR
JAHH ANTENNA PCS-700-850-LTE	-	-	EXISTING TO REMAIN - 1 PER SECTOR
SBS MOUNTING BRACKET	-	-	EXISTING TO REMAIN - 1 PER SECTOR
850-CDMA ANTENNA	-	-	EXISTING (3) TO REMAIN - 1 PER SECTOR

NOTES:
1. ITEMS SHOWN ARE FOR MAJOR DESIGN ELEMENTS ONLY. REFER TO VERIZON WIRELESS RFDS FOR ALL MANUFACTURER PART NUMBERS AND ACCESSORY ITEMS REQUIRED FOR A COMPLETE INSTALLATION.
2. CONTRACTOR SHALL DETERMINE AND PROVIDE ALL REQUIRED PRE-FAB JUMPER QUANTITIES AND LENGTHS, KEEPING ALL LENGTHS TO A MINIMUM.

verizon
WIRELESS COMMUNICATIONS FACILITY

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PROJECT NAME:
**ANTMO
MT6407
DESIGN EXHIBITS**

SITE NAME:
CHESHIRE NORTH 2 CT

SITE ADDRESS:
**EVERSOURCE TOWER
705 W. JOHNSON AVE.
CHESHIRE, CT 06410**

SHEET TITLE:
**RF PLUMBING
DIAGRAM & B.O.M.**

SHEET NUMBER:
DE-4

GENERAL CONSTRUCTION NOTES:

1. CONTRACTOR SHALL NOT COMMENCE ANY WORK UNTIL HE OBTAINS, AT HIS OWN EXPENSE, ALL INSURANCE REQUIRED BY *CELLCO PARTNERSHIP d/b/a VERIZON*, THE PROPERTY OWNER AND/OR PROPERTY MANAGEMENT COMPANY.

2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE CODES AND REGULATIONS AND ALL LOCAL LAWS AND REGULATIONS, CURRENT EDITIONS.

3. CONTRACTOR SHALL VISIT THE JOB SITE AND FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND MAKE PROVISIONS AS TO THE COST THEREOF. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIMSELF WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.

4. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS, ANGLES AND EXISTING CONDITIONS AT THE SITE PRIOR TO FABRICATION AND/OR INSTALLATION OF ANY WORK IN THE CONTRACT AREA AND SUBMIT TO THE ENGINEER ANY DISCREPANCIES FROM THE DRAWINGS.

5. CONTRACTOR IS TO REVIEW ALL DRAWINGS AND SPECIFICATIONS IN THE CONTRACT DOCUMENT SET. CONTRACTOR SHALL COORDINATE ALL WORK SHOWN IN THE SET OF DRAWINGS. CONTRACTOR SHALL PROVIDE A COMPLETE SET OF DRAWINGS TO ALL SUB-CONTRACTORS AND ALL RELATED PARTIES. THE SUB-CONTRACTORS SHALL EXAMINE ALL THE DRAWINGS AND SPECIFICATIONS FOR THE INFORMATION THAT AFFECTS THEIR WORK.

6. CONTRACTOR SHALL PROVIDE A COMPLETE BUILD-OUT WITH ALL FINISHES, STRUCTURAL, MECHANICAL AND ELECTRICAL COMPONENTS AND PROVIDE ALL ITEMS AS SHOWN OR INDICATED ON DRAWINGS OR WRITTEN IN SPECIFICATIONS.

7. CONTRACTOR SHALL FURNISH ALL MATERIAL, LABOR AND EQUIPMENT TO COMPLETE THE WORK AND FURNISH A COMPLETED JOB IN ACCORDANCE WITH LOCAL AND STATE GOVERNING AUTHORITIES AND OTHER AUTHORITIES HAVING LAWFUL JURISDICTION OVER THE WORK.

8. CONTRACTOR SHALL OBTAIN AT HIS OWN EXPENSE ALL PERMITS AND ALL INSPECTIONS REQUIRED FROM FEDERAL AND STATE GOVERNMENTS, COUNTIES, MUNICIPALITIES AND OTHER REGULATORY AGENCIES WHICH MAY BE REQUIRED FOR THE PROJECT.

10. DETAILS ARE INTENDED TO SHOW END RESULT OF DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK.

11. ALL MATERIAL PROVIDED BY *CELLCO PARTNERSHIP d/b/a VERIZON* IS TO BE REVIEWED BY CONTRACTOR AND ALL APPLICABLE SUB-CONTRACTOR PRIOR TO INSTALLATION. ANY DEFICIENCIES TO PROVIDED MATERIALS SHALL BE BROUGHT TO THE CONSTRUCTION MANAGERS ATTENTION IMMEDIATELY.

12. THE MATERIALS INSTALLED IN THE WORK SHALL MEET THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. NO SUBSTITUTIONS ARE ALLOWED.

13. CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION, FOR SEQUENCES AND PROCEDURES TO BE USED, AND TO ENSURE THE SAFETY OF THE EXISTING BUILDING AND ITS COMPONENT DURING CONSTRUCTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, BRACING, UNDERPINNING, ETC., THAT MAY BE NECESSARY.

14. CONTRACTOR SHALL COORDINATE ALL CIVIL, STRUCTURAL AND ELECTRICAL DRAWINGS FOR THE LOCATION OF ALL OPENINGS, RECESSES, BUILT-IN WORK, ETC.

15. CONTRACTOR SHALL RECEIVE CLARIFICATION IN WRITING AND SHALL RECEIVE IN WRITING AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEMS NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.

16. CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER OF ALL PRODUCTS OR ITEMS NOTED AS "EXISTING" WHICH ARE NOT FOUND TO BE IN THE FIELD.

17. ERECTION SHALL BE DONE IN A WORKMANLIKE MANNER BY COMPETENT EXPERIENCED WORKMEN IN ACCORDANCE WITH APPLICABLE CODES AND THE BEST-ACCEPTED PRACTICE. ALL MEMBERS SHALL BE LAID PLUMB AND TRUE AS INDICATED ON THE DRAWINGS.

18. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE WORK AREA, ADJACENT AREAS, AND BUILDING OCCUPANTS THAT ARE LIKELY TO BE AFFECTED BY THE WORK UNDER THIS CONTRACT. WORK SHALL CONFORM TO ALL O.S.H.A. REQUIREMENTS.

19. CONTRACTOR SHALL COORDINATE HIS WORK AND SCHEDULE HIS ACTIVITIES AND WORKING HOURS IN ACCORDANCE WITH THE REQUIREMENTS OF THE PROPERTY OWNER AND/OR PROPERTY MANAGEMENT COMPANY.

20. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS WORK WITH THE WORK OF OTHERS AS IT MAY RELATE TO RADIO EQUIPMENT, ANTENNAS AND ANY OTHER PORTIONS OF THE WORK.

21. CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OR WHERE LOCAL CODES OR REGULATIONS MAY TAKE PRECEDENCE.

22. CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING SURFACES, EQUIPMENT, IMPROVEMENTS, PIPING, ANTENNA AND ANTENNA CABLES AND REPAIR ANY DAMAGE THAT OCCURS DURING CONSTRUCTION.

23. CONTRACTOR SHALL REPAIR ALL EXISTING SURFACES DAMAGED DURING CONSTRUCTION SUCH THAT THEY MATCH AND BLEND WITH ADJACENT SURFACES.

24. CONTRACTOR SHALL KEEP CONTRACT AREA CLEAN, HAZARD FREE AND DISPOSE OF ALL DEBRIS AND RUBBISH. EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY OF THE OWNER SHALL BE REMOVED. LEAVE PREMISES IN CLEAN CONDITIONS AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL ITEMS UNTIL COMPLETION OF CONSTRUCTION.

25. BEFORE FINAL ACCEPTANCE OF THE WORK, CONTRACTOR SHALL REMOVE ALL EQUIPMENT, TEMPORARY WORKS, UNUSED AND USELESS MATERIALS, RUBBISH AND TEMPORARY STRUCTURES.

verizon
WIRELESS COMMUNICATIONS FACILITY

20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

On Air Engineering, LLC

88 Foundry Pond Road
Cold Spring, NY 10516
201-456-4624
onair@optonline.net

LICENSURE



DAVID WEINPAHL, P.E.
CT LIC NO. 22144

SUBMITTALS		
0	01.28.21	REVIEW
1	04.15.21	PERMITTING/CONSTRUCTION
2	10.04.21	REVISED PER NEW RFDS

NO. DATE DESCRIPTION

DRAWN BY: MF
CHECKED BY: DW

PROJECT NAME:
**ANTMO
MT6407
DESIGN EXHIBITS**

SITE NAME:
CHESHIRE NORTH 2 CT

SITE ADDRESS:
**EVERSOURCE TOWER
705 W. JOHNSON AVE.
CHESHIRE, CT 06410**

SHEET TITLE:
**GENERAL
CONSTRUCTION
NOTES**

SHEET NUMBER:
DE-5

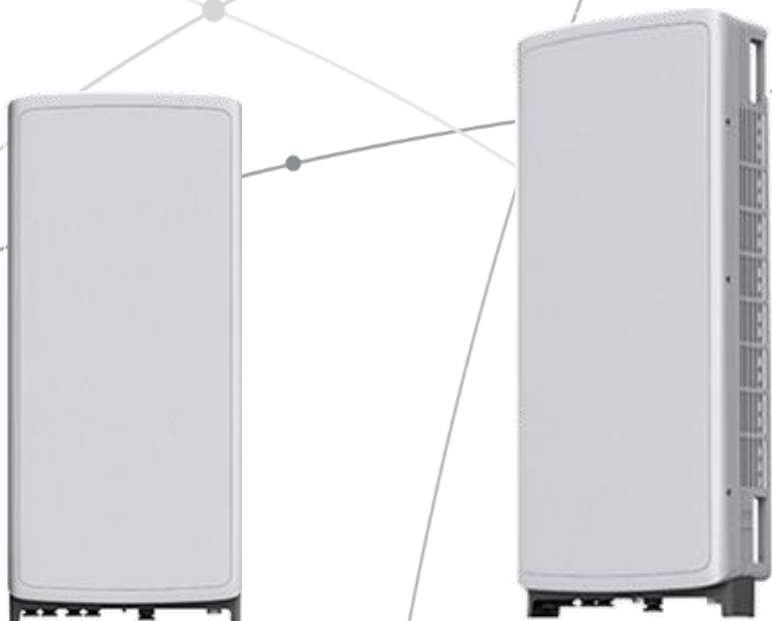
SAMSUNG

SAMSUNG C-Band 64T64R Massive MIMO Radio

for High Capacity and Wide Coverage

Samsung C-Band 64T64R Massive MIMO Radio enables mobile operators to increase coverage range, boost data speeds and ultimately offer enriched 5G experiences to users in the U.S..

Model Code : MT6407-77A



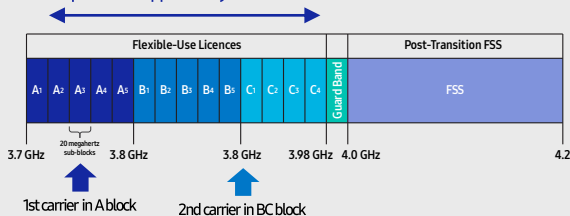
Points of Differentiation

Wide Bandwidth

With capability to support up to 2 CC carrier configuration, Samsung C-Band massive MIMO Radio supports 200 MHz bandwidth in the C-Band spectrum.

Samsung C-Band massive MIMO Radio covers the entire C-Band 280 MHz spectrum, so it can meet the operator's needs in current A block and future B/C blocks

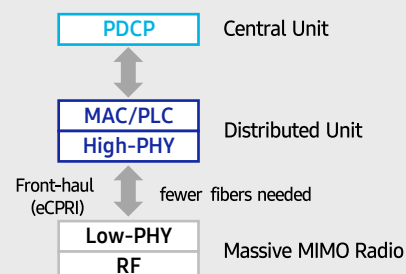
C-Band spectrum supported by Massive MIMO Radio



Future Proof Product

Samsung C-Band 64T64R Massive MIMO radio supports not only CPRI but also eCPRI as front-haul interface.

It enables operators can cut down on OPEX/CAPEX by reducing front-haul bandwidth through low layer split and using ethernet based higher efficient line.



Enhanced Performance

C-Band massive MIMO Radio creates sharp beams and extends networks' coverage on the critical mid-band spectrum using a large number of antenna elements and high output power to boost data speeds.

This helps operators reduce their CAPEX as they now need less products to cover the same area than before.

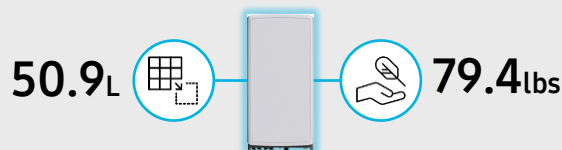
Furthermore, as C-Band massive MIMO Radio supports MU-MIMO (Multi-user MIMO), it enables to increase user throughput by minimizing interference.



Well Matched Design

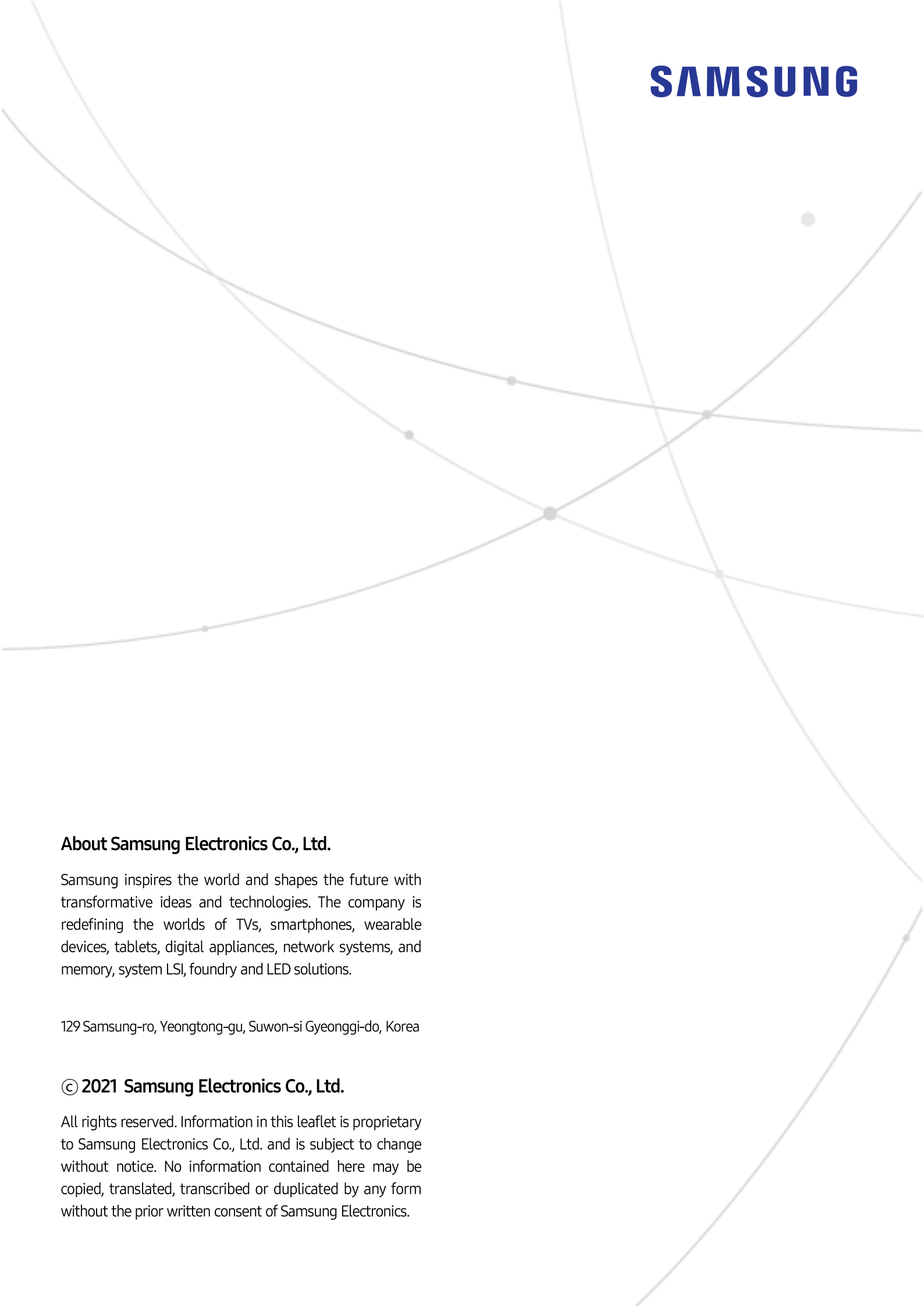
Samsung C-Band Massive MIMO radio utilizes 64 antennas, supports up to 280MHz bandwidth, and delivers a 200W output power. Despite the above advanced performance, the Radio has a compact size of 50.9L and 79.4lbs. This makes it easy to install the Radio.

It is designed to look solid and compact, with a low profile appearance so that, when installed, harmonizes well with the surrounding environment.



Technical Specifications

Item	Specification
Tech	NR
Band	n77
Frequency Band	3700 - 3980 MHz
EIRP	78.5dBm (53.0 dBm+25.5 dBi)
IBW/OBW	280 MHz / 200 MHz
Installation	Pole/Wall
Size/Weight	16.06 x 35.06 x 5.51 inch (50.86L)/ 79.4 lbs



SAMSUNG

About Samsung Electronics Co., Ltd.

Samsung inspires the world and shapes the future with transformative ideas and technologies. The company is redefining the worlds of TVs, smartphones, wearable devices, tablets, digital appliances, network systems, and memory, system LSI, foundry and LED solutions.

129 Samsung-ro, Yeongtong-gu, Suwon-si Gyeonggi-do, Korea

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ATTACHMENT 3

	General	Power	Density					
Site Name: Cheshire N 2								
Tower Height: Verizon @ 138ft								
CARRIER	# OF CHAN.	WATTS ERP	HEIGHT	FREQ.	CALC. POWER DENS	MAX. PERMISS.EXP.	FRACTION MPE	Total
*Eversource	1	120	146	37.76	0.002201756	0.2	0.11%	
*Eversource	1	473	83	10835	0.028689549	1	0.29%	
*Eversource	4	124	143	217	0.009503522	0.2	0.48%	
*AT&T-UMTS	2	728	97	850	0.063229917	0.566666667	1.12%	
*AT&T-PCS-UMTS	2	1005	97	1900	0.087288554	1	0.87%	
*AT&T-GSM	2	728	97	850	0.063229917	0.566666667	1.12%	
*AT&T-PCS-LTE	2	1791	97	1900	0.155556019	1	1.56%	
*AT&T-LTE	2	940	97	700	0.081643025	0.466666667	1.75%	
*MetroPCS CDMA	3	727	120	2135	0.060351767	1	0.60%	
*MetroPCS LTE	1	1200	120	2130	0.033205924	1	0.33%	
VZW 700	4	634	138	751	0.0048	0.5007	0.96%	
VZW Cellular	4	725	138	874	0.0055	0.5827	0.94%	
VZW PCS	4	1406	138	1975	0.0106	1.0000	1.06%	
VZW AWS	4	1414	138	2120	0.0107	1.0000	1.07%	
VZW CBAND	4	6531	138	3730.08	0.0493	1.0000	4.93%	
								17.18%
* Source: Siting Council								

ATTACHMENT 4



STRUCTURAL ANALYSIS REPORT
140-ft SELF-SUPPORTING TOWER
CHESHIRE, CONNECTICUT

Prepared for
Verizon Wireless

Verizon Site Ref.
468479; Cheshire North 2 CT

Site Address: 705 West Johnson Ave., Cheshire, CT 06410

APT Filing No. CT141_12840

August 23, 2021
Rev. 1: December 3, 2021



**STRUCTURAL ANALYSIS REPORT
140-ft SELF-SUPPORTING TOWER
CHESHIRE, CONNECTICUT
prepared for
Verizon Wireless**

EXECUTIVE SUMMARY:

All-Points Technology Corporation, P.C. (APT) performed a structural evaluation of an existing 140-ft self-supporting lattice tower structure to support a proposed Verizon equipment modification. The subject tower is owned and operated by Northeast Utilities (Eversource Energy).

The proposed Verizon antenna and appurtenance modification consists of the replacement of three (3) existing panel antennas with three (3) new Samsung MT6407-77A antennas. All other existing equipment on the tower is to remain. The proposed Verizon equipment shall be fed by twelve (12) 1-5/8" coaxial lines and one (1) 12x24 low-inductance (LI) hybrid feed-line, routed vertically on an existing feedline ladder.

The existing Verizon 13' T-frame sector mounts will require reinforcement prior to the installation of the proposed equipment modification, as referenced below. This analysis assumes that the Verizon 850NR project (16196189) will be completed prior to the implementation of the LSub6 loading proposed herein.

Our analysis indicates that the subject tower structure meets the requirements of the 2015 International Building Code (IBC), as amended by the 2018 Connecticut State Building Code, and the ANSI/TIA-222-H standard with the existing and proposed equipment loading.

INTRODUCTION:

A structural analysis of this communications tower was performed by APT for Verizon Wireless. The tower is located at 705 West Johnson Avenue in Cheshire, Connecticut.

The following information was utilized in the preparation of this analysis:

- Field observations by APT on numerous occasions, including most recently 3/1/2018. APT climbed the structure in its entirety and recorded information regarding physical and dimensional properties of the structure and its appurtenances.
- Geotechnical Study prepared by Clarence Welti Associates, Inc., dated 09/20/2004.
- Tower Drawings prepared by Central Tower (Dwg. No. CT2397-1), dated 10/13/2004.
- Tower Foundation Drawings, prepared by URS Corporation AES (URS Job No. CWI-024), marked Bulletin #1, dated 10/26/2004.
- Structural Analysis Report prepared by Black & Veatch (project No. 403093) dated 3/26/2020.
- Structural Analysis Report prepared by APT (APT Project No. CT415470) Rev. 3, dated 11/18/2020.
- Structural Analysis Report prepared by Paul J. Ford & Company (PFJ Project No. A42921-0005.001.8700), dated 4/26/2021.
- Verizon Antenna Mount Mapping Report prepared by Tower Engineering Professionals, dated 12/07/2020.

- RFDS prepared by Verizon marked Rev. 3, dated 6/16/2021.
- Post-Modification Antenna Mount Analysis Report and PMI Requirements and Mount Modification Drawings prepared by Maser Consulting Connecticut (Maser Project No. 20777358A), marked Rev. 2 dated 10/15/2021.
- Mount Modification Drawings prepared by Maser Consulting Connecticut (Maser Project No. 20777358A), marked Rev. 2 dated 10/15/2021.

The structure is a 140-foot, three-legged, galvanized steel self-supporting tower manufactured by Central Tower. The tower features solid rod leg members with angle steel and solid rod bracing arranged in X-braced patterns.

The analysis was conducted using the following antenna inventory (proposed equipment shown in **bold text**):

Carrier	Antenna and Appurtenance Make/Model	Elevation	Status	Mount Type	Coax/Feed-Line
Eversource	PD-1142-2C omnidirectional whip	140' ²	ETR	Leg	1-5/8"
Verizon	(6) Andrew JAHH-65B-R3B, (3) Samsung MT6407-77A panel antennas, (3) Samsung B2/B66A RRH – BR049, (3) Samsung B5/B13 RRH – BR04C, (3) RFS FDJ85020Q4-S1 diplexers (1) Raycap RVZDC-6627-PF-48 OVP	138'	ETR P ETR	(3) 13' T-Frame sector mounts w/ reinforcements	(12) 1-5/8", (1) 12x24 LI hybrid
Eversource	dbSpectra DS2C03F36D-D	137' ²	ETR	SitePro R5-LL (PM 601-1)	(2) 7/8"
Eversource	6' microwave dish w/ radome	120'	R	5' x 4-1/2" pipe on leg	E65
AT&T	(3) KMW AM-X-CD-16-65, (3) cci HPA-65R-BUU-H6, (3) cci OPA65R-BU6DA & (3) cci DMP65RBU6DA panel antennas, (3) TMAs, (3) 4449 RRHs, (3) 8843 RRHs, (3) 4415 RRHs, (2) Raycap DC6-48 'squid' D-boxes	98'	R	(3) 13' T-Frame sector mounts	(12) 1-5/8", (2) fiber and (5) power in 2" conduit
Eversource	4' microwave dish w/ radome	83'	ETR	4' x 4-1/2" pipe on leg	EW90

Notes:

1. ETR = Existing to Remain; ERL = Existing to be Relocated; P = Proposed; R = Future/Reserved.
2. Elevation is to the base of the antenna.

STRUCTURAL ANALYSIS:

Methodology:

This structural analysis has been prepared in accordance with the ANSI/TIA-222-H standard entitled "Structural Standard for Antenna Supporting Structures and Antennas and Small Wind Turbine Support Structures; American Institute of Steel Construction (AISC) Manual of Steel Construction", and the 2015 International Building Code (IBC), as amended by the 2018 Connecticut State Building Code.

Antenna, appurtenance and mount assembly loads were evaluated utilizing the ANSI TIA-222-H standard.

- Load Case 1: 135 mph (3-second gust) Ultimate Wind Speed, 0" ice
- Load Case 2: 50mph (3-second gust) w/ 1.50" ice thickness required
- Load Case 3: 106mph (3-second gust) Nominal Wind Speed (Service Load)

- Structure Class: III (Essential communications facility)
- Exposure Category: B
- Topographic Category: 1

Anchor Bolts:

Anchor bolts were evaluated under the proposed loading. All anchor bolts were found to be adequately sized to support the proposed equipment.

Analysis Results:

Analysis of the tower was conducted in accordance with the criteria outlined herein with antenna changes as previously described. The following table summarizes the results of the analysis based on stresses of individual leg and bracing members:

Elevation	Legs ¹	Bracing ²
120'-140'	45%	87%
100'-120'	44%	75%
80'-100'	48%	70% ³
60'-80'	53%	74% ³
40'-60'	54%	76% ³
20'-40'	54%	62% ³
0'-20'	53%	81% ³

Notes:

1. Based on ASTM A572 Gr. 50 solid rod legs. Leg diameter varies.
2. Based on ASTM A36 solid rod and angle braces. Bracing geometry varies.
3. Member connection controls.

Bracing and Splice Bolts:

Connection bolts were evaluated under the proposed loading. All bolts were found to be adequately sized to support the proposed loads.

Base Foundation:

Evaluation of the existing foundation was performed by comparing reactions calculated under the proposed loads with the design reactions indicated within the aforementioned Central Tower foundation design drawings. Reactions imposed by the proposed installation are less than the published reactions, indicating that the foundation is adequately sized. It should be noted that foundation capacity is governed by the overturning moment capacity.

The calculated base reactions utilized in the analysis of the foundation system with the proposed loading are as follows:

Load Effect	Original Design (TIA-222-G)	Calculated Reactions
Compression	392 k	269 k
Uplift	-327 k	-241 k
Shear	32 k	24 k
Overturning Moment	4,519 ft-k	3,102 ft-k

Deflection:

Combined twist and sway was evaluated per Northeast Utilities Substation Standard SUB 090, Section 7 utilizing a Nominal Service wind speed. The tower twist (rotation) and sway (deflection) meet the requirements of the Eversource SUB 090 criteria. Results are summarized as follows:

Load Case	Tilt	Twist	Combined Max. ¹	Eversource Allowable
Service Wind – 105-mph ¹	0.3667°	0.1825°	0.4096°	0.500°
Service Wind – 105-mph ²	0.4060°	0.2012°	0.4531°	0.500°

Notes:

1. Twist and sway was evaluated at the highest dish elevation at 120'.
2. Twist and sway was evaluated at the top of the tower.

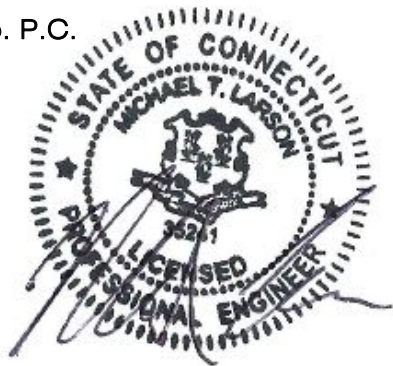
CONCLUSIONS AND SUGGESTIONS:

In conclusion, our analysis indicates that the 140-ft self-supporting lattice tower structure located at 705 West Johnson Avenue in Cheshire, Connecticut meets the requirements of 2015 International Building Code (IBC), as amended by the 2018 Connecticut State Building Code, and the ANSI/TIA-222-H standard with Verizon's proposed equipment changes and mount modifications.

Sincerely,
All-Points Technology Corp. P.C.



Robert E. Adair, P.E.
Principal



Prepared by:
All-Points Technology Corp. P.C.



Michael T. Larson, P.E.
Project Engineer

LIMITATIONS:

This report is based on the following:

1. Tower/structure is properly installed and maintained.
2. All members and components are in a non-deteriorated condition.
3. All required members are in place.
4. All bolts are in place and are properly tightened.
5. Tower/structure is in plumb condition.
6. All tower members were properly designed, detailed, fabricated, and installed and have been properly maintained since erection.

All-Points Technology Corporation, P.C. (APT) is not responsible for any modifications completed prior to or hereafter which APT is not or was not directly involved. Modifications include but are not limited to:

1. Replacing or reinforcing bracing members.
2. Reinforcing members in any manner.
3. Adding or relocating antennas.
4. Installing antenna mounts or waveguide cables.
5. Extending tower.

APT hereby states that this document represents the entire report and that it assumes no liability for any factual changes that may occur after the date of this report. All representations, recommendations, and conclusions are based upon the information contained and set forth herein. If you are aware of any information which conflicts with that which is contained herein, or you are aware of any defects arising from original design, material, fabrication, or erection deficiencies, you should disregard this report and immediately contact APT. APT disclaims all liability for any representation, recommendation, or conclusion not expressly stated herein.

Appendix A

Tower Schematic

The diagram shows a tall, slender tower with a lattice structure. The tower is divided into sections by horizontal cross-bracing. Key components and height markers are as follows:

- Top Section (140.0 ft):** The total height of the tower is marked as 140.0 ft at the top.
- 120.0 ft Mark:** A horizontal cross-bracing is shown at 120.0 ft, with a green diamond-shaped component attached to the right side.
- 100.0 ft Mark:** A horizontal cross-bracing is shown at 100.0 ft, with a green rectangular component attached to the right side.
- 80.0 ft Mark:** A circular component is attached to the right side at 80.0 ft.
- 60.0 ft Mark:** A horizontal cross-bracing is shown at 60.0 ft.
- 40.0 ft Mark:** A horizontal cross-bracing is shown at 40.0 ft.
- 20.0 ft Mark:** A horizontal cross-bracing is shown at 20.0 ft.
- 0.0 ft Mark:** The base of the tower is marked as 0.0 ft.

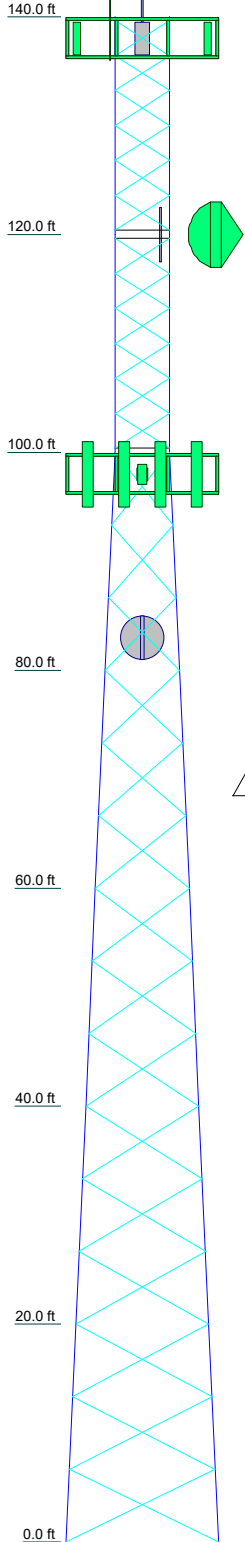
TYPE	ELEVATION	TYPE	ELEVATION
PD1142-2C (Eversource)	140	5'x4 1/2" Pipe Mount (Eversource)	120
(2) JAHH-65-R3B w/ SBS-2-2 Mount (VzW)	138	6' dish with radome (Eversource)	120
		13' T-Frame (ATI existing)	98
(2) JAHH-65-R3B w/ SBS-2-2 Mount (VzW)	138	13' T-Frame (ATI existing)	98
		13' T-Frame (ATI existing)	98
(2) JAHH-65-R3B w/ SBS-2-2 Mount (VzW)	138	Radio 8843 (ATI)	98
		Radio 8843 (ATI)	98
MT6407-77A (VzW)	138	Raycap DC6-48-60-18-8F surge suppressor (ATI)	98
MT6407-77A (VzW)	138		
MT6407-77A (VzW)	138	HPA-65R-BUU-H6 (ATI existing)	98
RFS FDJ85020Q4-S1 Diplexer (VzW)	138	HPA-65R-BUU-H6 (ATI existing)	98
RFS FDJ85020Q4-S1 Diplexer (VzW)	138	HPA-65R-BUU-H6 (ATI existing)	98
RFS FDJ85020Q4-S1 Diplexer (VzW)	138	AM-X-CD-16-65 (ATI existing)	98
Samsung B2/B66 PCS/AWS RRH (VzW)	138	AM-X-CD-16-65 (ATI existing)	98
		AM-X-CD-16-65 (ATI existing)	98
Samsung B2/B66 PCS/AWS RRH (VzW)	138	cci DMP65R-BU6DA (ATI)	98
		cci DMP65R-BU6DA (ATI)	98
Samsung B2/B66 PCS/AWS RRH (VzW)	138	cci DMP65R-BU6DA (ATI)	98
		cci DMP65R-BU6DA (ATI)	98
Samsung B5/B13 700/850 RRH (VzW)	138	OPA65R-BU6DA (ATI)	98
Samsung B5/B13 700/850 RRH (VzW)	138	OPA65R-BU6DA (ATI)	98
Samsung B5/B13 700/850 RRH (VzW)	138	OPA65R-BU6DA (ATI)	98
Raycap RDC-6627-PF-48 OVP (VzW)	138	cci DTMABP7819VG12A TMA (ATI existing)	98
13' T-Frame (VzW)	138		
13' T-Frame (VzW)	138	cci DTMABP7819VG12A TMA (ATI existing)	98
13' T-Frame (VzW)	138		
8'x2 1/2" Pipe Mount (VzW)	138	cci DTMABP7819VG12A TMA (ATI existing)	98
8'x2 1/2" Pipe Mount (VzW)	138	Radio 4415 (ATI)	98
8'x2 1/2" Pipe Mount (VzW)	138	Radio 4415 (ATI)	98
(2) (2) L2.5x2.5x1/4 x 6.5' Mount Reinf (VzW)	138	Radio 4415 (ATI)	98
		Radio 4449 (ATI)	98
(2) (2) L2.5x2.5x1/4 x 6.5' Mount Reinf (VzW)	138	Radio 4449 (ATI)	98
		Radio 4449 (ATI)	98
(2) (2) L2.5x2.5x1/4 x 6.5' Mount Reinf (VzW)	138	Radio 8843 (ATI)	98
		Radio 8843 (ATI)	98
DB Spectra DS2C03F36D-D (Eversource)	137	Raycap DC6-48-60-18-8F surge suppressor (ATI existing)	98
SitePro R5-LL (PM 601-1) (Eversource)	137	4'x4 1/2" Pipe Mount (Eversource)	85 - 81
		4' dish with radome (Eversource)	83

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-50	50 ksi	65 ksi	A36	36 ksi	58 ksi

1. Tower is located in New Haven County, Connecticut.
2. Tower designed for Exposure C to the TIA-222-H Standard.
3. Tower designed for a 135 mph basic wind in accordance with the TIA-222-H Standard.
4. Tower is also designed for a 50 mph basic wind with 1.00 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Risk Category III.
7. Topographic Category 1 with Crest Height of 0.00 ft

All-Points Technology Corp.		Job: 140' Self-Supporting Tower	
567 Vauxhall St. Ext. Suite 311		Project: CT141, 12840 Cheshire North 2 CT	
Waterford, CT 06385		Client: VzW; Site 468479	Drawn by: M. Larson
Phone: (860) 663-1937		Code: TIA-222-H	Date: 08/23/21
FAX: (860) 663-0957		Path:	Scale: NTS
C:\Users\KAPT User\Desktop\Work\Cheshire\CT141_12840 Cheshire North 2\CT141_12840 Cheshire North 2.dwg			Dwg No. E-1

Section	T1	T2	T3	T4	T5	T6	T7	
Legs	SR 1 3/4	SR 2 1/2	SR 3 1/2	SR 3 3/4	SR 4	SR 4 1/4	SR 4 1/2	
Leg Grade	SR 3/4	SR 7/8	L2x2x1/4	A572-50	L2 1/2x2 1/2x3/16	L2 1/2x2 1/2x1/4	L3x3x3/16	
Diagonals	SR 3/4	SR 7/8	L2x2x1/4	A36	N.A.	N.A.		
Diagonal Grade	SR 3/4	SR 7/8	SR 7/8					
Top Girts	SR 3/4	SR 7/8	SR 7/8					
Bottom Girts	SR 3/4	SR 7/8	SR 7/8					
Face Width (ft)	5	12 @ 3.20833	6.8	8.6	10.4	12.2	14	
# Panels @ (ft)	0.9	1.5	2.5	2.8	3.2	3.9	4.2	19.0
Weight (K)								



ALL REACTIONS ARE FACTORED

MAX. CORNER REACTIONS AT BASE:
 DOWN: 269 K
 SHEAR: 24 K

UPLIFT: -241 K
 SHEAR: 22 K

AXIAL
72 K

SHEAR
9 K

MOMENT
744 kip-ft

TORQUE 7 kip-ft
 50 mph WIND - 1.0000 in ICE

AXIAL
39 K

SHEAR
39 K

MOMENT
3102 kip-ft

TORQUE 36 kip-ft
 REACTIONS - 135 mph WIND

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-50	50 ksi	65 ksi	A36	36 ksi	58 ksi

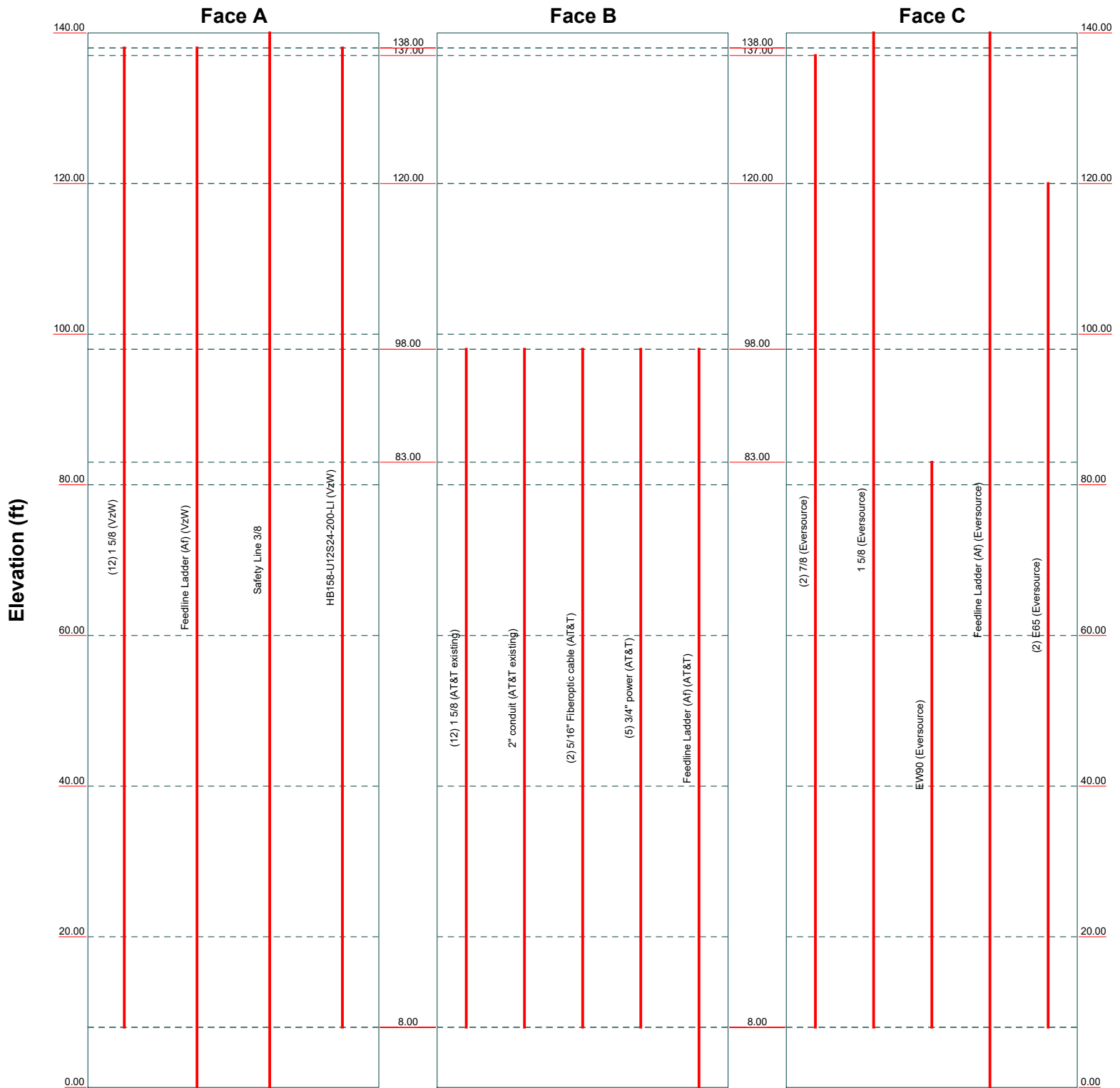
TOWER DESIGN NOTES

1. Tower is located in New Haven County, Connecticut.
2. Tower designed for Exposure C to the TIA-222-H Standard.
3. Tower designed for a 135 mph basic wind in accordance with the TIA-222-H Standard.
4. Tower is also designed for a 50 mph basic wind with 1.00 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Risk Category III.
7. Topographic Category 1 with Crest Height of 0.00 ft
8. TOWER RATING: 87%

All-Points Technology Corp. 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935			Job: 140' Self-Supporting Tower Project: CT141 12840 Cheshire North 2 CT Client: VzW; Site 468479 Code: TIA-222-H Path: C:\Users\APT User\Desktop\Work\Jobs\140' Self-Supporting Tower\CT141 12840 Cheshire North 2\CT141 12840 Cheshire North 2		
Drawn by: M. Larson Date: 08/23/21		App'd: Scale: NTS Dwg No. E-1			

Feed Line Distribution Chart
0' - 140'

Round Flat App In Face App Out Face Truss Leg



All-Points Technology Corp.				Job: 140' Self-Supporting Tower	
567 Vauxhall St. Ext. Suite 311				Project: CT141 12840 Cheshire North 2 CT	
Waterford, CT 06385				Client: VzW; Site 468479	Drawn by: M. Larson
Phone: (860) 663-1697				Code: TIA-222-H	Date: 08/23/21
FAX: (860) 663-0935				Path:	Scale: NTS
				Dwg No. E-7	

Feed Line Plan
20'

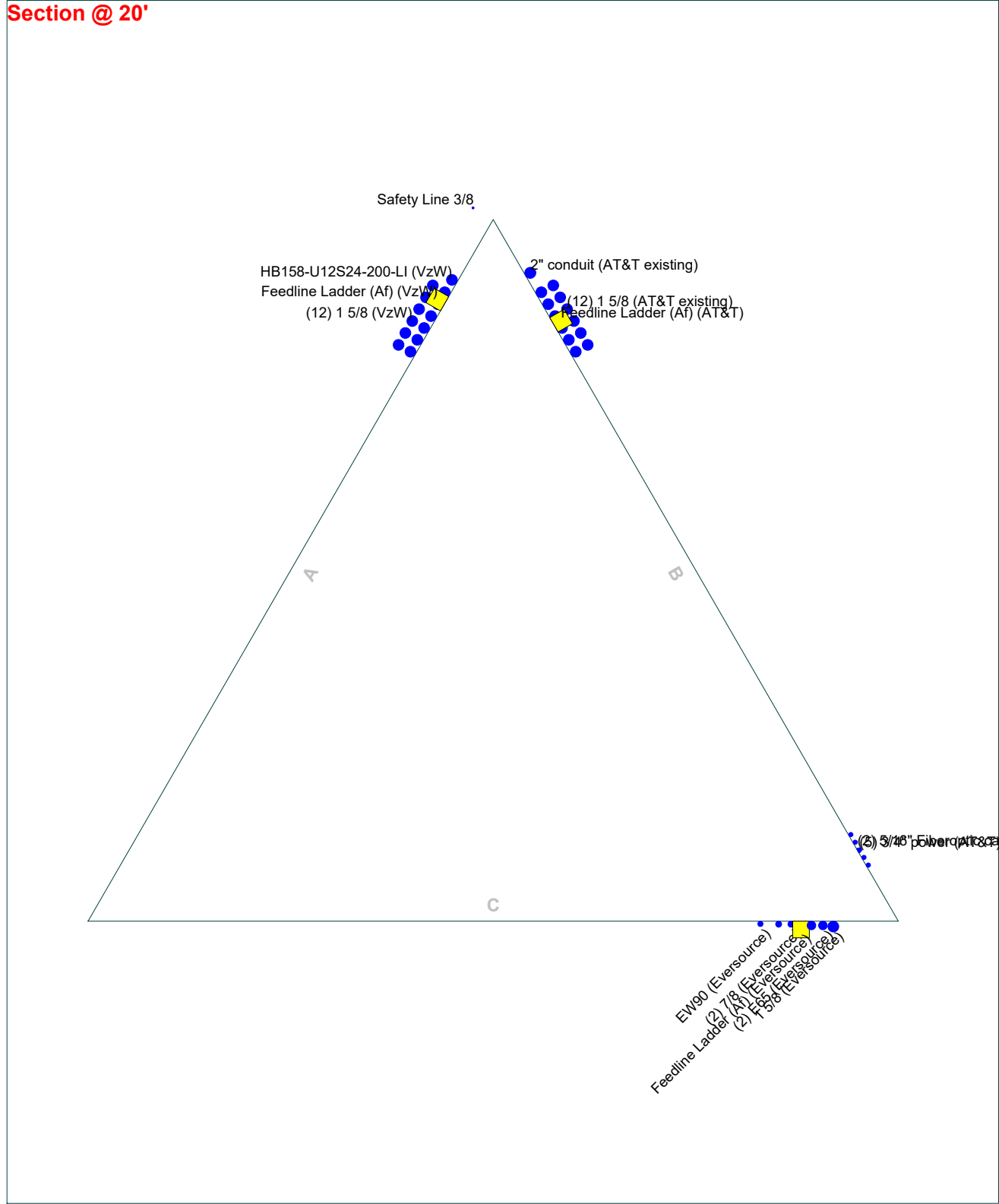
Round

Flat

App In Face

App Out Face

Section @ 20'



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Waterford, CT 06385
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Job: 140' Self-Supporting Tower		
Project: CT141 12840 Cheshire North 2 CT		
Client: VzW; Site 468479	Drawn by: M. Larson	App'd:
Code: TIA-222-H	Date: 08/23/21	Scale: NTS
Path:	Dwg No. E-7	

C:\Users\APT User\Desktop\Work\Jobs\Waterford\CT141 12840 Cheshire North 2\CT141 12840 Cheshire North 2.dwg

Appendix B

Calculations

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job 140' Self-Supporting Tower	Page 1 of 108
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	Client VzW; Site 468479	Designed by M. Larson

Tower Input Data

The main tower is a 3x free standing tower with an overall height of 140.00 ft above the ground line.

The base of the tower is set at an elevation of 0.00 ft above the ground line.

The face width of the tower is 5.00 ft at the top and 14.00 ft at the base.

This tower is designed using the TIA-222-H standard.

The following design criteria apply:

Tower is located in New Haven County, Connecticut.

Tower base elevation above sea level: 132.00 ft.

Basic wind speed of 135 mph.

Risk Category III.

Exposure Category C.

Simplified Topographic Factor Procedure for wind speed-up calculations is used.

Topographic Category: 1.

Crest Height: 0.00 ft.

Nominal ice thickness of 1.0000 in.

Ice thickness is considered to increase with height.

Ice density of 56 pcf.

A wind speed of 50 mph is used in combination with ice.

Temperature drop of 50 °F.

Deflections calculated using a wind speed of 60 mph.

A non-linear (P-delta) analysis was used.

Pressures are calculated at each section.

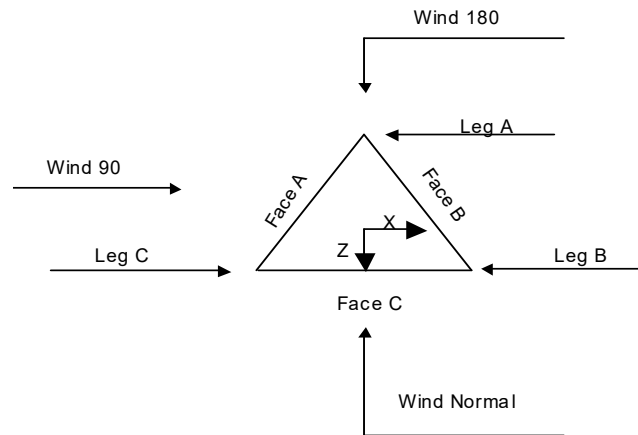
Stress ratio used in tower member design is 1.

Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

Consider Moments - Legs	Distribute Leg Loads As Uniform	Use ASCE 10 X-Brace Ly Rules
Consider Moments - Horizontals	Assume Legs Pinned	√ Calculate Redundant Bracing Forces
Consider Moments - Diagonals	√ Assume Rigid Index Plate	Ignore Redundant Members in FEA
Use Moment Magnification	√ Use Clear Spans For Wind Area	SR Leg Bolts Resist Compression
√ Use Code Stress Ratios	√ Use Clear Spans For KL/r	√ All Leg Panels Have Same Allowable
√ Use Code Safety Factors - Guys	Retension Guys To Initial Tension	Offset Girt At Foundation
Escalate Ice	Bypass Mast Stability Checks	√ Consider Feed Line Torque
Always Use Max Kz	Use Azimuth Dish Coefficients	√ Include Angle Block Shear Check
Use Special Wind Profile	√ Project Wind Area of Appurt.	Use TIA-222-H Bracing Resist. Exemption
√ Include Bolts In Member Capacity	Autocalc Torque Arm Areas	Use TIA-222-H Tension Splice Exemption
Leg Bolts Are At Top Of Section	Add IBC .6D+W Combination	Poles
√ Secondary Horizontal Braces Leg	√ Sort Capacity Reports By Component	Include Shear-Torsion Interaction
Use Diamond Inner Bracing (4 Sided)	√ Triangulate Diamond Inner Bracing	Always Use Sub-Critical Flow
√ SR Members Have Cut Ends	√ Treat Feed Line Bundles As Cylinder	Use Top Mounted Sockets
SR Members Are Concentric	Ignore KL/ry For 60 Deg. Angle Legs	Pole Without Linear Attachments
		Pole With Shroud Or No Appurtenances
		Outside and Inside Corner Radii Are
		Known

tnxTower All-Points Technology Corp. 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	2 of 108
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Triangular Tower

Tower Section Geometry

Tower Section	Tower Elevation	Assembly Database	Description	Section Width	Number of Sections	Section Length
	<i>ft</i>			<i>ft</i>		<i>ft</i>
T1	140.00-120.00			5.00	1	20.00
T2	120.00-100.00			5.00	1	20.00
T3	100.00-80.00			5.00	1	20.00
T4	80.00-60.00			6.80	1	20.00
T5	60.00-40.00			8.60	1	20.00
T6	40.00-20.00			10.40	1	20.00
T7	20.00-0.00			12.20	1	20.00

Tower Section Geometry (cont'd)

Tower Section	Tower Elevation	Diagonal Spacing	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset	Bottom Girt Offset
	<i>ft</i>	<i>ft</i>				<i>in</i>	<i>in</i>
T1	140.00-120.00	3.21	X Brace	No	No	4.5000	4.5000
T2	120.00-100.00	3.21	X Brace	No	No	4.5000	4.5000
T3	100.00-80.00	6.67	X Brace	No	No	0.0000	0.0000
T4	80.00-60.00	6.67	X Brace	No	No	0.0000	0.0000
T5	60.00-40.00	6.67	X Brace	No	No	0.0000	0.0000
T6	40.00-20.00	6.67	X Brace	No	No	0.0000	0.0000
T7	20.00-0.00	6.67	X Brace	No	No	0.0000	0.0000

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Tower Section Geometry (cont'd)

<i>Tower Elevation</i> <i>ft</i>	<i>Leg Type</i>	<i>Leg Size</i>	<i>Leg Grade</i>	<i>Diagonal Type</i>	<i>Diagonal Size</i>	<i>Diagonal Grade</i>
T1 140.00-120.00	Solid Round	1 3/4	A572-50 (50 ksi)	Solid Round	3/4	A36 (36 ksi)
T2 120.00-100.00	Solid Round	2 1/2	A572-50 (50 ksi)	Solid Round	7/8	A36 (36 ksi)
T3 100.00-80.00	Solid Round	3 1/2	A572-50 (50 ksi)	Equal Angle	L2x2x1/4	A36 (36 ksi)
T4 80.00-60.00	Solid Round	3 3/4	A572-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x3/16	A36 (36 ksi)
T5 60.00-40.00	Solid Round	4	A572-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x3/16	A36 (36 ksi)
T6 40.00-20.00	Solid Round	4 1/4	A572-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x1/4	A36 (36 ksi)
T7 20.00-0.00	Solid Round	4 1/2	A572-50 (50 ksi)	Equal Angle	L3x3x3/16	A36 (36 ksi)

Tower Section Geometry (cont'd)

<i>Tower Elevation</i> <i>ft</i>	<i>Top Girt Type</i>	<i>Top Girt Size</i>	<i>Top Girt Grade</i>	<i>Bottom Girt Type</i>	<i>Bottom Girt Size</i>	<i>Bottom Girt Grade</i>
T1 140.00-120.00	Solid Round	3/4	A36 (36 ksi)	Solid Round	3/4	A36 (36 ksi)
T2 120.00-100.00	Solid Round	7/8	A36 (36 ksi)	Solid Round	7/8	A36 (36 ksi)

Tower Section Geometry (cont'd)

<i>Tower Elevation</i> <i>ft</i>	<i>Gusset Area</i> <i>(per face)</i> <i>ft²</i>	<i>Gusset Thickness</i> <i>in</i>	<i>Gusset Grade</i>	<i>Adjust. Factor</i> <i>A_f</i>	<i>Adjust. Factor</i> <i>A_r</i>	<i>Weight Mult.</i>	<i>Double Angle</i> <i>Stitch Bolt</i> <i>Spacing</i> <i>Diagonals</i> <i>in</i>	<i>Double Angle</i> <i>Stitch Bolt</i> <i>Spacing</i> <i>Horizontal</i> <i>in</i>	<i>Double Angle</i> <i>Stitch Bolt</i> <i>Spacing</i> <i>Redundants</i> <i>in</i>
T1 140.00-120.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T2 120.00-100.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T3 100.00-80.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T4 80.00-60.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T5 60.00-40.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T6 40.00-20.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T7 20.00-0.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000

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Tower Section Geometry (cont'd)

Tower Elevation	Calc K Single Angles	Calc K Solid Rounds	K Factors ¹							
			Legs	X Brace Diags X Y	K Brace Diags X Y	Single Diags X Y	Girts X Y	Horiz. X Y	Sec. Horiz. X Y	Inner Brace X Y
T1 140.00-120.00	Yes	Yes	1	1	1	1	1	1	1	1
T2 120.00-100.00	Yes	Yes	1	1	1	1	1	1	1	1
T3 100.00-80.00	Yes	Yes	1	1	1	1	1	1	1	1
T4 80.00-60.00	Yes	Yes	1	1	1	1	1	1	1	1
T5 60.00-40.00	Yes	Yes	1	1	1	1	1	1	1	1
T6 40.00-20.00	Yes	Yes	1	1	1	1	1	1	1	1
T7 20.00-0.00	Yes	Yes	1	1	1	1	1	1	1	1

¹Note: K factors are applied to member segment lengths. K-braces without inner supporting members will have the K factor in the out-of-plane direction applied to the overall length.

Tower Section Geometry (cont'd)

[illegible][illegible]

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Tower Elevation ft	Redundant Horizontal		Redundant Diagonal		Redundant Sub-Diagonal		Redundant Sub-Horizontal		Redundant Vertical		Redundant Hip		Redundant Hip Diagonal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T2 120.00-100.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T3 100.00-80.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T4 80.00-60.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T5 60.00-40.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T6 40.00-20.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T7 20.00-0.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75

Tower Section Geometry (cont'd)

Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
T1 140.00-120.00	Flange	1.0000	4	0.7500	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T2 120.00-100.00	Flange	1.0000	6	0.7500	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T3 100.00-80.00	Flange	1.1250	6	0.7500	1	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T4 80.00-60.00	Flange	1.1250	6	0.7500	1	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T5 60.00-40.00	Flange	1.2500	6	0.7500	1	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T6 40.00-20.00	Flange	1.2500	6	0.7500	1	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T7 20.00-0.00	Flange	1.2500	6	0.7500	1	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
		A449		A325N		A325N		A325N		A325N		A325N		A325N	

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
7/8 (Eversource)	C	No	No	Ar (CaAa)	137.00 - 8.00	0.0000	-0.36	2	2	1.1100	1.1100		0.54
1 5/8 (Eversource)	C	No	No	Ar (CaAa)	140.00 - 8.00	0.0000	-0.42	1	1	0.5000	1.9800		1.04
1 5/8 (VzW)	A	No	No	Ar (CaAa)	138.00 - 8.00	0.0000	0.35	12	6	0.5000	1.9800		1.04
1 5/8 (AT&T existing)	B	No	No	Ar (CaAa)	98.00 - 8.00	0.0000	-0.35	12	6	0.5000	1.9800		1.04
2" conduit (AT&T)	B	No	No	Ar (CaAa)	98.00 - 8.00	0.0000	-0.42	1	1	0.5000	2.0000		2.00

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Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
existing) 5/16" Fiberoptic cable (AT&T)	B	No	No	Ar (CaAa)	98.00 - 8.00	0.0000	0.4	2	2	0.3125	0.3125		0.25
3/4" power (AT&T)	B	No	No	Ar (CaAa)	98.00 - 8.00	0.0000	0.4	5	5	0.7950	0.7950		0.58
EW90 (Eversource)	C	No	No	Ar (CaAa)	83.00 - 8.00	0.0000	-0.33	1	1	0.5000	0.9869		0.32
Feedline Ladder (Af) (Eversource)	C	No	No	Af (CaAa)	140.00 - 0.00	0.0000	-0.38	1	1	3.0000	3.0000		8.40
Feedline Ladder (Af) (AT&T)	B	No	No	Af (CaAa)	98.00 - 0.00	0.0000	-0.35	1	1	3.0000	3.0000		8.40
Feedline Ladder (Af) (VzW)	A	No	No	Af (CaAa)	138.00 - 0.00	0.0000	0.38	1	1	3.0000	3.0000		8.40
Safety Line 3/8 E65 (Eversource)	A	No	No	Ar (CaAa)	140.00 - 0.00	4.0000	0.5	1	1	0.3750	0.3750		0.22
HB158-U12S2 4-200-LI (VzW)	C	No	No	Ar (CaAa)	120.00 - 8.00	0.0000	-0.4	2	2	0.5000	1.5742		0.51
	A	No	No	Ar (CaAa)	138.00 - 8.00	0.0000	0.41	1	1	1.9800	1.9800		3.20

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A _R	A _F	C _A A _A In Face ft ²	C _A A _A Out Face ft ²	Weight K
T1	140.00-120.00	A	0.000	0.000	56.082	0.000	0.44
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	17.734	0.000	0.21
T2	120.00-100.00	A	0.000	0.000	62.230	0.000	0.49
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	24.697	0.000	0.23
T3	100.00-80.00	A	0.000	0.000	62.230	0.000	0.49
		B	0.000	0.000	63.648	0.000	0.47
		C	0.000	0.000	24.993	0.000	0.23
T4	80.00-60.00	A	0.000	0.000	62.230	0.000	0.49
		B	0.000	0.000	70.720	0.000	0.53
		C	0.000	0.000	26.671	0.000	0.24
T5	60.00-40.00	A	0.000	0.000	62.230	0.000	0.49
		B	0.000	0.000	70.720	0.000	0.53
		C	0.000	0.000	26.671	0.000	0.24
T6	40.00-20.00	A	0.000	0.000	62.230	0.000	0.49
		B	0.000	0.000	70.720	0.000	0.53
		C	0.000	0.000	26.671	0.000	0.24
T7	20.00-0.00	A	0.000	0.000	41.638	0.000	0.36
		B	0.000	0.000	46.432	0.000	0.38
		C	0.000	0.000	20.002	0.000	0.21

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Feed Line/Linear Appurtenances Section Areas - With Ice

<i>Tower Section</i>	<i>Tower Elevation ft</i>	<i>Face or Leg</i>	<i>Ice Thickness in</i>	<i>A_R ft²</i>	<i>A_F ft²</i>	<i>C_AA_A In Face ft²</i>	<i>C_AA_A Out Face ft²</i>	<i>Weight K</i>
T1	140.00-120.00	A	1.319	0.000	0.000	69.574	0.000	1.30
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	39.487	0.000	0.60
T2	120.00-100.00	A	1.297	0.000	0.000	76.230	0.000	1.42
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	60.571	0.000	0.78
T3	100.00-80.00	A	1.271	0.000	0.000	75.752	0.000	1.40
		B		0.000	0.000	96.166	0.000	1.50
		C		0.000	0.000	61.067	0.000	0.78
T4	80.00-60.00	A	1.240	0.000	0.000	75.168	0.000	1.38
		B		0.000	0.000	105.970	0.000	1.64
		C		0.000	0.000	66.253	0.000	0.82
T5	60.00-40.00	A	1.199	0.000	0.000	74.408	0.000	1.35
		B		0.000	0.000	104.826	0.000	1.61
		C		0.000	0.000	65.195	0.000	0.80
T6	40.00-20.00	A	1.139	0.000	0.000	73.303	0.000	1.31
		B		0.000	0.000	103.163	0.000	1.56
		C		0.000	0.000	63.655	0.000	0.76
T7	20.00-0.00	A	1.021	0.000	0.000	50.232	0.000	0.88
		B		0.000	0.000	65.553	0.000	0.99
		C		0.000	0.000	41.994	0.000	0.54

Feed Line Center of Pressure

<i>Section</i>	<i>Elevation ft</i>	<i>CP_X in</i>	<i>CP_Z in</i>	<i>CP_X Ice in</i>	<i>CP_Z Ice in</i>
T1	140.00-120.00	3.2155	-9.4987	3.6009	-6.4942
T2	120.00-100.00	4.1791	-7.8068	5.3759	-4.5424
T3	100.00-80.00	5.5159	-12.1266	7.8040	-8.4099
T4	80.00-60.00	6.7652	-14.3835	9.9297	-9.8630
T5	60.00-40.00	7.8499	-16.8187	11.5941	-11.6362
T6	40.00-20.00	8.7931	-18.9952	13.0271	-13.2921
T7	20.00-0.00	7.1461	-15.8490	10.4121	-13.0364

Shielding Factor Ka

<i>Tower Section</i>	<i>Feed Line Record No.</i>	<i>Description</i>	<i>Feed Line Segment Elev.</i>	<i>K_a No Ice</i>	<i>K_a Ice</i>
T1	1	7/8	120.00 - 137.00	0.6000	0.6000
T1	2	1 5/8	120.00 - 140.00	0.6000	0.6000
T1	4	1 5/8	120.00 - 138.00	0.6000	0.6000
T1	13	Feedline Ladder (Af)	120.00 - 140.00	0.6000	0.6000
T1	15	Feedline Ladder (Af)	120.00 -	0.6000	0.6000

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	8 of 108
	Project	CT141_12840 Cheshire North 2 CT	Date	14:14:51 08/23/21
	Client	VzW; Site 468479	Designed by	M. Larson

<i>Tower Section</i>	<i>Feed Line Record No.</i>	<i>Description</i>	<i>Feed Line Segment Elev.</i>	<i>K_a No Ice</i>	<i>K_a Ice</i>
T1	16	Safety Line 3/8	138.00 - 120.00	1.0000	1.0000
T1	18	HB158-U12S24-200-LI	140.00 - 120.00	0.6000	0.6000
T2	1	7/8	138.00 - 100.00	0.6000	0.6000
T2	2	1 5/8	120.00 - 100.00	0.6000	0.6000
T2	4	1 5/8	120.00 - 100.00	0.6000	0.6000
T2	13	Feedline Ladder (Af)	120.00 - 100.00	0.6000	0.6000
T2	15	Feedline Ladder (Af)	120.00 - 100.00	0.6000	0.6000
T2	16	Safety Line 3/8	120.00 - 100.00	1.0000	1.0000
T2	17	E65	120.00 - 100.00	0.6000	0.6000
T2	18	HB158-U12S24-200-LI	120.00 - 100.00	0.6000	0.6000
T3	1	7/8	80.00 - 100.00	0.6000	0.6000
T3	2	1 5/8	80.00 - 100.00	0.6000	0.6000
T3	4	1 5/8	80.00 - 100.00	0.6000	0.6000
T3	6	1 5/8	80.00 - 98.00	0.6000	0.6000
T3	7	2" conduit	80.00 - 98.00	0.6000	0.6000
T3	9	5/16" Fiberoptic cable	80.00 - 98.00	0.6000	0.6000
T3	11	3/4" power	80.00 - 98.00	0.6000	0.6000
T3	12	EW90	80.00 - 83.00	0.6000	0.6000
T3	13	Feedline Ladder (Af)	80.00 - 100.00	0.6000	0.6000
T3	14	Feedline Ladder (Af)	80.00 - 98.00	0.6000	0.6000
T3	15	Feedline Ladder (Af)	80.00 - 100.00	0.6000	0.6000
T3	16	Safety Line 3/8	80.00 - 100.00	1.0000	1.0000
T3	17	E65	80.00 - 100.00	0.6000	0.6000
T3	18	HB158-U12S24-200-LI	80.00 - 100.00	0.6000	0.6000
T4	1	7/8	60.00 - 80.00	0.6000	0.6000
T4	2	1 5/8	60.00 - 80.00	0.6000	0.6000
T4	4	1 5/8	60.00 - 80.00	0.6000	0.6000
T4	6	1 5/8	60.00 - 80.00	0.6000	0.6000
T4	7	2" conduit	60.00 - 80.00	0.6000	0.6000
T4	9	5/16" Fiberoptic cable	60.00 - 80.00	0.6000	0.6000
T4	11	3/4" power	60.00 - 80.00	0.6000	0.6000
T4	12	EW90	60.00 - 80.00	0.6000	0.6000
T4	13	Feedline Ladder (Af)	60.00 - 80.00	0.6000	0.6000
T4	14	Feedline Ladder (Af)	60.00 - 80.00	0.6000	0.6000
T4	15	Feedline Ladder (Af)	60.00 - 80.00	0.6000	0.6000
T4	16	Safety Line 3/8	60.00 - 80.00	1.0000	1.0000
T4	17	E65	60.00 - 80.00	0.6000	0.6000
T4	18	HB158-U12S24-200-LI	60.00 - 80.00	0.6000	0.6000
T5	1	7/8	40.00 - 60.00	0.6000	0.6000
T5	2	1 5/8	40.00 - 60.00	0.6000	0.6000
T5	4	1 5/8	40.00 - 60.00	0.6000	0.6000
T5	6	1 5/8	40.00 - 60.00	0.6000	0.6000
T5	7	2" conduit	40.00 - 60.00	0.6000	0.6000
T5	9	5/16" Fiberoptic cable	40.00 - 60.00	0.6000	0.6000
T5	11	3/4" power	40.00 - 60.00	0.6000	0.6000
T5	12	EW90	40.00 - 60.00	0.6000	0.6000
T5	13	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000
T5	14	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000
T5	15	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000
T5	16	Safety Line 3/8	40.00 - 60.00	1.0000	1.0000
T5	17	E65	40.00 - 60.00	0.6000	0.6000

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	9 of 108
	Project	CT141_12840 Cheshire North 2 CT	Date	14:14:51 08/23/21
	Client	VzW; Site 468479	Designed by	M. Larson

<i>Tower Section</i>	<i>Feed Line Record No.</i>	<i>Description</i>	<i>Feed Line Segment Elev.</i>	<i>K_a No Ice</i>	<i>K_a Ice</i>
T5	18	HB158-U12S24-200-LI	40.00 - 60.00	0.6000	0.6000
T6	1	7/8	20.00 - 40.00	0.6000	0.6000
T6	2	1 5/8	20.00 - 40.00	0.6000	0.6000
T6	4	1 5/8	20.00 - 40.00	0.6000	0.6000
T6	6	1 5/8	20.00 - 40.00	0.6000	0.6000
T6	7	2" conduit	20.00 - 40.00	0.6000	0.6000
T6	9	5/16" Fiberoptic cable	20.00 - 40.00	0.6000	0.6000
T6	11	3/4" power	20.00 - 40.00	0.6000	0.6000
T6	12	EW90	20.00 - 40.00	0.6000	0.6000
T6	13	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T6	14	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T6	15	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T6	16	Safety Line 3/8	20.00 - 40.00	1.0000	1.0000
T6	17	E65	20.00 - 40.00	0.6000	0.6000
T6	18	HB158-U12S24-200-LI	20.00 - 40.00	0.6000	0.6000
T7	1	7/8	8.00 - 20.00	0.6000	0.6000
T7	2	1 5/8	8.00 - 20.00	0.6000	0.6000
T7	4	1 5/8	8.00 - 20.00	0.6000	0.6000
T7	6	1 5/8	8.00 - 20.00	0.6000	0.6000
T7	7	2" conduit	8.00 - 20.00	0.6000	0.6000
T7	9	5/16" Fiberoptic cable	8.00 - 20.00	0.6000	0.6000
T7	11	3/4" power	8.00 - 20.00	0.6000	0.6000
T7	12	EW90	8.00 - 20.00	0.6000	0.6000
T7	13	Feedline Ladder (Af)	0.00 - 20.00	0.6000	0.6000
T7	14	Feedline Ladder (Af)	0.00 - 20.00	0.6000	0.6000
T7	15	Feedline Ladder (Af)	0.00 - 20.00	0.6000	0.6000
T7	16	Safety Line 3/8	0.00 - 20.00	1.0000	1.0000
T7	17	E65	8.00 - 20.00	0.6000	0.6000
T7	18	HB158-U12S24-200-LI	8.00 - 20.00	0.6000	0.6000

Discrete Tower Loads

<i>Description</i>	<i>Face or Leg</i>	<i>Offset Type</i>	<i>Offsets: Horiz Lateral Vert</i> <i>ft ft ft</i>	<i>Azimuth Adjustment</i> <i>°</i>	<i>Placement</i> <i>ft</i>	<i>C_dA_d Front</i> <i>ft²</i>	<i>C_dA_d Side</i> <i>ft²</i>	<i>Weight</i> <i>K</i>
PD1142-2C (Eversource)	C	From Leg	0.50 0.00 6.00	0.0000	140.00	No Ice 0.69 1/2" Ice 1.97 1" Ice 3.26	0.69 1.97 3.26	0.01 0.02 0.04
DB Spectra DS2C03F36D-D (Eversource)	A	From Leg	0.50 0.00 10.00	0.0000	137.00	No Ice 6.08 1/2" Ice 8.53 1" Ice 11.01	6.08 8.53 11.01	0.07 0.12 0.18
SitePro R5-LL (PM 601-1) (Eversource)	A	From Leg	0.00 0.00 0.00	0.0000	137.00	No Ice 1.32 1/2" Ice 1.58 1" Ice 2.40	1.32 1.58 2.40	0.07 0.08 0.13
5'x4 1/2" Pipe Mount (Eversource)	B	From Face	0.50 0.00 0.00	0.0000	120.00	No Ice 1.36 1/2" Ice 2.08 1" Ice 2.40	1.36 2.08 2.40	0.05 0.07 0.09
HPA-65R-BUU-H6 (AT&T existing)	A	From Face	4.00 0.00 0.00	0.0000	98.00	No Ice 9.66 1/2" Ice 10.13 1" Ice 10.61	6.45 6.91 7.38	0.06 0.12 0.19
HPA-65R-BUU-H6	B	From Face	4.00	0.0000	98.00	No Ice 9.66	6.45	0.06

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	10 of 108
	Project	CT141_12840 Cheshire North 2 CT	Date	14:14:51 08/23/21
	Client	VzW; Site 468479	Designed by	M. Larson

<i>Description</i>	<i>Face or Leg</i>	<i>Offset Type</i>	<i>Offsets: Horz Lateral Vert ft ft ft</i>	<i>Azimuth Adjustment °</i>	<i>Placement ft</i>	<i>C_{AA} Front ft²</i>	<i>C_{AA} Side ft²</i>	<i>Weight K</i>
(AT&T existing)			0.00			1/2" Ice 10.13	6.91	0.12
			0.00			1" Ice 10.61	7.38	0.19
HPA-65R-BUU-H6	C	From Face	4.00	0.0000	98.00	No Ice 9.66	6.45	0.06
(AT&T existing)			0.00			1/2" Ice 10.13	6.91	0.12
			0.00			1" Ice 10.61	7.38	0.19
AM-X-CD-16-65	A	From Face	4.00	0.0000	98.00	No Ice 6.04	4.11	0.04
(AT&T existing)			0.00			1/2" Ice 6.41	4.45	0.08
			0.00			1" Ice 6.77	4.80	0.12
AM-X-CD-16-65	B	From Face	4.00	0.0000	98.00	No Ice 6.04	4.11	0.04
(AT&T existing)			0.00			1/2" Ice 6.41	4.45	0.08
			0.00			1" Ice 6.77	4.80	0.12
AM-X-CD-16-65	C	From Face	4.00	0.0000	98.00	No Ice 6.04	4.11	0.04
(AT&T existing)			0.00			1/2" Ice 6.41	4.45	0.08
			0.00			1" Ice 6.77	4.80	0.12
cci DMP65R-BU6DA	A	From Face	4.00	0.0000	98.00	No Ice 12.71	5.62	0.08
(AT&T)			0.00			1/2" Ice 13.21	6.07	0.16
			0.00			1" Ice 13.71	6.53	0.24
cci DMP65R-BU6DA	B	From Face	4.00	0.0000	98.00	No Ice 12.71	5.62	0.08
(AT&T)			0.00			1/2" Ice 13.21	6.07	0.16
			0.00			1" Ice 13.71	6.53	0.24
cci DMP65R-BU6DA	C	From Face	4.00	0.0000	98.00	No Ice 12.71	5.62	0.08
(AT&T)			0.00			1/2" Ice 13.21	6.07	0.16
			0.00			1" Ice 13.71	6.53	0.24
OPA65R-BU6DA	A	From Face	4.00	0.0000	98.00	No Ice 12.87	5.67	0.07
(AT&T)			0.00			1/2" Ice 13.37	6.13	0.14
			0.00			1" Ice 13.87	6.59	0.22
OPA65R-BU6DA	B	From Face	4.00	0.0000	98.00	No Ice 12.87	5.67	0.07
(AT&T)			0.00			1/2" Ice 13.37	6.13	0.14
			0.00			1" Ice 13.87	6.59	0.22
OPA65R-BU6DA	C	From Face	4.00	0.0000	98.00	No Ice 12.87	5.67	0.07
(AT&T)			0.00			1/2" Ice 13.37	6.13	0.14
			0.00			1" Ice 13.87	6.59	0.22
cci DTMABP7819VG12A	A	From Face	3.50	0.0000	98.00	No Ice 1.36	0.51	0.02
TMA			0.00			1/2" Ice 1.51	0.61	0.03
(AT&T existing)			0.00			1" Ice 1.66	0.72	0.04
cci DTMABP7819VG12A	B	From Face	3.50	0.0000	98.00	No Ice 1.36	0.51	0.02
TMA			0.00			1/2" Ice 1.51	0.61	0.03
(AT&T existing)			0.00			1" Ice 1.66	0.72	0.04
cci DTMABP7819VG12A	C	From Face	3.50	0.0000	98.00	No Ice 1.36	0.51	0.02
TMA			0.00			1/2" Ice 1.51	0.61	0.03
(AT&T existing)			0.00			1" Ice 1.66	0.72	0.04
Radio 4415	A	From Face	3.50	0.0000	98.00	No Ice 1.84	0.82	0.05
(AT&T)			0.00			1/2" Ice 2.01	0.94	0.06
			0.00			1" Ice 2.19	1.07	0.08
Radio 4415	B	From Face	3.50	0.0000	98.00	No Ice 1.84	0.82	0.05
(AT&T)			0.00			1/2" Ice 2.01	0.94	0.06
			0.00			1" Ice 2.19	1.07	0.08
Radio 4415	C	From Face	3.50	0.0000	98.00	No Ice 1.84	0.82	0.05
(AT&T)			0.00			1/2" Ice 2.01	0.94	0.06
			0.00			1" Ice 2.19	1.07	0.08
Radio 4449	A	From Face	3.50	0.0000	98.00	No Ice 1.65	0.93	0.06
(AT&T)			0.00			1/2" Ice 1.81	1.05	0.07
			0.00			1" Ice 1.98	1.19	0.09
Radio 4449	B	From Face	3.50	0.0000	98.00	No Ice 1.65	0.93	0.06
(AT&T)			0.00			1/2" Ice 1.81	1.05	0.07
			0.00			1" Ice 1.98	1.19	0.09
Radio 4449	C	From Face	3.50	0.0000	98.00	No Ice 1.65	0.93	0.06

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	11 of 108
	Project	CT141_12840 Cheshire North 2 CT	Date	14:14:51 08/23/21
	Client	VzW; Site 468479	Designed by	M. Larson

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C _{AA} Front ft ²	C _{AA} Side ft ²	Weight K
(AT&T)			0.00			1/2" Ice	1.81	1.05	0.07
			0.00			1" Ice	1.98	1.19	0.09
Radio 8843	A	From Face	3.50	0.0000	98.00	No Ice	1.64	1.36	0.07
(AT&T)			0.00			1/2" Ice	1.80	1.51	0.09
			0.00			1" Ice	1.96	1.66	0.11
Radio 8843	B	From Face	3.50	0.0000	98.00	No Ice	1.64	1.36	0.07
(AT&T)			0.00			1/2" Ice	1.80	1.51	0.09
			0.00			1" Ice	1.96	1.66	0.11
Radio 8843	C	From Face	3.50	0.0000	98.00	No Ice	1.64	1.36	0.07
(AT&T)			0.00			1/2" Ice	1.80	1.51	0.09
			0.00			1" Ice	1.96	1.66	0.11
Raycap DC6-48-60-18-8F	A	From Face	1.00	0.0000	98.00	No Ice	0.74	0.74	0.03
surge suppressor			0.00			1/2" Ice	1.20	1.20	0.04
(AT&T)			0.00			1" Ice	1.37	1.37	0.06
Raycap DC6-48-60-18-8F	C	From Face	1.00	0.0000	98.00	No Ice	0.74	0.74	0.03
surge suppressor			0.00			1/2" Ice	1.20	1.20	0.04
(AT&T existing)			0.00			1" Ice	1.37	1.37	0.06
13' T-Frame	A	None		0.0000	98.00	No Ice	12.20	12.20	0.36
(AT&T existing)						1/2" Ice	17.60	17.60	0.49
						1" Ice	23.00	23.00	0.62
13' T-Frame	B	None		0.0000	98.00	No Ice	12.20	12.20	0.36
(AT&T existing)						1/2" Ice	17.60	17.60	0.49
						1" Ice	23.00	23.00	0.62
13' T-Frame	C	None		0.0000	98.00	No Ice	12.20	12.20	0.36
(AT&T existing)						1/2" Ice	17.60	17.60	0.49
						1" Ice	23.00	23.00	0.62
4'x4 1/2" Pipe Mount	A	From Leg	0.50	0.0000	85.00 - 81.00	No Ice	1.08	1.08	0.04
(Eversource)			0.00			1/2" Ice	1.58	1.58	0.06
			0.00			1" Ice	1.84	1.84	0.07
(2) JAHH-65-R3B w/	A	From Leg	4.00	0.0000	138.00	No Ice	9.11	5.98	0.10
SBS-2-2 Mount			0.00			1/2" Ice	9.58	6.44	0.16
(VzW)			0.00			1" Ice	10.05	6.91	0.22
(2) JAHH-65-R3B w/	B	From Leg	4.00	0.0000	138.00	No Ice	9.11	5.98	0.10
SBS-2-2 Mount			0.00			1/2" Ice	9.58	6.44	0.16
(VzW)			0.00			1" Ice	10.05	6.91	0.22
(2) JAHH-65-R3B w/	C	From Leg	4.00	0.0000	138.00	No Ice	9.11	5.98	0.10
SBS-2-2 Mount			0.00			1/2" Ice	9.58	6.44	0.16
(VzW)			0.00			1" Ice	10.05	6.91	0.22
MT6407-77A	A	From Leg	4.00	0.0000	138.00	No Ice	4.69	1.84	0.09
(VzW)			0.00			1/2" Ice	4.98	2.06	0.12
			0.00			1" Ice	5.28	2.29	0.15
MT6407-77A	B	From Leg	4.00	0.0000	138.00	No Ice	4.69	1.84	0.09
(VzW)			0.00			1/2" Ice	4.98	2.06	0.12
			0.00			1" Ice	5.28	2.29	0.15
MT6407-77A	C	From Leg	4.00	0.0000	138.00	No Ice	4.69	1.84	0.09
(VzW)			0.00			1/2" Ice	4.98	2.06	0.12
			0.00			1" Ice	5.28	2.29	0.15
RFS FDJ85020Q4-S1	A	From Leg	4.00	0.0000	138.00	No Ice	0.96	0.36	0.02
Diplexer			0.00			1/2" Ice	1.09	0.43	0.03
(VzW)			0.00			1" Ice	1.24	0.52	0.04
RFS FDJ85020Q4-S1	B	From Leg	4.00	0.0000	138.00	No Ice	0.96	0.36	0.02
Diplexer			0.00			1/2" Ice	1.09	0.43	0.03
(VzW)			0.00			1" Ice	1.24	0.52	0.04
RFS FDJ85020Q4-S1	C	From Leg	4.00	0.0000	138.00	No Ice	0.96	0.36	0.02
Diplexer			0.00			1/2" Ice	1.09	0.43	0.03
(VzW)			0.00			1" Ice	1.24	0.52	0.04
Samsung B2/B66 PCS/AWS	A	From Leg	4.00	0.0000	138.00	No Ice	1.88	1.25	0.10

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	12 of 108
	Project	CT141_12840 Cheshire North 2 CT	Date	14:14:51 08/23/21
	Client	VzW; Site 468479	Designed by	M. Larson

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft	C _{AA} Front ft²	C _{AA} Side ft²	Weight K	
RRH			2.00			1/2" Ice	2.05	1.39	0.12
(VzW)			0.00			1" Ice	2.22	1.54	0.14
Samsung B2/B66 PCS/AWS	B	From Leg	4.00	0.0000	138.00	No Ice	1.88	1.25	0.10
RRH			2.00			1/2" Ice	2.05	1.39	0.12
(VzW)			0.00			1" Ice	2.22	1.54	0.14
Samsung B2/B66 PCS/AWS	C	From Leg	4.00	0.0000	138.00	No Ice	1.88	1.25	0.10
RRH			2.00			1/2" Ice	2.05	1.39	0.12
(VzW)			0.00			1" Ice	2.22	1.54	0.14
Samsung B5/B13 700/850	A	From Leg	4.00	0.0000	138.00	No Ice	1.88	1.01	0.08
RRH			-2.00			1/2" Ice	2.05	1.14	0.10
(VzW)			0.00			1" Ice	2.22	1.28	0.12
Samsung B5/B13 700/850	B	From Leg	4.00	0.0000	138.00	No Ice	1.88	1.01	0.08
RRH			-2.00			1/2" Ice	2.05	1.14	0.10
(VzW)			0.00			1" Ice	2.22	1.28	0.12
Samsung B5/B13 700/850	C	From Leg	4.00	0.0000	138.00	No Ice	1.88	1.01	0.08
RRH			-2.00			1/2" Ice	2.05	1.14	0.10
(VzW)			0.00			1" Ice	2.22	1.28	0.12
Raycap RDC-6627-PF-48	C	From Leg	0.50	0.0000	138.00	No Ice	4.06	3.10	0.03
OVP			0.00			1/2" Ice	4.32	3.34	0.07
(VzW)			0.00			1" Ice	4.58	3.58	0.11
13' T-Frame	A	None		0.0000	138.00	No Ice	12.20	12.20	0.36
(VzW)						1/2" Ice	17.60	17.60	0.49
						1" Ice	23.00	23.00	0.62
13' T-Frame	B	None		0.0000	138.00	No Ice	12.20	12.20	0.36
(VzW)						1/2" Ice	17.60	17.60	0.49
						1" Ice	23.00	23.00	0.62
13' T-Frame	C	None		0.0000	138.00	No Ice	12.20	12.20	0.36
(VzW)						1/2" Ice	17.60	17.60	0.49
						1" Ice	23.00	23.00	0.62
8'x2 1/2" Pipe Mount	A	From Leg	4.00	0.0000	138.00	No Ice	2.30	2.30	0.04
(VzW)			0.00			1/2" Ice	3.13	3.13	0.06
			0.00			1" Ice	3.62	3.62	0.08
8'x2 1/2" Pipe Mount	B	From Leg	4.00	0.0000	138.00	No Ice	2.30	2.30	0.04
(VzW)			0.00			1/2" Ice	3.13	3.13	0.06
			0.00			1" Ice	3.62	3.62	0.08
8'x2 1/2" Pipe Mount	C	From Leg	4.00	0.0000	138.00	No Ice	2.30	2.30	0.04
(VzW)			0.00			1/2" Ice	3.13	3.13	0.06
			0.00			1" Ice	3.62	3.62	0.08
(2) (2) L2.5x2.5x1/4 x 6.5'	A	From Leg	4.00	0.0000	138.00	No Ice	2.71	0.01	0.03
Mount Reinf			0.00			1/2" Ice	3.45	0.74	0.04
(VzW)			0.00			1" Ice	4.19	1.47	0.05
(2) (2) L2.5x2.5x1/4 x 6.5'	B	From Leg	4.00	0.0000	138.00	No Ice	2.71	0.01	0.03
Mount Reinf			0.00			1/2" Ice	3.45	0.74	0.04
(VzW)			0.00			1" Ice	4.19	1.47	0.05
(2) (2) L2.5x2.5x1/4 x 6.5'	C	From Leg	4.00	0.0000	138.00	No Ice	2.71	0.01	0.03
Mount Reinf			0.00			1/2" Ice	3.45	0.74	0.04
(VzW)			0.00			1" Ice	4.19	1.47	0.05

Dishes

tnxTower All-Points Technology Corp. 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	13 of 108
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	Client	VzW; Site 468479	Designed by	M. Larson

Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral Vert ft	Azimuth Adjustment °	3 dB Beam Width °	Elevation ft	Outside Diameter ft	Aperture Area ft²	Weight K
6' dish with radome (Eversource)	B	Paraboloid w/Radome	From Leg	2.00	Worst		120.00	6.00	No Ice	28.27
				0.00					1/2" Ice	29.07
				0.00					1" Ice	29.86
4' dish with radome (Eversource)	A	Paraboloid w/Radome	From Leg	2.00	Worst		83.00	4.00	No Ice	12.57
				0.00					1/2" Ice	13.10
				0.00					1" Ice	13.62

222-H Verification Constants

Constant	Value
K _d	0.85
Ice Thickness Importance Factor	1.15
Z _g	900
α	9.5
K _{zmin}	0.85
K _c	n/a
K _t	1
f	1
K _e	0.995

222-H Section Verification ArRr By Element

Section Elevation ft	Elem. Num.	Size	C	C w/Ice	F a c e	e	e w/Ice	A _r ft ²	A _r w/Ice ft ²	A _r R _r ft ²	A _r R _r w/Ice ft ²
T1 140.00-120.00	1	1 3/4	22.714	21.094	C	0.105	0.344	2.917	7.313	1.646	4.489
	1	1 3/4	22.714	21.094	A	0.105	0.344	2.917	7.313	1.646	4.489
	2	1 3/4	22.714	21.094	C	0.105	0.344	2.917	7.313	1.646	4.489
	2	1 3/4	22.714	21.094	B	0.105	0.344	2.917	7.313	1.646	4.489
	3	1 3/4	22.714	21.094	B	0.105	0.344	2.917	7.313	1.646	4.489
	3	1 3/4	22.714	21.094	A	0.105	0.344	2.917	7.313	1.646	4.489
	4	3/4	9.735	16.287	C	0.105	0.344	0.303	1.370	0.171	0.841
	5	3/4	9.735	16.287	B	0.105	0.344	0.303	1.370	0.171	0.841
	6	3/4	9.735	16.287	A	0.105	0.344	0.303	1.370	0.171	0.841
	7	3/4	9.735	16.287	C	0.105	0.344	0.303	1.370	0.171	0.841
	8	3/4	9.735	16.287	B	0.105	0.344	0.303	1.370	0.171	0.841
	9	3/4	9.735	16.287	A	0.105	0.344	0.303	1.370	0.171	0.841
	10	3/4	9.735	16.287	C	0.105	0.344	0.360	1.628	0.203	1.000
	11	3/4	9.735	16.287	C	0.105	0.344	0.360	1.628	0.203	1.000
	12	3/4	9.735	16.287	B	0.105	0.344	0.360	1.628	0.203	1.000
	13	3/4	9.735	16.287	B	0.105	0.344	0.360	1.628	0.203	1.000
	14	3/4	9.735	16.287	A	0.105	0.344	0.360	1.628	0.203	1.000
	15	3/4	9.735	16.287	A	0.105	0.344	0.360	1.628	0.203	1.000
	16	3/4	9.735	16.287	C	0.105	0.344	0.360	1.628	0.203	1.000
	17	3/4	9.735	16.287	C	0.105	0.344	0.360	1.628	0.203	1.000
	18	3/4	9.735	16.287	B	0.105	0.344	0.360	1.628	0.203	1.000
	19	3/4	9.735	16.287	B	0.105	0.344	0.360	1.628	0.203	1.000
	20	3/4	9.735	16.287	A	0.105	0.344	0.360	1.628	0.203	1.000
	21	3/4	9.735	16.287	A	0.105	0.344	0.360	1.628	0.203	1.000
	22	3/4	9.735	16.287	C	0.105	0.344	0.360	1.628	0.203	1.000
	23	3/4	9.735	16.287	C	0.105	0.344	0.360	1.628	0.203	1.000

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	14 of 108
	Project	CT141_12840 Cheshire North 2 CT	Date	14:14:51 08/23/21
	Client	VzW; Site 468479	Designed by	M. Larson

Section Elevation	Elem. Num.	Size	C	C w/Ice	F a c e	e	e w/Ice	A _r	A _r w/Ice	A _r R _r	A _r R _r w/Ice
ft								ft ²	ft ²	ft ²	ft ²
T2 120.00-100.00	24	3/4	9.735	16.287	B	0.105	0.344	0.360	1.628	0.203	1.000
	25	3/4	9.735	16.287	B	0.105	0.344	0.360	1.628	0.203	1.000
	26	3/4	9.735	16.287	A	0.105	0.344	0.360	1.628	0.203	1.000
	27	3/4	9.735	16.287	A	0.105	0.344	0.360	1.628	0.203	1.000
	28	3/4	9.735	16.287	C	0.105	0.344	0.360	1.628	0.203	1.000
	29	3/4	9.735	16.287	C	0.105	0.344	0.360	1.628	0.203	1.000
	30	3/4	9.735	16.287	B	0.105	0.344	0.360	1.628	0.203	1.000
	31	3/4	9.735	16.287	B	0.105	0.344	0.360	1.628	0.203	1.000
	32	3/4	9.735	16.287	A	0.105	0.344	0.360	1.628	0.203	1.000
	33	3/4	9.735	16.287	A	0.105	0.344	0.360	1.628	0.203	1.000
	34	3/4	9.735	16.287	C	0.105	0.344	0.360	1.628	0.203	1.000
	35	3/4	9.735	16.287	C	0.105	0.344	0.360	1.628	0.203	1.000
	36	3/4	9.735	16.287	B	0.105	0.344	0.360	1.628	0.203	1.000
	37	3/4	9.735	16.287	B	0.105	0.344	0.360	1.628	0.203	1.000
	38	3/4	9.735	16.287	A	0.105	0.344	0.360	1.628	0.203	1.000
	39	3/4	9.735	16.287	A	0.105	0.344	0.360	1.628	0.203	1.000
	40	3/4	9.735	16.287	C	0.105	0.344	0.360	1.628	0.203	1.000
	41	3/4	9.735	16.287	C	0.105	0.344	0.360	1.628	0.203	1.000
	42	3/4	9.735	16.287	B	0.105	0.344	0.360	1.628	0.203	1.000
	43	3/4	9.735	16.287	B	0.105	0.344	0.360	1.628	0.203	1.000
	44	3/4	9.735	16.287	A	0.105	0.344	0.360	1.628	0.203	1.000
	45	3/4	9.735	16.287	A	0.105	0.344	0.360	1.628	0.203	1.000
					A		Sum:	10.766	36.908	6.077	22.655
					B			10.766	36.908	6.077	22.655
					C			10.766	36.908	6.077	22.655
	46	2 1/2	31.883	24.063	C	0.135	0.364	4.167	8.490	2.359	5.276
	46	2 1/2	31.883	24.063	A	0.135	0.364	4.167	8.490	2.359	5.276
	47	2 1/2	31.883	24.063	C	0.135	0.364	4.167	8.490	2.359	5.276
	47	2 1/2	31.883	24.063	B	0.135	0.364	4.167	8.490	2.359	5.276
	48	2 1/2	31.883	24.063	B	0.135	0.364	4.167	8.490	2.359	5.276
	48	2 1/2	31.883	24.063	A	0.135	0.364	4.167	8.490	2.359	5.276
	49	7/8	11.159	16.387	C	0.135	0.364	0.349	1.385	0.198	0.861
	50	7/8	11.159	16.387	B	0.135	0.364	0.349	1.385	0.198	0.861
	51	7/8	11.159	16.387	A	0.135	0.364	0.349	1.385	0.198	0.861
	52	7/8	11.159	16.387	C	0.135	0.364	0.349	1.385	0.198	0.861
	53	7/8	11.159	16.387	B	0.135	0.364	0.349	1.385	0.198	0.861
	54	7/8	11.159	16.387	A	0.135	0.364	0.349	1.385	0.198	0.861
	55	7/8	11.159	16.387	C	0.135	0.364	0.415	1.646	0.235	1.023
	56	7/8	11.159	16.387	C	0.135	0.364	0.415	1.646	0.235	1.023
	57	7/8	11.159	16.387	B	0.135	0.364	0.415	1.646	0.235	1.023
	58	7/8	11.159	16.387	B	0.135	0.364	0.415	1.646	0.235	1.023
	59	7/8	11.159	16.387	A	0.135	0.364	0.415	1.646	0.235	1.023
	60	7/8	11.159	16.387	A	0.135	0.364	0.415	1.646	0.235	1.023
	61	7/8	11.159	16.387	C	0.135	0.364	0.415	1.646	0.235	1.023
	62	7/8	11.159	16.387	C	0.135	0.364	0.415	1.646	0.235	1.023
	63	7/8	11.159	16.387	B	0.135	0.364	0.415	1.646	0.235	1.023
	64	7/8	11.159	16.387	B	0.135	0.364	0.415	1.646	0.235	1.023
	65	7/8	11.159	16.387	A	0.135	0.364	0.415	1.646	0.235	1.023
	66	7/8	11.159	16.387	A	0.135	0.364	0.415	1.646	0.235	1.023
	67	7/8	11.159	16.387	C	0.135	0.364	0.415	1.646	0.235	1.023
	68	7/8	11.159	16.387	C	0.135	0.364	0.415	1.646	0.235	1.023
	69	7/8	11.159	16.387	B	0.135	0.364	0.415	1.646	0.235	1.023
	70	7/8	11.159	16.387	B	0.135	0.364	0.415	1.646	0.235	1.023
	71	7/8	11.159	16.387	A	0.135	0.364	0.415	1.646	0.235	1.023
	72	7/8	11.159	16.387	A	0.135	0.364	0.415	1.646	0.235	1.023
	73	7/8	11.159	16.387	C	0.135	0.364	0.415	1.646	0.235	1.023
	74	7/8	11.159	16.387	C	0.135	0.364	0.415	1.646	0.235	1.023
	75	7/8	11.159	16.387	B	0.135	0.364	0.415	1.646	0.235	1.023
	76	7/8	11.159	16.387	B	0.135	0.364	0.415	1.646	0.235	1.023

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	Project	CT141_12840 Cheshire North 2 CT	Date	14:14:51 08/23/21
	Client	VzW; Site 468479	Designed by	M. Larson

Section Elevation	Elem. Num.	Size	C	C w/Ice	F a c e	e	e w/Ice	A _r	A _r w/Ice	A _r R _r	A _r R _r w/Ice
ft								ft ²	ft ²	ft ²	ft ²
T3 100.00-80.00	77	7/8	11.159	16.387	A	0.135	0.364	0.415	1.646	0.235	1.023
	78	7/8	11.159	16.387	A	0.135	0.364	0.415	1.646	0.235	1.023
	79	7/8	11.159	16.387	C	0.135	0.364	0.415	1.646	0.235	1.023
	80	7/8	11.159	16.387	C	0.135	0.364	0.415	1.646	0.235	1.023
	81	7/8	11.159	16.387	B	0.135	0.364	0.415	1.646	0.235	1.023
	82	7/8	11.159	16.387	B	0.135	0.364	0.415	1.646	0.235	1.023
	83	7/8	11.159	16.387	A	0.135	0.364	0.415	1.646	0.235	1.023
	84	7/8	11.159	16.387	A	0.135	0.364	0.415	1.646	0.235	1.023
	85	7/8	11.159	16.387	C	0.135	0.364	0.415	1.646	0.235	1.023
	86	7/8	11.159	16.387	C	0.135	0.364	0.415	1.646	0.235	1.023
	87	7/8	11.159	16.387	B	0.135	0.364	0.415	1.646	0.235	1.023
	88	7/8	11.159	16.387	B	0.135	0.364	0.415	1.646	0.235	1.023
	89	7/8	11.159	16.387	A	0.135	0.364	0.415	1.646	0.235	1.023
	90	7/8	11.159	16.387	A	0.135	0.364	0.415	1.646	0.235	1.023
					A		Sum:	14.014	39.503	7.934	24.549
					B			14.014	39.503	7.934	24.549
					C			14.014	39.503	7.934	24.549
	91	3 1/2	43.704	27.946	C	0.163	0.308	5.841	10.085	3.222	6.064
	91	3 1/2	43.704	27.946	A	0.163	0.308	5.841	10.085	3.222	6.064
	92	3 1/2	43.704	27.946	C	0.163	0.308	5.841	10.085	3.222	6.064
	92	3 1/2	43.704	27.946	B	0.163	0.308	5.841	10.085	3.222	6.064
	93	3 1/2	43.704	27.946	B	0.163	0.308	5.841	10.085	3.222	6.064
	93	3 1/2	43.704	27.946	A	0.163	0.308	5.841	10.085	3.222	6.064
					A		Sum:	11.682	20.170	6.444	12.129
					B			11.682	20.170	6.444	12.129
					C			11.682	20.170	6.444	12.129
T4 80.00-60.00	112	3 3/4	45.603	28.058	C	0.154	0.275	6.258	10.397	3.399	6.149
	112	3 3/4	45.603	28.058	A	0.154	0.275	6.258	10.397	3.399	6.149
	113	3 3/4	45.603	28.058	C	0.154	0.275	6.258	10.397	3.399	6.149
	113	3 3/4	45.603	28.058	B	0.154	0.275	6.258	10.397	3.399	6.149
	114	3 3/4	45.603	28.058	B	0.154	0.275	6.258	10.397	3.399	6.149
	114	3 3/4	45.603	28.058	A	0.154	0.275	6.258	10.397	3.399	6.149
					A		Sum:	12.517	20.793	6.798	12.298
					B			12.517	20.793	6.798	12.298
T5 60.00-40.00	133	4	46.95	27.812	C	0.139	0.243	6.676	10.677	3.573	6.228
	133	4	46.95	27.812	A	0.139	0.243	6.676	10.677	3.573	6.228
	134	4	46.95	27.812	C	0.139	0.243	6.676	10.677	3.573	6.228
	134	4	46.95	27.812	B	0.139	0.243	6.676	10.677	3.573	6.228
	135	4	46.95	27.812	B	0.139	0.243	6.676	10.677	3.573	6.228
	135	4	46.95	27.812	A	0.139	0.243	6.676	10.677	3.573	6.228
					A		Sum:	13.351	21.354	7.147	12.457
					B			13.351	21.354	7.147	12.457
T6 40.00-20.00	154	4 1/4	47.273	26.894	C	0.129	0.22	7.093	10.895	3.776	6.301
	154	4 1/4	47.273	26.894	A	0.129	0.22	7.093	10.895	3.776	6.301
	155	4 1/4	47.273	26.894	C	0.129	0.22	7.093	10.895	3.776	6.301
	155	4 1/4	47.273	26.894	B	0.129	0.22	7.093	10.895	3.776	6.301
	156	4 1/4	47.273	26.894	B	0.129	0.22	7.093	10.895	3.776	6.301
	156	4 1/4	47.273	26.894	A	0.129	0.22	7.093	10.895	3.776	6.301
					A		Sum:	14.186	21.790	7.552	12.601
					B			14.186	21.790	7.552	12.601
T7 20.00-0.00					C			14.186	21.790	7.552	12.601
	175	4 1/2	46.563	25.068	C	0.135	0.212	7.510	10.917	4.027	6.295
	175	4 1/2	46.563	25.068	A	0.135	0.212	7.510	10.917	4.027	6.295
	176	4 1/2	46.563	25.068	C	0.135	0.212	7.510	10.917	4.027	6.295
	176	4 1/2	46.563	25.068	B	0.135	0.212	7.510	10.917	4.027	6.295
	177	4 1/2	46.563	25.068	B	0.135	0.212	7.510	10.917	4.027	6.295
	177	4 1/2	46.563	25.068	A	0.135	0.212	7.510	10.917	4.027	6.295
					A		Sum:	15.020	21.833	8.053	12.590

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Section Elevation	Elem. Num.	Size	C	C w/Ice	F a c e	e	e w/Ice	A _r	A _r w/Ice	A _r R _r	A _r R _r w/Ice
ft								ft ²	ft ²	ft ²	ft ²
					B			15.020	21.833	8.053	12.590
					C			15.020	21.833	8.053	12.590

222-H Section Verification Tables - No Ice

Section Elevation	z _{wind}	z _{ice}	K _z	K _h	K _{zt}	t _z	q _z	F a c e	e	A _r R _r
ft	ft	ft				in	psf			ft ²
T1 140.00-120.00	130.00		1.337	1	1		53	A	0.105	6.077
								B	0.105	6.077
								C	0.105	6.077
T2 120.00-100.00	110.00		1.291	1	1		51	A	0.135	7.934
								B	0.135	7.934
								C	0.135	7.934
T3 100.00-80.00	90.00		1.238	1	1		49	A	0.163	6.444
								B	0.163	6.444
								C	0.163	6.444
T4 80.00-60.00	70.00		1.174	1	1		46	A	0.154	6.798
								B	0.154	6.798
								C	0.154	6.798
T5 60.00-40.00	50.00		1.094	1	1		43	A	0.139	7.147
								B	0.139	7.147
								C	0.139	7.147
T6 40.00-20.00	30.00		0.982	1	1		39	A	0.129	7.552
								B	0.129	7.552
								C	0.129	7.552
T7 20.00-0.00	10.00		0.85	1	1		34	A	0.135	8.053
								B	0.135	8.053
								C	0.135	8.053

222-H Section Verification Tables - Ice

Section Elevation	z _{wind}	z _{ice}	K _z	K _h	K _{zt}	t _z	q _z	F a c e	e	A _r R _r
ft	ft	ft				in	psf			ft ²
T1 140.00-120.00	130.00	130.00	1.337	1	1	1.3190	7	A	0.344	22.655
								B	0.344	22.655
								C	0.344	22.655
T2 120.00-100.00	110.00	110.00	1.291	1	1	1.2971	7	A	0.364	24.549
								B	0.364	24.549
								C	0.364	24.549
T3 100.00-80.00	90.00	90.00	1.238	1	1	1.2714	7	A	0.308	18.604
								B	0.308	18.604
								C	0.308	18.604
T4 80.00-60.00	70.00	70.00	1.174	1	1	1.2398	6	A	0.275	19.467
								B	0.275	19.467
								C	0.275	19.467
T5 60.00-40.00	50.00	50.00	1.094	1	1	1.1988	6	A	0.243	20.291

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Section Elevation	z_{wind}	z_{ice}	K_z	K_h	K_{zt}	t_z	q_z	F_{ac}	e	$A_e R_r$
ft	ft	ft				in	psf	e		ft ²
T6 40.00-20.00	30.00	30.00	0.982	1	1	1.1391	5	B	0.243	20.291
								C	0.243	20.291
								A	0.22	20.975
								B	0.22	20.975
T7 20.00-0.00	10.00	10.00	0.85	1	1	1.0206	5	C	0.22	20.975
								A	0.212	20.995
								B	0.212	20.995
								C	0.212	20.995

222-H Section Verification Tables - Service

Section Elevation	z_{wind}	z_{ice}	K_z	K_h	K_{zt}	t_z	q_z	F_{ac}	e	$A_e R_r$
ft	ft	ft				in	psf	e		ft ²
T1 140.00-120.00	130.00		1.337	1	1		10	A	0.105	6.077
T2 120.00-100.00	110.00		1.291	1	1		10	B	0.105	6.077
								C	0.105	6.077
								A	0.135	7.934
T3 100.00-80.00	90.00		1.238	1	1		10	B	0.135	7.934
								C	0.135	7.934
								A	0.163	6.647
T4 80.00-60.00	70.00		1.174	1	1		9	B	0.163	6.647
								C	0.163	6.647
								A	0.154	7.110
T5 60.00-40.00	50.00		1.094	1	1		9	B	0.154	7.110
								C	0.154	7.110
								A	0.139	7.564
T6 40.00-20.00	30.00		0.982	1	1		8	B	0.139	7.564
								C	0.139	7.564
								A	0.129	8.025
T7 20.00-0.00	10.00		0.85	1	1		7	B	0.129	8.025
								C	0.129	8.025
								A	0.135	8.504
								B	0.135	8.504
								C	0.135	8.504

Tower Pressures - No Ice

$$G_H = 0.850$$

Section Elevation	z	K_z	q_z	A_G	F_{ac}	A_F	A_R	A_{leg}	Leg %	$C_A A_A$ In Face ft ²	$C_A A_A$ Out Face ft ²
ft	ft		psf	ft ²	e	ft ²	ft ²	ft ²			ft ²
T1 140.00-120.00	130.00	1.337	53	102.917	A	0.000	10.766	5.833	54.18	56.082	0.000
					B	0.000	10.766		54.18	0.000	0.000
					C	0.000	10.766		54.18	17.734	0.000
T2 120.00-100.00	110.00	1.291	51	104.167	A	0.000	14.014	8.333	59.47	62.230	0.000
					B	0.000	14.014		59.47	0.000	0.000
					C	0.000	14.014		59.47	24.697	0.000
T3 100.00-80.00	90.00	1.238	49	123.839	A	8.470	11.682	11.682	57.97	62.230	0.000
					B	8.470	11.682		57.97	63.648	0.000

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Section Elevation	z	K _Z	q _z	A _G	F a c e	A _F	A _R	A _{leg}	Leg %	C _A A _A In Face ft ²	C _A A _A Out Face ft ²
ft	ft		psf	ft ²		ft ²	ft ²	ft ²			
T4 80.00-60.00	70.00	1.174	46	160.256	C	8.470	11.682		57.97	24.993	0.000
					A	12.222	12.517	12.517	50.60	62.230	0.000
					B	12.222	12.517		50.60	70.720	0.000
					C	12.222	12.517		50.60	26.671	0.000
T5 60.00-40.00	50.00	1.094	43	196.673	A	14.004	13.351	13.351	48.81	62.230	0.000
					B	14.004	13.351		48.81	70.720	0.000
					C	14.004	13.351		48.81	26.671	0.000
T6 40.00-20.00	30.00	0.982	39	233.091	A	15.890	14.186	14.186	47.17	62.230	0.000
					B	15.890	14.186		47.17	70.720	0.000
					C	15.890	14.186		47.17	26.671	0.000
T7 20.00-0.00	10.00	0.85	34	269.508	A	21.421	15.020	15.020	41.22	41.638	0.000
					B	21.421	15.020		41.22	46.432	0.000
					C	21.421	15.020		41.22	20.002	0.000

Tower Pressure - With Ice

$$G_H = 0.850$$

Section Elevation	z	K _Z	q _z	t _z	A _G	F a c e	A _F	A _R	A _{leg}	Leg %	C _A A _A In Face ft ²	C _A A _A Out Face ft ²
ft	ft		psf	in	ft ²		ft ²	ft ²	ft ²			
T1 140.00-120.00	130.00	1.337	7	1.3190	107.313	A	0.000	36.908	14.627	39.63	69.574	0.000
						B	0.000	36.908		39.63	0.000	0.000
						C	0.000	36.908		39.63	39.487	0.000
T2 120.00-100.00	110.00	1.291	7	1.2971	108.490	A	0.000	39.503	16.981	42.99	76.230	0.000
						B	0.000	39.503		42.99	0.000	0.000
						C	0.000	39.503		42.99	60.571	0.000
T3 100.00-80.00	90.00	1.238	7	1.2714	128.081	A	8.470	30.938	20.170	51.18	75.752	0.000
						B	8.470	30.938		51.18	96.166	0.000
						C	8.470	30.938		51.18	61.067	0.000
T4 80.00-60.00	70.00	1.174	6	1.2398	164.393	A	12.222	32.915	20.793	46.07	75.168	0.000
						B	12.222	32.915		46.07	105.970	0.000
						C	12.222	32.915		46.07	66.253	0.000
T5 60.00-40.00	50.00	1.094	6	1.1988	200.673	A	14.004	34.784	21.354	43.77	74.408	0.000
						B	14.004	34.784		43.77	104.826	0.000
						C	14.004	34.784		43.77	65.195	0.000
T6 40.00-20.00	30.00	0.982	5	1.1391	236.891	A	15.890	36.270	21.790	41.78	73.303	0.000
						B	15.890	36.270		41.78	103.163	0.000
						C	15.890	36.270		41.78	63.655	0.000
T7 20.00-0.00	10.00	0.85	5	1.0206	272.913	A	21.421	36.408	21.833	37.76	50.232	0.000
						B	21.421	36.408		37.76	65.553	0.000
						C	21.421	36.408		37.76	41.994	0.000

Tower Pressure - Service

$$G_H = 0.850$$

Section Elevation	z	K _Z	q _z	A _G	F a c e	A _F	A _R	A _{leg}	Leg %	C _A A _A In Face ft ²	C _A A _A Out Face ft ²
ft	ft		psf	ft ²		ft ²	ft ²	ft ²			

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Section Elevation	<i>z</i>	<i>K_Z</i>	<i>q_z</i>	<i>A_G</i>	<i>F_{a c e}</i>	<i>A_F</i>	<i>A_R</i>	<i>A_{leg}</i>	<i>Leg %</i>	<i>C_{A A} In Face ft²</i>	<i>C_{A A} Out Face ft²</i>
<i>ft</i>	<i>ft</i>		<i>psf</i>	<i>ft²</i>		<i>ft²</i>	<i>ft²</i>	<i>ft²</i>			
T1 140.00-120.00	130.00	1.337	10	102.917	A	0.000	10.766	5.833	54.18	56.082	0.000
					B	0.000	10.766		54.18	0.000	0.000
					C	0.000	10.766		54.18	17.734	0.000
T2 120.00-100.00	110.00	1.291	10	104.167	A	0.000	14.014	8.333	59.47	62.230	0.000
					B	0.000	14.014		59.47	0.000	0.000
					C	0.000	14.014		59.47	24.697	0.000
T3 100.00-80.00	90.00	1.238	10	123.839	A	8.470	11.682	11.682	57.97	62.230	0.000
					B	8.470	11.682		57.97	63.648	0.000
					C	8.470	11.682		57.97	24.993	0.000
T4 80.00-60.00	70.00	1.174	9	160.256	A	12.222	12.517	12.517	50.60	62.230	0.000
					B	12.222	12.517		50.60	70.720	0.000
					C	12.222	12.517		50.60	26.671	0.000
T5 60.00-40.00	50.00	1.094	9	196.673	A	14.004	13.351	13.351	48.81	62.230	0.000
					B	14.004	13.351		48.81	70.720	0.000
					C	14.004	13.351		48.81	26.671	0.000
T6 40.00-20.00	30.00	0.982	8	233.091	A	15.890	14.186	14.186	47.17	62.230	0.000
					B	15.890	14.186		47.17	70.720	0.000
					C	15.890	14.186		47.17	26.671	0.000
T7 20.00-0.00	10.00	0.85	7	269.508	A	21.421	15.020	15.020	41.22	41.638	0.000
					B	21.421	15.020		41.22	46.432	0.000
					C	21.421	15.020		41.22	20.002	0.000

Tower Forces - No Ice - Wind Normal To Face

Section Elevation	Add Weight	Self Weight	<i>F_{a c e}</i>	<i>e</i>	<i>C_F</i>	<i>q_z</i>	<i>D_F</i>	<i>D_R</i>	<i>A_E</i>	<i>F</i>	<i>w</i>	<i>Ctrl. Face</i>
<i>ft</i>	<i>K</i>	<i>K</i>				<i>psf</i>			<i>ft²</i>	<i>K</i>	<i>plf</i>	
T1 140.00-120.00	0.65	0.86	A	0.105	2.946	53	1	1	6.077	2.52	126.18	A
			B	0.105	2.946		1	1	6.077			
			C	0.105	2.946		1	1	6.077			
T2 120.00-100.00	0.72	1.50	A	0.135	2.829	51	1	1	7.934	2.94	147.20	A
			B	0.135	2.829		1	1	7.934			
			C	0.135	2.829		1	1	7.934			
T3 100.00-80.00	1.19	2.48	A	0.163	2.725	49	1	1	14.914	4.45	222.42	A
			B	0.163	2.725		1	1	14.914			
			C	0.163	2.725		1	1	14.914			
T4 80.00-60.00	1.25	2.82	A	0.154	2.755	46	1	1	19.020	4.86	243.09	B
			B	0.154	2.755		1	1	19.020			
			C	0.154	2.755		1	1	19.020			
T5 60.00-40.00	1.25	3.21	A	0.139	2.812	43	1	1	21.150	4.79	239.44	B
			B	0.139	2.812		1	1	21.150			
			C	0.139	2.812		1	1	21.150			
T6 40.00-20.00	1.25	3.86	A	0.129	2.85	39	1	1	23.442	4.54	227.11	B
			B	0.129	2.85		1	1	23.442			
			C	0.129	2.85		1	1	23.442			
T7 20.00-0.00	0.95	4.23	A	0.135	2.827	34	1	1	29.474	3.80	190.25	B
			B	0.135	2.827		1	1	29.474			
			C	0.135	2.827		1	1	29.474			
Sum Weight:	7.25	18.96						OTM	1806.36 kip-ft	27.91		

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Tower Forces - No Ice - Wind 60 To Face

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	q _z psf	D _F	D _R	A _E ft ²	F K	w plf	Ctrl. Face
ft	K	K										
T1 140.00-120.00	0.65	0.86	A	0.105	2.946	53	0.8	1	6.077	2.52	126.18	B
			B	0.105	2.946		0.8	1	6.077			
			C	0.105	2.946		0.8	1	6.077			
T2 120.00-100.00	0.72	1.50	A	0.135	2.829	51	0.8	1	7.934	2.94	147.20	B
			B	0.135	2.829		0.8	1	7.934			
			C	0.135	2.829		0.8	1	7.934			
T3 100.00-80.00	1.19	2.48	A	0.163	2.725	49	0.8	1	13.220	4.26	212.83	B
			B	0.163	2.725		0.8	1	13.220			
			C	0.163	2.725		0.8	1	13.220			
T4 80.00-60.00	1.25	2.82	A	0.154	2.755	46	0.8	1	16.575	4.60	229.83	C
			B	0.154	2.755		0.8	1	16.575			
			C	0.154	2.755		0.8	1	16.575			
T5 60.00-40.00	1.25	3.21	A	0.139	2.812	43	0.8	1	18.349	4.50	224.99	C
			B	0.139	2.812		0.8	1	18.349			
			C	0.139	2.812		0.8	1	18.349			
T6 40.00-20.00	1.25	3.86	A	0.129	2.85	39	0.8	1	20.264	4.24	212.19	C
			B	0.129	2.85		0.8	1	20.264			
			C	0.129	2.85		0.8	1	20.264			
T7 20.00-0.00	0.95	4.23	A	0.135	2.827	34	0.8	1	25.190	3.46	172.98	C
			B	0.135	2.827		0.8	1	25.190			
			C	0.135	2.827		0.8	1	25.190			
Sum Weight:	7.25	18.96						OTM	1743.68 kip-ft	26.52		

Tower Forces - No Ice - Wind 90 To Face

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	q _z psf	D _F	D _R	A _E ft ²	F K	w plf	Ctrl. Face
ft	K	K										
T1 140.00-120.00	0.65	0.86	A	0.105	2.946	53	0.85	1	6.077	2.37	118.67	C
			B	0.105	2.946		0.85	1	6.077			
			C	0.105	2.946		0.85	1	6.077			
T2 120.00-100.00	0.72	1.50	A	0.135	2.829	51	0.85	1	7.934	2.78	139.15	C
			B	0.135	2.829		0.85	1	7.934			
			C	0.135	2.829		0.85	1	7.934			
T3 100.00-80.00	1.19	2.48	A	0.163	2.725	49	0.85	1	13.644	4.47	223.72	C
			B	0.163	2.725		0.85	1	13.644			
			C	0.163	2.725		0.85	1	13.644			
T4 80.00-60.00	1.25	2.82	A	0.154	2.755	46	0.85	1	17.186	4.81	240.47	C
			B	0.154	2.755		0.85	1	17.186			
			C	0.154	2.755		0.85	1	17.186			
T5 60.00-40.00	1.25	3.21	A	0.139	2.812	43	0.85	1	19.050	4.71	235.43	C
			B	0.139	2.812		0.85	1	19.050			
			C	0.139	2.812		0.85	1	19.050			
T6 40.00-20.00	1.25	3.86	A	0.129	2.85	39	0.85	1	21.058	4.44	222.05	C
			B	0.129	2.85		0.85	1	21.058			
			C	0.129	2.85		0.85	1	21.058			
T7 20.00-0.00	0.95	4.23	A	0.135	2.827	34	0.85	1	26.261	3.61	180.48	C
			B	0.135	2.827		0.85	1	26.261			
			C	0.135	2.827		0.85	1	26.261			

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	Client	VzW; Site 468479	Designed by	M. Larson

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	q _z psf	D _F	D _R	A _E	F	w	Ctrl. Face
ft	K	K							ft ²	K	plf	
Sum Weight:	7.25	18.96						OTM	1758.78 kip-ft	27.20		

Tower Forces - With Ice - Wind Normal To Face

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	q _z psf	D _F	D _R	A _E	F	w	Ctrl. Face
ft	K	K							ft ²	K	plf	
T1 140.00-120.00	1.90	1.97	A	0.344	2.186	7	1	1	22.655	0.71	35.53	A
			B	0.344	2.186		1	1	22.655			
			C	0.344	2.186		1	1	22.655			
T2 120.00-100.00	2.20	2.70	A	0.364	2.139	7	1	1	24.549	0.80	40.07	A
			B	0.364	2.139		1	1	24.549			
			C	0.364	2.139		1	1	24.549			
T3 100.00-80.00	3.69	3.95	A	0.308	2.276	7	1	1	27.074	1.06	53.12	B
			B	0.308	2.276		1	1	27.074			
			C	0.308	2.276		1	1	27.074			
T4 80.00-60.00	3.85	4.60	A	0.275	2.366	6	1	1	31.689	1.12	56.22	B
			B	0.275	2.366		1	1	31.689			
			C	0.275	2.366		1	1	31.689			
T5 60.00-40.00	3.76	5.12	A	0.243	2.458	6	1	1	34.295	1.09	54.30	B
			B	0.243	2.458		1	1	34.295			
			C	0.243	2.458		1	1	34.295			
T6 40.00-20.00	3.63	5.84	A	0.22	2.53	5	1	1	36.865	1.00	50.24	B
			B	0.22	2.53		1	1	36.865			
			C	0.22	2.53		1	1	36.865			
T7 20.00-0.00	2.40	6.38	A	0.212	2.557	5	1	1	42.416	0.76	38.14	B
			B	0.212	2.557		1	1	42.416			
			C	0.212	2.557		1	1	42.416			
Sum Weight:	21.44	30.56						OTM	446.92 kip-ft	6.55		

Tower Forces - With Ice - Wind 60 To Face

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	q _z psf	D _F	D _R	A _E	F	w	Ctrl. Face
ft	K	K							ft ²	K	plf	
T1 140.00-120.00	1.90	1.97	A	0.344	2.186	7	0.8	1	22.655	0.71	35.53	B
			B	0.344	2.186		0.8	1	22.655			
			C	0.344	2.186		0.8	1	22.655			
T2 120.00-100.00	2.20	2.70	A	0.364	2.139	7	0.8	1	24.549	0.80	40.07	B
			B	0.364	2.139		0.8	1	24.549			
			C	0.364	2.139		0.8	1	24.549			
T3 100.00-80.00	3.69	3.95	A	0.308	2.276	7	0.8	1	25.380	1.04	52.02	C
			B	0.308	2.276		0.8	1	25.380			
			C	0.308	2.276		0.8	1	25.380			
T4	3.85	4.60	A	0.275	2.366	6	0.8	1	29.244	1.09	54.66	C

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	22 of 108
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Section Elevation <i>ft</i>	Add Weight <i>K</i>	Self Weight <i>K</i>	<i>F a c e</i>	<i>e</i>	<i>C_F</i>	<i>q_z</i> <i>psf</i>	<i>D_F</i>	<i>D_R</i>	<i>A_E</i> <i>ft²</i>	<i>F</i> <i>K</i>	<i>w</i> <i>plf</i>	<i>Ctrl. Face</i>
80.00-60.00			B	0.275	2.366		0.8	1	29.244			
			C	0.275	2.366		0.8	1	29.244			
T5	3.76	5.12	A	0.243	2.458	6	0.8	1	31.494	1.05	52.57	C
60.00-40.00			B	0.243	2.458		0.8	1	31.494			
			C	0.243	2.458		0.8	1	31.494			
T6	3.63	5.84	A	0.22	2.53	5	0.8	1	33.687	0.97	48.42	C
40.00-20.00			B	0.22	2.53		0.8	1	33.687			
			C	0.22	2.53		0.8	1	33.687			
T7 20.00-0.00	2.40	6.38	A	0.212	2.557	5	0.8	1	38.132	0.72	36.00	C
			B	0.212	2.557		0.8	1	38.132			
			C	0.212	2.557		0.8	1	38.132			
Sum Weight:	21.44	30.56						OTM	439.50 kip-ft	6.39		

Tower Forces - With Ice - Wind 90 To Face

Section Elevation <i>ft</i>	Add Weight <i>K</i>	Self Weight <i>K</i>	<i>F a c e</i>	<i>e</i>	<i>C_F</i>	<i>q_z</i> <i>psf</i>	<i>D_F</i>	<i>D_R</i>	<i>A_E</i> <i>ft²</i>	<i>F</i> <i>K</i>	<i>w</i> <i>plf</i>	<i>Ctrl. Face</i>
T1	1.90	1.97	A	0.344	2.186	7	0.85	1	22.655	0.69	34.50	C
140.00-120.00			B	0.344	2.186		0.85	1	22.655			
			C	0.344	2.186		0.85	1	22.655			
T2	2.20	2.70	A	0.364	2.139	7	0.85	1	24.549	0.78	38.97	C
120.00-100.00			B	0.364	2.139		0.85	1	24.549			
			C	0.364	2.139		0.85	1	24.549			
T3	3.69	3.95	A	0.308	2.276	7	0.85	1	25.803	1.06	52.79	C
100.00-80.00			B	0.308	2.276		0.85	1	25.803			
			C	0.308	2.276		0.85	1	25.803			
T4	3.85	4.60	A	0.275	2.366	6	0.85	1	29.855	1.11	55.35	C
80.00-60.00			B	0.275	2.366		0.85	1	29.855			
			C	0.275	2.366		0.85	1	29.855			
T5	3.76	5.12	A	0.243	2.458	6	0.85	1	32.194	1.07	53.28	C
60.00-40.00			B	0.243	2.458		0.85	1	32.194			
			C	0.243	2.458		0.85	1	32.194			
T6	3.63	5.84	A	0.22	2.53	5	0.85	1	34.482	0.98	49.12	C
40.00-20.00			B	0.22	2.53		0.85	1	34.482			
			C	0.22	2.53		0.85	1	34.482			
T7 20.00-0.00	2.40	6.38	A	0.212	2.557	5	0.85	1	39.203	0.73	36.66	C
			B	0.212	2.557		0.85	1	39.203			
			C	0.212	2.557		0.85	1	39.203			
Sum Weight:	21.44	30.56						OTM	438.00 kip-ft	6.41		

Tower Forces - Service - Wind Normal To Face

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	VzW; Site 468479	M. Larson

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	q _z psf	D _F	D _R	A _E ft ²	F K	w plf	Ctrl. Face
ft	K	K										
T1 140.00-120.00	0.65	0.86	A	0.105	2.946	10	1	1	6.077	0.50	24.92	A
			B	0.105	2.946		1	1	6.077			
			C	0.105	2.946		1	1	6.077			
T2 120.00-100.00	0.72	1.50	A	0.135	2.829	10	1	1	7.934	0.58	29.08	A
			B	0.135	2.829		1	1	7.934			
			C	0.135	2.829		1	1	7.934			
T3 100.00-80.00	1.19	2.48	A	0.163	2.725	10	1	1	15.116	0.88	44.16	A
			B	0.163	2.725		1	1	15.116			
			C	0.163	2.725		1	1	15.116			
T4 80.00-60.00	1.25	2.82	A	0.154	2.755	9	1	1	19.331	0.97	48.35	B
			B	0.154	2.755		1	1	19.331			
			C	0.154	2.755		1	1	19.331			
T5 60.00-40.00	1.25	3.21	A	0.139	2.812	9	1	1	21.567	0.95	47.72	B
			B	0.139	2.812		1	1	21.567			
			C	0.139	2.812		1	1	21.567			
T6 40.00-20.00	1.25	3.86	A	0.129	2.85	8	1	1	23.915	0.91	45.30	B
			B	0.129	2.85		1	1	23.915			
			C	0.129	2.85		1	1	23.915			
T7 20.00-0.00	0.95	4.23	A	0.135	2.827	7	1	1	29.925	0.76	37.94	B
			B	0.135	2.827		1	1	29.925			
			C	0.135	2.827		1	1	29.925			
Sum Weight:	7.25	18.96						OTM	358.45 kip-ft	5.55		

Tower Forces - Service - Wind 60 To Face

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	q _z psf	D _F	D _R	A _E ft ²	F K	w plf	Ctrl. Face
ft	K	K										
T1 140.00-120.00	0.65	0.86	A	0.105	2.946	10	0.8	1	6.077	0.50	24.92	B
			B	0.105	2.946		0.8	1	6.077			
			C	0.105	2.946		0.8	1	6.077			
T2 120.00-100.00	0.72	1.50	A	0.135	2.829	10	0.8	1	7.934	0.58	29.08	B
			B	0.135	2.829		0.8	1	7.934			
			C	0.135	2.829		0.8	1	7.934			
T3 100.00-80.00	1.19	2.48	A	0.163	2.725	10	0.8	1	13.423	0.85	42.27	B
			B	0.163	2.725		0.8	1	13.423			
			C	0.163	2.725		0.8	1	13.423			
T4 80.00-60.00	1.25	2.82	A	0.154	2.755	9	0.8	1	16.887	0.91	45.73	C
			B	0.154	2.755		0.8	1	16.887			
			C	0.154	2.755		0.8	1	16.887			
T5 60.00-40.00	1.25	3.21	A	0.139	2.812	9	0.8	1	18.767	0.90	44.87	C
			B	0.139	2.812		0.8	1	18.767			
			C	0.139	2.812		0.8	1	18.767			
T6 40.00-20.00	1.25	3.86	A	0.129	2.85	8	0.8	1	20.737	0.85	42.35	C
			B	0.129	2.85		0.8	1	20.737			
			C	0.129	2.85		0.8	1	20.737			
T7 20.00-0.00	0.95	4.23	A	0.135	2.827	7	0.8	1	25.641	0.69	34.53	C
			B	0.135	2.827		0.8	1	25.641			
			C	0.135	2.827		0.8	1	25.641			
Sum Weight:	7.25	18.96						OTM	346.07 kip-ft	5.28		

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Tower Forces - Service - Wind 90 To Face

Section Elevation <i>ft</i>	Add Weight <i>K</i>	Self Weight <i>K</i>	<i>F a c e</i>	<i>e</i>	<i>C_F</i>	<i>q_z</i> <i>psf</i>	<i>D_F</i>	<i>D_R</i>	<i>A_E</i> <i>ft²</i>	<i>F</i> <i>K</i>	<i>w</i> <i>plf</i>	<i>Ctrl. Face</i>
T1 140.00-120.00	0.65	0.86	A	0.105	2.946	10	0.85	1	6.077	0.47	23.44	C
			B	0.105	2.946		0.85	1	6.077			
			C	0.105	2.946		0.85	1	6.077			
T2 120.00-100.00	0.72	1.50	A	0.135	2.829	10	0.85	1	7.934	0.55	27.49	C
			B	0.135	2.829		0.85	1	7.934			
			C	0.135	2.829		0.85	1	7.934			
T3 100.00-80.00	1.19	2.48	A	0.163	2.725	10	0.85	1	13.846	0.89	44.42	C
			B	0.163	2.725		0.85	1	13.846			
			C	0.163	2.725		0.85	1	13.846			
T4 80.00-60.00	1.25	2.82	A	0.154	2.755	9	0.85	1	17.498	0.96	47.83	C
			B	0.154	2.755		0.85	1	17.498			
			C	0.154	2.755		0.85	1	17.498			
T5 60.00-40.00	1.25	3.21	A	0.139	2.812	9	0.85	1	19.467	0.94	46.93	C
			B	0.139	2.812		0.85	1	19.467			
			C	0.139	2.812		0.85	1	19.467			
T6 40.00-20.00	1.25	3.86	A	0.129	2.85	8	0.85	1	21.532	0.89	44.30	C
			B	0.129	2.85		0.85	1	21.532			
			C	0.129	2.85		0.85	1	21.532			
T7 20.00-0.00	0.95	4.23	A	0.135	2.827	7	0.85	1	26.712	0.72	36.01	C
			B	0.135	2.827		0.85	1	26.712			
			C	0.135	2.827		0.85	1	26.712			
Sum Weight:	7.25	18.96						OTM	349.05 kip-ft	5.41		

Mast Vectors - No Ice

Section No.	Section Elevation <i>ft</i>	Wind Azimuth <i>°</i>	Directionality	<i>F</i> <i>K</i>	<i>V_x</i> <i>K</i>	<i>V_z</i> <i>K</i>	<i>OTM_x</i> <i>kip-ft</i>	<i>OTM_z</i> <i>kip-ft</i>	<i>Torque</i> <i>kip-ft</i>
T1	140.00-120.00	0	Wind Normal	2.07	0.00	-2.07	-270.21	-0.20	0.56
		30	Wind 90	1.92	0.96	-1.67	-217.19	-125.17	0.14
		60	Wind 60	2.07	1.80	-1.04	-135.47	-233.57	-0.74
		90	Wind 90	2.37	2.37	0.00	-0.73	-308.74	-1.88
		120	Wind Normal	2.52	2.19	1.26	163.31	-284.31	-2.09
		150	Wind 90	2.37	1.19	2.06	266.48	-154.47	-1.28
		180	Wind 60	2.07	0.00	2.07	268.76	-0.20	-0.56
		210	Wind 90	1.92	-0.96	1.67	215.74	124.78	-0.14
		240	Wind Normal	2.07	-1.80	1.04	134.01	233.18	0.74
		270	Wind 90	2.37	-2.37	0.00	-0.73	308.35	1.88
		300	Wind 60	2.52	-2.19	-1.26	-164.76	283.92	2.09
		330	Wind 90	2.37	-1.19	-2.06	-267.93	154.08	1.28
T2	120.00-100.00	0	Wind Normal	2.46	0.00	-2.46	-271.47	-0.22	0.86
		30	Wind 90	2.30	1.15	-1.99	-219.86	-126.69	0.47
		60	Wind 60	2.46	2.13	-1.23	-136.14	-234.62	-0.49
		90	Wind 90	2.78	2.78	0.00	-0.81	-306.34	-1.81
		120	Wind Normal	2.94	2.55	1.47	161.12	-280.68	-2.19
		150	Wind 90	2.78	1.39	2.41	264.30	-153.28	-1.50
		180	Wind 60	2.46	0.00	2.46	269.86	-0.22	-0.86

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Section No.	Section Elevation ft	Wind Azimuth °	Directionality	F K	V _x K	V _z K	OTM _x kip-ft	OTM _z kip-ft	Torque kip-ft
T3	100.00-80.00	210	Wind 90	2.30	-1.15	1.99	218.24	126.25	-0.47
		240	Wind Normal	2.46	-2.13	1.23	134.53	234.18	0.49
		270	Wind 90	2.78	-2.78	0.00	-0.81	305.90	1.81
		300	Wind 60	2.94	-2.55	-1.47	-162.73	280.24	2.19
		330	Wind 90	2.78	-1.39	-2.41	-265.91	152.84	1.50
		0	Wind Normal	3.98	0.00	-3.98	-360.66	-0.67	1.83
		30	Wind 90	4.01	2.01	-3.47	-314.65	-181.17	0.30
		60	Wind 60	4.26	3.69	-2.13	-193.57	-332.44	-2.41
		90	Wind 90	4.47	4.47	0.00	-2.02	-403.38	-4.52
		120	Wind Normal	4.45	3.85	2.22	198.15	-347.39	-4.44
		150	Wind 90	3.91	1.96	3.39	302.98	-176.77	-2.89
		180	Wind 60	3.79	0.00	3.79	339.36	-0.67	-1.83
T4	80.00-60.00	210	Wind 90	4.01	-2.01	3.47	310.60	179.82	-0.30
		240	Wind Normal	4.45	-3.85	2.22	198.15	346.04	2.41
		270	Wind 90	4.47	-4.47	0.00	-2.02	402.03	4.52
		300	Wind 60	4.26	-3.69	-2.13	-193.57	331.10	4.44
		330	Wind 90	3.91	-1.96	-3.39	-307.02	175.42	2.89
		0	Wind Normal	4.37	0.00	-4.37	-308.89	-0.94	2.47
		30	Wind 90	4.37	2.18	-3.78	-267.66	-153.89	0.46
		60	Wind 60	4.60	3.98	-2.30	-163.63	-279.60	-3.06
		90	Wind 90	4.81	4.81	0.00	-2.75	-337.61	-5.76
		120	Wind Normal	4.81	4.17	2.41	165.71	-292.72	-5.68
		150	Wind 90	4.22	2.11	3.65	252.95	-148.57	-3.76
		180	Wind 60	4.11	0.00	4.11	284.83	-0.94	-2.47
T5	60.00-40.00	210	Wind 90	4.37	-2.18	3.78	262.16	152.00	-0.46
		240	Wind Normal	4.86	-4.21	2.43	167.42	293.79	3.06
		270	Wind 90	4.81	-4.81	0.00	-2.75	335.72	5.76
		300	Wind 60	4.55	-3.94	-2.27	-161.92	274.75	5.68
		330	Wind 90	4.22	-2.11	-3.65	-258.44	146.68	3.76
		0	Wind Normal	4.33	0.00	-4.33	-220.07	-1.16	2.83
		30	Wind 90	4.30	2.15	-3.72	-189.53	-108.64	0.52
		60	Wind 60	4.50	3.90	-2.25	-115.87	-196.01	-3.51
		90	Wind 90	4.71	4.71	0.00	-3.38	-236.59	-6.60
		120	Wind Normal	4.74	4.11	2.37	115.20	-206.55	-6.52
		150	Wind 90	4.16	2.08	3.60	176.64	-105.10	-4.33
		180	Wind 60	4.04	0.00	4.04	198.86	-1.16	-2.83
T6	40.00-20.00	210	Wind 90	4.30	-2.15	3.72	182.77	106.31	-0.52
		240	Wind Normal	4.79	-4.15	2.39	116.34	206.19	3.51
		270	Wind 90	4.71	-4.71	0.00	-3.38	234.26	6.60
		300	Wind 60	4.45	-3.86	-2.23	-114.74	191.71	6.52
		330	Wind 90	4.16	-2.08	-3.60	-183.40	102.77	4.33
		0	Wind Normal	4.13	0.00	-4.13	-128.02	-1.38	3.03
		30	Wind 90	4.07	2.04	-3.53	-109.84	-62.48	0.56
		60	Wind 60	4.24	3.68	-2.12	-67.67	-111.64	-3.74
		90	Wind 90	4.44	4.44	0.00	-4.01	-134.61	-7.03
		120	Wind Normal	4.50	3.90	2.25	63.51	-118.34	-6.95
		150	Wind 90	3.95	1.97	3.42	98.51	-60.58	-4.63
		180	Wind 60	3.84	0.00	3.84	111.05	-1.38	-3.03
T7	20.00-0.00	210	Wind 90	4.07	-2.04	3.53	101.82	59.71	-0.56
		240	Wind Normal	4.54	-3.93	2.27	64.12	116.63	3.74
		270	Wind 90	4.44	-4.44	0.00	-4.01	131.85	7.03
		300	Wind 60	4.20	-3.64	-2.10	-67.05	107.81	6.95
		330	Wind 90	3.95	-1.97	-3.42	-106.53	57.81	4.63
		0	Wind Normal	3.59	0.00	-3.59	-39.23	-1.30	2.14
		30	Wind 90	3.42	1.71	-2.96	-32.91	-18.39	0.31
		60	Wind 60	3.46	3.00	-1.73	-20.60	-31.26	-2.57
		90	Wind 90	3.61	3.61	0.00	-3.30	-37.39	-4.77
		120	Wind Normal	3.78	3.28	1.89	15.62	-34.07	-4.82
		150	Wind 90	3.35	1.68	2.90	25.73	-18.06	-3.36
		180	Wind 60	3.25	0.00	3.25	29.17	-1.30	-2.14
		210	Wind 90	3.42	-1.71	2.96	26.30	15.79	-0.31

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	26 of 108
	Project	CT141_12840 Cheshire North 2 CT	Date	14:14:51 08/23/21
	Client	VzW; Site 468479	Designed by	M. Larson

Section No.	Section Elevation ft	Wind Azimuth °	Directionality	F K	V _x K	V _z K	OTM _x kip-ft	OTM _z kip-ft	Torque kip-ft
		240	Wind Normal	3.80	-3.30	1.90	15.72	31.65	2.57
		270	Wind 90	3.61	-3.61	0.00	-3.30	34.80	4.77
		300	Wind 60	3.44	-2.98	-1.72	-20.49	28.48	4.82
		330	Wind 90	3.35	-1.68	-2.90	-32.34	15.46	3.36

Mast Totals - No Ice

Wind Azimuth °	V _x K	V _z K	OTM _x kip-ft	OTM _z kip-ft	Torque kip-ft
0	0.00	-24.95	-1598.56	-5.88	13.71
30	12.20	-21.13	-1351.64	-776.43	2.76
60	22.16	-12.79	-832.95	-1419.15	-16.52
90	27.20	0.00	-17.00	-1764.66	-32.37
120	24.04	13.88	882.62	-1564.06	-32.68
150	12.37	21.43	1387.59	-816.82	-21.76
180	0.00	23.56	1501.88	-5.88	-13.71
210	-12.20	21.13	1317.64	764.68	-2.76
240	-23.37	13.49	830.29	1461.68	16.52
270	-27.20	0.00	-17.00	1752.90	32.37
300	-22.84	-13.18	-885.27	1498.02	32.68
330	-12.37	-21.43	-1421.59	805.06	21.76

Mast Vectors - With Ice

Section No.	Section Elevation ft	Wind Azimuth °	Directionality	F K	V _x K	V _z K	OTM _x kip-ft	OTM _z kip-ft	Torque kip-ft
T1	140.00-120.00	0	Wind Normal	0.65	0.00	-0.65	-86.54	-0.55	0.19
		30	Wind 90	0.63	0.31	-0.54	-72.92	-41.38	0.06
		60	Wind 60	0.65	0.56	-0.32	-44.37	-73.59	-0.14
		90	Wind 90	0.69	0.69	0.00	-2.20	-90.25	-0.37
		120	Wind Normal	0.71	0.62	0.36	43.98	-80.55	-0.45
		150	Wind 90	0.69	0.34	0.60	75.47	-45.40	-0.34
		180	Wind 60	0.65	0.00	0.65	82.13	-0.55	-0.19
		210	Wind 90	0.63	-0.31	0.54	68.51	40.28	-0.06
		240	Wind Normal	0.65	-0.56	0.32	39.96	72.49	0.14
		270	Wind 90	0.69	-0.69	0.00	-2.20	89.14	0.37
		300	Wind 60	0.71	-0.62	-0.36	-48.39	79.45	0.45
		330	Wind 90	0.69	-0.34	-0.60	-79.88	44.30	0.34
T2	120.00-100.00	0	Wind Normal	0.74	0.00	-0.74	-83.09	-0.84	0.33
		30	Wind 90	0.71	0.36	-0.62	-70.15	-40.06	0.23
		60	Wind 60	0.74	0.64	-0.37	-42.66	-70.87	-0.00
		90	Wind 90	0.78	0.78	0.00	-2.23	-86.57	-0.29
		120	Wind Normal	0.80	0.69	0.40	41.85	-77.19	-0.45
		150	Wind 90	0.78	0.39	0.67	72.01	-43.71	-0.41
		180	Wind 60	0.74	0.00	0.74	78.63	-0.84	-0.33
		210	Wind 90	0.71	-0.36	0.62	65.70	38.37	-0.23
		240	Wind Normal	0.74	-0.64	0.37	38.20	69.18	0.00
		270	Wind 90	0.78	-0.78	0.00	-2.23	84.88	0.29
		300	Wind 60	0.80	-0.69	-0.40	-46.31	75.50	0.45
		330	Wind 90	0.78	-0.39	-0.67	-76.47	42.02	0.41

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	27 of 108
	Project	CT141_12840 Cheshire North 2 CT	Date	14:14:51 08/23/21
	Client	VzW; Site 468479	Designed by	M. Larson

Section No.	Section Elevation ft	Wind Azimuth °	Directionality	F K	V _x K	V _z K	OTM _x kip-ft	OTM _z kip-ft	Torque kip-ft
T3	100.00-80.00	0	Wind Normal	0.96	0.00	-0.96	-92.37	-2.55	0.63
		30	Wind 90	0.99	0.50	-0.86	-82.87	-47.20	0.35
		60	Wind 60	1.04	0.90	-0.52	-52.35	-83.64	-0.19
		90	Wind 90	1.06	1.06	0.00	-5.54	-97.57	-0.74
		120	Wind Normal	1.03	0.89	0.51	40.74	-82.71	-0.92
		150	Wind 90	0.96	0.48	0.83	69.15	-45.67	-0.79
		180	Wind 60	0.94	0.00	0.94	79.32	-2.55	-0.63
		210	Wind 90	0.99	-0.50	0.86	71.79	42.09	-0.35
		240	Wind Normal	1.06	-0.92	0.53	42.27	80.24	0.19
		270	Wind 90	1.06	-1.06	0.00	-5.54	92.46	0.74
		300	Wind 60	1.01	-0.87	-0.50	-50.83	75.89	0.92
		330	Wind 90	0.96	-0.48	-0.83	-80.22	40.57	0.79
T4	80.00-60.00	0	Wind Normal	1.02	0.00	-1.02	-78.82	-3.60	0.85
		30	Wind 90	1.05	0.52	-0.91	-70.76	-40.23	0.51
		60	Wind 60	1.09	0.95	-0.55	-45.57	-69.87	-0.19
		90	Wind 90	1.11	1.11	0.00	-7.31	-81.09	-0.91
		120	Wind Normal	1.08	0.94	0.54	30.56	-69.19	-1.16
		150	Wind 90	1.00	0.50	0.87	53.56	-38.75	-1.03
		180	Wind 60	0.99	0.00	0.99	62.02	-3.60	-0.85
		210	Wind 90	1.05	-0.52	0.91	56.14	33.03	-0.51
		240	Wind Normal	1.12	-0.97	0.56	32.04	64.56	0.19
		270	Wind 90	1.11	-1.11	0.00	-7.31	73.88	0.91
		300	Wind 60	1.05	-0.91	-0.53	-44.08	60.09	1.16
		330	Wind 90	1.00	-0.50	-0.87	-68.18	31.54	1.03
T5	60.00-40.00	0	Wind Normal	0.99	0.00	-0.99	-58.35	-4.31	0.96
		30	Wind 90	1.01	0.50	-0.87	-52.54	-29.55	0.57
		60	Wind 60	1.05	0.91	-0.53	-35.12	-49.84	-0.21
		90	Wind 90	1.07	1.07	0.00	-8.83	-57.59	-1.03
		120	Wind Normal	1.05	0.91	0.52	17.33	-49.63	-1.32
		150	Wind 90	0.97	0.48	0.84	33.16	-28.56	-1.17
		180	Wind 60	0.96	0.00	0.96	38.95	-4.31	-0.96
		210	Wind 90	1.01	-0.50	0.87	34.88	20.92	-0.57
		240	Wind Normal	1.09	-0.94	0.54	18.32	42.71	0.21
		270	Wind 90	1.07	-1.07	0.00	-8.83	48.97	1.03
		300	Wind 60	1.01	-0.88	-0.51	-34.13	39.50	1.32
		330	Wind 90	0.97	-0.48	-0.84	-50.83	19.93	1.17
T6	40.00-20.00	0	Wind Normal	0.92	0.00	-0.92	-37.78	-4.90	1.00
		30	Wind 90	0.93	0.47	-0.81	-34.44	-18.88	0.60
		60	Wind 60	0.97	0.84	-0.48	-24.75	-30.06	-0.23
		90	Wind 90	0.98	0.98	0.00	-10.22	-34.37	-1.09
		120	Wind Normal	0.97	0.84	0.48	4.32	-30.08	-1.39
		150	Wind 90	0.90	0.45	0.78	13.07	-18.35	-1.22
		180	Wind 60	0.88	0.00	0.88	16.25	-4.90	-1.00
		210	Wind 90	0.93	-0.47	0.81	13.99	9.08	-0.60
		240	Wind Normal	1.00	-0.87	0.50	4.85	21.20	0.23
		270	Wind 90	0.98	-0.98	0.00	-10.22	24.57	1.09
		300	Wind 60	0.93	-0.81	-0.47	-24.22	19.33	1.39
		330	Wind 90	0.90	-0.45	-0.78	-33.51	8.55	1.22
T7	20.00-0.00	0	Wind Normal	0.72	0.00	-0.72	-14.89	-3.65	0.62
		30	Wind 90	0.71	0.35	-0.61	-13.83	-7.18	0.30
		60	Wind 60	0.72	0.62	-0.36	-11.31	-9.88	-0.25
		90	Wind 90	0.73	0.73	0.00	-7.71	-10.98	-0.80
		120	Wind Normal	0.74	0.64	0.37	-3.99	-10.09	-0.97
		150	Wind 90	0.69	0.34	0.60	-1.74	-7.09	-0.83
		180	Wind 60	0.68	0.00	0.68	-0.96	-3.65	-0.62
		210	Wind 90	0.71	-0.35	0.61	-1.59	-0.11	-0.30
		240	Wind Normal	0.76	-0.66	0.38	-3.89	2.96	0.25
		270	Wind 90	0.73	-0.73	0.00	-7.71	3.68	0.80
		300	Wind 60	0.70	-0.61	-0.35	-11.22	2.43	0.97
		330	Wind 90	0.69	-0.34	-0.60	-13.67	-0.21	0.83

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Mast Totals - With Ice

Wind Azimuth °	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.00	-6.00	-451.85	-20.41	4.57
30	3.01	-5.22	-397.51	-224.49	2.63
60	5.42	-3.13	-256.13	-387.76	-1.22
90	6.41	0.00	-44.04	-458.42	-5.24
120	5.53	3.19	174.79	-399.44	-6.66
150	2.99	5.18	314.68	-227.53	-5.79
180	0.00	5.83	356.35	-20.41	-4.57
210	-3.01	5.22	309.42	183.66	-2.63
240	-5.56	3.21	171.75	353.35	1.22
270	-6.41	0.00	-44.04	417.59	5.24
300	-5.38	-3.11	-259.17	352.19	6.66
330	-2.99	-5.18	-402.77	186.70	5.79

Mast Vectors - Service

Section No.	Section Elevation ft	Wind Azimuth °	Directionality	F K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
T1	140.00-120.00	0	Wind Normal	0.41	0.00	-0.41	-53.96	-0.20	0.11
		30	Wind 90	0.38	0.19	-0.33	-43.49	-24.88	0.03
		60	Wind 60	0.41	0.35	-0.20	-27.34	-46.30	-0.15
		90	Wind 90	0.47	0.47	0.00	-0.73	-61.14	-0.37
		120	Wind Normal	0.50	0.43	0.25	31.67	-56.32	-0.41
		150	Wind 90	0.47	0.23	0.41	52.05	-30.67	-0.25
		180	Wind 60	0.41	0.00	0.41	52.50	-0.20	-0.11
		210	Wind 90	0.38	-0.19	0.33	42.03	24.49	-0.03
		240	Wind Normal	0.41	-0.35	0.20	25.89	45.90	0.15
		270	Wind 90	0.47	-0.47	0.00	-0.73	60.75	0.37
		300	Wind 60	0.50	-0.43	-0.25	-33.13	55.93	0.41
		330	Wind 90	0.47	-0.23	-0.41	-53.51	30.28	0.25
T2	120.00-100.00	0	Wind Normal	0.49	0.00	-0.49	-54.27	-0.22	0.17
		30	Wind 90	0.45	0.23	-0.39	-44.08	-25.20	0.09
		60	Wind 60	0.49	0.42	-0.24	-27.54	-46.52	-0.10
		90	Wind 90	0.55	0.55	0.00	-0.81	-60.69	-0.36
		120	Wind Normal	0.58	0.50	0.29	31.18	-55.62	-0.43
		150	Wind 90	0.55	0.27	0.48	51.56	-30.45	-0.30
		180	Wind 60	0.49	0.00	0.49	52.66	-0.22	-0.17
		210	Wind 90	0.45	-0.23	0.39	42.46	24.76	-0.09
		240	Wind Normal	0.49	-0.42	0.24	25.92	46.08	0.10
		270	Wind 90	0.55	-0.55	0.00	-0.81	60.25	0.36
		300	Wind 60	0.58	-0.50	-0.29	-32.79	55.18	0.43
		330	Wind 90	0.55	-0.27	-0.48	-53.17	30.01	0.30
T3	100.00-80.00	0	Wind Normal	0.79	0.00	-0.79	-73.27	-0.67	0.36
		30	Wind 90	0.80	0.40	-0.69	-64.13	-36.53	0.06
		60	Wind 60	0.85	0.73	-0.42	-40.06	-66.56	-0.48
		90	Wind 90	0.89	0.89	0.00	-2.02	-80.63	-0.89
		120	Wind Normal	0.88	0.76	0.44	37.72	-69.51	-0.88
		150	Wind 90	0.78	0.39	0.67	58.58	-35.66	-0.57
		180	Wind 60	0.75	0.00	0.75	65.82	-0.67	-0.36
		210	Wind 90	0.80	-0.40	0.69	60.08	35.18	-0.06

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	Project	CT141_12840 Cheshire North 2 CT	Date	14:14:51 08/23/21
	Client	VzW; Site 468479	Designed by	M. Larson

Section No.	Section Elevation ft	Wind Azimuth °	Directionality	F K	V _x K	V _z K	OTM _x kip-ft	OTM _z kip-ft	Torque kip-ft
T4	80.00-60.00	240	Wind Normal	0.88	-0.76	0.44	37.72	68.17	0.48
		270	Wind 90	0.89	-0.89	0.00	-2.02	79.28	0.89
		300	Wind 60	0.85	-0.73	-0.42	-40.06	65.21	0.88
		330	Wind 90	0.78	-0.39	-0.67	-62.62	34.31	0.57
		0	Wind Normal	0.87	0.00	-0.87	-63.69	-0.94	0.49
		30	Wind 90	0.87	0.43	-0.75	-55.48	-31.39	0.09
		60	Wind 60	0.91	0.79	-0.46	-34.76	-56.39	-0.61
		90	Wind 90	0.96	0.96	0.00	-2.75	-67.91	-1.14
		120	Wind Normal	0.96	0.83	0.48	30.76	-58.98	-1.12
		150	Wind 90	0.84	0.42	0.73	48.17	-30.34	-0.74
		180	Wind 60	0.82	0.00	0.82	54.52	-0.94	-0.49
		210	Wind 90	0.87	-0.43	0.75	49.99	29.50	-0.09
T5	60.00-40.00	240	Wind Normal	0.97	-0.84	0.48	31.10	57.68	0.61
		270	Wind 90	0.96	-0.96	0.00	-2.75	66.03	1.14
		300	Wind 60	0.91	-0.78	-0.45	-34.42	53.92	1.12
		330	Wind 90	0.84	-0.42	-0.73	-53.66	28.45	0.74
		0	Wind Normal	0.86	0.00	-0.86	-46.61	-1.16	0.56
		30	Wind 90	0.86	0.43	-0.74	-40.52	-22.61	0.10
		60	Wind 60	0.90	0.78	-0.45	-25.81	-40.02	-0.69
		90	Wind 90	0.94	0.94	0.00	-3.38	-48.09	-1.30
		120	Wind Normal	0.95	0.82	0.47	20.26	-42.10	-1.29
		150	Wind 90	0.83	0.41	0.72	32.55	-21.91	-0.86
		180	Wind 60	0.81	0.00	0.81	36.99	-1.16	-0.56
		210	Wind 90	0.86	-0.43	0.74	33.76	20.28	-0.10
T6	40.00-20.00	240	Wind Normal	0.95	-0.83	0.48	20.48	40.16	0.69
		270	Wind 90	0.94	-0.94	0.00	-3.38	45.77	1.30
		300	Wind 60	0.89	-0.77	-0.44	-25.59	37.30	1.29
		330	Wind 90	0.83	-0.41	-0.72	-39.31	19.58	0.86
		0	Wind Normal	0.83	0.00	-0.83	-28.77	-1.38	0.60
		30	Wind 90	0.81	0.41	-0.70	-25.14	-13.59	0.11
		60	Wind 60	0.85	0.73	-0.42	-16.72	-23.39	-0.74
		90	Wind 90	0.89	0.89	0.00	-4.01	-27.97	-1.39
		120	Wind Normal	0.90	0.78	0.45	9.46	-24.71	-1.37
		150	Wind 90	0.79	0.39	0.68	16.47	-13.21	-0.91
		180	Wind 60	0.77	0.00	0.77	18.98	-1.38	-0.60
		210	Wind 90	0.81	-0.41	0.70	17.12	10.82	-0.11
T7	20.00-0.00	240	Wind Normal	0.91	-0.78	0.45	9.58	22.15	0.74
		270	Wind 90	0.89	-0.89	0.00	-4.01	25.20	1.39
		300	Wind 60	0.84	-0.73	-0.42	-16.59	20.41	1.37
		330	Wind 90	0.79	-0.39	-0.68	-24.49	10.44	0.91
		0	Wind Normal	0.72	0.00	-0.72	-10.47	-1.30	0.42
		30	Wind 90	0.68	0.34	-0.59	-9.21	-4.71	0.06
		60	Wind 60	0.69	0.60	-0.35	-6.76	-7.28	-0.51
		90	Wind 90	0.72	0.72	0.00	-3.30	-8.50	-0.94
		120	Wind Normal	0.75	0.65	0.38	0.47	-7.83	-0.95
		150	Wind 90	0.67	0.33	0.58	2.49	-4.65	-0.66
		180	Wind 60	0.65	0.00	0.65	3.18	-1.30	-0.42
		210	Wind 90	0.68	-0.34	0.59	2.61	2.11	-0.06
		240	Wind Normal	0.76	-0.66	0.38	0.49	5.27	0.51
		270	Wind 90	0.72	-0.72	0.00	-3.30	5.90	0.94
		300	Wind 60	0.69	-0.59	-0.34	-6.73	4.65	0.95
		330	Wind 90	0.67	-0.33	-0.58	-9.10	2.05	0.66

Mast Totals - Service

All-Points Technology Corp.
567 Vauxhall St. Ext. Suite 311
Waterford, CT 06385
Phone: (860) 663-1697
FAX: (860) 663-0935

<i>Wind Azimuth</i> °	V_x <i>K</i>	V_z <i>K</i>	OTM_x <i>kip-ft</i>	OTM_z <i>kip-ft</i>	<i>Torque</i> <i>kip-ft</i>
0	0.00	-4.96	-331.04	-5.88	2.71
30	2.43	-4.20	-282.05	-158.90	0.55
60	4.41	-2.55	-178.99	-286.46	-3.26
90	5.41	0.00	-17.00	-354.93	-6.39
120	4.78	2.76	161.52	-315.08	-6.46
150	2.46	4.26	261.87	-166.88	-4.30
180	0.00	4.69	284.66	-5.88	-2.71
210	-2.43	4.20	248.05	147.15	-0.55
240	-4.65	2.68	151.19	285.43	3.26
270	-5.41	0.00	-17.00	343.17	6.39
300	-4.54	-2.62	-189.33	292.60	6.46
330	-2.46	-4.26	-295.86	155.12	4.30

 $G_H = 0.850$ [illegible]

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	31 of 108
	Project	CT141_12840 Cheshire North 2 CT	Date	14:14:51 08/23/21
	Client	VzW; Site 468479	Designed by	M. Larson

Description	Aiming Azimuth °	Weight K	Offset _x ft	Offset _z ft	z ft	K _z	q _z psf	C _{AAc} Front ft ²	C _{AAc} Side ft ²
Raycap	180.0000	0.03	0.00	2.50	98.00	1.260	50	0.74	0.74
DC6-48-60-18-8F surge suppressor									
13' T-Frame	0.0000	0.36	0.00	0.00	98.00	1.260	50	12.20	12.20
13' T-Frame	0.0000	0.36	0.00	0.00	98.00	1.260	50	12.20	12.20
13' T-Frame	0.0000	0.36	0.00	0.00	98.00	1.260	50	12.20	12.20
4'x4 1/2" Pipe Mount	0.0000	0.04	0.00	-4.27	83.00	1.217	48	1.08	1.08
JAHH-65-R3B w/	0.0000	0.20	0.00	-6.89	138.00	1.354	53	18.23	11.97
SBS-2-2 Mount									
JAHH-65-R3B w/	120.0000	0.20	5.96	3.44	138.00	1.354	53	18.23	11.97
SBS-2-2 Mount									
JAHH-65-R3B w/	240.0000	0.20	-5.96	3.44	138.00	1.354	53	18.23	11.97
SBS-2-2 Mount									
MT6407-77A	0.0000	0.09	0.00	-6.89	138.00	1.354	53	4.69	1.84
MT6407-77A	120.0000	0.09	5.96	3.44	138.00	1.354	53	4.69	1.84
MT6407-77A	240.0000	0.09	-5.96	3.44	138.00	1.354	53	4.69	1.84
RFS FDJ85020Q4-S1	0.0000	0.02	0.00	-6.89	138.00	1.354	53	0.96	0.36
Diplexer									
RFS FDJ85020Q4-S1	120.0000	0.02	5.96	3.44	138.00	1.354	53	0.96	0.36
Diplexer									
RFS FDJ85020Q4-S1	240.0000	0.02	-5.96	3.44	138.00	1.354	53	0.96	0.36
Diplexer									
Samsung B2/B66	0.0000	0.10	2.00	-6.89	138.00	1.354	53	1.88	1.25
PCS/AWS RRH									
Samsung B2/B66	120.0000	0.10	4.96	5.18	138.00	1.354	53	1.88	1.25
PCS/AWS RRH									
Samsung B2/B66	240.0000	0.10	-6.96	1.71	138.00	1.354	53	1.88	1.25
PCS/AWS RRH									
Samsung B5/B13	0.0000	0.08	-2.00	-6.89	138.00	1.354	53	1.88	1.01
700/850 RRH									
Samsung B5/B13	120.0000	0.08	6.96	1.71	138.00	1.354	53	1.88	1.01
700/850 RRH									
Samsung B5/B13	240.0000	0.08	-4.96	5.18	138.00	1.354	53	1.88	1.01
700/850 RRH									
Raycap	240.0000	0.03	-2.93	1.69	138.00	1.354	53	4.06	3.10
RDC-6627-PF-48 OVP									
13' T-Frame	0.0000	0.36	0.00	0.00	138.00	1.354	53	12.20	12.20
13' T-Frame	0.0000	0.36	0.00	0.00	138.00	1.354	53	12.20	12.20
13' T-Frame	0.0000	0.36	0.00	0.00	138.00	1.354	53	12.20	12.20
8'x2 1/2" Pipe Mount	0.0000	0.04	0.00	-6.89	138.00	1.354	53	2.30	2.30
8'x2 1/2" Pipe Mount	120.0000	0.04	5.96	3.44	138.00	1.354	53	2.30	2.30
8'x2 1/2" Pipe Mount	240.0000	0.04	-5.96	3.44	138.00	1.354	53	2.30	2.30
(2) L2.5x2.5x1/4 x 6.5' Mount Reinf	0.0000	0.06	0.00	-6.89	138.00	1.354	53	5.42	0.02
(2) L2.5x2.5x1/4 x 6.5' Mount Reinf	120.0000	0.06	5.96	3.44	138.00	1.354	53	5.42	0.02
(2) L2.5x2.5x1/4 x 6.5' Mount Reinf	240.0000	0.06	-5.96	3.44	138.00	1.354	53	5.42	0.02
Sum Weight:		5.62							

Discrete Appurtenance Vectors - No Ice

PD1142-2C - Elevation 146 - From Leg C							
Wind Azimuth °	F _a K	F _s K	V _x K	V _z K	OTM _x kip-ft	OTM _z kip-ft	Torque kip-ft
0	0.02	0.03	0.00	-0.03	-4.64	0.03	-0.09

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	32 of 108
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PD1142-2C - Elevation 146 - From Leg C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
30	0.03	0.02	0.02	-0.03	-4.01	-2.30	-0.05
60	0.03	0.00	0.03	-0.02	-2.31	-4.00	0.00
90	0.03	0.02	0.03	0.00	0.02	-4.62	0.05
120	0.02	0.03	0.03	0.02	2.34	-4.00	0.09
150	0.00	0.03	0.02	0.03	4.05	-2.30	0.11
180	0.02	0.03	0.00	0.03	4.67	0.03	0.09
210	0.03	0.02	-0.02	0.03	4.05	2.36	0.05
240	0.03	0.00	-0.03	0.02	2.34	4.06	0.00
270	0.03	0.02	-0.03	0.00	0.02	4.68	-0.05
300	0.02	0.03	-0.03	-0.02	-2.31	4.06	-0.09
330	0.00	0.03	-0.02	-0.03	-4.01	2.36	-0.11

DB Spectra DS2C03F36D-D - Elevation 147 - From Leg A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.28	0.00	0.00	-0.28	-41.37	0.00	0.00
30	0.24	0.14	0.14	-0.24	-35.87	-20.56	-0.47
60	0.14	0.24	0.24	-0.14	-20.81	-35.61	-0.82
90	0.00	0.28	0.28	0.00	-0.25	-41.12	-0.95
120	0.14	0.24	0.24	0.14	20.31	-35.61	-0.82
150	0.24	0.14	0.14	0.24	35.36	-20.56	-0.47
180	0.28	0.00	0.00	0.28	40.87	0.00	0.00
210	0.24	0.14	-0.14	0.24	35.36	20.56	0.47
240	0.14	0.24	-0.24	0.14	20.31	35.61	0.82
270	0.00	0.28	-0.28	0.00	-0.25	41.12	0.95
300	0.14	0.24	-0.24	-0.14	-20.81	35.61	0.82
330	0.24	0.14	-0.14	-0.24	-35.87	20.56	0.47

SitePro R5-LL (PM 601-1) - Elevation 137 - From Leg A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.06	0.00	0.00	-0.06	-8.41	0.00	0.00
30	0.05	0.03	0.03	-0.05	-7.31	-4.10	-0.09
60	0.03	0.05	0.05	-0.03	-4.30	-7.11	-0.15
90	0.00	0.06	0.06	0.00	-0.20	-8.20	-0.17
120	0.03	0.05	0.05	0.03	3.90	-7.11	-0.15
150	0.05	0.03	0.03	0.05	6.90	-4.10	-0.09
180	0.06	0.00	0.00	0.06	8.00	0.00	0.00
210	0.05	0.03	-0.03	0.05	6.90	4.10	0.09
240	0.03	0.05	-0.05	0.03	3.90	7.11	0.15
270	0.00	0.06	-0.06	0.00	-0.20	8.20	0.17
300	0.03	0.05	-0.05	-0.03	-4.30	7.11	0.15
330	0.05	0.03	-0.03	-0.05	-7.31	4.10	0.09

5'x4 1/2" Pipe Mount - Elevation 120 - From Face B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.03	0.05	0.00	-0.06	-7.24	-0.08	0.10
30	0.05	0.03	0.03	-0.05	-6.28	-3.68	0.06
60	0.06	0.00	0.05	-0.03	-3.64	-6.31	0.00
90	0.05	0.03	0.06	0.00	-0.05	-7.28	-0.06

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job 140' Self-Supporting Tower	Page 33 of 108
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5"x4 1/2" Pipe Mount - Elevation 120 - From Face B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
120	0.03	0.05	0.05	0.03	3.55	-6.31	-0.10
150	0.00	0.06	0.03	0.05	6.18	-3.68	-0.12
180	0.03	0.05	0.00	0.06	7.14	-0.08	-0.10
210	0.05	0.03	-0.03	0.05	6.18	3.51	-0.06
240	0.06	0.00	-0.05	0.03	3.55	6.14	0.00
270	0.05	0.03	-0.06	0.00	-0.05	7.11	0.06
300	0.03	0.05	-0.05	-0.03	-3.64	6.14	0.10
330	0.00	0.06	-0.03	-0.05	-6.28	3.51	0.12

HPA-65R-BUU-H6 - Elevation 98 - From Face A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.15	0.18	-0.04	-0.23	-22.70	4.60	-0.97
30	0.00	0.20	0.10	-0.18	-17.52	-9.74	-1.12
60	0.15	0.18	0.22	-0.08	-7.69	-21.39	-0.97
90	0.27	0.10	0.28	0.04	4.15	-27.23	-0.56
120	0.31	0.00	0.27	0.15	14.84	-25.71	0.00
150	0.27	0.10	0.18	0.22	21.51	-17.21	0.56
180	0.15	0.18	0.04	0.23	22.37	-4.03	0.97
210	0.00	0.20	-0.10	0.18	17.19	10.31	1.12
240	0.15	0.18	-0.22	0.08	7.36	21.96	0.97
270	0.27	0.10	-0.28	-0.04	-4.48	27.81	0.56
300	0.31	0.00	-0.27	-0.15	-15.17	26.28	0.00
330	0.27	0.10	-0.18	-0.22	-21.84	17.78	-0.56

HPA-65R-BUU-H6 - Elevation 98 - From Face B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.15	0.18	0.04	-0.23	-22.70	-4.60	0.97
30	0.27	0.10	0.18	-0.22	-21.84	-17.78	0.56
60	0.31	0.00	0.27	-0.15	-15.17	-26.28	0.00
90	0.27	0.10	0.28	-0.04	-4.48	-27.81	-0.56
120	0.15	0.18	0.22	0.08	7.36	-21.96	-0.97
150	0.00	0.20	0.10	0.18	17.19	-10.31	-1.12
180	0.15	0.18	-0.04	0.23	22.37	4.03	-0.97
210	0.27	0.10	-0.18	0.22	21.51	17.21	-0.56
240	0.31	0.00	-0.27	0.15	14.84	25.71	0.00
270	0.27	0.10	-0.28	0.04	4.15	27.23	0.56
300	0.15	0.18	-0.22	-0.08	-7.69	21.39	0.97
330	0.00	0.20	-0.10	-0.18	-17.52	9.74	1.12

HPA-65R-BUU-H6 - Elevation 98 - From Face C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.31	0.00	0.00	-0.31	-29.68	0.00	0.00
30	0.27	0.10	0.10	-0.27	-25.66	-10.02	0.56
60	0.15	0.18	0.18	-0.15	-14.68	-17.36	0.97
90	0.00	0.20	0.20	0.00	0.33	-20.04	1.12
120	0.15	0.18	0.18	0.15	15.34	-17.36	0.97
150	0.27	0.10	0.10	0.27	26.32	-10.02	0.56
180	0.31	0.00	0.00	0.31	30.34	0.00	0.00

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	34 of 108
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<i>HPA-65R-BUU-H6 - Elevation 98 - From Face C</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> K	<i>F_s</i> K	<i>V_x</i> K	<i>V_z</i> K	<i>OTM_x</i> kip-ft	<i>OTM_z</i> kip-ft	<i>Torque</i> kip-ft
210	0.27	0.10	-0.10	0.27	26.32	10.02	-0.56
240	0.15	0.18	-0.18	0.15	15.34	17.36	-0.97
270	0.00	0.20	-0.20	0.00	0.33	20.04	-1.12
300	0.15	0.18	-0.18	-0.15	-14.68	17.36	-0.97
330	0.27	0.10	-0.10	-0.27	-25.66	10.02	-0.56

<i>AM-X-CD-16-65 - Elevation 98 - From Face A</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> K	<i>F_s</i> K	<i>V_x</i> K	<i>V_z</i> K	<i>OTM_x</i> kip-ft	<i>OTM_z</i> kip-ft	<i>Torque</i> kip-ft
0	0.10	0.11	-0.03	-0.15	-14.39	2.79	-0.62
30	0.00	0.13	0.07	-0.11	-11.18	-6.20	-0.72
60	0.10	0.11	0.14	-0.05	-5.00	-13.48	-0.62
90	0.17	0.07	0.18	0.03	2.49	-17.09	-0.36
120	0.19	0.00	0.17	0.10	9.28	-16.08	0.00
150	0.17	0.07	0.11	0.14	13.56	-10.70	0.36
180	0.10	0.11	0.03	0.15	14.17	-2.41	0.62
210	0.00	0.13	-0.07	0.11	10.96	6.58	0.72
240	0.10	0.11	-0.14	0.05	4.78	13.86	0.62
270	0.17	0.07	-0.18	-0.03	-2.71	17.47	0.36
300	0.19	0.00	-0.17	-0.10	-9.50	16.46	0.00
330	0.17	0.07	-0.11	-0.14	-13.78	11.08	-0.36

<i>AM-X-CD-16-65 - Elevation 98 - From Face B</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> K	<i>F_s</i> K	<i>V_x</i> K	<i>V_z</i> K	<i>OTM_x</i> kip-ft	<i>OTM_z</i> kip-ft	<i>Torque</i> kip-ft
0	0.10	0.11	0.03	-0.15	-14.39	-2.79	0.62
30	0.17	0.07	0.11	-0.14	-13.78	-11.08	0.36
60	0.19	0.00	0.17	-0.10	-9.50	-16.46	0.00
90	0.17	0.07	0.18	-0.03	-2.71	-17.47	-0.36
120	0.10	0.11	0.14	0.05	4.78	-13.86	-0.62
150	0.00	0.13	0.07	0.11	10.96	-6.58	-0.72
180	0.10	0.11	-0.03	0.15	14.17	2.41	-0.62
210	0.17	0.07	-0.11	0.14	13.56	10.70	-0.36
240	0.19	0.00	-0.17	0.10	9.28	16.08	0.00
270	0.17	0.07	-0.18	0.03	2.49	17.09	0.36
300	0.10	0.11	-0.14	-0.05	-5.00	13.48	0.62
330	0.00	0.13	-0.07	-0.11	-11.18	6.20	0.72

<i>AM-X-CD-16-65 - Elevation 98 - From Face C</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> K	<i>F_s</i> K	<i>V_x</i> K	<i>V_z</i> K	<i>OTM_x</i> kip-ft	<i>OTM_z</i> kip-ft	<i>Torque</i> kip-ft
0	0.19	0.00	0.00	-0.19	-18.57	0.00	0.00
30	0.17	0.07	0.07	-0.17	-16.05	-6.39	0.36
60	0.10	0.11	0.11	-0.10	-9.17	-11.07	0.62
90	0.00	0.13	0.13	0.00	0.22	-12.78	0.72
120	0.10	0.11	0.11	0.10	9.61	-11.07	0.62
150	0.17	0.07	0.07	0.17	16.49	-6.39	0.36
180	0.19	0.00	0.00	0.19	19.00	0.00	0.00
210	0.17	0.07	-0.07	0.17	16.49	6.39	-0.36
240	0.10	0.11	-0.11	0.10	9.61	11.07	-0.62
270	0.00	0.13	-0.13	0.00	0.22	12.78	-0.72

tnxTower All-Points Technology Corp. 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	35 of 108
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AM-X-CD-16-65 - Elevation 98 - From Face C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
300	0.10	0.11	-0.11	-0.10	-9.17	11.07	-0.62
330	0.17	0.07	-0.07	-0.17	-16.05	6.39	-0.36

cci DMP65R-BU6DA - Elevation 98 - From Face A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.20	0.15	-0.10	-0.23	-23.19	9.94	-0.85
30	0.00	0.18	0.09	-0.15	-15.34	-8.33	-0.98
60	0.20	0.15	0.25	-0.03	-3.44	-24.26	-0.85
90	0.35	0.09	0.35	0.10	9.32	-33.59	-0.49
120	0.40	0.00	0.35	0.20	19.52	-33.81	0.00
150	0.35	0.09	0.26	0.25	24.43	-24.86	0.49
180	0.20	0.15	0.10	0.23	22.73	-9.15	0.85
210	0.00	0.18	-0.09	0.15	14.88	9.12	0.98
240	0.20	0.15	-0.25	0.03	2.99	25.05	0.85
270	0.35	0.09	-0.35	-0.10	-9.77	34.38	0.49
300	0.40	0.00	-0.35	-0.20	-19.98	34.60	0.00
330	0.35	0.09	-0.26	-0.25	-24.89	25.65	-0.49

cci DMP65R-BU6DA - Elevation 98 - From Face B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.20	0.15	0.10	-0.23	-23.19	-9.94	0.85
30	0.35	0.09	0.26	-0.25	-24.89	-25.65	0.49
60	0.40	0.00	0.35	-0.20	-19.98	-34.60	0.00
90	0.35	0.09	0.35	-0.10	-9.77	-34.38	-0.49
120	0.20	0.15	0.25	0.03	2.99	-25.05	-0.85
150	0.00	0.18	0.09	0.15	14.88	-9.12	-0.98
180	0.20	0.15	-0.10	0.23	22.73	9.15	-0.85
210	0.35	0.09	-0.26	0.25	24.43	24.86	-0.49
240	0.40	0.00	-0.35	0.20	19.52	33.81	0.00
270	0.35	0.09	-0.35	0.10	9.32	33.59	0.49
300	0.20	0.15	-0.25	-0.03	-3.44	24.26	0.85
330	0.00	0.18	-0.09	-0.15	-15.34	8.33	0.98

cci DMP65R-BU6DA - Elevation 98 - From Face C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.40	0.00	0.00	-0.40	-39.04	0.00	0.00
30	0.35	0.09	0.09	-0.35	-33.75	-8.72	0.49
60	0.20	0.15	0.15	-0.20	-19.29	-15.11	0.85
90	0.00	0.18	0.18	0.00	0.46	-17.45	0.98
120	0.20	0.15	0.15	0.20	20.20	-15.11	0.85
150	0.35	0.09	0.09	0.35	34.66	-8.72	0.49
180	0.40	0.00	0.00	0.40	39.95	0.00	0.00
210	0.35	0.09	-0.09	0.35	34.66	8.72	-0.49
240	0.20	0.15	-0.15	0.20	20.20	15.11	-0.85
270	0.00	0.18	-0.18	0.00	0.46	17.45	-0.98
300	0.20	0.15	-0.15	-0.20	-19.29	15.11	-0.85
330	0.35	0.09	-0.09	-0.35	-33.75	8.72	-0.49

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	36 of 108
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<i>OPA65R-BU6DA - Elevation 98 - From Face A</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> K	<i>F_s</i> K	<i>V_x</i> K	<i>V_z</i> K	<i>OTM_x</i> kip-ft	<i>OTM_z</i> kip-ft	<i>Torque</i> kip-ft
0	0.20	0.16	-0.10	-0.24	-23.41	10.01	-0.86
30	0.00	0.18	0.09	-0.16	-15.45	-8.49	-0.99
60	0.20	0.16	0.25	-0.03	-3.41	-24.63	-0.86
90	0.35	0.09	0.35	0.10	9.50	-34.08	-0.49
120	0.41	0.00	0.35	0.20	19.81	-34.31	0.00
150	0.35	0.09	0.26	0.25	24.77	-25.27	0.49
180	0.20	0.16	0.10	0.24	23.03	-9.36	0.86
210	0.00	0.18	-0.09	0.16	15.08	9.14	0.99
240	0.20	0.16	-0.25	0.03	3.04	25.28	0.86
270	0.35	0.09	-0.35	-0.10	-9.87	34.73	0.49
300	0.41	0.00	-0.35	-0.20	-20.19	34.96	0.00
330	0.35	0.09	-0.26	-0.25	-25.14	25.91	-0.49

<i>OPA65R-BU6DA - Elevation 98 - From Face B</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> K	<i>F_s</i> K	<i>V_x</i> K	<i>V_z</i> K	<i>OTM_x</i> kip-ft	<i>OTM_z</i> kip-ft	<i>Torque</i> kip-ft
0	0.20	0.16	0.10	-0.24	-23.41	-10.01	0.86
30	0.35	0.09	0.26	-0.25	-25.14	-25.91	0.49
60	0.41	0.00	0.35	-0.20	-20.19	-34.96	0.00
90	0.35	0.09	0.35	-0.10	-9.87	-34.73	-0.49
120	0.20	0.16	0.25	0.03	3.04	-25.28	-0.86
150	0.00	0.18	0.09	0.16	15.08	-9.14	-0.99
180	0.20	0.16	-0.10	0.24	23.03	9.36	-0.86
210	0.35	0.09	-0.26	0.25	24.77	25.27	-0.49
240	0.41	0.00	-0.35	0.20	19.81	34.31	0.00
270	0.35	0.09	-0.35	0.10	9.50	34.08	0.49
300	0.20	0.16	-0.25	-0.03	-3.41	24.63	0.86
330	0.00	0.18	-0.09	-0.16	-15.45	8.49	0.99

<i>OPA65R-BU6DA - Elevation 98 - From Face C</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> K	<i>F_s</i> K	<i>V_x</i> K	<i>V_z</i> K	<i>OTM_x</i> kip-ft	<i>OTM_z</i> kip-ft	<i>Torque</i> kip-ft
0	0.41	0.00	0.00	-0.41	-39.62	0.00	0.00
30	0.35	0.09	0.09	-0.35	-34.26	-8.81	0.49
60	0.20	0.16	0.16	-0.20	-19.62	-15.27	0.86
90	0.00	0.18	0.18	0.00	0.37	-17.63	0.99
120	0.20	0.16	0.16	0.20	20.37	-15.27	0.86
150	0.35	0.09	0.09	0.35	35.01	-8.81	0.49
180	0.41	0.00	0.00	0.41	40.37	0.00	0.00
210	0.35	0.09	-0.09	0.35	35.01	8.81	-0.49
240	0.20	0.16	-0.16	0.20	20.37	15.27	-0.86
270	0.00	0.18	-0.18	0.00	0.37	17.63	-0.99
300	0.20	0.16	-0.16	-0.20	-19.62	15.27	-0.86
330	0.35	0.09	-0.09	-0.35	-34.26	8.81	-0.49

<i>cci DTMABP7819VG12A TMA - Elevation 98 - From Face A</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> K	<i>F_s</i> K	<i>V_x</i> K	<i>V_z</i> K	<i>OTM_x</i> kip-ft	<i>OTM_z</i> kip-ft	<i>Torque</i> kip-ft
0	0.03	0.02	-0.02	-0.03	-3.05	1.61	-0.09
30	0.00	0.02	0.01	-0.02	-1.89	-0.97	-0.11

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	37 of 108
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<i>cci DTMAP7819VG12A TMA - Elevation 98 - From Face A</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
60	0.03	0.02	0.03	-0.00	-0.23	-3.27	-0.09
90	0.05	0.01	0.05	0.02	1.47	-4.67	-0.05
120	0.06	0.00	0.05	0.03	2.77	-4.80	0.00
150	0.05	0.01	0.04	0.03	3.31	-3.61	0.05
180	0.03	0.02	0.02	0.03	2.95	-1.44	0.09
210	0.00	0.02	-0.01	0.02	1.79	1.15	0.11
240	0.03	0.02	-0.03	0.00	0.13	3.45	0.09
270	0.05	0.01	-0.05	-0.02	-1.57	4.85	0.05
300	0.06	0.00	-0.05	-0.03	-2.87	4.97	0.00
330	0.05	0.01	-0.04	-0.03	-3.41	3.79	-0.05

<i>cci DTMAP7819VG12A TMA - Elevation 98 - From Face B</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.03	0.02	0.02	-0.03	-3.05	-1.61	0.09
30	0.05	0.01	0.04	-0.03	-3.41	-3.79	0.05
60	0.06	0.00	0.05	-0.03	-2.87	-4.97	0.00
90	0.05	0.01	0.05	-0.02	-1.57	-4.85	-0.05
120	0.03	0.02	0.03	0.00	0.13	-3.45	-0.09
150	0.00	0.02	0.01	0.02	1.79	-1.15	-0.11
180	0.03	0.02	-0.02	0.03	2.95	1.44	-0.09
210	0.05	0.01	-0.04	0.03	3.31	3.61	-0.05
240	0.06	0.00	-0.05	0.03	2.77	4.80	0.00
270	0.05	0.01	-0.05	0.02	1.47	4.67	0.05
300	0.03	0.02	-0.03	-0.00	-0.23	3.27	0.09
330	0.00	0.02	-0.01	-0.02	-1.89	0.97	0.11

<i>cci DTMAP7819VG12A TMA - Elevation 98 - From Face C</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.06	0.00	0.00	-0.06	-5.54	0.00	0.00
30	0.05	0.01	0.01	-0.05	-4.78	-1.06	0.05
60	0.03	0.02	0.02	-0.03	-2.72	-1.84	0.09
90	0.00	0.02	0.02	0.00	0.10	-2.12	0.11
120	0.03	0.02	0.02	0.03	2.92	-1.84	0.09
150	0.05	0.01	0.01	0.05	4.98	-1.06	0.05
180	0.06	0.00	0.00	0.06	5.74	0.00	0.00
210	0.05	0.01	-0.01	0.05	4.98	1.06	-0.05
240	0.03	0.02	-0.02	0.03	2.92	1.84	-0.09
270	0.00	0.02	-0.02	0.00	0.10	2.12	-0.11
300	0.03	0.02	-0.02	-0.03	-2.72	1.84	-0.09
330	0.05	0.01	-0.01	-0.05	-4.78	1.06	-0.05

<i>Radio 4415 - Elevation 98 - From Face A</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.03	0.02	-0.01	-0.03	-3.47	1.59	-0.11
30	0.00	0.03	0.01	-0.02	-2.33	-1.06	-0.13
60	0.03	0.02	0.04	-0.00	-0.60	-3.37	-0.11
90	0.05	0.01	0.05	0.01	1.25	-4.72	-0.06
120	0.06	0.00	0.05	0.03	2.74	-4.74	0.00

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	38 of 108
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Radio 4415 - Elevation 98 - From Face A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
150	0.05	0.01	0.04	0.04	3.46	-3.44	0.06
180	0.03	0.02	0.01	0.03	3.22	-1.16	0.11
210	0.00	0.03	-0.01	0.02	2.08	1.49	0.13
240	0.03	0.02	-0.04	0.00	0.36	3.80	0.11
270	0.05	0.01	-0.05	-0.01	-1.50	5.15	0.06
300	0.06	0.00	-0.05	-0.03	-2.99	5.17	0.00
330	0.05	0.01	-0.04	-0.04	-3.71	3.87	-0.06

Radio 4415 - Elevation 98 - From Face B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.03	0.02	0.01	-0.03	-3.47	-1.59	0.11
30	0.05	0.01	0.04	-0.04	-3.71	-3.87	0.06
60	0.06	0.00	0.05	-0.03	-2.99	-5.17	0.00
90	0.05	0.01	0.05	-0.01	-1.50	-5.15	-0.06
120	0.03	0.02	0.04	0.00	0.36	-3.80	-0.11
150	0.00	0.03	0.01	0.02	2.08	-1.49	-0.13
180	0.03	0.02	-0.01	0.03	3.22	1.16	-0.11
210	0.05	0.01	-0.04	0.04	3.46	3.44	-0.06
240	0.06	0.00	-0.05	0.03	2.74	4.74	0.00
270	0.05	0.01	-0.05	0.01	1.25	4.72	0.06
300	0.03	0.02	-0.04	-0.00	-0.60	3.37	0.11
330	0.00	0.03	-0.01	-0.02	-2.33	1.06	0.13

Radio 4415 - Elevation 98 - From Face C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.06	0.00	0.00	-0.06	-5.48	0.00	0.00
30	0.05	0.01	0.01	-0.05	-4.71	-1.27	0.06
60	0.03	0.02	0.02	-0.03	-2.61	-2.21	0.11
90	0.00	0.03	0.03	0.00	0.25	-2.55	0.13
120	0.03	0.02	0.02	0.03	3.11	-2.21	0.11
150	0.05	0.01	0.01	0.05	5.21	-1.27	0.06
180	0.06	0.00	0.00	0.06	5.98	0.00	0.00
210	0.05	0.01	-0.01	0.05	5.21	1.27	-0.06
240	0.03	0.02	-0.02	0.03	3.11	2.21	-0.11
270	0.00	0.03	-0.03	0.00	0.25	2.55	-0.13
300	0.03	0.02	-0.02	-0.03	-2.61	2.21	-0.11
330	0.05	0.01	-0.01	-0.05	-4.71	1.27	-0.06

Radio 4449 - Elevation 98 - From Face A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.03	0.03	-0.01	-0.04	-3.59	1.24	-0.13
30	0.00	0.03	0.01	-0.03	-2.64	-1.18	-0.15
60	0.03	0.03	0.04	-0.01	-1.02	-3.21	-0.13
90	0.05	0.01	0.05	0.01	0.83	-4.30	-0.07
120	0.05	0.00	0.05	0.03	2.41	-4.18	0.00
150	0.05	0.01	0.03	0.04	3.32	-2.87	0.07
180	0.03	0.03	0.01	0.04	3.29	-0.72	0.13
210	0.00	0.03	-0.01	0.03	2.34	1.70	0.15

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	39 of 108
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<i>Radio 4449 - Elevation 98 - From Face A</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
240	0.03	0.03	-0.04	0.01	0.72	3.72	0.13
270	0.05	0.01	-0.05	-0.01	-1.13	4.82	0.07
300	0.05	0.00	-0.05	-0.03	-2.71	4.70	0.00
330	0.05	0.01	-0.03	-0.04	-3.61	3.39	-0.07

<i>Radio 4449 - Elevation 98 - From Face B</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.03	0.03	0.01	-0.04	-3.59	-1.24	0.13
30	0.05	0.01	0.03	-0.04	-3.61	-3.39	0.07
60	0.05	0.00	0.05	-0.03	-2.71	-4.70	0.00
90	0.05	0.01	0.05	-0.01	-1.13	-4.82	-0.07
120	0.03	0.03	0.04	0.01	0.72	-3.72	-0.13
150	0.00	0.03	0.01	0.03	2.34	-1.70	-0.15
180	0.03	0.03	-0.01	0.04	3.29	0.72	-0.13
210	0.05	0.01	-0.03	0.04	3.32	2.87	-0.07
240	0.05	0.00	-0.05	0.03	2.41	4.18	0.00
270	0.05	0.01	-0.05	0.01	0.83	4.30	0.07
300	0.03	0.03	-0.04	-0.01	-1.02	3.21	0.13
330	0.00	0.03	-0.01	-0.03	-2.64	1.18	0.15

<i>Radio 4449 - Elevation 98 - From Face C</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.05	0.00	0.00	-0.05	-4.83	0.00	0.00
30	0.05	0.01	0.01	-0.05	-4.14	-1.44	0.07
60	0.03	0.03	0.03	-0.03	-2.26	-2.49	0.13
90	0.00	0.03	0.03	0.00	0.30	-2.87	0.15
120	0.03	0.03	0.03	0.03	2.86	-2.49	0.13
150	0.05	0.01	0.01	0.05	4.74	-1.44	0.07
180	0.05	0.00	0.00	0.05	5.43	0.00	0.00
210	0.05	0.01	-0.01	0.05	4.74	1.44	-0.07
240	0.03	0.03	-0.03	0.03	2.86	2.49	-0.13
270	0.00	0.03	-0.03	0.00	0.30	2.87	-0.15
300	0.03	0.03	-0.03	-0.03	-2.26	2.49	-0.13
330	0.05	0.01	-0.01	-0.05	-4.14	1.44	-0.07

<i>Radio 8843 - Elevation 98 - From Face A</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.03	0.04	-0.00	-0.05	-4.62	0.68	-0.19
30	0.00	0.04	0.02	-0.04	-3.84	-1.80	-0.22
60	0.03	0.04	0.04	-0.02	-2.08	-3.72	-0.19
90	0.04	0.02	0.05	0.00	0.19	-4.56	-0.11
120	0.05	0.00	0.04	0.03	2.36	-4.09	0.00
150	0.04	0.02	0.03	0.04	3.85	-2.45	0.11
180	0.03	0.04	0.00	0.05	4.26	-0.06	0.19
210	0.00	0.04	-0.02	0.04	3.48	2.42	0.22
240	0.03	0.04	-0.04	0.02	1.72	4.34	0.19
270	0.04	0.02	-0.05	-0.00	-0.55	5.18	0.11
300	0.05	0.00	-0.04	-0.03	-2.72	4.71	0.00

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	40 of 108
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<i>Radio 8843 - Elevation 98 - From Face A</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> <i>K</i>	<i>F_s</i> <i>K</i>	<i>V_x</i> <i>K</i>	<i>V_z</i> <i>K</i>	<i>OTM_x</i> <i>kip-ft</i>	<i>OTM_z</i> <i>kip-ft</i>	<i>Torque</i> <i>kip-ft</i>
330	0.04	0.02	-0.03	-0.04	-4.21	3.07	-0.11

<i>Radio 8843 - Elevation 98 - From Face B</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> <i>K</i>	<i>F_s</i> <i>K</i>	<i>V_x</i> <i>K</i>	<i>V_z</i> <i>K</i>	<i>OTM_x</i> <i>kip-ft</i>	<i>OTM_z</i> <i>kip-ft</i>	<i>Torque</i> <i>kip-ft</i>
0	0.03	0.04	0.00	-0.05	-4.62	-0.68	0.19
30	0.04	0.02	0.03	-0.04	-4.21	-3.07	0.11
60	0.05	0.00	0.04	-0.03	-2.72	-4.71	0.00
90	0.04	0.02	0.05	-0.00	-0.55	-5.18	-0.11
120	0.03	0.04	0.04	0.02	1.72	-4.34	-0.19
150	0.00	0.04	0.02	0.04	3.48	-2.42	-0.22
180	0.03	0.04	-0.00	0.05	4.26	0.06	-0.19
210	0.04	0.02	-0.03	0.04	3.85	2.45	-0.11
240	0.05	0.00	-0.04	0.03	2.36	4.09	0.00
270	0.04	0.02	-0.05	0.00	0.19	4.56	0.11
300	0.03	0.04	-0.04	-0.02	-2.08	3.72	0.19
330	0.00	0.04	-0.02	-0.04	-3.84	1.80	0.22

<i>Radio 8843 - Elevation 98 - From Face C</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> <i>K</i>	<i>F_s</i> <i>K</i>	<i>V_x</i> <i>K</i>	<i>V_z</i> <i>K</i>	<i>OTM_x</i> <i>kip-ft</i>	<i>OTM_z</i> <i>kip-ft</i>	<i>Torque</i> <i>kip-ft</i>
0	0.05	0.00	0.00	-0.05	-4.72	0.00	0.00
30	0.04	0.02	0.02	-0.04	-4.04	-2.11	0.11
60	0.03	0.04	0.04	-0.03	-2.18	-3.66	0.19
90	0.00	0.04	0.04	0.00	0.36	-4.22	0.22
120	0.03	0.04	0.04	0.03	2.90	-3.66	0.19
150	0.04	0.02	0.02	0.04	4.76	-2.11	0.11
180	0.05	0.00	0.00	0.05	5.44	0.00	0.00
210	0.04	0.02	-0.02	0.04	4.76	2.11	-0.11
240	0.03	0.04	-0.04	0.03	2.90	3.66	-0.19
270	0.00	0.04	-0.04	0.00	0.36	4.22	-0.22
300	0.03	0.04	-0.04	-0.03	-2.18	3.66	-0.19
330	0.04	0.02	-0.02	-0.04	-4.04	2.11	-0.11

<i>Raycap DC6-48-60-18-8F surge suppressor - Elevation 98 - From Face A</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> <i>K</i>	<i>F_s</i> <i>K</i>	<i>V_x</i> <i>K</i>	<i>V_z</i> <i>K</i>	<i>OTM_x</i> <i>kip-ft</i>	<i>OTM_z</i> <i>kip-ft</i>	<i>Torque</i> <i>kip-ft</i>
0	0.02	0.03	0.00	-0.03	-3.11	0.06	-0.07
30	0.00	0.03	0.02	-0.03	-2.70	-1.47	-0.08
60	0.02	0.03	0.03	-0.02	-1.57	-2.59	-0.07
90	0.03	0.02	0.03	0.00	-0.04	-3.01	-0.04
120	0.03	0.00	0.03	0.02	1.50	-2.59	0.00
150	0.03	0.02	0.02	0.03	2.62	-1.47	0.04
180	0.02	0.03	0.00	0.03	3.03	0.06	0.07
210	0.00	0.03	-0.02	0.03	2.62	1.60	0.08
240	0.02	0.03	-0.03	0.02	1.50	2.72	0.07
270	0.03	0.02	-0.03	0.00	-0.04	3.13	0.04
300	0.03	0.00	-0.03	-0.02	-1.57	2.72	0.00
330	0.03	0.02	-0.02	-0.03	-2.70	1.60	-0.04

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	41 of 108
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<i>Raycap DC6-48-60-18-8F surge suppressor - Elevation 98 - From Face C</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.03	0.00	0.00	-0.03	-3.00	0.00	0.00
30	0.03	0.02	0.02	-0.03	-2.58	-1.54	0.04
60	0.02	0.03	0.03	-0.02	-1.46	-2.66	0.07
90	0.00	0.03	0.03	0.00	0.07	-3.07	0.08
120	0.02	0.03	0.03	0.02	1.61	-2.66	0.07
150	0.03	0.02	0.02	0.03	2.73	-1.54	0.04
180	0.03	0.00	0.00	0.03	3.14	0.00	0.00
210	0.03	0.02	-0.02	0.03	2.73	1.54	-0.04
240	0.02	0.03	-0.03	0.02	1.61	2.66	-0.07
270	0.00	0.03	-0.03	0.00	0.07	3.07	-0.08
300	0.02	0.03	-0.03	-0.02	-1.46	2.66	-0.07
330	0.03	0.02	-0.02	-0.03	-2.58	1.54	-0.04

<i>13' T-Frame - Elevation 98 - None A</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.39	0.00	0.00	-0.39	-37.91	0.00	0.00
30	0.39	0.00	0.19	-0.34	-32.83	-18.96	0.00
60	0.39	0.00	0.34	-0.19	-18.96	-32.83	0.00
90	0.39	0.00	0.39	0.00	0.00	-37.91	0.00
120	0.39	0.00	0.34	0.19	18.96	-32.83	0.00
150	0.39	0.00	0.19	0.34	32.83	-18.96	0.00
180	0.39	0.00	0.00	0.39	37.91	0.00	0.00
210	0.39	0.00	-0.19	0.34	32.83	18.96	0.00
240	0.39	0.00	-0.34	0.19	18.96	32.83	0.00
270	0.39	0.00	-0.39	0.00	0.00	37.91	0.00
300	0.39	0.00	-0.34	-0.19	-18.96	32.83	0.00
330	0.39	0.00	-0.19	-0.34	-32.83	18.96	0.00

<i>13' T-Frame - Elevation 98 - None B</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.39	0.00	0.00	-0.39	-37.91	0.00	0.00
30	0.39	0.00	0.19	-0.34	-32.83	-18.96	0.00
60	0.39	0.00	0.34	-0.19	-18.96	-32.83	0.00
90	0.39	0.00	0.39	0.00	0.00	-37.91	0.00
120	0.39	0.00	0.34	0.19	18.96	-32.83	0.00
150	0.39	0.00	0.19	0.34	32.83	-18.96	0.00
180	0.39	0.00	0.00	0.39	37.91	0.00	0.00
210	0.39	0.00	-0.19	0.34	32.83	18.96	0.00
240	0.39	0.00	-0.34	0.19	18.96	32.83	0.00
270	0.39	0.00	-0.39	0.00	0.00	37.91	0.00
300	0.39	0.00	-0.34	-0.19	-18.96	32.83	0.00
330	0.39	0.00	-0.19	-0.34	-32.83	18.96	0.00

<i>13' T-Frame - Elevation 98 - None C</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.39	0.00	0.00	-0.39	-37.91	0.00	0.00
30	0.39	0.00	0.19	-0.34	-32.83	-18.96	0.00

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13' T-Frame - Elevation 98 - None C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
60	0.39	0.00	0.34	-0.19	-18.96	-32.83	0.00
90	0.39	0.00	0.39	0.00	0.00	-37.91	0.00
120	0.39	0.00	0.34	0.19	18.96	-32.83	0.00
150	0.39	0.00	0.19	0.34	32.83	-18.96	0.00
180	0.39	0.00	0.00	0.39	37.91	0.00	0.00
210	0.39	0.00	-0.19	0.34	32.83	18.96	0.00
240	0.39	0.00	-0.34	0.19	18.96	32.83	0.00
270	0.39	0.00	-0.39	0.00	0.00	37.91	0.00
300	0.39	0.00	-0.34	-0.19	-18.96	32.83	0.00
330	0.39	0.00	-0.19	-0.34	-32.83	18.96	0.00

4'x4 1/2" Pipe Mount - Elevation 81.00-85.00 - From Leg A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.03	0.00	0.00	-0.03	-2.92	0.00	0.00
30	0.03	0.02	0.02	-0.03	-2.55	-1.37	-0.07
60	0.02	0.03	0.03	-0.02	-1.54	-2.38	-0.12
90	0.00	0.03	0.03	0.00	-0.17	-2.75	-0.14
120	0.02	0.03	0.03	0.02	1.20	-2.38	-0.12
150	0.03	0.02	0.02	0.03	2.21	-1.37	-0.07
180	0.03	0.00	0.00	0.03	2.58	0.00	0.00
210	0.03	0.02	-0.02	0.03	2.21	1.37	0.07
240	0.02	0.03	-0.03	0.02	1.20	2.38	0.12
270	0.00	0.03	-0.03	0.00	-0.17	2.75	0.14
300	0.02	0.03	-0.03	-0.02	-1.54	2.38	0.12
330	0.03	0.02	-0.02	-0.03	-2.55	1.37	0.07

JAHH-65-R3B w/ SBS-2-2 Mount - Elevation 138 - From Leg A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.62	0.00	0.00	-0.62	-87.09	0.00	0.00
30	0.54	0.20	0.20	-0.54	-75.61	-28.14	-1.40
60	0.31	0.35	0.35	-0.31	-44.24	-48.74	-2.43
90	0.00	0.41	0.41	0.00	-1.38	-56.28	-2.81
120	0.31	0.35	0.35	0.31	41.48	-48.74	-2.43
150	0.54	0.20	0.20	0.54	72.86	-28.14	-1.40
180	0.62	0.00	0.00	0.62	84.34	0.00	0.00
210	0.54	0.20	-0.20	0.54	72.86	28.14	1.40
240	0.31	0.35	-0.35	0.31	41.48	48.74	2.43
270	0.00	0.41	-0.41	0.00	-1.38	56.28	2.81
300	0.31	0.35	-0.35	-0.31	-44.24	48.74	2.43
330	0.54	0.20	-0.20	-0.54	-75.61	28.14	1.40

JAHH-65-R3B w/ SBS-2-2 Mount - Elevation 138 - From Leg B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.31	0.35	-0.09	-0.46	-62.95	11.56	2.43
30	0.00	0.41	0.20	-0.35	-48.05	-29.33	2.81
60	0.31	0.35	0.45	-0.15	-20.09	-62.68	2.43
90	0.54	0.20	0.57	0.09	13.44	-79.55	1.40
120	0.62	0.00	0.54	0.31	43.55	-75.43	0.00

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<i>JAHH-65-R3B w/ SBS-2-2 Mount - Elevation 138 - From Leg B</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> K	<i>F_s</i> K	<i>V_x</i> K	<i>V_z</i> K	<i>OTM_x</i> kip-ft	<i>OTM_z</i> kip-ft	<i>Torque</i> kip-ft
150	0.54	0.20	0.36	0.45	62.17	-51.41	-1.40
180	0.31	0.35	0.09	0.46	64.33	-13.94	-2.43
210	0.00	0.41	-0.20	0.35	49.43	26.95	-2.81
240	0.31	0.35	-0.45	0.15	21.47	60.29	-2.43
270	0.54	0.20	-0.57	-0.09	-12.06	77.16	-1.40
300	0.62	0.00	-0.54	-0.31	-42.17	73.04	0.00
330	0.54	0.20	-0.36	-0.45	-60.80	49.03	1.40

<i>JAHH-65-R3B w/ SBS-2-2 Mount - Elevation 138 - From Leg C</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> K	<i>F_s</i> K	<i>V_x</i> K	<i>V_z</i> K	<i>OTM_x</i> kip-ft	<i>OTM_z</i> kip-ft	<i>Torque</i> kip-ft
0	0.31	0.35	0.09	-0.46	-62.95	-11.56	-2.43
30	0.54	0.20	0.36	-0.45	-60.80	-49.03	-1.40
60	0.62	0.00	0.54	-0.31	-42.17	-73.04	0.00
90	0.54	0.20	0.57	-0.09	-12.06	-77.16	1.40
120	0.31	0.35	0.45	0.15	21.47	-60.29	2.43
150	0.00	0.41	0.20	0.35	49.43	-26.95	2.81
180	0.31	0.35	-0.09	0.46	64.33	13.94	2.43
210	0.54	0.20	-0.36	0.45	62.17	51.41	1.40
240	0.62	0.00	-0.54	0.31	43.55	75.43	0.00
270	0.54	0.20	-0.57	0.09	13.44	79.55	-1.40
300	0.31	0.35	-0.45	-0.15	-20.09	62.68	-2.43
330	0.00	0.41	-0.20	-0.35	-48.05	29.33	-2.81

<i>MT6407-77A - Elevation 138 - From Leg A</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> K	<i>F_s</i> K	<i>V_x</i> K	<i>V_z</i> K	<i>OTM_x</i> kip-ft	<i>OTM_z</i> kip-ft	<i>Torque</i> kip-ft
0	0.16	0.00	0.00	-0.16	-22.69	0.00	0.00
30	0.14	0.03	0.03	-0.14	-19.73	-4.33	-0.22
60	0.08	0.05	0.05	-0.08	-11.65	-7.49	-0.37
90	0.00	0.06	0.06	0.00	-0.62	-8.65	-0.43
120	0.08	0.05	0.05	0.08	10.41	-7.49	-0.37
150	0.14	0.03	0.03	0.14	18.49	-4.33	-0.22
180	0.16	0.00	0.00	0.16	21.45	0.00	0.00
210	0.14	0.03	-0.03	0.14	18.49	4.33	0.22
240	0.08	0.05	-0.05	0.08	10.41	7.49	0.37
270	0.00	0.06	-0.06	0.00	-0.62	8.65	0.43
300	0.08	0.05	-0.05	-0.08	-11.65	7.49	0.37
330	0.14	0.03	-0.03	-0.14	-19.73	4.33	0.22

<i>MT6407-77A - Elevation 138 - From Leg B</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> K	<i>F_s</i> K	<i>V_x</i> K	<i>V_z</i> K	<i>OTM_x</i> kip-ft	<i>OTM_z</i> kip-ft	<i>Torque</i> kip-ft
0	0.08	0.05	-0.04	-0.09	-11.70	5.27	0.37
30	0.00	0.06	0.03	-0.05	-7.18	-4.86	0.43
60	0.08	0.05	0.10	-0.01	-0.66	-13.84	0.37
90	0.14	0.03	0.14	0.04	6.12	-19.25	0.22
120	0.16	0.00	0.14	0.08	11.34	-19.65	0.00
150	0.14	0.03	0.10	0.10	13.61	-14.92	-0.22
180	0.08	0.05	0.04	0.09	12.32	-6.34	-0.37
210	0.00	0.06	-0.03	0.05	7.80	3.79	-0.43

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<i>MT6407-77A - Elevation 138 - From Leg B</i>							
<i>Wind Azimuth</i> °	F_a <i>K</i>	F_s <i>K</i>	V_x <i>K</i>	V_z <i>K</i>	OTM_x <i>kip-ft</i>	OTM_z <i>kip-ft</i>	<i>Torque</i> <i>kip-ft</i>
240	0.08	0.05	-0.10	0.01	1.28	12.77	-0.37
270	0.14	0.03	-0.14	-0.04	-5.50	18.18	-0.22
300	0.16	0.00	-0.14	-0.08	-10.72	18.57	0.00
330	0.14	0.03	-0.10	-0.10	-12.99	13.85	0.22

<i>MT6407-77A - Elevation 138 - From Leg C</i>							
<i>Wind Azimuth</i> °	F_a <i>K</i>	F_s <i>K</i>	V_x <i>K</i>	V_z <i>K</i>	OTM_x <i>kip-ft</i>	OTM_z <i>kip-ft</i>	<i>Torque</i> <i>kip-ft</i>
0	0.08	0.05	0.04	-0.09	-11.70	-5.27	-0.37
30	0.14	0.03	0.10	-0.10	-12.99	-13.85	-0.22
60	0.16	0.00	0.14	-0.08	-10.72	-18.57	0.00
90	0.14	0.03	0.14	-0.04	-5.50	-18.18	0.22
120	0.08	0.05	0.10	0.01	1.28	-12.77	0.37
150	0.00	0.06	0.03	0.05	7.80	-3.79	0.43
180	0.08	0.05	-0.04	0.09	12.32	6.34	0.37
210	0.14	0.03	-0.10	0.10	13.61	14.92	0.22
240	0.16	0.00	-0.14	0.08	11.34	19.65	0.00
270	0.14	0.03	-0.14	0.04	6.12	19.25	-0.22
300	0.08	0.05	-0.10	-0.01	-0.66	13.84	-0.37
330	0.00	0.06	-0.03	-0.05	-7.18	4.86	-0.43

<i>RFS FDJ85020Q4-S1 Diplexer - Elevation 138 - From Leg A</i>							
<i>Wind Azimuth</i> °	F_a <i>K</i>	F_s <i>K</i>	V_x <i>K</i>	V_z <i>K</i>	OTM_x <i>kip-ft</i>	OTM_z <i>kip-ft</i>	<i>Torque</i> <i>kip-ft</i>
0	0.04	0.00	0.00	-0.04	-6.14	0.00	0.00
30	0.04	0.01	0.01	-0.04	-5.34	-1.12	-0.06
60	0.02	0.01	0.01	-0.02	-3.14	-1.94	-0.10
90	0.00	0.02	0.02	0.00	-0.14	-2.24	-0.11
120	0.02	0.01	0.01	0.02	2.86	-1.94	-0.10
150	0.04	0.01	0.01	0.04	5.06	-1.12	-0.06
180	0.04	0.00	0.00	0.04	5.87	0.00	0.00
210	0.04	0.01	-0.01	0.04	5.06	1.12	0.06
240	0.02	0.01	-0.01	0.02	2.86	1.94	0.10
270	0.00	0.02	-0.02	0.00	-0.14	2.24	0.11
300	0.02	0.01	-0.01	-0.02	-3.14	1.94	0.10
330	0.04	0.01	-0.01	-0.04	-5.34	1.12	0.06

<i>RFS FDJ85020Q4-S1 Diplexer - Elevation 138 - From Leg B</i>							
<i>Wind Azimuth</i> °	F_a <i>K</i>	F_s <i>K</i>	V_x <i>K</i>	V_z <i>K</i>	OTM_x <i>kip-ft</i>	OTM_z <i>kip-ft</i>	<i>Torque</i> <i>kip-ft</i>
0	0.02	0.01	-0.01	-0.02	-3.11	1.51	0.10
30	0.00	0.02	0.01	-0.01	-1.87	-1.24	0.11
60	0.02	0.01	0.03	-0.00	-0.11	-3.69	0.10
90	0.04	0.01	0.04	0.01	1.70	-5.18	0.06
120	0.04	0.00	0.04	0.02	3.07	-5.32	0.00
150	0.04	0.01	0.03	0.03	3.64	-4.06	-0.06
180	0.02	0.01	0.01	0.02	3.25	-1.75	-0.10
210	0.00	0.02	-0.01	0.01	2.01	1.00	-0.11
240	0.02	0.01	-0.03	0.00	0.25	3.45	-0.10
270	0.04	0.01	-0.04	-0.01	-1.56	4.94	-0.06
300	0.04	0.00	-0.04	-0.02	-2.93	5.08	0.00

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RFS FDJ85020Q4-S1 Diplexer - Elevation 138 - From Leg B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
330	0.04	0.01	-0.03	-0.03	-3.50	3.82	0.06

RFS FDJ85020Q4-S1 Diplexer - Elevation 138 - From Leg C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.02	0.01	0.01	-0.02	-3.11	-1.51	-0.10
30	0.04	0.01	0.03	-0.03	-3.50	-3.82	-0.06
60	0.04	0.00	0.04	-0.02	-2.93	-5.08	0.00
90	0.04	0.01	0.04	-0.01	-1.56	-4.94	0.06
120	0.02	0.01	0.03	0.00	0.25	-3.45	0.10
150	0.00	0.02	0.01	0.01	2.01	-1.00	0.11
180	0.02	0.01	-0.01	0.02	3.25	1.75	0.10
210	0.04	0.01	-0.03	0.03	3.64	4.06	0.06
240	0.04	0.00	-0.03	0.02	3.07	5.32	0.00
270	0.04	0.01	-0.04	0.01	1.70	5.18	-0.06
300	0.02	0.01	-0.03	-0.00	-0.11	3.69	-0.10
330	0.00	0.02	-0.01	-0.01	-1.87	1.24	-0.11

Samsung B2/B66 PCS/AWS RRH - Elevation 138 - From Leg A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.06	0.00	0.00	-0.06	-9.51	-0.20	0.13
30	0.06	0.02	0.02	-0.06	-8.33	-3.14	-0.04
60	0.03	0.04	0.04	-0.03	-5.10	-5.29	-0.19
90	0.00	0.04	0.04	0.00	-0.69	-6.08	-0.29
120	0.03	0.04	0.04	0.03	3.72	-5.29	-0.32
150	0.06	0.02	0.02	0.06	6.95	-3.14	-0.26
180	0.06	0.00	0.00	0.06	8.13	-0.20	-0.13
210	0.06	0.02	-0.02	0.06	6.95	2.74	0.04
240	0.03	0.04	-0.04	0.03	3.72	4.89	0.19
270	0.00	0.04	-0.04	0.00	-0.69	5.68	0.29
300	0.03	0.04	-0.04	-0.03	-5.10	4.89	0.32
330	0.06	0.02	-0.02	-0.06	-8.33	2.74	0.26

Samsung B2/B66 PCS/AWS RRH - Elevation 138 - From Leg B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.03	0.04	-0.01	-0.05	-6.10	0.78	0.19
30	0.00	0.04	0.02	-0.04	-4.57	-3.44	0.29
60	0.03	0.04	0.05	-0.02	-1.69	-6.86	0.32
90	0.06	0.02	0.06	0.01	1.79	-8.58	0.26
120	0.06	0.00	0.06	0.03	4.93	-8.13	0.13
150	0.06	0.02	0.04	0.05	6.88	-5.64	-0.04
180	0.03	0.04	0.01	0.05	7.13	-1.77	-0.19
210	0.00	0.04	-0.02	0.04	5.61	2.44	-0.29
240	0.03	0.04	-0.05	0.02	2.72	5.87	-0.32
270	0.06	0.02	-0.06	-0.01	-0.76	7.59	-0.26
300	0.06	0.00	-0.06	-0.03	-3.89	7.14	-0.13
330	0.06	0.02	-0.04	-0.05	-5.85	4.65	0.04

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Samsung B2/B66 PCS/AWS RRH - Elevation 138 - From Leg C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.03	0.04	0.01	-0.05	-6.44	-0.58	-0.32
30	0.06	0.02	0.04	-0.05	-6.19	-4.45	-0.26
60	0.06	0.00	0.06	-0.03	-4.24	-6.94	-0.13
90	0.06	0.02	0.06	-0.01	-1.10	-7.39	0.04
120	0.03	0.04	0.05	0.02	2.38	-5.67	0.19
150	0.00	0.04	0.02	0.04	5.26	-2.24	0.29
180	0.03	0.04	-0.01	0.05	6.78	1.97	0.32
210	0.06	0.02	-0.04	0.05	6.53	5.84	0.26
240	0.06	0.00	-0.06	0.03	4.58	8.33	0.13
270	0.06	0.02	-0.06	0.01	1.44	8.78	-0.04
300	0.03	0.04	-0.05	-0.02	-2.03	7.06	-0.19
330	0.00	0.04	-0.02	-0.04	-4.92	3.64	-0.29

Samsung B5/B13 700/850 RRH - Elevation 138 - From Leg A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.06	0.00	0.00	-0.06	-9.37	0.16	-0.13
30	0.06	0.02	0.02	-0.06	-8.19	-2.22	-0.23
60	0.03	0.03	0.03	-0.03	-4.96	-3.96	-0.27
90	0.00	0.03	0.03	0.00	-0.55	-4.60	-0.24
120	0.03	0.03	0.03	0.03	3.86	-3.96	-0.14
150	0.06	0.02	0.02	0.06	7.09	-2.22	-0.01
180	0.06	0.00	0.00	0.06	8.27	0.16	0.13
210	0.06	0.02	-0.02	0.06	7.09	2.54	0.23
240	0.03	0.03	-0.03	0.03	3.86	4.28	0.27
270	0.00	0.03	-0.03	0.00	-0.55	4.92	0.24
300	0.03	0.03	-0.03	-0.03	-4.96	4.28	0.14
330	0.06	0.02	-0.02	-0.06	-8.19	2.54	0.01

Samsung B5/B13 700/850 RRH - Elevation 138 - From Leg B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.03	0.03	-0.01	-0.04	-5.64	1.20	0.27
30	0.00	0.03	0.02	-0.03	-3.99	-2.94	0.24
60	0.03	0.03	0.04	-0.01	-1.23	-6.44	0.14
90	0.06	0.02	0.06	0.01	1.89	-8.36	0.01
120	0.06	0.00	0.06	0.03	4.55	-8.19	-0.13
150	0.06	0.02	0.04	0.04	6.02	-5.98	-0.23
180	0.03	0.03	0.01	0.04	5.91	-2.31	-0.27
210	0.00	0.03	-0.02	0.03	4.26	1.82	-0.24
240	0.03	0.03	-0.04	0.01	1.50	5.32	-0.14
270	0.06	0.02	-0.06	-0.01	-1.62	7.25	-0.01
300	0.06	0.00	-0.06	-0.03	-4.27	7.08	0.13
330	0.06	0.02	-0.04	-0.04	-5.74	4.87	0.23

Samsung B5/B13 700/850 RRH - Elevation 138 - From Leg C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.03	0.03	0.01	-0.04	-5.36	-1.36	-0.14
30	0.06	0.02	0.04	-0.04	-5.47	-5.03	-0.01

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Samsung B5/B13 700/850 RRH - Elevation 138 - From Leg C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
60	0.06	0.00	0.06	-0.03	-3.99	-7.24	0.13
90	0.06	0.02	0.06	-0.01	-1.34	-7.41	0.23
120	0.03	0.03	0.04	0.01	1.78	-5.48	0.27
150	0.00	0.03	0.02	0.03	4.54	-1.98	0.24
180	0.03	0.03	-0.01	0.04	6.19	2.15	0.14
210	0.06	0.02	-0.04	0.04	6.29	5.82	0.01
240	0.06	0.00	-0.06	0.03	4.82	8.03	-0.13
270	0.06	0.02	-0.06	0.01	2.17	8.20	-0.23
300	0.03	0.03	-0.04	-0.01	-0.95	6.28	-0.27
330	0.00	0.03	-0.02	-0.03	-3.71	2.78	-0.24

Raycap RDC-6627-PF-48 OVP - Elevation 138 - From Leg C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.09	0.12	0.02	-0.15	-20.87	-2.52	-0.41
30	0.16	0.07	0.10	-0.14	-19.37	-14.13	-0.24
60	0.18	0.00	0.16	-0.09	-12.67	-21.94	0.00
90	0.16	0.07	0.17	-0.02	-2.55	-23.84	0.24
120	0.09	0.12	0.14	0.06	8.26	-19.34	0.41
150	0.00	0.14	0.07	0.12	16.87	-9.62	0.48
180	0.09	0.12	-0.02	0.15	20.98	2.69	0.41
210	0.16	0.07	-0.10	0.14	19.47	14.31	0.24
240	0.18	0.00	-0.16	0.09	12.77	22.12	0.00
270	0.16	0.07	-0.17	0.02	2.65	24.02	-0.24
300	0.09	0.12	-0.14	-0.06	-8.16	19.51	-0.41
330	0.00	0.14	-0.07	-0.12	-16.77	9.80	-0.48

13' T-Frame - Elevation 138 - None A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.42	0.00	0.00	-0.42	-57.37	0.00	0.00
30	0.42	0.00	0.21	-0.36	-49.69	-28.69	0.00
60	0.42	0.00	0.36	-0.21	-28.69	-49.69	0.00
90	0.42	0.00	0.42	0.00	0.00	-57.37	0.00
120	0.42	0.00	0.36	0.21	28.69	-49.69	0.00
150	0.42	0.00	0.21	0.36	49.69	-28.69	0.00
180	0.42	0.00	0.00	0.42	57.37	0.00	0.00
210	0.42	0.00	-0.21	0.36	49.69	28.69	0.00
240	0.42	0.00	-0.36	0.21	28.69	49.69	0.00
270	0.42	0.00	-0.42	0.00	0.00	57.37	0.00
300	0.42	0.00	-0.36	-0.21	-28.69	49.69	0.00
330	0.42	0.00	-0.21	-0.36	-49.69	28.69	0.00

13' T-Frame - Elevation 138 - None B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.42	0.00	0.00	-0.42	-57.37	0.00	0.00
30	0.42	0.00	0.21	-0.36	-49.69	-28.69	0.00
60	0.42	0.00	0.36	-0.21	-28.69	-49.69	0.00
90	0.42	0.00	0.42	0.00	0.00	-57.37	0.00
120	0.42	0.00	0.36	0.21	28.69	-49.69	0.00

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13' T-Frame - Elevation 138 - None B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
150	0.42	0.00	0.21	0.36	49.69	-28.69	0.00
180	0.42	0.00	0.00	0.42	57.37	0.00	0.00
210	0.42	0.00	-0.21	0.36	49.69	28.69	0.00
240	0.42	0.00	-0.36	0.21	28.69	49.69	0.00
270	0.42	0.00	-0.42	0.00	0.00	57.37	0.00
300	0.42	0.00	-0.36	-0.21	-28.69	49.69	0.00
330	0.42	0.00	-0.21	-0.36	-49.69	28.69	0.00

13' T-Frame - Elevation 138 - None C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.42	0.00	0.00	-0.42	-57.37	0.00	0.00
30	0.42	0.00	0.21	-0.36	-49.69	-28.69	0.00
60	0.42	0.00	0.36	-0.21	-28.69	-49.69	0.00
90	0.42	0.00	0.42	0.00	0.00	-57.37	0.00
120	0.42	0.00	0.36	0.21	28.69	-49.69	0.00
150	0.42	0.00	0.21	0.36	49.69	-28.69	0.00
180	0.42	0.00	0.00	0.42	57.37	0.00	0.00
210	0.42	0.00	-0.21	0.36	49.69	28.69	0.00
240	0.42	0.00	-0.36	0.21	28.69	49.69	0.00
270	0.42	0.00	-0.42	0.00	0.00	57.37	0.00
300	0.42	0.00	-0.36	-0.21	-28.69	49.69	0.00
330	0.42	0.00	-0.21	-0.36	-49.69	28.69	0.00

8x2 1/2" Pipe Mount - Elevation 138 - From Leg A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.10	0.00	0.00	-0.10	-14.70	0.00	0.00
30	0.09	0.05	0.05	-0.09	-12.77	-7.21	-0.36
60	0.05	0.09	0.09	-0.05	-7.49	-12.49	-0.62
90	0.00	0.10	0.10	0.00	-0.28	-14.42	-0.72
120	0.05	0.09	0.09	0.05	6.94	-12.49	-0.62
150	0.09	0.05	0.05	0.09	12.21	-7.21	-0.36
180	0.10	0.00	0.00	0.10	14.15	0.00	0.00
210	0.09	0.05	-0.05	0.09	12.21	7.21	0.36
240	0.05	0.09	-0.09	0.05	6.94	12.49	0.62
270	0.00	0.10	-0.10	0.00	-0.28	14.42	0.72
300	0.05	0.09	-0.09	-0.05	-7.49	12.49	0.62
330	0.09	0.05	-0.05	-0.09	-12.77	7.21	0.36

8x2 1/2" Pipe Mount - Elevation 138 - From Leg B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.05	0.09	0.00	-0.10	-14.28	-0.24	0.62
30	0.00	0.10	0.05	-0.09	-12.35	-7.45	0.72
60	0.05	0.09	0.09	-0.05	-7.07	-12.73	0.62
90	0.09	0.05	0.10	0.00	0.14	-14.66	0.36
120	0.10	0.00	0.09	0.05	7.35	-12.73	0.00
150	0.09	0.05	0.05	0.09	12.63	-7.45	-0.36
180	0.05	0.09	0.00	0.10	14.56	-0.24	-0.62
210	0.00	0.10	-0.05	0.09	12.63	6.97	-0.72

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	49 of 108
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8x2 1/2" Pipe Mount - Elevation 138 - From Leg B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
240	0.05	0.09	-0.09	0.05	7.35	12.25	-0.62
270	0.09	0.05	-0.10	0.00	0.14	14.18	-0.36
300	0.10	0.00	-0.09	-0.05	-7.07	12.25	0.00
330	0.09	0.05	-0.05	-0.09	-12.35	6.97	0.36

8x2 1/2" Pipe Mount - Elevation 138 - From Leg C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.05	0.09	0.00	-0.10	-14.28	0.24	-0.62
30	0.09	0.05	0.05	-0.09	-12.35	-6.97	-0.36
60	0.10	0.00	0.09	-0.05	-7.07	-12.25	0.00
90	0.09	0.05	0.10	0.00	0.14	-14.18	0.36
120	0.05	0.09	0.09	0.05	7.35	-12.25	0.62
150	0.00	0.10	0.05	0.09	12.63	-6.97	0.72
180	0.05	0.09	0.00	0.10	14.56	0.24	0.62
210	0.09	0.05	-0.05	0.09	12.63	7.45	0.36
240	0.10	0.00	-0.09	0.05	7.35	12.73	0.00
270	0.09	0.05	-0.10	0.00	0.14	14.66	-0.36
300	0.05	0.09	-0.09	-0.05	-7.07	12.73	-0.62
330	0.00	0.10	-0.05	-0.09	-12.35	7.45	-0.72

(2) L2.5x2.5x1/4 x 6.5' Mount Reinf - Elevation 138 - From Leg A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.25	0.00	0.00	-0.25	-34.40	0.00	0.00
30	0.21	0.00	0.00	-0.21	-29.85	-0.06	-0.00
60	0.12	0.00	0.00	-0.12	-17.41	-0.11	-0.01
90	0.00	0.00	0.00	0.00	-0.41	-0.13	-0.01
120	0.12	0.00	0.00	0.12	16.58	-0.11	-0.01
150	0.21	0.00	0.00	0.21	29.02	-0.06	-0.00
180	0.25	0.00	0.00	0.25	33.57	0.00	0.00
210	0.21	0.00	-0.00	0.21	29.02	0.06	0.00
240	0.12	0.00	-0.00	0.12	16.58	0.11	0.01
270	0.00	0.00	-0.00	0.00	-0.41	0.13	0.01
300	0.12	0.00	-0.00	-0.12	-17.41	0.11	0.01
330	0.21	0.00	-0.00	-0.21	-29.85	0.06	0.00

(2) L2.5x2.5x1/4 x 6.5' Mount Reinf - Elevation 138 - From Leg B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.12	0.00	-0.11	-0.06	-8.38	14.30	0.01
30	0.00	0.00	0.00	-0.00	0.10	-0.42	0.01
60	0.12	0.00	0.11	0.06	8.61	-15.13	0.01
90	0.21	0.00	0.18	0.11	14.87	-25.88	0.00
120	0.25	0.00	0.21	0.12	17.20	-29.79	0.00
150	0.21	0.00	0.18	0.11	14.98	-25.82	-0.00
180	0.12	0.00	0.11	0.06	8.80	-15.02	-0.01
210	0.00	0.00	-0.00	0.00	0.32	-0.30	-0.01
240	0.12	0.00	-0.11	-0.06	-8.20	14.41	-0.01
270	0.21	0.00	-0.18	-0.11	-14.46	25.16	-0.00
300	0.25	0.00	-0.21	-0.12	-16.79	29.07	0.00

tnxTower All-Points Technology Corp. 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	50 of 108
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(2) L2.5x2.5x1/4 x 6.5' Mount Reinf - Elevation 138 - From Leg B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
330	0.21	0.00	-0.18	-0.11	-14.56	25.10	0.00

(2) L2.5x2.5x1/4 x 6.5' Mount Reinf - Elevation 138 - From Leg C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.12	0.00	0.11	-0.06	-8.38	-14.30	-0.01
30	0.21	0.00	0.18	-0.11	-14.56	-25.10	-0.00
60	0.25	0.00	0.21	-0.12	-16.79	-29.07	0.00
90	0.21	0.00	0.18	-0.11	-14.46	-25.16	0.00
120	0.12	0.00	0.11	-0.06	-8.20	-14.41	0.01
150	0.00	0.00	0.00	0.00	0.32	0.30	0.01
180	0.12	0.00	-0.11	0.06	8.80	15.02	0.01
210	0.21	0.00	-0.18	0.11	14.98	25.82	0.00
240	0.25	0.00	-0.21	0.12	17.20	29.79	0.00
270	0.21	0.00	-0.18	0.11	14.87	25.88	-0.00
300	0.12	0.00	-0.11	0.06	8.61	15.13	-0.01
330	0.00	0.00	-0.00	-0.00	0.10	0.42	-0.01

Discrete Appurtenance Totals - No Ice

Wind Azimuth °	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.02	-9.56	-1130.00	-2.51	-0.47
30	4.81	-8.29	-979.99	-568.37	-0.90
60	8.31	-4.80	-567.54	-981.92	-1.09
90	9.58	-0.02	-3.17	-1132.34	-0.99
120	8.29	4.76	561.89	-979.32	-0.62
150	4.77	8.27	976.24	-563.87	-0.08
180	-0.02	9.56	1128.86	2.70	0.47
210	-4.81	8.29	978.85	568.57	0.90
240	-8.31	4.80	566.40	982.12	1.09
270	-9.58	0.02	2.03	1132.53	0.99
300	-8.29	-4.76	-563.03	979.51	0.62
330	-4.77	-8.27	-977.38	564.06	0.08

Discrete Appurtenance Pressures - With Ice

$G_H = 0.850$

Description	Aiming Azimuth °	Weight K	Offset _x ft	Offset _z ft	z ft	K_z	q_z psf	C_{AAc} Front ft ²	C_{AAc} Side ft ²	t_z in
PD1142-2C	240.0000	0.06	-2.93	1.69	146.00	1.371	7	4.13	4.13	1.3344
DB Spectra	0.0000	0.24	0.00	-3.39	147.00	1.373	7	12.69	12.69	1.3353
DS2C03F36D-D										
SitePro R5-LL (PM 601-1)	0.0000	0.12	0.00	-2.89	137.00	1.352	7	2.39	2.39	1.3259
5'x4 1/2" Pipe Mount	60.0000	0.11	1.68	-0.97	120.00	1.315	7	2.60	2.60	1.3085
HPA-65R-BUU-H6	300.0000	0.23	-4.76	-2.75	98.00	1.260	7	10.88	7.64	1.2822
HPA-65R-BUU-H6	60.0000	0.23	4.76	-2.75	98.00	1.260	7	10.88	7.64	1.2822

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	51 of 108
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Description	Aiming Azimuth °	Weight K	Offset _x ft	Offset _z ft	z ft	K _z	q _z psf	C _{AAc} Front ft ²	C _{AAc} Side ft ²	t _z in
HPA-65R-BUU-H6	180.0000	0.23	0.00	5.50	98.00	1.260	7	10.88	7.64	1.2822
AM-X-CD-16-65	300.0000	0.15	-4.76	-2.75	98.00	1.260	7	6.99	5.00	1.2822
AM-X-CD-16-65	60.0000	0.15	4.76	-2.75	98.00	1.260	7	6.99	5.00	1.2822
AM-X-CD-16-65	180.0000	0.15	0.00	5.50	98.00	1.260	7	6.99	5.00	1.2822
cci DMP65R-BU6DA	300.0000	0.29	-4.76	-2.75	98.00	1.260	7	14.00	6.79	1.2822
cci DMP65R-BU6DA	60.0000	0.29	4.76	-2.75	98.00	1.260	7	14.00	6.79	1.2822
cci DMP65R-BU6DA	180.0000	0.29	0.00	5.50	98.00	1.260	7	14.00	6.79	1.2822
OPA65R-BU6DA	300.0000	0.28	-4.76	-2.75	98.00	1.260	7	14.16	6.85	1.2822
OPA65R-BU6DA	60.0000	0.28	4.76	-2.75	98.00	1.260	7	14.16	6.85	1.2822
OPA65R-BU6DA	180.0000	0.28	0.00	5.50	98.00	1.260	7	14.16	6.85	1.2822
cci	300.0000	0.05	-4.33	-2.50	98.00	1.260	7	1.75	0.79	1.2822
DTMABP7819VG12A TMA										
cci	60.0000	0.05	4.33	-2.50	98.00	1.260	7	1.75	0.79	1.2822
DTMABP7819VG12A TMA										
cci	180.0000	0.05	0.00	5.00	98.00	1.260	7	1.75	0.79	1.2822
DTMABP7819VG12A TMA										
Radio 4415	300.0000	0.09	-4.33	-2.50	98.00	1.260	7	2.30	1.16	1.2822
Radio 4415	60.0000	0.09	4.33	-2.50	98.00	1.260	7	2.30	1.16	1.2822
Radio 4415	180.0000	0.09	0.00	5.00	98.00	1.260	7	2.30	1.16	1.2822
Radio 4449	300.0000	0.10	-4.33	-2.50	98.00	1.260	7	2.08	1.27	1.2822
Radio 4449	60.0000	0.10	4.33	-2.50	98.00	1.260	7	2.08	1.27	1.2822
Radio 4449	180.0000	0.10	0.00	5.00	98.00	1.260	7	2.08	1.27	1.2822
Radio 8843	300.0000	0.12	-4.33	-2.50	98.00	1.260	7	2.06	1.75	1.2822
Radio 8843	60.0000	0.12	4.33	-2.50	98.00	1.260	7	2.06	1.75	1.2822
Radio 8843	180.0000	0.12	0.00	5.00	98.00	1.260	7	2.06	1.75	1.2822
Raycap	300.0000	0.07	-2.16	-1.25	98.00	1.260	7	1.47	1.47	1.2822
DC6-48-60-18-8F surge suppressor										
Raycap	180.0000	0.07	0.00	2.50	98.00	1.260	7	1.47	1.47	1.2822
DC6-48-60-18-8F surge suppressor										
13' T-Frame	0.0000	0.69	0.00	0.00	98.00	1.260	7	26.05	26.05	1.2822
13' T-Frame	0.0000	0.69	0.00	0.00	98.00	1.260	7	26.05	26.05	1.2822
13' T-Frame	0.0000	0.69	0.00	0.00	98.00	1.260	7	26.05	26.05	1.2822
4"x4 1/2" Pipe Mount	0.0000	0.08	0.00	-4.27	83.00	1.217	7	1.99	1.99	1.2611
JAHH-65-R3B w/ SBS-2-2 Mount	0.0000	0.54	0.00	-6.89	138.00	1.354	7	20.74	14.44	1.3269
JAHH-65-R3B w/ SBS-2-2 Mount	120.0000	0.54	5.96	3.44	138.00	1.354	7	20.74	14.44	1.3269
JAHH-65-R3B w/ SBS-2-2 Mount	240.0000	0.54	-5.96	3.44	138.00	1.354	7	20.74	14.44	1.3269
MT6407-77A	0.0000	0.18	0.00	-6.89	138.00	1.354	7	5.48	2.45	1.3269
MT6407-77A	120.0000	0.18	5.96	3.44	138.00	1.354	7	5.48	2.45	1.3269
MT6407-77A	240.0000	0.18	-5.96	3.44	138.00	1.354	7	5.48	2.45	1.3269
RFS FDJ85020Q4-S1 Diplexer	0.0000	0.05	0.00	-6.89	138.00	1.354	7	1.34	0.58	1.3269
RFS FDJ85020Q4-S1 Diplexer	120.0000	0.05	5.96	3.44	138.00	1.354	7	1.34	0.58	1.3269
RFS FDJ85020Q4-S1 Diplexer	240.0000	0.05	-5.96	3.44	138.00	1.354	7	1.34	0.58	1.3269
Samsung B2/B66 PCS/AWS RRH	0.0000	0.15	2.00	-6.89	138.00	1.354	7	2.35	1.65	1.3269
Samsung B2/B66 PCS/AWS RRH	120.0000	0.15	4.96	5.18	138.00	1.354	7	2.35	1.65	1.3269
Samsung B2/B66 PCS/AWS RRH	240.0000	0.15	-6.96	1.71	138.00	1.354	7	2.35	1.65	1.3269
Samsung B5/B13 700/850 RRH	0.0000	0.13	-2.00	-6.89	138.00	1.354	7	2.35	1.38	1.3269

tnxTower All-Points Technology Corp. 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	52 of 108
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Description	Aiming Azimuth °	Weight K	Offset _x ft	Offset _z ft	z ft	K _z	q _z psf	C _{AAc} Front ft ²	C _{AAc} Side ft ²	t _z in
Samsung B5/B13 700/850 RRH	120.0000	0.13	6.96	1.71	138.00	1.354	7	2.35	1.38	1.3269
Samsung B5/B13 700/850 RRH	240.0000	0.13	-4.96	5.18	138.00	1.354	7	2.35	1.38	1.3269
Raycap RDC-6627-PF-48 OVP	240.0000	0.14	-2.93	1.69	138.00	1.354	7	4.76	3.75	1.3269
13' T-Frame	0.0000	0.70	0.00	0.00	138.00	1.354	7	26.53	26.53	1.3269
13' T-Frame	0.0000	0.70	0.00	0.00	138.00	1.354	7	26.53	26.53	1.3269
13' T-Frame	0.0000	0.70	0.00	0.00	138.00	1.354	7	26.53	26.53	1.3269
8'x2 1/2" Pipe Mount	0.0000	0.10	0.00	-6.89	138.00	1.354	7	3.95	3.95	1.3269
8'x2 1/2" Pipe Mount	120.0000	0.10	5.96	3.44	138.00	1.354	7	3.95	3.95	1.3269
8'x2 1/2" Pipe Mount	240.0000	0.10	-5.96	3.44	138.00	1.354	7	3.95	3.95	1.3269
(2) L2.5x2.5x1/4 x 6.5' Mount Reinf	0.0000	0.11	0.00	-6.89	138.00	1.354	7	9.35	3.89	1.3269
(2) L2.5x2.5x1/4 x 6.5' Mount Reinf	120.0000	0.11	5.96	3.44	138.00	1.354	7	9.35	3.89	1.3269
(2) L2.5x2.5x1/4 x 6.5' Mount Reinf	240.0000	0.11	-5.96	3.44	138.00	1.354	7	9.35	3.89	1.3269
Sum Weight:		12.85								

Discrete Appurtenance Vectors - With Ice

PD1142-2C - Elevation 146 - From Leg C							
Wind Azimuth °	F _a K	F _s K	V _x K	V _z K	OTM _x kip-ft	OTM _z kip-ft	Torque kip-ft
0	0.01	0.02	0.00	-0.03	-3.71	0.16	-0.08
30	0.02	0.01	0.01	-0.02	-3.20	-1.74	-0.04
60	0.03	0.00	0.02	-0.01	-1.81	-3.14	0.00
90	0.02	0.01	0.03	0.00	0.09	-3.65	0.04
120	0.01	0.02	0.02	0.01	2.00	-3.14	0.08
150	0.00	0.03	0.01	0.02	3.39	-1.74	0.09
180	0.01	0.02	0.00	0.03	3.90	0.16	0.08
210	0.02	0.01	-0.01	0.02	3.39	2.07	0.04
240	0.03	0.00	-0.02	0.01	2.00	3.46	0.00
270	0.02	0.01	-0.03	0.00	0.09	3.97	-0.04
300	0.01	0.02	-0.02	-0.01	-1.81	3.46	-0.08
330	0.00	0.03	-0.01	-0.02	-3.20	2.07	-0.09

DB Spectra DS2C03F36D-D - Elevation 147 - From Leg A							
Wind Azimuth °	F _a K	F _s K	V _x K	V _z K	OTM _x kip-ft	OTM _z kip-ft	Torque kip-ft
0	0.08	0.00	0.00	-0.08	-12.58	0.00	0.00
30	0.07	0.04	0.04	-0.07	-11.00	-5.89	-0.14
60	0.04	0.07	0.07	-0.04	-6.69	-10.20	-0.24
90	0.00	0.08	0.08	0.00	-0.80	-11.78	-0.27
120	0.04	0.07	0.07	0.04	5.09	-10.20	-0.24
150	0.07	0.04	0.04	0.07	9.40	-5.89	-0.14
180	0.08	0.00	0.00	0.08	10.98	0.00	0.00
210	0.07	0.04	-0.04	0.07	9.40	5.89	0.14
240	0.04	0.07	-0.07	0.04	5.09	10.20	0.24
270	0.00	0.08	-0.08	0.00	-0.80	11.78	0.27
300	0.04	0.07	-0.07	-0.04	-6.69	10.20	0.24
330	0.07	0.04	-0.04	-0.07	-11.00	5.89	0.14

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<i>SitePro R5-LL (PM 601-1) - Elevation 137 - From Leg A</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.01	0.00	0.00	-0.01	-2.39	0.00	0.00
30	0.01	0.01	0.01	-0.01	-2.12	-1.02	-0.02
60	0.01	0.01	0.01	-0.01	-1.37	-1.76	-0.04
90	0.00	0.01	0.01	0.00	-0.36	-2.04	-0.04
120	0.01	0.01	0.01	0.01	0.66	-1.76	-0.04
150	0.01	0.01	0.01	0.01	1.41	-1.02	-0.02
180	0.01	0.00	0.00	0.01	1.68	0.00	0.00
210	0.01	0.01	-0.01	0.01	1.41	1.02	0.02
240	0.01	0.01	-0.01	0.01	0.66	1.76	0.04
270	0.00	0.01	-0.01	0.00	-0.36	2.04	0.04
300	0.01	0.01	-0.01	-0.01	-1.37	1.76	0.04
330	0.01	0.01	-0.01	-0.01	-2.12	1.02	0.02

<i>5'x4 1/2" Pipe Mount - Elevation 120 - From Face B</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.01	0.01	0.00	-0.02	-1.99	-0.18	0.03
30	0.01	0.01	0.01	-0.01	-1.74	-1.12	0.02
60	0.02	0.00	0.01	-0.01	-1.05	-1.81	0.00
90	0.01	0.01	0.02	0.00	-0.10	-2.07	-0.02
120	0.01	0.01	0.01	0.01	0.84	-1.81	-0.03
150	0.00	0.02	0.01	0.01	1.54	-1.12	-0.03
180	0.01	0.01	0.00	0.02	1.79	-0.18	-0.03
210	0.01	0.01	-0.01	0.01	1.54	0.77	-0.02
240	0.02	0.00	-0.01	0.01	0.84	1.46	0.00
270	0.01	0.01	-0.02	0.00	-0.10	1.71	0.02
300	0.01	0.01	-0.01	-0.01	-1.05	1.46	0.03
330	0.00	0.02	-0.01	-0.01	-1.74	0.77	0.03

<i>HPA-65R-BUU-H6 - Elevation 98 - From Face A</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.02	0.03	-0.01	-0.04	-4.24	1.70	-0.16
30	0.00	0.03	0.02	-0.03	-3.46	-0.52	-0.18
60	0.02	0.03	0.03	-0.01	-1.92	-2.31	-0.16
90	0.04	0.02	0.04	0.01	-0.04	-3.19	-0.09
120	0.05	0.00	0.04	0.02	1.68	-2.91	0.00
150	0.04	0.02	0.03	0.03	2.78	-1.56	0.09
180	0.02	0.03	0.01	0.04	2.97	0.51	0.16
210	0.00	0.03	-0.02	0.03	2.18	2.73	0.18
240	0.02	0.03	-0.03	0.01	0.65	4.52	0.16
270	0.04	0.02	-0.04	-0.01	-1.24	5.40	0.09
300	0.05	0.00	-0.04	-0.02	-2.96	5.12	0.00
330	0.04	0.02	-0.03	-0.03	-4.06	3.77	-0.09

<i>HPA-65R-BUU-H6 - Elevation 98 - From Face B</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.02	0.03	0.01	-0.04	-4.24	-1.70	0.16

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	54 of 108
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HPA-65R-BUU-H6 - Elevation 98 - From Face B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
30	0.04	0.02	0.03	-0.03	-4.06	-3.77	0.09
60	0.05	0.00	0.04	-0.02	-2.96	-5.12	0.00
90	0.04	0.02	0.04	-0.01	-1.24	-5.40	-0.09
120	0.02	0.03	0.03	0.01	0.65	-4.52	-0.16
150	0.00	0.03	0.02	0.03	2.18	-2.73	-0.18
180	0.02	0.03	-0.01	0.04	2.97	-0.51	-0.16
210	0.04	0.02	-0.03	0.03	2.78	1.56	-0.09
240	0.05	0.00	-0.04	0.02	1.68	2.91	0.00
270	0.04	0.02	-0.04	0.01	-0.04	3.19	0.09
300	0.02	0.03	-0.03	-0.01	-1.92	2.31	0.16
330	0.00	0.03	-0.02	-0.03	-3.46	0.52	0.18

HPA-65R-BUU-H6 - Elevation 98 - From Face C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.05	0.00	0.00	-0.05	-3.36	0.00	0.00
30	0.04	0.02	0.02	-0.04	-2.74	-1.63	0.09
60	0.02	0.03	0.03	-0.02	-1.04	-2.82	0.16
90	0.00	0.03	0.03	0.00	1.28	-3.26	0.18
120	0.02	0.03	0.03	0.02	3.60	-2.82	0.16
150	0.04	0.02	0.02	0.04	5.29	-1.63	0.09
180	0.05	0.00	0.00	0.05	5.91	0.00	0.00
210	0.04	0.02	-0.02	0.04	5.29	1.63	-0.09
240	0.02	0.03	-0.03	0.02	3.60	2.82	-0.16
270	0.00	0.03	-0.03	0.00	1.28	3.26	-0.18
300	0.02	0.03	-0.03	-0.02	-1.04	2.82	-0.16
330	0.04	0.02	-0.02	-0.04	-2.74	1.63	-0.09

AM-X-CD-16-65 - Elevation 98 - From Face A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.02	0.02	-0.00	-0.02	-2.76	1.10	-0.10
30	0.00	0.02	0.01	-0.02	-2.27	-0.33	-0.12
60	0.02	0.02	0.02	-0.01	-1.27	-1.48	-0.10
90	0.03	0.01	0.03	0.00	-0.05	-2.04	-0.06
120	0.03	0.00	0.03	0.02	1.07	-1.85	0.00
150	0.03	0.01	0.02	0.02	1.79	-0.97	0.06
180	0.02	0.02	0.00	0.02	1.92	0.36	0.10
210	0.00	0.02	-0.01	0.02	1.42	1.80	0.12
240	0.02	0.02	-0.02	0.01	0.43	2.94	0.10
270	0.03	0.01	-0.03	-0.00	-0.79	3.50	0.06
300	0.03	0.00	-0.03	-0.02	-1.91	3.31	0.00
330	0.03	0.01	-0.02	-0.02	-2.63	2.43	-0.06

AM-X-CD-16-65 - Elevation 98 - From Face B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.02	0.02	0.00	-0.02	-2.76	-1.10	0.10
30	0.03	0.01	0.02	-0.02	-2.63	-2.43	0.06
60	0.03	0.00	0.03	-0.02	-1.91	-3.31	0.00
90	0.03	0.01	0.03	-0.00	-0.79	-3.50	-0.06

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AM-X-CD-16-65 - Elevation 98 - From Face B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
120	0.02	0.02	0.02	0.01	0.43	-2.94	-0.10
150	0.00	0.02	0.01	0.02	1.42	-1.80	-0.12
180	0.02	0.02	-0.00	0.02	1.92	-0.36	-0.10
210	0.03	0.01	-0.02	0.02	1.79	0.97	-0.06
240	0.03	0.00	-0.03	0.02	1.07	1.85	0.00
270	0.03	0.01	-0.03	0.00	-0.05	2.04	0.06
300	0.02	0.02	-0.02	-0.01	-1.27	1.48	0.10
330	0.00	0.02	-0.01	-0.02	-2.27	0.33	0.12

AM-X-CD-16-65 - Elevation 98 - From Face C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.03	0.00	0.00	-0.03	-2.13	0.00	0.00
30	0.03	0.01	0.01	-0.03	-1.74	-1.06	0.06
60	0.02	0.02	0.02	-0.02	-0.64	-1.84	0.10
90	0.00	0.02	0.02	0.00	0.84	-2.13	0.12
120	0.02	0.02	0.02	0.02	2.33	-1.84	0.10
150	0.03	0.01	0.01	0.03	3.42	-1.06	0.06
180	0.03	0.00	0.00	0.03	3.82	0.00	0.00
210	0.03	0.01	-0.01	0.03	3.42	1.06	-0.06
240	0.02	0.02	-0.02	0.02	2.33	1.84	-0.10
270	0.00	0.02	-0.02	0.00	0.84	2.13	-0.12
300	0.02	0.02	-0.02	-0.02	-0.64	1.84	-0.10
330	0.03	0.01	-0.01	-0.03	-1.74	1.06	-0.06

cci DMP65R-BU6DA - Elevation 98 - From Face A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.03	0.03	-0.01	-0.04	-4.46	2.71	-0.14
30	0.00	0.03	0.01	-0.03	-3.30	-0.07	-0.16
60	0.03	0.03	0.04	-0.01	-1.47	-2.46	-0.14
90	0.05	0.01	0.05	0.01	0.54	-3.82	-0.08
120	0.06	0.00	0.05	0.03	2.19	-3.79	0.00
150	0.05	0.01	0.04	0.04	3.04	-2.38	0.08
180	0.03	0.03	0.01	0.04	2.87	0.04	0.14
210	0.00	0.03	-0.01	0.03	1.71	2.82	0.16
240	0.03	0.03	-0.04	0.01	-0.11	5.21	0.14
270	0.05	0.01	-0.05	-0.01	-2.12	6.57	0.08
300	0.06	0.00	-0.05	-0.03	-3.78	6.54	0.00
330	0.05	0.01	-0.04	-0.04	-4.63	5.13	-0.08

cci DMP65R-BU6DA - Elevation 98 - From Face B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.03	0.03	0.01	-0.04	-4.46	-2.71	0.14
30	0.05	0.01	0.04	-0.04	-4.63	-5.13	0.08
60	0.06	0.00	0.05	-0.03	-3.78	-6.54	0.00
90	0.05	0.01	0.05	-0.01	-2.12	-6.57	-0.08
120	0.03	0.03	0.04	0.01	-0.11	-5.21	-0.14
150	0.00	0.03	0.01	0.03	1.71	-2.82	-0.16
180	0.03	0.03	-0.01	0.04	2.87	-0.04	-0.14

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<i>cci DMP65R-BU6DA - Elevation 98 - From Face B</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> <i>K</i>	<i>F_s</i> <i>K</i>	<i>V_x</i> <i>K</i>	<i>V_z</i> <i>K</i>	<i>OTM_x</i> <i>kip-ft</i>	<i>OTM_z</i> <i>kip-ft</i>	<i>Torque</i> <i>kip-ft</i>
210	0.05	0.01	-0.04	0.04	3.04	2.38	-0.08
240	0.06	0.00	-0.05	0.03	2.19	3.79	0.00
270	0.05	0.01	-0.05	0.01	0.54	3.82	0.08
300	0.03	0.03	-0.04	-0.01	-1.47	2.46	0.14
330	0.00	0.03	-0.01	-0.03	-3.30	0.07	0.16

<i>cci DMP65R-BU6DA - Elevation 98 - From Face C</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> <i>K</i>	<i>F_s</i> <i>K</i>	<i>V_x</i> <i>K</i>	<i>V_z</i> <i>K</i>	<i>OTM_x</i> <i>kip-ft</i>	<i>OTM_z</i> <i>kip-ft</i>	<i>Torque</i> <i>kip-ft</i>
0	0.06	0.00	0.00	-0.06	-4.38	0.00	0.00
30	0.05	0.01	0.01	-0.05	-3.58	-1.45	0.08
60	0.03	0.03	0.03	-0.03	-1.40	-2.51	0.14
90	0.00	0.03	0.03	0.00	1.59	-2.90	0.16
120	0.03	0.03	0.03	0.03	4.57	-2.51	0.14
150	0.05	0.01	0.01	0.05	6.76	-1.45	0.08
180	0.06	0.00	0.00	0.06	7.55	0.00	0.00
210	0.05	0.01	-0.01	0.05	6.76	1.45	-0.08
240	0.03	0.03	-0.03	0.03	4.57	2.51	-0.14
270	0.00	0.03	-0.03	0.00	1.59	2.90	-0.16
300	0.03	0.03	-0.03	-0.03	-1.40	2.51	-0.14
330	0.05	0.01	-0.01	-0.05	-3.58	1.45	-0.08

<i>OPA65R-BU6DA - Elevation 98 - From Face A</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> <i>K</i>	<i>F_s</i> <i>K</i>	<i>V_x</i> <i>K</i>	<i>V_z</i> <i>K</i>	<i>OTM_x</i> <i>kip-ft</i>	<i>OTM_z</i> <i>kip-ft</i>	<i>Torque</i> <i>kip-ft</i>
0	0.03	0.03	-0.01	-0.04	-4.46	2.67	-0.14
30	0.00	0.03	0.01	-0.03	-3.29	-0.14	-0.16
60	0.03	0.03	0.04	-0.01	-1.44	-2.56	-0.14
90	0.05	0.01	0.05	0.01	0.59	-3.94	-0.08
120	0.06	0.00	0.05	0.03	2.26	-3.91	0.00
150	0.05	0.01	0.04	0.04	3.12	-2.48	0.08
180	0.03	0.03	0.01	0.04	2.94	-0.03	0.14
210	0.00	0.03	-0.01	0.03	1.77	2.78	0.16
240	0.03	0.03	-0.04	0.01	-0.08	5.20	0.14
270	0.05	0.01	-0.05	-0.01	-2.11	6.58	0.08
300	0.06	0.00	-0.05	-0.03	-3.78	6.55	0.00
330	0.05	0.01	-0.04	-0.04	-4.64	5.12	-0.08

<i>OPA65R-BU6DA - Elevation 98 - From Face B</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> <i>K</i>	<i>F_s</i> <i>K</i>	<i>V_x</i> <i>K</i>	<i>V_z</i> <i>K</i>	<i>OTM_x</i> <i>kip-ft</i>	<i>OTM_z</i> <i>kip-ft</i>	<i>Torque</i> <i>kip-ft</i>
0	0.03	0.03	0.01	-0.04	-4.46	-2.67	0.14
30	0.05	0.01	0.04	-0.04	-4.64	-5.12	0.08
60	0.06	0.00	0.05	-0.03	-3.78	-6.55	0.00
90	0.05	0.01	0.05	-0.01	-2.11	-6.58	-0.08
120	0.03	0.03	0.04	0.01	-0.08	-5.20	-0.14
150	0.00	0.03	0.01	0.03	1.77	-2.78	-0.16
180	0.03	0.03	-0.01	0.04	2.94	0.03	-0.14
210	0.05	0.01	-0.04	0.04	3.12	2.48	-0.08
240	0.06	0.00	-0.05	0.03	2.26	3.91	0.00
270	0.05	0.01	-0.05	0.01	0.59	3.94	0.08

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OPA65R-BU6DA - Elevation 98 - From Face B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
300	0.03	0.03	-0.04	-0.01	-1.44	2.56	0.14
330	0.00	0.03	-0.01	-0.03	-3.29	0.14	0.16

OPA65R-BU6DA - Elevation 98 - From Face C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.06	0.00	0.00	-0.06	-4.52	0.00	0.00
30	0.05	0.01	0.01	-0.05	-3.71	-1.46	0.08
60	0.03	0.03	0.03	-0.03	-1.50	-2.53	0.14
90	0.00	0.03	0.03	0.00	1.52	-2.92	0.16
120	0.03	0.03	0.03	0.03	4.54	-2.53	0.14
150	0.05	0.01	0.01	0.05	6.75	-1.46	0.08
180	0.06	0.00	0.00	0.06	7.56	0.00	0.00
210	0.05	0.01	-0.01	0.05	6.75	1.46	-0.08
240	0.03	0.03	-0.03	0.03	4.54	2.53	-0.14
270	0.00	0.03	-0.03	0.00	1.52	2.92	-0.16
300	0.03	0.03	-0.03	-0.03	-1.50	2.53	-0.14
330	0.05	0.01	-0.01	-0.05	-3.71	1.46	-0.08

cci DTMAP7819VG12A TMA - Elevation 98 - From Face A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.01	0.00	-0.00	-0.01	-0.71	0.46	-0.02
30	0.00	0.00	0.00	-0.00	-0.52	-0.01	-0.02
60	0.01	0.00	0.01	-0.00	-0.21	-0.41	-0.02
90	0.01	0.00	0.01	0.00	0.11	-0.64	-0.01
120	0.01	0.00	0.01	0.01	0.37	-0.65	0.00
150	0.01	0.00	0.01	0.01	0.50	-0.42	0.01
180	0.01	0.00	0.00	0.01	0.46	-0.02	0.02
210	0.00	0.00	-0.00	0.00	0.26	0.44	0.02
240	0.01	0.00	-0.01	0.00	-0.04	0.84	0.02
270	0.01	0.00	-0.01	-0.00	-0.36	1.08	0.01
300	0.01	0.00	-0.01	-0.01	-0.62	1.08	0.00
330	0.01	0.00	-0.01	-0.01	-0.75	0.85	-0.01

cci DTMAP7819VG12A TMA - Elevation 98 - From Face B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.01	0.00	0.00	-0.01	-0.71	-0.46	0.02
30	0.01	0.00	0.01	-0.01	-0.75	-0.85	0.01
60	0.01	0.00	0.01	-0.01	-0.62	-1.08	0.00
90	0.01	0.00	0.01	-0.00	-0.36	-1.08	-0.01
120	0.01	0.00	0.01	0.00	-0.04	-0.84	-0.02
150	0.00	0.00	0.00	0.00	0.26	-0.44	-0.02
180	0.01	0.00	-0.00	0.01	0.46	0.02	-0.02
210	0.01	0.00	-0.01	0.01	0.50	0.42	-0.01
240	0.01	0.00	-0.01	0.01	0.37	0.65	0.00
270	0.01	0.00	-0.01	0.00	0.11	0.64	0.01
300	0.01	0.00	-0.01	-0.00	-0.21	0.41	0.02
330	0.00	0.00	-0.00	-0.00	-0.52	0.01	0.02

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	58 of 108
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<i>cci DTMAPB7819VG12A TMA - Elevation 98 - From Face C</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.01	0.00	0.00	-0.01	-0.75	0.00	0.00
30	0.01	0.00	0.00	-0.01	-0.61	-0.22	0.01
60	0.01	0.00	0.00	-0.01	-0.25	-0.39	0.02
90	0.00	0.00	0.00	0.00	0.25	-0.45	0.02
120	0.01	0.00	0.00	0.01	0.75	-0.39	0.02
150	0.01	0.00	0.00	0.01	1.12	-0.22	0.01
180	0.01	0.00	0.00	0.01	1.25	0.00	0.00
210	0.01	0.00	-0.00	0.01	1.12	0.22	-0.01
240	0.01	0.00	-0.00	0.01	0.75	0.39	-0.02
270	0.00	0.00	-0.00	0.00	0.25	0.45	-0.02
300	0.01	0.00	-0.00	-0.01	-0.25	0.39	-0.02
330	0.01	0.00	-0.00	-0.01	-0.61	0.22	-0.01

<i>Radio 4415 - Elevation 98 - From Face A</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.00	0.00	-0.00	-0.01	-0.85	0.61	-0.02
30	0.00	0.01	0.00	-0.00	-0.66	0.15	-0.03
60	0.00	0.00	0.01	-0.00	-0.36	-0.24	-0.02
90	0.01	0.00	0.01	0.00	-0.02	-0.46	-0.01
120	0.01	0.00	0.01	0.00	0.26	-0.45	0.00
150	0.01	0.00	0.01	0.01	0.41	-0.21	0.01
180	0.00	0.00	0.00	0.01	0.38	0.19	0.02
210	0.00	0.01	-0.00	0.00	0.20	0.65	0.03
240	0.00	0.00	-0.01	0.00	-0.11	1.04	0.02
270	0.01	0.00	-0.01	-0.00	-0.44	1.26	0.01
300	0.01	0.00	-0.01	-0.00	-0.72	1.25	0.00
330	0.01	0.00	-0.01	-0.01	-0.87	1.01	-0.01

<i>Radio 4415 - Elevation 98 - From Face B</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.00	0.00	0.00	-0.01	-0.85	-0.61	0.02
30	0.01	0.00	0.01	-0.01	-0.87	-1.01	0.01
60	0.01	0.00	0.01	-0.00	-0.72	-1.25	0.00
90	0.01	0.00	0.01	-0.00	-0.44	-1.26	-0.01
120	0.00	0.00	0.01	0.00	-0.11	-1.04	-0.02
150	0.00	0.01	0.00	0.00	0.20	-0.65	-0.03
180	0.00	0.00	-0.00	0.01	0.38	-0.19	-0.02
210	0.01	0.00	-0.01	0.01	0.41	0.21	-0.01
240	0.01	0.00	-0.01	0.00	0.26	0.45	0.00
270	0.01	0.00	-0.01	0.00	-0.02	0.46	0.01
300	0.00	0.00	-0.01	-0.00	-0.36	0.24	0.02
330	0.00	0.01	-0.00	-0.00	-0.66	-0.15	0.03

<i>Radio 4415 - Elevation 98 - From Face C</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.01	0.00	0.00	-0.01	-0.52	0.00	0.00
30	0.01	0.00	0.00	-0.01	-0.39	-0.25	0.01

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	59 of 108
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Radio 4415 - Elevation 98 - From Face C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
60	0.00	0.00	0.00	-0.00	-0.03	-0.43	0.02
90	0.00	0.01	0.01	0.00	0.46	-0.49	0.03
120	0.00	0.00	0.00	0.00	0.95	-0.43	0.02
150	0.01	0.00	0.00	0.01	1.31	-0.25	0.01
180	0.01	0.00	0.00	0.01	1.44	0.00	0.00
210	0.01	0.00	-0.00	0.01	1.31	0.25	-0.01
240	0.00	0.00	-0.00	0.00	0.95	0.43	-0.02
270	0.00	0.01	-0.01	0.00	0.46	0.49	-0.03
300	0.00	0.00	-0.00	-0.00	-0.03	0.43	-0.02
330	0.01	0.00	-0.00	-0.01	-0.39	0.25	-0.01

Radio 4449 - Elevation 98 - From Face A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.00	0.00	-0.00	-0.01	-0.89	0.60	-0.02
30	0.00	0.01	0.00	-0.00	-0.73	0.17	-0.03
60	0.00	0.00	0.01	-0.00	-0.44	-0.17	-0.02
90	0.01	0.00	0.01	0.00	-0.11	-0.35	-0.01
120	0.01	0.00	0.01	0.00	0.19	-0.32	0.00
150	0.01	0.00	0.01	0.01	0.36	-0.08	0.01
180	0.00	0.00	0.00	0.01	0.37	0.30	0.02
210	0.00	0.01	-0.00	0.00	0.21	0.72	0.03
240	0.00	0.00	-0.01	0.00	-0.07	1.06	0.02
270	0.01	0.00	-0.01	-0.00	-0.41	1.25	0.01
300	0.01	0.00	-0.01	-0.00	-0.70	1.21	0.00
330	0.01	0.00	-0.01	-0.01	-0.88	0.98	-0.01

Radio 4449 - Elevation 98 - From Face B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.00	0.00	0.00	-0.01	-0.89	-0.60	0.02
30	0.01	0.00	0.01	-0.01	-0.88	-0.98	0.01
60	0.01	0.00	0.01	-0.00	-0.70	-1.21	0.00
90	0.01	0.00	0.01	-0.00	-0.41	-1.25	-0.01
120	0.00	0.00	0.01	0.00	-0.07	-1.06	-0.02
150	0.00	0.01	0.00	0.00	0.21	-0.72	-0.03
180	0.00	0.00	-0.00	0.01	0.37	-0.30	-0.02
210	0.01	0.00	-0.01	0.01	0.36	0.08	-0.01
240	0.01	0.00	-0.01	0.00	0.19	0.32	0.00
270	0.01	0.00	-0.01	0.00	-0.11	0.35	0.01
300	0.00	0.00	-0.01	-0.00	-0.44	0.17	0.02
330	0.00	0.01	-0.00	-0.00	-0.73	-0.17	0.03

Radio 4449 - Elevation 98 - From Face C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.01	0.00	0.00	-0.01	-0.37	0.00	0.00
30	0.01	0.00	0.00	-0.01	-0.25	-0.27	0.01
60	0.00	0.00	0.00	-0.00	0.07	-0.47	0.02
90	0.00	0.01	0.01	0.00	0.51	-0.54	0.03
120	0.00	0.00	0.00	0.00	0.96	-0.47	0.02

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	60 of 108
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Radio 4449 - Elevation 98 - From Face C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
150	0.01	0.00	0.00	0.01	1.28	-0.27	0.01
180	0.01	0.00	0.00	0.01	1.40	0.00	0.00
210	0.01	0.00	-0.00	0.01	1.28	0.27	-0.01
240	0.00	0.00	-0.00	0.00	0.96	0.47	-0.02
270	0.00	0.01	-0.01	0.00	0.51	0.54	-0.03
300	0.00	0.00	-0.00	-0.00	0.07	0.47	-0.02
330	0.01	0.00	-0.00	-0.01	-0.25	0.27	-0.01

Radio 8843 - Elevation 98 - From Face A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.00	0.01	-0.00	-0.01	-1.09	0.59	-0.03
30	0.00	0.01	0.00	-0.01	-0.96	0.16	-0.04
60	0.00	0.01	0.01	-0.00	-0.65	-0.17	-0.03
90	0.01	0.00	0.01	0.00	-0.25	-0.31	-0.02
120	0.01	0.00	0.01	0.00	0.13	-0.23	0.00
150	0.01	0.00	0.00	0.01	0.40	0.06	0.02
180	0.00	0.01	0.00	0.01	0.47	0.48	0.03
210	0.00	0.01	-0.00	0.01	0.34	0.91	0.04
240	0.00	0.01	-0.01	0.00	0.03	1.24	0.03
270	0.01	0.00	-0.01	-0.00	-0.37	1.38	0.02
300	0.01	0.00	-0.01	-0.00	-0.75	1.30	0.00
330	0.01	0.00	-0.00	-0.01	-1.01	1.01	-0.02

Radio 8843 - Elevation 98 - From Face B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.00	0.01	0.00	-0.01	-1.09	-0.59	0.03
30	0.01	0.00	0.00	-0.01	-1.01	-1.01	0.02
60	0.01	0.00	0.01	-0.00	-0.75	-1.30	0.00
90	0.01	0.00	0.01	-0.00	-0.37	-1.38	-0.02
120	0.00	0.01	0.01	0.00	0.03	-1.24	-0.03
150	0.00	0.01	0.00	0.01	0.34	-0.91	-0.04
180	0.00	0.01	-0.00	0.01	0.47	-0.48	-0.03
210	0.01	0.00	-0.00	0.01	0.40	-0.06	-0.02
240	0.01	0.00	-0.01	0.00	0.13	0.23	0.00
270	0.01	0.00	-0.01	0.00	-0.25	0.31	0.02
300	0.00	0.01	-0.01	-0.00	-0.65	0.17	0.03
330	0.00	0.01	-0.00	-0.01	-0.96	-0.16	0.04

Radio 8843 - Elevation 98 - From Face C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.01	0.00	0.00	-0.01	-0.26	0.00	0.00
30	0.01	0.00	0.00	-0.01	-0.14	-0.37	0.02
60	0.00	0.01	0.01	-0.00	0.18	-0.65	0.03
90	0.00	0.01	0.01	0.00	0.62	-0.75	0.04
120	0.00	0.01	0.01	0.00	1.06	-0.65	0.03
150	0.01	0.00	0.00	0.01	1.38	-0.37	0.02
180	0.01	0.00	0.00	0.01	1.50	0.00	0.00
210	0.01	0.00	-0.00	0.01	1.38	0.37	-0.02

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	61 of 108
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<i>Radio 8843 - Elevation 98 - From Face C</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
240	0.00	0.01	-0.01	0.00	1.06	0.65	-0.03
270	0.00	0.01	-0.01	0.00	0.62	0.75	-0.04
300	0.00	0.01	-0.01	-0.00	0.18	0.65	-0.03
330	0.01	0.00	-0.00	-0.01	-0.14	0.37	-0.02

<i>Raycap DC6-48-60-18-8F surge suppressor - Elevation 98 - From Face A</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.00	0.01	0.00	-0.01	-0.92	0.16	-0.02
30	0.00	0.01	0.00	-0.01	-0.81	-0.26	-0.02
60	0.00	0.01	0.01	-0.00	-0.51	-0.57	-0.02
90	0.01	0.00	0.01	0.00	-0.09	-0.68	-0.01
120	0.01	0.00	0.01	0.00	0.33	-0.57	0.00
150	0.01	0.00	0.00	0.01	0.63	-0.26	0.01
180	0.00	0.01	0.00	0.01	0.74	0.16	0.02
210	0.00	0.01	-0.00	0.01	0.63	0.57	0.02
240	0.00	0.01	-0.01	0.00	0.33	0.88	0.02
270	0.01	0.00	-0.01	0.00	-0.09	0.99	0.01
300	0.01	0.00	-0.01	-0.00	-0.51	0.88	0.00
330	0.01	0.00	-0.00	-0.01	-0.81	0.57	-0.01

<i>Raycap DC6-48-60-18-8F surge suppressor - Elevation 98 - From Face C</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.01	0.00	0.00	-0.01	-0.65	0.00	0.00
30	0.01	0.00	0.00	-0.01	-0.54	-0.42	0.01
60	0.00	0.01	0.01	-0.00	-0.24	-0.72	0.02
90	0.00	0.01	0.01	0.00	0.18	-0.83	0.02
120	0.00	0.01	0.01	0.00	0.60	-0.72	0.02
150	0.01	0.00	0.00	0.01	0.90	-0.42	0.01
180	0.01	0.00	0.00	0.01	1.02	0.00	0.00
210	0.01	0.00	-0.00	0.01	0.90	0.42	-0.01
240	0.00	0.01	-0.01	0.00	0.60	0.72	-0.02
270	0.00	0.01	-0.01	0.00	0.18	0.83	-0.02
300	0.00	0.01	-0.01	-0.00	-0.24	0.72	-0.02
330	0.01	0.00	-0.00	-0.01	-0.54	0.42	-0.01

<i>13' T-Frame - Elevation 98 - None A</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.11	0.00	0.00	-0.11	-11.10	0.00	0.00
30	0.11	0.00	0.06	-0.10	-9.62	-5.55	0.00
60	0.11	0.00	0.10	-0.06	-5.55	-9.62	0.00
90	0.11	0.00	0.11	0.00	0.00	-11.10	0.00
120	0.11	0.00	0.10	0.06	5.55	-9.62	0.00
150	0.11	0.00	0.06	0.10	9.62	-5.55	0.00
180	0.11	0.00	0.00	0.11	11.10	0.00	0.00
210	0.11	0.00	-0.06	0.10	9.62	5.55	0.00
240	0.11	0.00	-0.10	0.06	5.55	9.62	0.00
270	0.11	0.00	-0.11	0.00	0.00	11.10	0.00
300	0.11	0.00	-0.10	-0.06	-5.55	9.62	0.00

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	62 of 108
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13' T-Frame - Elevation 98 - None A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
330	0.11	0.00	-0.06	-0.10	-9.62	5.55	0.00

13' T-Frame - Elevation 98 - None B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.11	0.00	0.00	-0.11	-11.10	0.00	0.00
30	0.11	0.00	0.06	-0.10	-9.62	-5.55	0.00
60	0.11	0.00	0.10	-0.06	-5.55	-9.62	0.00
90	0.11	0.00	0.11	0.00	0.00	-11.10	0.00
120	0.11	0.00	0.10	0.06	5.55	-9.62	0.00
150	0.11	0.00	0.06	0.10	9.62	-5.55	0.00
180	0.11	0.00	0.00	0.11	11.10	0.00	0.00
210	0.11	0.00	-0.06	0.10	9.62	5.55	0.00
240	0.11	0.00	-0.10	0.06	5.55	9.62	0.00
270	0.11	0.00	-0.11	0.00	0.00	11.10	0.00
300	0.11	0.00	-0.10	-0.06	-5.55	9.62	0.00
330	0.11	0.00	-0.06	-0.10	-9.62	5.55	0.00

13' T-Frame - Elevation 98 - None C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.11	0.00	0.00	-0.11	-11.10	0.00	0.00
30	0.11	0.00	0.06	-0.10	-9.62	-5.55	0.00
60	0.11	0.00	0.10	-0.06	-5.55	-9.62	0.00
90	0.11	0.00	0.11	0.00	0.00	-11.10	0.00
120	0.11	0.00	0.10	0.06	5.55	-9.62	0.00
150	0.11	0.00	0.06	0.10	9.62	-5.55	0.00
180	0.11	0.00	0.00	0.11	11.10	0.00	0.00
210	0.11	0.00	-0.06	0.10	9.62	5.55	0.00
240	0.11	0.00	-0.10	0.06	5.55	9.62	0.00
270	0.11	0.00	-0.11	0.00	0.00	11.10	0.00
300	0.11	0.00	-0.10	-0.06	-5.55	9.62	0.00
330	0.11	0.00	-0.06	-0.10	-9.62	5.55	0.00

4x4 1/2" Pipe Mount - Elevation 81.00-85.00 - From Leg A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.01	0.00	0.00	-0.01	-1.05	0.00	0.00
30	0.01	0.00	0.00	-0.01	-0.95	-0.35	-0.02
60	0.00	0.01	0.01	-0.00	-0.70	-0.60	-0.03
90	0.00	0.01	0.01	0.00	-0.35	-0.69	-0.04
120	0.00	0.01	0.01	0.00	-0.01	-0.60	-0.03
150	0.01	0.00	0.00	0.01	0.24	-0.35	-0.02
180	0.01	0.00	0.00	0.01	0.34	0.00	0.00
210	0.01	0.00	-0.00	0.01	0.24	0.35	0.02
240	0.00	0.01	-0.01	0.00	-0.01	0.60	0.03
270	0.00	0.01	-0.01	0.00	-0.35	0.69	0.04
300	0.00	0.01	-0.01	-0.00	-0.70	0.60	0.03
330	0.01	0.00	-0.00	-0.01	-0.95	0.35	0.02

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JAHH-65-R3B w/ SBS-2-2 Mount - Elevation 138 - From Leg A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.10	0.00	0.00	-0.10	-17.07	0.00	0.00
30	0.08	0.03	0.03	-0.08	-15.27	-4.66	-0.23
60	0.05	0.06	0.06	-0.05	-10.38	-8.07	-0.40
90	0.00	0.07	0.07	0.00	-3.69	-9.31	-0.46
120	0.05	0.06	0.06	0.05	3.00	-8.07	-0.40
150	0.08	0.03	0.03	0.08	7.89	-4.66	-0.23
180	0.10	0.00	0.00	0.10	9.69	0.00	0.00
210	0.08	0.03	-0.03	0.08	7.89	4.66	0.23
240	0.05	0.06	-0.06	0.05	3.00	8.07	0.40
270	0.00	0.07	-0.07	0.00	-3.69	9.31	0.46
300	0.05	0.06	-0.06	-0.05	-10.38	8.07	0.40
330	0.08	0.03	-0.03	-0.08	-15.27	4.66	0.23

JAHH-65-R3B w/ SBS-2-2 Mount - Elevation 138 - From Leg B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.05	0.06	-0.01	-0.07	-8.48	-1.44	0.40
30	0.00	0.07	0.03	-0.06	-6.22	-7.85	0.46
60	0.05	0.06	0.07	-0.03	-1.80	-13.02	0.40
90	0.08	0.03	0.09	0.01	3.60	-15.56	0.23
120	0.10	0.00	0.08	0.05	8.53	-14.78	0.00
150	0.08	0.03	0.06	0.07	11.67	-10.90	-0.23
180	0.05	0.06	0.01	0.07	12.17	-4.96	-0.40
210	0.00	0.07	-0.03	0.06	9.91	1.46	-0.46
240	0.05	0.06	-0.07	0.03	5.49	6.63	-0.40
270	0.08	0.03	-0.09	-0.01	0.09	9.16	-0.23
300	0.10	0.00	-0.08	-0.05	-4.84	8.39	0.00
330	0.08	0.03	-0.06	-0.07	-7.98	4.51	0.23

JAHH-65-R3B w/ SBS-2-2 Mount - Elevation 138 - From Leg C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.05	0.06	0.01	-0.07	-8.48	1.44	-0.40
30	0.08	0.03	0.06	-0.07	-7.98	-4.51	-0.23
60	0.10	0.00	0.08	-0.05	-4.84	-8.39	0.00
90	0.08	0.03	0.09	-0.01	0.09	-9.16	0.23
120	0.05	0.06	0.07	0.03	5.49	-6.63	0.40
150	0.00	0.07	0.03	0.06	9.91	-1.46	0.46
180	0.05	0.06	-0.01	0.07	12.17	4.96	0.40
210	0.08	0.03	-0.06	0.07	11.67	10.90	0.23
240	0.10	0.00	-0.08	0.05	8.53	14.78	0.00
270	0.08	0.03	-0.09	0.01	3.60	15.56	-0.23
300	0.05	0.06	-0.07	-0.03	-1.80	13.02	-0.40
330	0.00	0.07	-0.03	-0.06	-6.22	7.85	-0.46

MT6407-77A - Elevation 138 - From Leg A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.03	0.00	0.00	-0.03	-4.76	0.00	0.00
30	0.02	0.01	0.01	-0.02	-4.29	-0.79	-0.04

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MT6407-77A - Elevation 138 - From Leg A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
60	0.01	0.01	0.01	-0.01	-2.99	-1.37	-0.07
90	0.00	0.01	0.01	0.00	-1.23	-1.58	-0.08
120	0.01	0.01	0.01	0.01	0.54	-1.37	-0.07
150	0.02	0.01	0.01	0.02	1.83	-0.79	-0.04
180	0.03	0.00	0.00	0.03	2.31	0.00	0.00
210	0.02	0.01	-0.01	0.02	1.83	0.79	0.04
240	0.01	0.01	-0.01	0.01	0.54	1.37	0.07
270	0.00	0.01	-0.01	0.00	-1.23	1.58	0.08
300	0.01	0.01	-0.01	-0.01	-2.99	1.37	0.07
330	0.02	0.01	-0.01	-0.02	-4.29	0.79	0.04

MT6407-77A - Elevation 138 - From Leg B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.01	0.01	-0.01	-0.01	-1.45	-0.22	0.07
30	0.00	0.01	0.01	-0.01	-0.76	-1.85	0.08
60	0.01	0.01	0.02	-0.00	0.31	-3.28	0.07
90	0.02	0.01	0.02	0.01	1.46	-4.11	0.04
120	0.03	0.00	0.02	0.01	2.38	-4.12	0.00
150	0.02	0.01	0.02	0.02	2.83	-3.32	-0.04
180	0.01	0.01	0.01	0.01	2.68	-1.91	-0.07
210	0.00	0.01	-0.01	0.01	1.98	-0.27	-0.08
240	0.01	0.01	-0.02	0.00	0.91	1.15	-0.07
270	0.02	0.01	-0.02	-0.01	-0.23	1.98	-0.04
300	0.03	0.00	-0.02	-0.01	-1.15	2.00	0.00
330	0.02	0.01	-0.02	-0.02	-1.60	1.19	0.04

MT6407-77A - Elevation 138 - From Leg C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.01	0.01	0.01	-0.01	-1.45	0.22	-0.07
30	0.02	0.01	0.02	-0.02	-1.60	-1.19	-0.04
60	0.03	0.00	0.02	-0.01	-1.15	-2.00	0.00
90	0.02	0.01	0.02	-0.01	-0.23	-1.98	0.04
120	0.01	0.01	0.02	0.00	0.91	-1.15	0.07
150	0.00	0.01	0.01	0.01	1.98	0.27	0.08
180	0.01	0.01	-0.01	0.01	2.68	1.91	0.07
210	0.02	0.01	-0.02	0.02	2.83	3.32	0.04
240	0.03	0.00	-0.02	0.01	2.38	4.12	0.00
270	0.02	0.01	-0.02	0.01	1.46	4.11	-0.04
300	0.01	0.01	-0.02	-0.00	0.31	3.28	-0.07
330	0.00	0.01	-0.01	-0.01	-0.76	1.85	-0.08

RFS FDJ85020Q4-S1 Diplexer - Elevation 138 - From Leg A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.01	0.00	0.00	-0.01	-1.53	0.00	0.00
30	0.01	0.00	0.00	-0.01	-1.37	-0.25	-0.01
60	0.00	0.00	0.00	-0.00	-0.95	-0.43	-0.02
90	0.00	0.00	0.00	0.00	-0.38	-0.50	-0.02
120	0.00	0.00	0.00	0.00	0.20	-0.43	-0.02

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<i>RFS FDJ85020Q4-S1 Diplexer - Elevation 138 - From Leg A</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> K	<i>F_s</i> K	<i>V_x</i> K	<i>V_z</i> K	<i>OTM_x</i> kip-ft	<i>OTM_z</i> kip-ft	<i>Torque</i> kip-ft
150	0.01	0.00	0.00	0.01	0.62	-0.25	-0.01
180	0.01	0.00	0.00	0.01	0.77	0.00	0.00
210	0.01	0.00	-0.00	0.01	0.62	0.25	0.01
240	0.00	0.00	-0.00	0.00	0.20	0.43	0.02
270	0.00	0.00	-0.00	0.00	-0.38	0.50	0.02
300	0.00	0.00	-0.00	-0.00	-0.95	0.43	0.02
330	0.01	0.00	-0.00	-0.01	-1.37	0.25	0.01

<i>RFS FDJ85020Q4-S1 Diplexer - Elevation 138 - From Leg B</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> K	<i>F_s</i> K	<i>V_x</i> K	<i>V_z</i> K	<i>OTM_x</i> kip-ft	<i>OTM_z</i> kip-ft	<i>Torque</i> kip-ft
0	0.00	0.00	-0.00	-0.00	-0.47	-0.05	0.02
30	0.00	0.00	0.00	-0.00	-0.24	-0.58	0.02
60	0.00	0.00	0.01	-0.00	0.10	-1.04	0.02
90	0.01	0.00	0.01	0.00	0.47	-1.31	0.01
120	0.01	0.00	0.01	0.00	0.76	-1.32	0.00
150	0.01	0.00	0.01	0.01	0.90	-1.06	-0.01
180	0.00	0.00	0.00	0.00	0.85	-0.61	-0.02
210	0.00	0.00	-0.00	0.00	0.62	-0.08	-0.02
240	0.00	0.00	-0.01	0.00	0.28	0.39	-0.02
270	0.01	0.00	-0.01	-0.00	-0.09	0.66	-0.01
300	0.01	0.00	-0.01	-0.00	-0.39	0.67	0.00
330	0.01	0.00	-0.01	-0.01	-0.52	0.41	0.01

<i>RFS FDJ85020Q4-S1 Diplexer - Elevation 138 - From Leg C</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> K	<i>F_s</i> K	<i>V_x</i> K	<i>V_z</i> K	<i>OTM_x</i> kip-ft	<i>OTM_z</i> kip-ft	<i>Torque</i> kip-ft
0	0.00	0.00	0.00	-0.00	-0.47	0.05	-0.02
30	0.01	0.00	0.01	-0.01	-0.52	-0.41	-0.01
60	0.01	0.00	0.01	-0.00	-0.39	-0.67	0.00
90	0.01	0.00	0.01	-0.00	-0.09	-0.66	0.01
120	0.00	0.00	0.01	0.00	0.28	-0.39	0.02
150	0.00	0.00	0.00	0.00	0.62	0.08	0.02
180	0.00	0.00	-0.00	0.00	0.85	0.61	0.02
210	0.01	0.00	-0.01	0.01	0.90	1.06	0.01
240	0.01	0.00	-0.01	0.00	0.76	1.32	0.00
270	0.01	0.00	-0.01	0.00	0.47	1.31	-0.01
300	0.00	0.00	-0.01	-0.00	0.10	1.04	-0.02
330	0.00	0.00	-0.00	-0.00	-0.24	0.58	-0.02

<i>Samsung B2/B66 PCS/AWS RRH - Elevation 138 - From Leg A</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> K	<i>F_s</i> K	<i>V_x</i> K	<i>V_z</i> K	<i>OTM_x</i> kip-ft	<i>OTM_z</i> kip-ft	<i>Torque</i> kip-ft
0	0.01	0.00	0.00	-0.01	-2.57	-0.31	0.02
30	0.01	0.00	0.00	-0.01	-2.37	-0.84	-0.01
60	0.01	0.01	0.01	-0.01	-1.82	-1.23	-0.03
90	0.00	0.01	0.01	0.00	-1.06	-1.37	-0.05
120	0.01	0.01	0.01	0.01	-0.30	-1.23	-0.06
150	0.01	0.00	0.00	0.01	0.25	-0.84	-0.05
180	0.01	0.00	0.00	0.01	0.45	-0.31	-0.02
210	0.01	0.00	-0.00	0.01	0.25	0.22	0.01

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<i>Samsung B2/B66 PCS/AWS RRH - Elevation 138 - From Leg A</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
240	0.01	0.01	-0.01	0.01	-0.30	0.61	0.03
270	0.00	0.01	-0.01	0.00	-1.06	0.76	0.05
300	0.01	0.01	-0.01	-0.01	-1.82	0.61	0.06
330	0.01	0.00	-0.00	-0.01	-2.37	0.22	0.05

<i>Samsung B2/B66 PCS/AWS RRH - Elevation 138 - From Leg B</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.01	0.01	-0.00	-0.01	-0.38	-0.57	0.03
30	0.00	0.01	0.00	-0.01	-0.12	-1.29	0.05
60	0.01	0.01	0.01	-0.00	0.38	-1.88	0.06
90	0.01	0.00	0.01	0.00	0.99	-2.16	0.05
120	0.01	0.00	0.01	0.01	1.55	-2.07	0.02
150	0.01	0.00	0.01	0.01	1.91	-1.63	-0.01
180	0.01	0.01	0.00	0.01	1.97	-0.96	-0.03
210	0.00	0.01	-0.00	0.01	1.72	-0.23	-0.05
240	0.01	0.01	-0.01	0.00	1.21	0.35	-0.06
270	0.01	0.00	-0.01	-0.00	0.60	0.64	-0.05
300	0.01	0.00	-0.01	-0.01	0.04	0.55	-0.02
330	0.01	0.00	-0.01	-0.01	-0.32	0.11	0.01

<i>Samsung B2/B66 PCS/AWS RRH - Elevation 138 - From Leg C</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.01	0.01	0.00	-0.01	-0.91	0.88	-0.06
30	0.01	0.00	0.01	-0.01	-0.85	0.20	-0.05
60	0.01	0.00	0.01	-0.01	-0.49	-0.24	-0.02
90	0.01	0.00	0.01	-0.00	0.07	-0.33	0.01
120	0.01	0.01	0.01	0.00	0.68	-0.04	0.03
150	0.00	0.01	0.00	0.01	1.18	0.54	0.05
180	0.01	0.01	-0.00	0.01	1.44	1.27	0.06
210	0.01	0.00	-0.01	0.01	1.38	1.94	0.05
240	0.01	0.00	-0.01	0.01	1.02	2.38	0.02
270	0.01	0.00	-0.01	0.00	0.46	2.47	-0.01
300	0.01	0.01	-0.01	-0.00	-0.16	2.19	-0.03
330	0.00	0.01	-0.00	-0.01	-0.66	1.60	-0.05

<i>Samsung B5/B13 700/850 RRH - Elevation 138 - From Leg A</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.01	0.00	0.00	-0.01	-2.43	0.27	-0.02
30	0.01	0.00	0.00	-0.01	-2.23	-0.18	-0.04
60	0.01	0.01	0.01	-0.01	-1.67	-0.51	-0.05
90	0.00	0.01	0.01	0.00	-0.92	-0.63	-0.04
120	0.01	0.01	0.01	0.01	-0.16	-0.51	-0.03
150	0.01	0.00	0.00	0.01	0.40	-0.18	-0.00
180	0.01	0.00	0.00	0.01	0.60	0.27	0.02
210	0.01	0.00	-0.00	0.01	0.40	0.71	0.04
240	0.01	0.01	-0.01	0.01	-0.16	1.04	0.05
270	0.00	0.01	-0.01	0.00	-0.92	1.16	0.04
300	0.01	0.01	-0.01	-0.01	-1.67	1.04	0.03

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<i>Samsung B5/B13 700/850 RRH - Elevation 138 - From Leg A</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> <i>K</i>	<i>F_s</i> <i>K</i>	<i>V_x</i> <i>K</i>	<i>V_z</i> <i>K</i>	<i>OTM_x</i> <i>kip-ft</i>	<i>OTM_z</i> <i>kip-ft</i>	<i>Torque</i> <i>kip-ft</i>
330	0.01	0.00	-0.00	-0.01	-2.23	0.71	0.00

<i>Samsung B5/B13 700/850 RRH - Elevation 138 - From Leg B</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> <i>K</i>	<i>F_s</i> <i>K</i>	<i>V_x</i> <i>K</i>	<i>V_z</i> <i>K</i>	<i>OTM_x</i> <i>kip-ft</i>	<i>OTM_z</i> <i>kip-ft</i>	<i>Torque</i> <i>kip-ft</i>
0	0.01	0.01	-0.00	-0.01	-0.82	-0.66	0.05
30	0.00	0.01	0.00	-0.01	-0.54	-1.37	0.04
60	0.01	0.01	0.01	-0.00	-0.06	-1.97	0.03
90	0.01	0.00	0.01	0.00	0.50	-2.28	0.00
120	0.01	0.00	0.01	0.01	0.98	-2.24	-0.02
150	0.01	0.00	0.01	0.01	1.27	-1.84	-0.04
180	0.01	0.01	0.00	0.01	1.27	-1.19	-0.05
210	0.00	0.01	-0.00	0.01	1.00	-0.48	-0.04
240	0.01	0.01	-0.01	0.00	0.52	0.12	-0.03
270	0.01	0.00	-0.01	-0.00	-0.04	0.43	-0.00
300	0.01	0.00	-0.01	-0.01	-0.53	0.39	0.02
330	0.01	0.00	-0.01	-0.01	-0.81	-0.01	0.04

<i>Samsung B5/B13 700/850 RRH - Elevation 138 - From Leg C</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> <i>K</i>	<i>F_s</i> <i>K</i>	<i>V_x</i> <i>K</i>	<i>V_z</i> <i>K</i>	<i>OTM_x</i> <i>kip-ft</i>	<i>OTM_z</i> <i>kip-ft</i>	<i>Torque</i> <i>kip-ft</i>
0	0.01	0.01	0.00	-0.01	-0.36	0.39	-0.03
30	0.01	0.00	0.01	-0.01	-0.35	-0.25	-0.00
60	0.01	0.00	0.01	-0.01	-0.07	-0.65	0.02
90	0.01	0.00	0.01	-0.00	0.42	-0.70	0.04
120	0.01	0.01	0.01	0.00	0.98	-0.38	0.05
150	0.00	0.01	0.00	0.01	1.46	0.21	0.04
180	0.01	0.01	-0.00	0.01	1.74	0.93	0.03
210	0.01	0.00	-0.01	0.01	1.73	1.57	0.00
240	0.01	0.00	-0.01	0.01	1.44	1.97	-0.02
270	0.01	0.00	-0.01	0.00	0.96	2.02	-0.04
300	0.01	0.01	-0.01	-0.00	0.40	1.70	-0.05
330	0.00	0.01	-0.00	-0.01	-0.08	1.11	-0.04

<i>Raycap RDC-6627-PF-48 OVP - Elevation 138 - From Leg C</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> <i>K</i>	<i>F_s</i> <i>K</i>	<i>V_x</i> <i>K</i>	<i>V_z</i> <i>K</i>	<i>OTM_x</i> <i>kip-ft</i>	<i>OTM_z</i> <i>kip-ft</i>	<i>Torque</i> <i>kip-ft</i>
0	0.01	0.02	0.00	-0.02	-3.21	0.03	-0.07
30	0.03	0.01	0.02	-0.02	-2.93	-1.86	-0.04
60	0.03	0.00	0.03	-0.01	-1.81	-3.14	0.00
90	0.03	0.01	0.03	-0.00	-0.14	-3.47	0.04
120	0.01	0.02	0.02	0.01	1.63	-2.76	0.07
150	0.00	0.02	0.01	0.02	3.03	-1.20	0.08
180	0.01	0.02	-0.00	0.02	3.68	0.79	0.07
210	0.03	0.01	-0.02	0.02	3.41	2.68	0.04
240	0.03	0.00	-0.03	0.01	2.29	3.96	0.00
270	0.03	0.01	-0.03	0.00	0.61	4.29	-0.04
300	0.01	0.02	-0.02	-0.01	-1.16	3.58	-0.07
330	0.00	0.02	-0.01	-0.02	-2.56	2.02	-0.08

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	68 of 108
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	Client	VzW; Site 468479	Designed by	M. Larson

13' T-Frame - Elevation 138 - None A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.12	0.00	0.00	-0.12	-17.12	0.00	0.00
30	0.12	0.00	0.06	-0.11	-14.82	-8.56	0.00
60	0.12	0.00	0.11	-0.06	-8.56	-14.82	0.00
90	0.12	0.00	0.12	0.00	0.00	-17.12	0.00
120	0.12	0.00	0.11	0.06	8.56	-14.82	0.00
150	0.12	0.00	0.06	0.11	14.82	-8.56	0.00
180	0.12	0.00	0.00	0.12	17.12	0.00	0.00
210	0.12	0.00	-0.06	0.11	14.82	8.56	0.00
240	0.12	0.00	-0.11	0.06	8.56	14.82	0.00
270	0.12	0.00	-0.12	0.00	0.00	17.12	0.00
300	0.12	0.00	-0.11	-0.06	-8.56	14.82	0.00
330	0.12	0.00	-0.06	-0.11	-14.82	8.56	0.00

13' T-Frame - Elevation 138 - None B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.12	0.00	0.00	-0.12	-17.12	0.00	0.00
30	0.12	0.00	0.06	-0.11	-14.82	-8.56	0.00
60	0.12	0.00	0.11	-0.06	-8.56	-14.82	0.00
90	0.12	0.00	0.12	0.00	0.00	-17.12	0.00
120	0.12	0.00	0.11	0.06	8.56	-14.82	0.00
150	0.12	0.00	0.06	0.11	14.82	-8.56	0.00
180	0.12	0.00	0.00	0.12	17.12	0.00	0.00
210	0.12	0.00	-0.06	0.11	14.82	8.56	0.00
240	0.12	0.00	-0.11	0.06	8.56	14.82	0.00
270	0.12	0.00	-0.12	0.00	0.00	17.12	0.00
300	0.12	0.00	-0.11	-0.06	-8.56	14.82	0.00
330	0.12	0.00	-0.06	-0.11	-14.82	8.56	0.00

13' T-Frame - Elevation 138 - None C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.12	0.00	0.00	-0.12	-17.12	0.00	0.00
30	0.12	0.00	0.06	-0.11	-14.82	-8.56	0.00
60	0.12	0.00	0.11	-0.06	-8.56	-14.82	0.00
90	0.12	0.00	0.12	0.00	0.00	-17.12	0.00
120	0.12	0.00	0.11	0.06	8.56	-14.82	0.00
150	0.12	0.00	0.06	0.11	14.82	-8.56	0.00
180	0.12	0.00	0.00	0.12	17.12	0.00	0.00
210	0.12	0.00	-0.06	0.11	14.82	8.56	0.00
240	0.12	0.00	-0.11	0.06	8.56	14.82	0.00
270	0.12	0.00	-0.12	0.00	0.00	17.12	0.00
300	0.12	0.00	-0.11	-0.06	-8.56	14.82	0.00
330	0.12	0.00	-0.06	-0.11	-14.82	8.56	0.00

8x2 1/2" Pipe Mount - Elevation 138 - From Leg A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.02	0.00	0.00	-0.02	-4.08	0.00	0.00
30	0.02	0.01	0.01	-0.02	-3.63	-1.70	-0.08

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	69 of 108
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	Client	VzW; Site 468479	Designed by	M. Larson

8x2 1/2" Pipe Mount - Elevation 138 - From Leg A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
60	0.01	0.02	0.02	-0.01	-2.38	-2.94	-0.15
90	0.00	0.02	0.02	0.00	-0.69	-3.40	-0.17
120	0.01	0.02	0.02	0.01	1.01	-2.94	-0.15
150	0.02	0.01	0.01	0.02	2.25	-1.70	-0.08
180	0.02	0.00	0.00	0.02	2.71	0.00	0.00
210	0.02	0.01	-0.01	0.02	2.25	1.70	0.08
240	0.01	0.02	-0.02	0.01	1.01	2.94	0.15
270	0.00	0.02	-0.02	0.00	-0.69	3.40	0.17
300	0.01	0.02	-0.02	-0.01	-2.38	2.94	0.15
330	0.02	0.01	-0.01	-0.02	-3.63	1.70	0.08

8x2 1/2" Pipe Mount - Elevation 138 - From Leg B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.01	0.02	0.00	-0.02	-3.05	-0.59	0.15
30	0.00	0.02	0.01	-0.02	-2.60	-2.29	0.17
60	0.01	0.02	0.02	-0.01	-1.35	-3.53	0.15
90	0.02	0.01	0.02	0.00	0.34	-3.99	0.08
120	0.02	0.00	0.02	0.01	2.04	-3.53	0.00
150	0.02	0.01	0.01	0.02	3.28	-2.29	-0.08
180	0.01	0.02	0.00	0.02	3.74	-0.59	-0.15
210	0.00	0.02	-0.01	0.02	3.28	1.10	-0.17
240	0.01	0.02	-0.02	0.01	2.04	2.35	-0.15
270	0.02	0.01	-0.02	0.00	0.34	2.80	-0.08
300	0.02	0.00	-0.02	-0.01	-1.35	2.35	0.00
330	0.02	0.01	-0.01	-0.02	-2.60	1.10	0.08

8x2 1/2" Pipe Mount - Elevation 138 - From Leg C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.01	0.02	0.00	-0.02	-3.05	0.59	-0.15
30	0.02	0.01	0.01	-0.02	-2.60	-1.10	-0.08
60	0.02	0.00	0.02	-0.01	-1.35	-2.35	0.00
90	0.02	0.01	0.02	0.00	0.34	-2.80	0.08
120	0.01	0.02	0.02	0.01	2.04	-2.35	0.15
150	0.00	0.02	0.01	0.02	3.28	-1.10	0.17
180	0.01	0.02	0.00	0.02	3.74	0.59	0.15
210	0.02	0.01	-0.01	0.02	3.28	2.29	0.08
240	0.02	0.00	-0.02	0.01	2.04	3.53	0.00
270	0.02	0.01	-0.02	0.00	0.34	3.99	-0.08
300	0.01	0.02	-0.02	-0.01	-1.35	3.53	-0.15
330	0.00	0.02	-0.01	-0.02	-2.60	2.29	-0.17

(2) L2.5x2.5x1/4 x 6.5' Mount Reinf - Elevation 138 - From Leg A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.06	0.00	0.00	-0.06	-8.82	0.00	0.00
30	0.05	0.01	0.01	-0.05	-7.74	-1.67	-0.08
60	0.03	0.02	0.02	-0.03	-4.80	-2.90	-0.14
90	0.00	0.02	0.02	0.00	-0.78	-3.35	-0.17
120	0.03	0.02	0.02	0.03	3.24	-2.90	-0.14

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(2) L2.5x2.5x1/4 x 6.5' Mount Reinf - Elevation 138 - From Leg A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
150	0.05	0.01	0.01	0.05	6.18	-1.67	-0.08
180	0.06	0.00	0.00	0.06	7.26	0.00	0.00
210	0.05	0.01	-0.01	0.05	6.18	1.67	0.08
240	0.03	0.02	-0.02	0.03	3.24	2.90	0.14
270	0.00	0.02	-0.02	0.00	-0.78	3.35	0.17
300	0.03	0.02	-0.02	-0.03	-4.80	2.90	0.14
330	0.05	0.01	-0.01	-0.05	-7.74	1.67	0.08

(2) L2.5x2.5x1/4 x 6.5' Mount Reinf - Elevation 138 - From Leg B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.03	0.02	-0.01	-0.03	-4.13	1.36	0.14
30	0.00	0.02	0.01	-0.02	-2.51	-2.35	0.17
60	0.03	0.02	0.04	-0.00	-0.11	-5.61	0.14
90	0.05	0.01	0.05	0.01	2.42	-7.54	0.08
120	0.06	0.00	0.05	0.03	4.41	-7.64	0.00
150	0.05	0.01	0.04	0.04	5.32	-5.87	-0.08
180	0.03	0.02	0.01	0.03	4.91	-2.71	-0.14
210	0.00	0.02	-0.01	0.02	3.29	1.00	-0.17
240	0.03	0.02	-0.04	0.00	0.89	4.26	-0.14
270	0.05	0.01	-0.05	-0.01	-1.64	6.19	-0.08
300	0.06	0.00	-0.05	-0.03	-3.63	6.29	0.00
330	0.05	0.01	-0.04	-0.04	-4.54	4.52	0.08

(2) L2.5x2.5x1/4 x 6.5' Mount Reinf - Elevation 138 - From Leg C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.03	0.02	0.01	-0.03	-4.13	-1.36	-0.14
30	0.05	0.01	0.04	-0.04	-4.54	-4.52	-0.08
60	0.06	0.00	0.05	-0.03	-3.63	-6.29	0.00
90	0.05	0.01	0.05	-0.01	-1.64	-6.19	0.08
120	0.03	0.02	0.04	0.00	0.89	-4.26	0.14
150	0.00	0.02	0.01	0.02	3.29	-1.00	0.17
180	0.03	0.02	-0.01	0.03	4.91	2.71	0.14
210	0.05	0.01	-0.04	0.04	5.32	5.87	0.08
240	0.06	0.00	-0.05	0.03	4.41	7.64	0.00
270	0.05	0.01	-0.05	0.01	2.42	7.54	-0.08
300	0.03	0.02	-0.04	-0.00	-0.11	5.61	-0.14
330	0.00	0.02	-0.01	-0.02	-2.51	2.35	-0.17

Discrete Appurtenance Totals - With Ice

Wind Azimuth °	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.00	-2.03	-245.29	0.17	-0.14
30	1.02	-1.76	-212.77	-122.04	-0.25
60	1.77	-1.02	-123.57	-211.41	-0.30
90	2.04	-0.00	-1.57	-243.98	-0.27
120	1.76	1.01	120.53	-211.03	-0.17

tnxTower All-Points Technology Corp. 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	71 of 108
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Wind Azimuth °	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
150	1.02	1.76	210.01	-121.39	-0.02
180	-0.00	2.03	242.90	0.93	0.14
210	-1.02	1.76	210.39	123.14	0.25
240	-1.77	1.02	121.18	212.51	0.30
270	-2.04	0.00	-0.81	245.08	0.27
300	-1.76	-1.01	-122.91	212.13	0.17
330	-1.02	-1.76	-212.39	122.49	0.02

Discrete Appurtenance Pressures - Service $G_H = 0.850$

Description	Aiming Azimuth °	Weight K	Offset _x ft	Offset _z ft	z ft	K_z	q_z psf	C_{AC} Front ft ²	C_{AC} Side ft ²
PD1142-2C	240.0000	0.01	-2.93	1.69	146.00	1.371	11	0.69	0.69
DB Spectra	0.0000	0.07	0.00	-3.39	147.00	1.373	11	6.08	6.08
DS2C03F36D-D									
SitePro R5-LL (PM 601-1)	0.0000	0.07	0.00	-2.89	137.00	1.352	11	1.32	1.32
5'x4 1/2" Pipe Mount	60.0000	0.05	1.68	-0.97	120.00	1.315	10	1.76	1.76
HPA-65R-BUU-H6	300.0000	0.06	-4.76	-2.75	98.00	1.260	10	9.66	6.45
HPA-65R-BUU-H6	60.0000	0.06	4.76	-2.75	98.00	1.260	10	9.66	6.45
HPA-65R-BUU-H6	180.0000	0.06	0.00	5.50	98.00	1.260	10	9.66	6.45
AM-X-CD-16-65	300.0000	0.04	-4.76	-2.75	98.00	1.260	10	6.04	4.11
AM-X-CD-16-65	60.0000	0.04	4.76	-2.75	98.00	1.260	10	6.04	4.11
AM-X-CD-16-65	180.0000	0.04	0.00	5.50	98.00	1.260	10	6.04	4.11
cci DMP65R-BU6DA	300.0000	0.08	-4.76	-2.75	98.00	1.260	10	12.71	5.62
cci DMP65R-BU6DA	60.0000	0.08	4.76	-2.75	98.00	1.260	10	12.71	5.62
cci DMP65R-BU6DA	180.0000	0.08	0.00	5.50	98.00	1.260	10	12.71	5.62
OPA65R-BU6DA	300.0000	0.07	-4.76	-2.75	98.00	1.260	10	12.87	5.67
OPA65R-BU6DA	60.0000	0.07	4.76	-2.75	98.00	1.260	10	12.87	5.67
OPA65R-BU6DA	180.0000	0.07	0.00	5.50	98.00	1.260	10	12.87	5.67
cci	300.0000	0.02	-4.33	-2.50	98.00	1.260	10	1.36	0.51
DTMABP7819VG12A TMA									
cci	60.0000	0.02	4.33	-2.50	98.00	1.260	10	1.36	0.51
DTMABP7819VG12A TMA									
cci	180.0000	0.02	0.00	5.00	98.00	1.260	10	1.36	0.51
DTMABP7819VG12A TMA									
Radio 4415	300.0000	0.05	-4.33	-2.50	98.00	1.260	10	1.84	0.82
Radio 4415	60.0000	0.05	4.33	-2.50	98.00	1.260	10	1.84	0.82
Radio 4415	180.0000	0.05	0.00	5.00	98.00	1.260	10	1.84	0.82
Radio 4449	300.0000	0.06	-4.33	-2.50	98.00	1.260	10	1.65	0.93
Radio 4449	60.0000	0.06	4.33	-2.50	98.00	1.260	10	1.65	0.93
Radio 4449	180.0000	0.06	0.00	5.00	98.00	1.260	10	1.65	0.93
Radio 8843	300.0000	0.07	-4.33	-2.50	98.00	1.260	10	1.64	1.36
Radio 8843	60.0000	0.07	4.33	-2.50	98.00	1.260	10	1.64	1.36
Radio 8843	180.0000	0.07	0.00	5.00	98.00	1.260	10	1.64	1.36
Raycap	300.0000	0.03	-2.16	-1.25	98.00	1.260	10	0.88	0.88
DC6-48-60-18-8F surge suppressor									
Raycap	180.0000	0.03	0.00	2.50	98.00	1.260	10	0.88	0.88
DC6-48-60-18-8F surge suppressor									
13' T-Frame	0.0000	0.36	0.00	0.00	98.00	1.260	10	12.20	12.20
13' T-Frame	0.0000	0.36	0.00	0.00	98.00	1.260	10	12.20	12.20

tnxTower All-Points Technology Corp. 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	72 of 108
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Description	Aiming Azimuth °	Weight K	Offset _x ft	Offset _z ft	z ft	K _z	q _z psf	C _{AAc} Front ft ²	C _{AAc} Side ft ²
13' T-Frame	0.0000	0.36	0.00	0.00	98.00	1.260	10	12.20	12.20
4'x4 1/2" Pipe Mount	0.0000	0.04	0.00	-4.27	83.00	1.217	9	1.32	1.32
JAHH-65-R3B w/ SBS-2-2 Mount	0.0000	0.20	0.00	-6.89	138.00	1.354	11	18.23	11.97
JAHH-65-R3B w/ SBS-2-2 Mount	120.0000	0.20	5.96	3.44	138.00	1.354	11	18.23	11.97
JAHH-65-R3B w/ SBS-2-2 Mount	240.0000	0.20	-5.96	3.44	138.00	1.354	11	18.23	11.97
MT6407-77A	0.0000	0.09	0.00	-6.89	138.00	1.354	11	4.69	1.84
MT6407-77A	120.0000	0.09	5.96	3.44	138.00	1.354	11	4.69	1.84
MT6407-77A	240.0000	0.09	-5.96	3.44	138.00	1.354	11	4.69	1.84
RFS FDJ85020Q4-S1 Diplexer	0.0000	0.02	0.00	-6.89	138.00	1.354	11	0.96	0.36
RFS FDJ85020Q4-S1 Diplexer	120.0000	0.02	5.96	3.44	138.00	1.354	11	0.96	0.36
RFS FDJ85020Q4-S1 Diplexer	240.0000	0.02	-5.96	3.44	138.00	1.354	11	0.96	0.36
Samsung B2/B66 PCS/AWS RRH	0.0000	0.10	2.00	-6.89	138.00	1.354	11	1.88	1.25
Samsung B2/B66 PCS/AWS RRH	120.0000	0.10	4.96	5.18	138.00	1.354	11	1.88	1.25
Samsung B2/B66 PCS/AWS RRH	240.0000	0.10	-6.96	1.71	138.00	1.354	11	1.88	1.25
Samsung B5/B13 700/850 RRH	0.0000	0.08	-2.00	-6.89	138.00	1.354	11	1.88	1.01
Samsung B5/B13 700/850 RRH	120.0000	0.08	6.96	1.71	138.00	1.354	11	1.88	1.01
Samsung B5/B13 700/850 RRH	240.0000	0.08	-4.96	5.18	138.00	1.354	11	1.88	1.01
Raycap RDC-6627-PF-48 OVP	240.0000	0.03	-2.93	1.69	138.00	1.354	11	4.06	3.10
13' T-Frame	0.0000	0.36	0.00	0.00	138.00	1.354	11	12.20	12.20
13' T-Frame	0.0000	0.36	0.00	0.00	138.00	1.354	11	12.20	12.20
13' T-Frame	0.0000	0.36	0.00	0.00	138.00	1.354	11	12.20	12.20
8'x2 1/2" Pipe Mount	0.0000	0.04	0.00	-6.89	138.00	1.354	11	2.30	2.30
8'x2 1/2" Pipe Mount	120.0000	0.04	5.96	3.44	138.00	1.354	11	2.30	2.30
8'x2 1/2" Pipe Mount	240.0000	0.04	-5.96	3.44	138.00	1.354	11	2.30	2.30
(2) L2.5x2.5x1/4 x 6.5' Mount Reinf	0.0000	0.06	0.00	-6.89	138.00	1.354	11	5.42	0.02
(2) L2.5x2.5x1/4 x 6.5' Mount Reinf	120.0000	0.06	5.96	3.44	138.00	1.354	11	5.42	0.02
(2) L2.5x2.5x1/4 x 6.5' Mount Reinf	240.0000	0.06	-5.96	3.44	138.00	1.354	11	5.42	0.02
Sum Weight:		5.62							

Discrete Appurtenance Vectors - Service

PD1142-2C - Elevation 146 - From Leg C							
Wind Azimuth °	F _a K	F _s K	V _x K	V _z K	OTM _x kip-ft	OTM _z kip-ft	Torque kip-ft
0	0.00	0.01	0.00	-0.01	-0.90	0.03	-0.02
30	0.01	0.00	0.00	-0.01	-0.78	-0.43	-0.01
60	0.01	0.00	0.01	-0.00	-0.44	-0.77	0.00
90	0.01	0.00	0.01	0.00	0.02	-0.89	0.01
120	0.00	0.01	0.01	0.00	0.48	-0.77	0.02
150	0.00	0.01	0.00	0.01	0.81	-0.43	0.02

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<i>PD1142-2C - Elevation 146 - From Leg C</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
180	0.00	0.01	0.00	0.01	0.94	0.03	0.02
210	0.01	0.00	-0.00	0.01	0.81	0.49	0.01
240	0.01	0.00	-0.01	0.00	0.48	0.83	0.00
270	0.01	0.00	-0.01	0.00	0.02	0.95	-0.01
300	0.00	0.01	-0.01	-0.00	-0.44	0.83	-0.02
330	0.00	0.01	-0.00	-0.01	-0.78	0.49	-0.02

<i>DB Spectra DS2C03F36D-D - Elevation 147 - From Leg A</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.06	0.00	0.00	-0.06	-8.38	0.00	0.00
30	0.05	0.03	0.03	-0.05	-7.29	-4.06	-0.09
60	0.03	0.05	0.05	-0.03	-4.32	-7.03	-0.16
90	0.00	0.06	0.06	0.00	-0.25	-8.12	-0.19
120	0.03	0.05	0.05	0.03	3.81	-7.03	-0.16
150	0.05	0.03	0.03	0.05	6.78	-4.06	-0.09
180	0.06	0.00	0.00	0.06	7.87	0.00	0.00
210	0.05	0.03	-0.03	0.05	6.78	4.06	0.09
240	0.03	0.05	-0.05	0.03	3.81	7.03	0.16
270	0.00	0.06	-0.06	0.00	-0.25	8.12	0.19
300	0.03	0.05	-0.05	-0.03	-4.32	7.03	0.16
330	0.05	0.03	-0.03	-0.05	-7.29	4.06	0.09

<i>SitePro R5-LL (PM 601-1) - Elevation 137 - From Leg A</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.01	0.00	0.00	-0.01	-1.82	0.00	0.00
30	0.01	0.01	0.01	-0.01	-1.61	-0.81	-0.02
60	0.01	0.01	0.01	-0.01	-1.01	-1.40	-0.03
90	0.00	0.01	0.01	0.00	-0.20	-1.62	-0.03
120	0.01	0.01	0.01	0.01	0.61	-1.40	-0.03
150	0.01	0.01	0.01	0.01	1.20	-0.81	-0.02
180	0.01	0.00	0.00	0.01	1.42	0.00	0.00
210	0.01	0.01	-0.01	0.01	1.20	0.81	0.02
240	0.01	0.01	-0.01	0.01	0.61	1.40	0.03
270	0.00	0.01	-0.01	0.00	-0.20	1.62	0.03
300	0.01	0.01	-0.01	-0.01	-1.01	1.40	0.03
330	0.01	0.01	-0.01	-0.01	-1.61	0.81	0.02

<i>5'x4 1/2" Pipe Mount - Elevation 120 - From Face B</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.01	0.01	0.00	-0.02	-1.89	-0.08	0.03
30	0.01	0.01	0.01	-0.01	-1.65	-1.01	0.01
60	0.02	0.00	0.01	-0.01	-0.97	-1.68	0.00
90	0.01	0.01	0.02	0.00	-0.05	-1.93	-0.01
120	0.01	0.01	0.01	0.01	0.87	-1.68	-0.03
150	0.00	0.02	0.01	0.01	1.55	-1.01	-0.03
180	0.01	0.01	0.00	0.02	1.80	-0.08	-0.03
210	0.01	0.01	-0.01	0.01	1.55	0.84	-0.01
240	0.02	0.00	-0.01	0.01	0.87	1.51	0.00

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<i>5'x4 1/2" Pipe Mount - Elevation 120 - From Face B</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> K	<i>F_s</i> K	<i>V_x</i> K	<i>V_z</i> K	<i>OTM_x</i> kip-ft	<i>OTM_z</i> kip-ft	<i>Torque</i> kip-ft
270	0.01	0.01	-0.02	0.00	-0.05	1.76	0.01
300	0.01	0.01	-0.01	-0.01	-0.97	1.51	0.03
330	0.00	0.02	-0.01	-0.01	-1.65	0.84	0.03

<i>HPA-65R-BUU-H6 - Elevation 98 - From Face A</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> K	<i>F_s</i> K	<i>V_x</i> K	<i>V_z</i> K	<i>OTM_x</i> kip-ft	<i>OTM_z</i> kip-ft	<i>Torque</i> kip-ft
0	0.03	0.03	-0.01	-0.05	-4.62	1.14	-0.19
30	0.00	0.04	0.02	-0.03	-3.59	-1.69	-0.22
60	0.03	0.03	0.04	-0.02	-1.65	-4.00	-0.19
90	0.05	0.02	0.06	0.01	0.69	-5.15	-0.11
120	0.06	0.00	0.05	0.03	2.80	-4.85	0.00
150	0.05	0.02	0.04	0.04	4.12	-3.17	0.11
180	0.03	0.03	0.01	0.05	4.29	-0.57	0.19
210	0.00	0.04	-0.02	0.03	3.26	2.27	0.22
240	0.03	0.03	-0.04	0.02	1.32	4.57	0.19
270	0.05	0.02	-0.06	-0.01	-1.02	5.72	0.11
300	0.06	0.00	-0.05	-0.03	-3.13	5.42	0.00
330	0.05	0.02	-0.04	-0.04	-4.45	3.74	-0.11

<i>HPA-65R-BUU-H6 - Elevation 98 - From Face B</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> K	<i>F_s</i> K	<i>V_x</i> K	<i>V_z</i> K	<i>OTM_x</i> kip-ft	<i>OTM_z</i> kip-ft	<i>Torque</i> kip-ft
0	0.03	0.03	0.01	-0.05	-4.62	-1.14	0.19
30	0.05	0.02	0.04	-0.04	-4.45	-3.74	0.11
60	0.06	0.00	0.05	-0.03	-3.13	-5.42	0.00
90	0.05	0.02	0.06	-0.01	-1.02	-5.72	-0.11
120	0.03	0.03	0.04	0.02	1.32	-4.57	-0.19
150	0.00	0.04	0.02	0.03	3.26	-2.27	-0.22
180	0.03	0.03	-0.01	0.05	4.29	0.57	-0.19
210	0.05	0.02	-0.04	0.04	4.12	3.17	-0.11
240	0.06	0.00	-0.05	0.03	2.80	4.85	0.00
270	0.05	0.02	-0.06	0.01	0.69	5.15	0.11
300	0.03	0.03	-0.04	-0.02	-1.65	4.00	0.19
330	0.00	0.04	-0.02	-0.03	-3.59	1.69	0.22

<i>HPA-65R-BUU-H6 - Elevation 98 - From Face C</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> K	<i>F_s</i> K	<i>V_x</i> K	<i>V_z</i> K	<i>OTM_x</i> kip-ft	<i>OTM_z</i> kip-ft	<i>Torque</i> kip-ft
0	0.06	0.00	0.00	-0.06	-5.60	0.00	0.00
30	0.05	0.02	0.02	-0.05	-4.80	-1.98	0.11
60	0.03	0.03	0.03	-0.03	-2.63	-3.43	0.19
90	0.00	0.04	0.04	0.00	0.33	-3.96	0.22
120	0.03	0.03	0.03	0.03	3.29	-3.43	0.19
150	0.05	0.02	0.02	0.05	5.46	-1.98	0.11
180	0.06	0.00	0.00	0.06	6.26	0.00	0.00
210	0.05	0.02	-0.02	0.05	5.46	1.98	-0.11
240	0.03	0.03	-0.03	0.03	3.29	3.43	-0.19
270	0.00	0.04	-0.04	0.00	0.33	3.96	-0.22
300	0.03	0.03	-0.03	-0.03	-2.63	3.43	-0.19
330	0.05	0.02	-0.02	-0.05	-4.80	1.98	-0.11

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AM-X-CD-16-65 - Elevation 98 - From Face A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.02	0.02	-0.01	-0.03	-2.93	0.70	-0.12
30	0.00	0.03	0.01	-0.02	-2.30	-1.07	-0.14
60	0.02	0.02	0.03	-0.01	-1.08	-2.51	-0.12
90	0.03	0.01	0.03	0.01	0.40	-3.22	-0.07
120	0.04	0.00	0.03	0.02	1.75	-3.02	0.00
150	0.03	0.01	0.02	0.03	2.59	-1.96	0.07
180	0.02	0.02	0.01	0.03	2.71	-0.32	0.12
210	0.00	0.03	-0.01	0.02	2.08	1.45	0.14
240	0.02	0.02	-0.03	0.01	0.86	2.89	0.12
270	0.03	0.01	-0.03	-0.01	-0.62	3.60	0.07
300	0.04	0.00	-0.03	-0.02	-1.97	3.40	0.00
330	0.03	0.01	-0.02	-0.03	-2.81	2.34	-0.07

AM-X-CD-16-65 - Elevation 98 - From Face B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.02	0.02	0.01	-0.03	-2.93	-0.70	0.12
30	0.03	0.01	0.02	-0.03	-2.81	-2.34	0.07
60	0.04	0.00	0.03	-0.02	-1.97	-3.40	0.00
90	0.03	0.01	0.03	-0.01	-0.62	-3.60	-0.07
120	0.02	0.02	0.03	0.01	0.86	-2.89	-0.12
150	0.00	0.03	0.01	0.02	2.08	-1.45	-0.14
180	0.02	0.02	-0.01	0.03	2.71	0.32	-0.12
210	0.03	0.01	-0.02	0.03	2.59	1.96	-0.07
240	0.04	0.00	-0.03	0.02	1.75	3.02	0.00
270	0.03	0.01	-0.03	0.01	0.40	3.22	0.07
300	0.02	0.02	-0.03	-0.01	-1.08	2.51	0.12
330	0.00	0.03	-0.01	-0.02	-2.30	1.07	0.14

AM-X-CD-16-65 - Elevation 98 - From Face C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.04	0.00	0.00	-0.04	-3.49	0.00	0.00
30	0.03	0.01	0.01	-0.03	-2.99	-1.26	0.07
60	0.02	0.02	0.02	-0.02	-1.64	-2.19	0.12
90	0.00	0.03	0.03	0.00	0.22	-2.53	0.14
120	0.02	0.02	0.02	0.02	2.08	-2.19	0.12
150	0.03	0.01	0.01	0.03	3.43	-1.26	0.07
180	0.04	0.00	0.00	0.04	3.93	0.00	0.00
210	0.03	0.01	-0.01	0.03	3.43	1.26	-0.07
240	0.02	0.02	-0.02	0.02	2.08	2.19	-0.12
270	0.00	0.03	-0.03	0.00	0.22	2.53	-0.14
300	0.02	0.02	-0.02	-0.02	-1.64	2.19	-0.12
330	0.03	0.01	-0.01	-0.03	-2.99	1.26	-0.07

cci DMP65R-BU6DA - Elevation 98 - From Face A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.04	0.03	-0.02	-0.05	-4.76	2.28	-0.17

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cci DMP65R-BU6DA - Elevation 98 - From Face A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
30	0.00	0.04	0.02	-0.03	-3.21	-1.33	-0.19
60	0.04	0.03	0.05	-0.01	-0.86	-4.48	-0.17
90	0.07	0.02	0.07	0.02	1.66	-6.32	-0.10
120	0.08	0.00	0.07	0.04	3.67	-6.36	0.00
150	0.07	0.02	0.05	0.05	4.64	-4.59	0.10
180	0.04	0.03	0.02	0.05	4.31	-1.49	0.17
210	0.00	0.04	-0.02	0.03	2.76	2.12	0.19
240	0.04	0.03	-0.05	0.01	0.41	5.27	0.17
270	0.07	0.02	-0.02	-0.02	-2.11	7.11	0.10
300	0.08	0.00	-0.07	-0.04	-4.13	7.15	0.00
330	0.07	0.02	-0.05	-0.05	-5.10	5.38	-0.10

cci DMP65R-BU6DA - Elevation 98 - From Face B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.04	0.03	0.02	-0.05	-4.76	-2.28	0.17
30	0.07	0.02	0.05	-0.05	-5.10	-5.38	0.10
60	0.08	0.00	0.07	-0.04	-4.13	-7.15	0.00
90	0.07	0.02	0.07	-0.02	-2.11	-7.11	-0.10
120	0.04	0.03	0.05	0.01	0.41	-5.27	-0.17
150	0.00	0.04	0.02	0.03	2.76	-2.12	-0.19
180	0.04	0.03	-0.02	0.05	4.31	1.49	-0.17
210	0.07	0.02	-0.05	0.05	4.64	4.59	-0.10
240	0.08	0.00	-0.07	0.04	3.67	6.36	0.00
270	0.07	0.02	-0.07	0.02	1.66	6.32	0.10
300	0.04	0.03	-0.05	-0.01	-0.86	4.48	0.17
330	0.00	0.04	-0.02	-0.03	-3.21	1.33	0.19

cci DMP65R-BU6DA - Elevation 98 - From Face C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.08	0.00	0.00	-0.08	-7.35	0.00	0.00
30	0.07	0.02	0.02	-0.07	-6.30	-1.72	0.10
60	0.04	0.03	0.03	-0.04	-3.44	-2.99	0.17
90	0.00	0.04	0.04	0.00	0.46	-3.45	0.19
120	0.04	0.03	0.03	0.04	4.36	-2.99	0.17
150	0.07	0.02	0.02	0.07	7.21	-1.72	0.10
180	0.08	0.00	0.00	0.08	8.26	0.00	0.00
210	0.07	0.02	-0.02	0.07	7.21	1.72	-0.10
240	0.04	0.03	-0.03	0.04	4.36	2.99	-0.17
270	0.00	0.04	-0.04	0.00	0.46	3.45	-0.19
300	0.04	0.03	-0.03	-0.04	-3.44	2.99	-0.17
330	0.07	0.02	-0.02	-0.07	-6.30	1.72	-0.10

OPA65R-BU6DA - Elevation 98 - From Face A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.04	0.03	-0.02	-0.05	-4.77	2.24	-0.17
30	0.00	0.04	0.02	-0.03	-3.20	-1.42	-0.20
60	0.04	0.03	0.05	-0.01	-0.82	-4.61	-0.17
90	0.07	0.02	0.07	0.02	1.73	-6.47	-0.10

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	77 of 108
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OPA65R-BU6DA - Elevation 98 - From Face A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
120	0.08	0.00	0.07	0.04	3.76	-6.52	0.00
150	0.07	0.02	0.05	0.05	4.74	-4.73	0.10
180	0.04	0.03	0.02	0.05	4.40	-1.59	0.17
210	0.00	0.04	-0.02	0.03	2.83	2.06	0.20
240	0.04	0.03	-0.05	0.01	0.45	5.25	0.17
270	0.07	0.02	-0.07	-0.02	-2.10	7.12	0.10
300	0.08	0.00	-0.07	-0.04	-4.14	7.17	0.00
330	0.07	0.02	-0.05	-0.05	-5.12	5.38	-0.10

OPA65R-BU6DA - Elevation 98 - From Face B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.04	0.03	0.02	-0.05	-4.77	-2.24	0.17
30	0.07	0.02	0.05	-0.05	-5.12	-5.38	0.10
60	0.08	0.00	0.07	-0.04	-4.14	-7.17	0.00
90	0.07	0.02	0.07	-0.02	-2.10	-7.12	-0.10
120	0.04	0.03	0.05	0.01	0.45	-5.25	-0.17
150	0.00	0.04	0.02	0.03	2.83	-2.06	-0.20
180	0.04	0.03	-0.02	0.05	4.40	1.59	-0.17
210	0.07	0.02	-0.05	0.05	4.74	4.73	-0.10
240	0.08	0.00	-0.07	0.04	3.76	6.52	0.00
270	0.07	0.02	-0.07	0.02	1.73	6.47	0.10
300	0.04	0.03	-0.05	-0.01	-0.82	4.61	0.17
330	0.00	0.04	-0.02	-0.03	-3.20	1.42	0.20

OPA65R-BU6DA - Elevation 98 - From Face C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.08	0.00	0.00	-0.08	-7.53	0.00	0.00
30	0.07	0.02	0.02	-0.07	-6.47	-1.74	0.10
60	0.04	0.03	0.03	-0.04	-3.58	-3.02	0.17
90	0.00	0.04	0.04	0.00	0.37	-3.48	0.20
120	0.04	0.03	0.03	0.04	4.32	-3.02	0.17
150	0.07	0.02	0.02	0.07	7.22	-1.74	0.10
180	0.08	0.00	0.00	0.08	8.27	0.00	0.00
210	0.07	0.02	-0.02	0.07	7.22	1.74	-0.10
240	0.04	0.03	-0.03	0.04	4.32	3.02	-0.17
270	0.00	0.04	-0.04	0.00	0.37	3.48	-0.20
300	0.04	0.03	-0.03	-0.04	-3.58	3.02	-0.17
330	0.07	0.02	-0.02	-0.07	-6.47	1.74	-0.10

cci DTMABP7819VG12A TMA - Elevation 98 - From Face A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.01	0.00	-0.00	-0.01	-0.64	0.39	-0.02
30	0.00	0.00	0.00	-0.00	-0.41	-0.12	-0.02
60	0.01	0.00	0.01	-0.00	-0.09	-0.58	-0.02
90	0.01	0.00	0.01	0.00	0.25	-0.85	-0.01
120	0.01	0.00	0.01	0.01	0.51	-0.88	0.00
150	0.01	0.00	0.01	0.01	0.61	-0.64	0.01
180	0.01	0.00	0.00	0.01	0.54	-0.21	0.02

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	78 of 108
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<i>cci DTMAPB7819VG12A TMA - Elevation 98 - From Face A</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
210	0.00	0.00	-0.00	0.00	0.31	0.30	0.02
240	0.01	0.00	-0.01	0.00	-0.01	0.75	0.02
270	0.01	0.00	-0.01	-0.00	-0.35	1.03	0.01
300	0.01	0.00	-0.01	-0.01	-0.61	1.05	0.00
330	0.01	0.00	-0.01	-0.01	-0.71	0.82	-0.01

<i>cci DTMAPB7819VG12A TMA - Elevation 98 - From Face B</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.01	0.00	0.00	-0.01	-0.64	-0.39	0.02
30	0.01	0.00	0.01	-0.01	-0.71	-0.82	0.01
60	0.01	0.00	0.01	-0.01	-0.61	-1.05	0.00
90	0.01	0.00	0.01	-0.00	-0.35	-1.03	-0.01
120	0.01	0.00	0.01	0.00	-0.01	-0.75	-0.02
150	0.00	0.00	0.00	0.00	0.31	-0.30	-0.02
180	0.01	0.00	-0.00	0.01	0.54	0.21	-0.02
210	0.01	0.00	-0.01	0.01	0.61	0.64	-0.01
240	0.01	0.00	-0.01	0.01	0.51	0.88	0.00
270	0.01	0.00	-0.01	0.00	0.25	0.85	0.01
300	0.01	0.00	-0.01	-0.00	-0.09	0.58	0.02
330	0.00	0.00	-0.00	-0.00	-0.41	0.12	0.02

<i>cci DTMAPB7819VG12A TMA - Elevation 98 - From Face C</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.01	0.00	0.00	-0.01	-1.01	0.00	0.00
30	0.01	0.00	0.00	-0.01	-0.86	-0.21	0.01
60	0.01	0.00	0.00	-0.01	-0.46	-0.36	0.02
90	0.00	0.00	0.00	0.00	0.10	-0.42	0.02
120	0.01	0.00	0.00	0.01	0.66	-0.36	0.02
150	0.01	0.00	0.00	0.01	1.06	-0.21	0.01
180	0.01	0.00	0.00	0.01	1.21	0.00	0.00
210	0.01	0.00	-0.00	0.01	1.06	0.21	-0.01
240	0.01	0.00	-0.00	0.01	0.66	0.36	-0.02
270	0.00	0.00	-0.00	0.00	0.10	0.42	-0.02
300	0.01	0.00	-0.00	-0.01	-0.46	0.36	-0.02
330	0.01	0.00	-0.00	-0.01	-0.86	0.21	-0.01

<i>Radio 4415 - Elevation 98 - From Face A</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.01	0.00	-0.00	-0.01	-0.79	0.49	-0.02
30	0.00	0.01	0.00	-0.00	-0.56	-0.04	-0.03
60	0.01	0.00	0.01	-0.00	-0.22	-0.49	-0.02
90	0.01	0.00	0.01	0.00	0.15	-0.76	-0.01
120	0.01	0.00	0.01	0.01	0.44	-0.76	0.00
150	0.01	0.00	0.01	0.01	0.58	-0.51	0.01
180	0.01	0.00	0.00	0.01	0.54	-0.06	0.02
210	0.00	0.01	-0.00	0.00	0.31	0.47	0.03
240	0.01	0.00	-0.01	0.00	-0.03	0.92	0.02
270	0.01	0.00	-0.01	-0.00	-0.40	1.19	0.01

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	79 of 108
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<i>Radio 4415 - Elevation 98 - From Face A</i>							
<i>Wind Azimuth</i> °	F_a <i>K</i>	F_s <i>K</i>	V_x <i>K</i>	V_z <i>K</i>	OTM_x <i>kip-ft</i>	OTM_z <i>kip-ft</i>	<i>Torque</i> <i>kip-ft</i>
300	0.01	0.00	-0.01	-0.01	-0.69	1.20	0.00
330	0.01	0.00	-0.01	-0.01	-0.83	0.94	-0.01

<i>Radio 4415 - Elevation 98 - From Face B</i>							
<i>Wind Azimuth</i> °	F_a <i>K</i>	F_s <i>K</i>	V_x <i>K</i>	V_z <i>K</i>	OTM_x <i>kip-ft</i>	OTM_z <i>kip-ft</i>	<i>Torque</i> <i>kip-ft</i>
0	0.01	0.00	0.00	-0.01	-0.79	-0.49	0.02
30	0.01	0.00	0.01	-0.01	-0.83	-0.94	0.01
60	0.01	0.00	0.01	-0.01	-0.69	-1.20	0.00
90	0.01	0.00	0.01	-0.00	-0.40	-1.19	-0.01
120	0.01	0.00	0.01	0.00	-0.03	-0.92	-0.02
150	0.00	0.01	0.00	0.00	0.31	-0.47	-0.03
180	0.01	0.00	-0.00	0.01	0.54	0.06	-0.02
210	0.01	0.00	-0.01	0.01	0.58	0.51	-0.01
240	0.01	0.00	-0.01	0.01	0.44	0.76	0.00
270	0.01	0.00	-0.01	0.00	0.15	0.76	0.01
300	0.01	0.00	-0.01	-0.00	-0.22	0.49	0.02
330	0.00	0.01	-0.00	-0.00	-0.56	0.04	0.03

<i>Radio 4415 - Elevation 98 - From Face C</i>							
<i>Wind Azimuth</i> °	F_a <i>K</i>	F_s <i>K</i>	V_x <i>K</i>	V_z <i>K</i>	OTM_x <i>kip-ft</i>	OTM_z <i>kip-ft</i>	<i>Torque</i> <i>kip-ft</i>
0	0.01	0.00	0.00	-0.01	-0.88	0.00	0.00
30	0.01	0.00	0.00	-0.01	-0.73	-0.25	0.01
60	0.01	0.00	0.00	-0.01	-0.32	-0.44	0.02
90	0.00	0.01	0.01	0.00	0.25	-0.50	0.03
120	0.01	0.00	0.00	0.01	0.82	-0.44	0.02
150	0.01	0.00	0.00	0.01	1.23	-0.25	0.01
180	0.01	0.00	0.00	0.01	1.38	0.00	0.00
210	0.01	0.00	-0.00	0.01	1.23	0.25	-0.01
240	0.01	0.00	-0.00	0.01	0.82	0.44	-0.02
270	0.00	0.01	-0.01	0.00	0.25	0.50	-0.03
300	0.01	0.00	-0.00	-0.01	-0.32	0.44	-0.02
330	0.01	0.00	-0.00	-0.01	-0.73	0.25	-0.01

<i>Radio 4449 - Elevation 98 - From Face A</i>							
<i>Wind Azimuth</i> °	F_a <i>K</i>	F_s <i>K</i>	V_x <i>K</i>	V_z <i>K</i>	OTM_x <i>kip-ft</i>	OTM_z <i>kip-ft</i>	<i>Torque</i> <i>kip-ft</i>
0	0.01	0.01	-0.00	-0.01	-0.83	0.45	-0.03
30	0.00	0.01	0.00	-0.01	-0.64	-0.02	-0.03
60	0.01	0.01	0.01	-0.00	-0.32	-0.42	-0.03
90	0.01	0.00	0.01	0.00	0.04	-0.64	-0.01
120	0.01	0.00	0.01	0.01	0.36	-0.62	0.00
150	0.01	0.00	0.01	0.01	0.53	-0.36	0.01
180	0.01	0.01	0.00	0.01	0.53	0.07	0.03
210	0.00	0.01	-0.00	0.01	0.34	0.54	0.03
240	0.01	0.01	-0.01	0.00	0.02	0.94	0.03
270	0.01	0.00	-0.01	-0.00	-0.34	1.16	0.01
300	0.01	0.00	-0.01	-0.01	-0.66	1.14	0.00
330	0.01	0.00	-0.01	-0.01	-0.83	0.88	-0.01

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Radio 4449 - Elevation 98 - From Face B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.01	0.01	0.00	-0.01	-0.83	-0.45	0.03
30	0.01	0.00	0.01	-0.01	-0.83	-0.88	0.01
60	0.01	0.00	0.01	-0.01	-0.66	-1.14	0.00
90	0.01	0.00	0.01	-0.00	-0.34	-1.16	-0.01
120	0.01	0.01	0.01	0.00	0.02	-0.94	-0.03
150	0.00	0.01	0.00	0.01	0.34	-0.54	-0.03
180	0.01	0.01	-0.00	0.01	0.53	-0.07	-0.03
210	0.01	0.00	-0.01	0.01	0.53	0.36	-0.01
240	0.01	0.00	-0.01	0.01	0.36	0.62	0.00
270	0.01	0.00	-0.01	0.00	0.04	0.64	0.01
300	0.01	0.01	-0.01	-0.00	-0.32	0.42	0.03
330	0.00	0.01	-0.00	-0.01	-0.64	0.02	0.03

Radio 4449 - Elevation 98 - From Face C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.01	0.00	0.00	-0.01	-0.71	0.00	0.00
30	0.01	0.00	0.00	-0.01	-0.58	-0.28	0.01
60	0.01	0.01	0.01	-0.01	-0.21	-0.49	0.03
90	0.00	0.01	0.01	0.00	0.30	-0.57	0.03
120	0.01	0.01	0.01	0.01	0.81	-0.49	0.03
150	0.01	0.00	0.00	0.01	1.18	-0.28	0.01
180	0.01	0.00	0.00	0.01	1.31	0.00	0.00
210	0.01	0.00	-0.00	0.01	1.18	0.28	-0.01
240	0.01	0.01	-0.01	0.01	0.81	0.49	-0.03
270	0.00	0.01	-0.01	0.00	0.30	0.57	-0.03
300	0.01	0.01	-0.01	-0.01	-0.21	0.49	-0.03
330	0.01	0.00	-0.00	-0.01	-0.58	0.28	-0.01

Radio 8843 - Elevation 98 - From Face A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.01	0.01	-0.00	-0.01	-1.06	0.38	-0.04
30	0.00	0.01	0.00	-0.01	-0.90	-0.11	-0.04
60	0.01	0.01	0.01	-0.00	-0.55	-0.49	-0.04
90	0.01	0.00	0.01	0.00	-0.11	-0.65	-0.02
120	0.01	0.00	0.01	0.01	0.32	-0.56	0.00
150	0.01	0.00	0.01	0.01	0.62	-0.23	0.02
180	0.01	0.01	0.00	0.01	0.70	0.24	0.04
210	0.00	0.01	-0.00	0.01	0.54	0.73	0.04
240	0.01	0.01	-0.01	0.00	0.20	1.11	0.04
270	0.01	0.00	-0.01	-0.00	-0.25	1.27	0.02
300	0.01	0.00	-0.01	-0.01	-0.68	1.18	0.00
330	0.01	0.00	-0.01	-0.01	-0.98	0.86	-0.02

Radio 8843 - Elevation 98 - From Face B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.01	0.01	0.00	-0.01	-1.06	-0.38	0.04
30	0.01	0.00	0.01	-0.01	-0.98	-0.86	0.02

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	81 of 108
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<i>Radio 8843 - Elevation 98 - From Face B</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
60	0.01	0.00	0.01	-0.01	-0.68	-1.18	0.00
90	0.01	0.00	0.01	-0.00	-0.25	-1.27	-0.02
120	0.01	0.01	0.01	0.00	0.20	-1.11	-0.04
150	0.00	0.01	0.00	0.01	0.54	-0.73	-0.04
180	0.01	0.01	-0.00	0.01	0.70	-0.24	-0.04
210	0.01	0.00	-0.01	0.01	0.62	0.23	-0.02
240	0.01	0.00	-0.01	0.01	0.32	0.56	0.00
270	0.01	0.00	-0.01	0.00	-0.11	0.65	0.02
300	0.01	0.01	-0.01	-0.00	-0.55	0.49	0.04
330	0.00	0.01	-0.00	-0.01	-0.90	0.11	0.04

<i>Radio 8843 - Elevation 98 - From Face C</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.01	0.00	0.00	-0.01	-0.64	0.00	0.00
30	0.01	0.00	0.00	-0.01	-0.51	-0.42	0.02
60	0.01	0.01	0.01	-0.01	-0.14	-0.72	0.04
90	0.00	0.01	0.01	0.00	0.36	-0.83	0.04
120	0.01	0.01	0.01	0.01	0.86	-0.72	0.04
150	0.01	0.00	0.00	0.01	1.23	-0.42	0.02
180	0.01	0.00	0.00	0.01	1.36	0.00	0.00
210	0.01	0.00	-0.00	0.01	1.23	0.42	-0.02
240	0.01	0.01	-0.01	0.01	0.86	0.72	-0.04
270	0.00	0.01	-0.01	0.00	0.36	0.83	-0.04
300	0.01	0.01	-0.01	-0.01	-0.14	0.72	-0.04
330	0.01	0.00	-0.00	-0.01	-0.51	0.42	-0.02

<i>Raycap DC6-48-60-18-8F surge suppressor - Elevation 98 - From Face A</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.00	0.01	0.00	-0.01	-0.76	0.06	-0.02
30	0.00	0.01	0.00	-0.01	-0.66	-0.30	-0.02
60	0.00	0.01	0.01	-0.00	-0.40	-0.56	-0.02
90	0.01	0.00	0.01	0.00	-0.04	-0.66	-0.01
120	0.01	0.00	0.01	0.00	0.32	-0.56	0.00
150	0.01	0.00	0.00	0.01	0.59	-0.30	0.01
180	0.00	0.01	0.00	0.01	0.69	0.06	0.02
210	0.00	0.01	-0.00	0.01	0.59	0.43	0.02
240	0.00	0.01	-0.01	0.00	0.32	0.69	0.02
270	0.01	0.00	-0.01	0.00	-0.04	0.79	0.01
300	0.01	0.00	-0.01	-0.00	-0.40	0.69	0.00
330	0.01	0.00	-0.00	-0.01	-0.66	0.43	-0.01

<i>Raycap DC6-48-60-18-8F surge suppressor - Elevation 98 - From Face C</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.01	0.00	0.00	-0.01	-0.65	0.00	0.00
30	0.01	0.00	0.00	-0.01	-0.55	-0.36	0.01
60	0.00	0.01	0.01	-0.00	-0.29	-0.63	0.02
90	0.00	0.01	0.01	0.00	0.07	-0.72	0.02
120	0.00	0.01	0.01	0.00	0.44	-0.63	0.02

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	82 of 108
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<i>Raycap DC6-48-60-18-8F surge suppressor - Elevation 98 - From Face C</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> K	<i>F_s</i> K	<i>V_x</i> K	<i>V_z</i> K	<i>OTM_x</i> kip-ft	<i>OTM_z</i> kip-ft	<i>Torque</i> kip-ft
150	0.01	0.00	0.00	0.01	0.70	-0.36	0.01
180	0.01	0.00	0.00	0.01	0.80	0.00	0.00
210	0.01	0.00	-0.00	0.01	0.70	0.36	-0.01
240	0.00	0.01	-0.01	0.00	0.44	0.63	-0.02
270	0.00	0.01	-0.01	0.00	0.07	0.72	-0.02
300	0.00	0.01	-0.01	-0.00	-0.29	0.63	-0.02
330	0.01	0.00	-0.00	-0.01	-0.55	0.36	-0.01

<i>13' T-Frame - Elevation 98 - None A</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> K	<i>F_s</i> K	<i>V_x</i> K	<i>V_z</i> K	<i>OTM_x</i> kip-ft	<i>OTM_z</i> kip-ft	<i>Torque</i> kip-ft
0	0.08	0.00	0.00	-0.08	-7.49	0.00	0.00
30	0.08	0.00	0.04	-0.07	-6.49	-3.74	0.00
60	0.08	0.00	0.07	-0.04	-3.74	-6.49	0.00
90	0.08	0.00	0.08	0.00	0.00	-7.49	0.00
120	0.08	0.00	0.07	0.04	3.74	-6.49	0.00
150	0.08	0.00	0.04	0.07	6.49	-3.74	0.00
180	0.08	0.00	0.00	0.08	7.49	0.00	0.00
210	0.08	0.00	-0.04	0.07	6.49	3.74	0.00
240	0.08	0.00	-0.07	0.04	3.74	6.49	0.00
270	0.08	0.00	-0.08	0.00	0.00	7.49	0.00
300	0.08	0.00	-0.07	-0.04	-3.74	6.49	0.00
330	0.08	0.00	-0.04	-0.07	-6.49	3.74	0.00

<i>13' T-Frame - Elevation 98 - None B</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> K	<i>F_s</i> K	<i>V_x</i> K	<i>V_z</i> K	<i>OTM_x</i> kip-ft	<i>OTM_z</i> kip-ft	<i>Torque</i> kip-ft
0	0.08	0.00	0.00	-0.08	-7.49	0.00	0.00
30	0.08	0.00	0.04	-0.07	-6.49	-3.74	0.00
60	0.08	0.00	0.07	-0.04	-3.74	-6.49	0.00
90	0.08	0.00	0.08	0.00	0.00	-7.49	0.00
120	0.08	0.00	0.07	0.04	3.74	-6.49	0.00
150	0.08	0.00	0.04	0.07	6.49	-3.74	0.00
180	0.08	0.00	0.00	0.08	7.49	0.00	0.00
210	0.08	0.00	-0.04	0.07	6.49	3.74	0.00
240	0.08	0.00	-0.07	0.04	3.74	6.49	0.00
270	0.08	0.00	-0.08	0.00	0.00	7.49	0.00
300	0.08	0.00	-0.07	-0.04	-3.74	6.49	0.00
330	0.08	0.00	-0.04	-0.07	-6.49	3.74	0.00

<i>13' T-Frame - Elevation 98 - None C</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> K	<i>F_s</i> K	<i>V_x</i> K	<i>V_z</i> K	<i>OTM_x</i> kip-ft	<i>OTM_z</i> kip-ft	<i>Torque</i> kip-ft
0	0.08	0.00	0.00	-0.08	-7.49	0.00	0.00
30	0.08	0.00	0.04	-0.07	-6.49	-3.74	0.00
60	0.08	0.00	0.07	-0.04	-3.74	-6.49	0.00
90	0.08	0.00	0.08	0.00	0.00	-7.49	0.00
120	0.08	0.00	0.07	0.04	3.74	-6.49	0.00
150	0.08	0.00	0.04	0.07	6.49	-3.74	0.00
180	0.08	0.00	0.00	0.08	7.49	0.00	0.00
210	0.08	0.00	-0.04	0.07	6.49	3.74	0.00

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	83 of 108
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13' T-Frame - Elevation 98 - None C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
240	0.08	0.00	-0.07	0.04	3.74	6.49	0.00
270	0.08	0.00	-0.08	0.00	0.00	7.49	0.00
300	0.08	0.00	-0.07	-0.04	-3.74	6.49	0.00
330	0.08	0.00	-0.04	-0.07	-6.49	3.74	0.00

4'x4 1/2" Pipe Mount - Elevation 81.00-85.00 - From Leg A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.01	0.00	0.00	-0.01	-0.83	0.00	0.00
30	0.01	0.00	0.00	-0.01	-0.75	-0.33	-0.02
60	0.00	0.01	0.01	-0.00	-0.50	-0.57	-0.03
90	0.00	0.01	0.01	0.00	-0.17	-0.66	-0.03
120	0.00	0.01	0.01	0.00	0.16	-0.57	-0.03
150	0.01	0.00	0.00	0.01	0.40	-0.33	-0.02
180	0.01	0.00	0.00	0.01	0.49	0.00	0.00
210	0.01	0.00	-0.00	0.01	0.40	0.33	0.02
240	0.00	0.01	-0.01	0.00	0.16	0.57	0.03
270	0.00	0.01	-0.01	0.00	-0.17	0.66	0.03
300	0.00	0.01	-0.01	-0.00	-0.50	0.57	0.03
330	0.01	0.00	-0.00	-0.01	-0.75	0.33	0.02

JAHH-65-R3B w/ SBS-2-2 Mount - Elevation 138 - From Leg A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.12	0.00	0.00	-0.12	-18.31	0.00	0.00
30	0.11	0.04	0.04	-0.11	-16.04	-5.56	-0.28
60	0.06	0.07	0.07	-0.06	-9.84	-9.63	-0.48
90	0.00	0.08	0.08	0.00	-1.38	-11.12	-0.55
120	0.06	0.07	0.07	0.06	7.09	-9.63	-0.48
150	0.11	0.04	0.04	0.11	13.29	-5.56	-0.28
180	0.12	0.00	0.00	0.12	15.55	0.00	0.00
210	0.11	0.04	-0.04	0.11	13.29	5.56	0.28
240	0.06	0.07	-0.07	0.06	7.09	9.63	0.48
270	0.00	0.08	-0.08	0.00	-1.38	11.12	0.55
300	0.06	0.07	-0.07	-0.06	-9.84	9.63	0.48
330	0.11	0.04	-0.04	-0.11	-16.04	5.56	0.28

JAHH-65-R3B w/ SBS-2-2 Mount - Elevation 138 - From Leg B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.06	0.07	-0.02	-0.09	-11.88	1.33	0.48
30	0.00	0.08	0.04	-0.07	-8.94	-6.75	0.55
60	0.06	0.07	0.09	-0.03	-3.42	-13.34	0.48
90	0.11	0.04	0.11	0.02	3.21	-16.67	0.28
120	0.12	0.00	0.11	0.06	9.15	-15.86	0.00
150	0.11	0.04	0.07	0.09	12.83	-11.11	-0.28
180	0.06	0.07	0.02	0.09	13.26	-3.71	-0.48
210	0.00	0.08	-0.04	0.07	10.32	4.37	-0.55
240	0.06	0.07	-0.09	0.03	4.79	10.95	-0.48
270	0.11	0.04	-0.11	-0.02	-1.83	14.29	-0.28
300	0.12	0.00	-0.11	-0.06	-7.78	13.47	0.00

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	84 of 108
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<i>JAHH-65-R3B w/ SBS-2-2 Mount - Elevation 138 - From Leg B</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> K	<i>F_s</i> K	<i>V_x</i> K	<i>V_z</i> K	<i>OTM_x</i> kip-ft	<i>OTM_z</i> kip-ft	<i>Torque</i> kip-ft
330	0.11	0.04	-0.07	-0.09	-11.46	8.73	0.28

<i>JAHH-65-R3B w/ SBS-2-2 Mount - Elevation 138 - From Leg C</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> K	<i>F_s</i> K	<i>V_x</i> K	<i>V_z</i> K	<i>OTM_x</i> kip-ft	<i>OTM_z</i> kip-ft	<i>Torque</i> kip-ft
0	0.06	0.07	0.02	-0.09	-11.88	-1.33	-0.48
30	0.11	0.04	0.07	-0.09	-11.46	-8.73	-0.28
60	0.12	0.00	0.11	-0.06	-7.78	-13.47	0.00
90	0.11	0.04	0.11	-0.02	-1.83	-14.29	0.28
120	0.06	0.07	0.09	0.03	4.79	-10.95	0.48
150	0.00	0.08	0.04	0.07	10.32	-4.37	0.55
180	0.06	0.07	-0.02	0.09	13.26	3.71	0.48
210	0.11	0.04	-0.07	0.09	12.83	11.11	0.28
240	0.12	0.00	-0.11	0.06	9.15	15.86	0.00
270	0.11	0.04	-0.11	0.02	3.21	16.67	-0.28
300	0.06	0.07	-0.09	-0.03	-3.42	13.34	-0.48
330	0.00	0.08	-0.04	-0.07	-8.94	6.75	-0.55

<i>MT6407-77A - Elevation 138 - From Leg A</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> K	<i>F_s</i> K	<i>V_x</i> K	<i>V_z</i> K	<i>OTM_x</i> kip-ft	<i>OTM_z</i> kip-ft	<i>Torque</i> kip-ft
0	0.03	0.00	0.00	-0.03	-4.98	0.00	0.00
30	0.03	0.01	0.01	-0.03	-4.39	-0.85	-0.04
60	0.02	0.01	0.01	-0.02	-2.80	-1.48	-0.07
90	0.00	0.01	0.01	0.00	-0.62	-1.71	-0.09
120	0.02	0.01	0.01	0.02	1.56	-1.48	-0.07
150	0.03	0.01	0.01	0.03	3.16	-0.85	-0.04
180	0.03	0.00	0.00	0.03	3.74	0.00	0.00
210	0.03	0.01	-0.01	0.03	3.16	0.85	0.04
240	0.02	0.01	-0.01	0.02	1.56	1.48	0.07
270	0.00	0.01	-0.01	0.00	-0.62	1.71	0.09
300	0.02	0.01	-0.01	-0.02	-2.80	1.48	0.07
330	0.03	0.01	-0.01	-0.03	-4.39	0.85	0.04

<i>MT6407-77A - Elevation 138 - From Leg B</i>							
<i>Wind Azimuth</i> °	<i>F_a</i> K	<i>F_s</i> K	<i>V_x</i> K	<i>V_z</i> K	<i>OTM_x</i> kip-ft	<i>OTM_z</i> kip-ft	<i>Torque</i> kip-ft
0	0.02	0.01	-0.01	-0.02	-2.06	0.61	0.07
30	0.00	0.01	0.01	-0.01	-1.17	-1.39	0.09
60	0.02	0.01	0.02	-0.00	0.12	-3.16	0.07
90	0.03	0.01	0.03	0.01	1.46	-4.23	0.04
120	0.03	0.00	0.03	0.02	2.49	-4.31	0.00
150	0.03	0.01	0.02	0.02	2.94	-3.38	-0.04
180	0.02	0.01	0.01	0.02	2.68	-1.68	-0.07
210	0.00	0.01	-0.01	0.01	1.79	0.32	-0.09
240	0.02	0.01	-0.02	0.00	0.50	2.09	-0.07
270	0.03	0.01	-0.03	-0.01	-0.84	3.16	-0.04
300	0.03	0.00	-0.03	-0.02	-1.87	3.24	0.00
330	0.03	0.01	-0.02	-0.02	-2.32	2.31	0.04

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<i>MT6407-77A - Elevation 138 - From Leg C</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.02	0.01	0.01	-0.02	-2.06	-0.61	-0.07
30	0.03	0.01	0.02	-0.02	-2.32	-2.31	-0.04
60	0.03	0.00	0.03	-0.02	-1.87	-3.24	0.00
90	0.03	0.01	0.03	-0.01	-0.84	-3.16	0.04
120	0.02	0.01	0.02	0.00	0.50	-2.09	0.07
150	0.00	0.01	0.01	0.01	1.79	-0.32	0.09
180	0.02	0.01	-0.01	0.02	2.68	1.68	0.07
210	0.03	0.01	-0.02	0.02	2.94	3.38	0.04
240	0.03	0.00	-0.03	0.02	2.49	4.31	0.00
270	0.03	0.01	-0.03	0.01	1.46	4.23	-0.04
300	0.02	0.01	-0.02	-0.00	0.12	3.16	-0.07
330	0.00	0.01	-0.01	-0.01	-1.17	1.39	-0.09

<i>RFS FDJ85020Q4-S1 Diplexer - Elevation 138 - From Leg A</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.01	0.00	0.00	-0.01	-1.32	0.00	0.00
30	0.01	0.00	0.00	-0.01	-1.16	-0.22	-0.01
60	0.00	0.00	0.00	-0.00	-0.73	-0.38	-0.02
90	0.00	0.00	0.00	0.00	-0.14	-0.44	-0.02
120	0.00	0.00	0.00	0.00	0.46	-0.38	-0.02
150	0.01	0.00	0.00	0.01	0.89	-0.22	-0.01
180	0.01	0.00	0.00	0.01	1.05	0.00	0.00
210	0.01	0.00	-0.00	0.01	0.89	0.22	0.01
240	0.00	0.00	-0.00	0.00	0.46	0.38	0.02
270	0.00	0.00	-0.00	0.00	-0.14	0.44	0.02
300	0.00	0.00	-0.00	-0.00	-0.73	0.38	0.02
330	0.01	0.00	-0.00	-0.01	-1.16	0.22	0.01

<i>RFS FDJ85020Q4-S1 Diplexer - Elevation 138 - From Leg B</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.00	0.00	-0.00	-0.00	-0.56	0.20	0.02
30	0.00	0.00	0.00	-0.00	-0.31	-0.34	0.02
60	0.00	0.00	0.01	-0.00	0.03	-0.82	0.02
90	0.01	0.00	0.01	0.00	0.39	-1.12	0.01
120	0.01	0.00	0.01	0.00	0.66	-1.15	0.00
150	0.01	0.00	0.01	0.01	0.77	-0.90	-0.01
180	0.00	0.00	0.00	0.00	0.70	-0.44	-0.02
210	0.00	0.00	-0.00	0.00	0.45	0.10	-0.02
240	0.00	0.00	-0.01	0.00	0.10	0.59	-0.02
270	0.01	0.00	-0.01	-0.00	-0.25	0.88	-0.01
300	0.01	0.00	-0.01	-0.00	-0.52	0.91	0.00
330	0.01	0.00	-0.01	-0.01	-0.64	0.66	0.01

<i>RFS FDJ85020Q4-S1 Diplexer - Elevation 138 - From Leg C</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.00	0.00	0.00	-0.00	-0.56	-0.20	-0.02
30	0.01	0.00	0.01	-0.01	-0.64	-0.66	-0.01

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	86 of 108
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<i>RFS FDJ85020Q4-S1 Diplexer - Elevation 138 - From Leg C</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
60	0.01	0.00	0.01	-0.00	-0.52	-0.91	0.00
90	0.01	0.00	0.01	-0.00	-0.25	-0.88	0.01
120	0.00	0.00	0.01	0.00	0.10	-0.59	0.02
150	0.00	0.00	0.00	0.00	0.45	-0.10	0.02
180	0.00	0.00	-0.00	0.00	0.70	0.44	0.02
210	0.01	0.00	-0.01	0.01	0.77	0.90	0.01
240	0.01	0.00	-0.01	0.00	0.66	1.15	0.00
270	0.01	0.00	-0.01	0.00	0.39	1.12	-0.01
300	0.00	0.00	-0.01	-0.00	0.03	0.82	-0.02
330	0.00	0.00	-0.00	-0.00	-0.31	0.34	-0.02

<i>Samsung B2/B66 PCS/AWS RRH - Elevation 138 - From Leg A</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.01	0.00	0.00	-0.01	-2.43	-0.20	0.03
30	0.01	0.00	0.00	-0.01	-2.20	-0.78	-0.01
60	0.01	0.01	0.01	-0.01	-1.56	-1.21	-0.04
90	0.00	0.01	0.01	0.00	-0.69	-1.36	-0.06
120	0.01	0.01	0.01	0.01	0.18	-1.21	-0.06
150	0.01	0.00	0.00	0.01	0.82	-0.78	-0.05
180	0.01	0.00	0.00	0.01	1.05	-0.20	-0.03
210	0.01	0.00	-0.00	0.01	0.82	0.38	0.01
240	0.01	0.01	-0.01	0.01	0.18	0.81	0.04
270	0.00	0.01	-0.01	0.00	-0.69	0.96	0.06
300	0.01	0.01	-0.01	-0.01	-1.56	0.81	0.06
330	0.01	0.00	-0.00	-0.01	-2.20	0.38	0.05

<i>Samsung B2/B66 PCS/AWS RRH - Elevation 138 - From Leg B</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.01	0.01	-0.00	-0.01	-0.79	-0.25	0.04
30	0.00	0.01	0.00	-0.01	-0.49	-1.08	0.06
60	0.01	0.01	0.01	-0.00	0.08	-1.75	0.06
90	0.01	0.00	0.01	0.00	0.77	-2.09	0.05
120	0.01	0.00	0.01	0.01	1.39	-2.00	0.03
150	0.01	0.00	0.01	0.01	1.77	-1.51	-0.01
180	0.01	0.01	0.00	0.01	1.82	-0.75	-0.04
210	0.00	0.01	-0.00	0.01	1.52	0.08	-0.06
240	0.01	0.01	-0.01	0.00	0.95	0.76	-0.06
270	0.01	0.00	-0.01	-0.00	0.27	1.10	-0.05
300	0.01	0.00	-0.01	-0.01	-0.35	1.01	-0.03
330	0.01	0.00	-0.01	-0.01	-0.74	0.52	0.01

<i>Samsung B2/B66 PCS/AWS RRH - Elevation 138 - From Leg C</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.01	0.01	0.00	-0.01	-1.14	0.45	-0.06
30	0.01	0.00	0.01	-0.01	-1.09	-0.32	-0.05
60	0.01	0.00	0.01	-0.01	-0.70	-0.81	-0.03
90	0.01	0.00	0.01	-0.00	-0.08	-0.90	0.01
120	0.01	0.01	0.01	0.00	0.61	-0.56	0.04

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	87 of 108
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Samsung B2/B66 PCS/AWS RRH - Elevation 138 - From Leg C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
150	0.00	0.01	0.00	0.01	1.18	0.12	0.06
180	0.01	0.01	-0.00	0.01	1.48	0.95	0.06
210	0.01	0.00	-0.01	0.01	1.43	1.71	0.05
240	0.01	0.00	-0.01	0.01	1.04	2.20	0.03
270	0.01	0.00	-0.01	0.00	0.42	2.29	-0.01
300	0.01	0.01	-0.01	-0.00	-0.26	1.95	-0.04
330	0.00	0.01	-0.00	-0.01	-0.83	1.28	-0.06

Samsung B5/B13 700/850 RRH - Elevation 138 - From Leg A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.01	0.00	0.00	-0.01	-2.29	0.16	-0.03
30	0.01	0.00	0.00	-0.01	-2.06	-0.31	-0.05
60	0.01	0.01	0.01	-0.01	-1.42	-0.65	-0.05
90	0.00	0.01	0.01	0.00	-0.55	-0.78	-0.05
120	0.01	0.01	0.01	0.01	0.32	-0.65	-0.03
150	0.01	0.00	0.00	0.01	0.96	-0.31	-0.00
180	0.01	0.00	0.00	0.01	1.19	0.16	0.03
210	0.01	0.00	-0.00	0.01	0.96	0.63	0.05
240	0.01	0.01	-0.01	0.01	0.32	0.97	0.05
270	0.00	0.01	-0.01	0.00	-0.55	1.10	0.05
300	0.01	0.01	-0.01	-0.01	-1.42	0.97	0.03
330	0.01	0.00	-0.00	-0.01	-2.06	0.63	0.00

Samsung B5/B13 700/850 RRH - Elevation 138 - From Leg B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.01	0.01	-0.00	-0.01	-1.00	-0.21	0.05
30	0.00	0.01	0.00	-0.01	-0.68	-1.03	0.05
60	0.01	0.01	0.01	-0.00	-0.13	-1.72	0.03
90	0.01	0.00	0.01	0.00	0.48	-2.10	0.00
120	0.01	0.00	0.01	0.01	1.01	-2.07	-0.03
150	0.01	0.00	0.01	0.01	1.30	-1.63	-0.05
180	0.01	0.01	0.00	0.01	1.28	-0.90	-0.05
210	0.00	0.01	-0.00	0.01	0.95	-0.09	-0.05
240	0.01	0.01	-0.01	0.00	0.41	0.60	-0.03
270	0.01	0.00	-0.01	-0.00	-0.21	0.98	-0.00
300	0.01	0.00	-0.01	-0.01	-0.73	0.95	0.03
330	0.01	0.00	-0.01	-0.01	-1.02	0.51	0.05

Samsung B5/B13 700/850 RRH - Elevation 138 - From Leg C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.01	0.01	0.00	-0.01	-0.73	0.05	-0.03
30	0.01	0.00	0.01	-0.01	-0.75	-0.67	-0.00
60	0.01	0.00	0.01	-0.01	-0.46	-1.11	0.03
90	0.01	0.00	0.01	-0.00	0.07	-1.14	0.05
120	0.01	0.01	0.01	0.00	0.68	-0.76	0.05
150	0.00	0.01	0.00	0.01	1.23	-0.07	0.05
180	0.01	0.01	-0.00	0.01	1.55	0.74	0.03
210	0.01	0.00	-0.01	0.01	1.58	1.47	0.00

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	88 of 108
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<i>Samsung B5/B13 700/850 RRH - Elevation 138 - From Leg C</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
240	0.01	0.00	-0.01	0.01	1.28	1.91	-0.03
270	0.01	0.00	-0.01	0.00	0.76	1.94	-0.05
300	0.01	0.01	-0.01	-0.00	0.14	1.56	-0.05
330	0.00	0.01	-0.00	-0.01	-0.40	0.87	-0.05

<i>Raycap RDC-6627-PF-48 OVP - Elevation 138 - From Leg C</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.02	0.02	0.00	-0.03	-4.08	-0.43	-0.08
30	0.03	0.01	0.02	-0.03	-3.79	-2.72	-0.05
60	0.04	0.00	0.03	-0.02	-2.46	-4.26	0.00
90	0.03	0.01	0.03	-0.00	-0.46	-4.64	0.05
120	0.02	0.02	0.03	0.01	1.67	-3.75	0.08
150	0.00	0.03	0.01	0.02	3.37	-1.83	0.09
180	0.02	0.02	-0.00	0.03	4.18	0.60	0.08
210	0.03	0.01	-0.02	0.03	3.89	2.90	0.05
240	0.04	0.00	-0.03	0.02	2.56	4.44	0.00
270	0.03	0.01	-0.03	0.00	0.57	4.82	-0.05
300	0.02	0.02	-0.03	-0.01	-1.57	3.92	-0.08
330	0.00	0.03	-0.01	-0.02	-3.27	2.01	-0.09

<i>13' T-Frame - Elevation 138 - None A</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.08	0.00	0.00	-0.08	-11.33	0.00	0.00
30	0.08	0.00	0.04	-0.07	-9.81	-5.67	0.00
60	0.08	0.00	0.07	-0.04	-5.67	-9.81	0.00
90	0.08	0.00	0.08	0.00	0.00	-11.33	0.00
120	0.08	0.00	0.07	0.04	5.67	-9.81	0.00
150	0.08	0.00	0.04	0.07	9.81	-5.67	0.00
180	0.08	0.00	0.00	0.08	11.33	0.00	0.00
210	0.08	0.00	-0.04	0.07	9.81	5.67	0.00
240	0.08	0.00	-0.07	0.04	5.67	9.81	0.00
270	0.08	0.00	-0.08	0.00	0.00	11.33	0.00
300	0.08	0.00	-0.07	-0.04	-5.67	9.81	0.00
330	0.08	0.00	-0.04	-0.07	-9.81	5.67	0.00

<i>13' T-Frame - Elevation 138 - None B</i>							
<i>Wind Azimuth</i> °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	<i>Torque</i> kip-ft
0	0.08	0.00	0.00	-0.08	-11.33	0.00	0.00
30	0.08	0.00	0.04	-0.07	-9.81	-5.67	0.00
60	0.08	0.00	0.07	-0.04	-5.67	-9.81	0.00
90	0.08	0.00	0.08	0.00	0.00	-11.33	0.00
120	0.08	0.00	0.07	0.04	5.67	-9.81	0.00
150	0.08	0.00	0.04	0.07	9.81	-5.67	0.00
180	0.08	0.00	0.00	0.08	11.33	0.00	0.00
210	0.08	0.00	-0.04	0.07	9.81	5.67	0.00
240	0.08	0.00	-0.07	0.04	5.67	9.81	0.00
270	0.08	0.00	-0.08	0.00	0.00	11.33	0.00
300	0.08	0.00	-0.07	-0.04	-5.67	9.81	0.00

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	89 of 108
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13' T-Frame - Elevation 138 - None B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
330	0.08	0.00	-0.04	-0.07	-9.81	5.67	0.00

13' T-Frame - Elevation 138 - None C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.08	0.00	0.00	-0.08	-11.33	0.00	0.00
30	0.08	0.00	0.04	-0.07	-9.81	-5.67	0.00
60	0.08	0.00	0.07	-0.04	-5.67	-9.81	0.00
90	0.08	0.00	0.08	0.00	0.00	-11.33	0.00
120	0.08	0.00	0.07	0.04	5.67	-9.81	0.00
150	0.08	0.00	0.04	0.07	9.81	-5.67	0.00
180	0.08	0.00	0.00	0.08	11.33	0.00	0.00
210	0.08	0.00	-0.04	0.07	9.81	5.67	0.00
240	0.08	0.00	-0.07	0.04	5.67	9.81	0.00
270	0.08	0.00	-0.08	0.00	0.00	11.33	0.00
300	0.08	0.00	-0.07	-0.04	-5.67	9.81	0.00
330	0.08	0.00	-0.04	-0.07	-9.81	5.67	0.00

8x2 1/2" Pipe Mount - Elevation 138 - From Leg A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.02	0.00	0.00	-0.02	-3.12	0.00	0.00
30	0.02	0.01	0.01	-0.02	-2.74	-1.42	-0.07
60	0.01	0.02	0.02	-0.01	-1.70	-2.47	-0.12
90	0.00	0.02	0.02	0.00	-0.28	-2.85	-0.14
120	0.01	0.02	0.02	0.01	1.15	-2.47	-0.12
150	0.02	0.01	0.01	0.02	2.19	-1.42	-0.07
180	0.02	0.00	0.00	0.02	2.57	0.00	0.00
210	0.02	0.01	-0.01	0.02	2.19	1.42	0.07
240	0.01	0.02	-0.02	0.01	1.15	2.47	0.12
270	0.00	0.02	-0.02	0.00	-0.28	2.85	0.14
300	0.01	0.02	-0.02	-0.01	-1.70	2.47	0.12
330	0.02	0.01	-0.01	-0.02	-2.74	1.42	0.07

8x2 1/2" Pipe Mount - Elevation 138 - From Leg B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.01	0.02	0.00	-0.02	-2.71	-0.24	0.12
30	0.00	0.02	0.01	-0.02	-2.33	-1.66	0.14
60	0.01	0.02	0.02	-0.01	-1.29	-2.71	0.12
90	0.02	0.01	0.02	0.00	0.14	-3.09	0.07
120	0.02	0.00	0.02	0.01	1.56	-2.71	0.00
150	0.02	0.01	0.01	0.02	2.60	-1.66	-0.07
180	0.01	0.02	0.00	0.02	2.99	-0.24	-0.12
210	0.00	0.02	-0.01	0.02	2.60	1.19	-0.14
240	0.01	0.02	-0.02	0.01	1.56	2.23	-0.12
270	0.02	0.01	-0.02	0.00	0.14	2.61	-0.07
300	0.02	0.00	-0.02	-0.01	-1.29	2.23	0.00
330	0.02	0.01	-0.01	-0.02	-2.33	1.19	0.07

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8x2 1/2" Pipe Mount - Elevation 138 - From Leg C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.01	0.02	0.00	-0.02	-2.71	0.24	-0.12
30	0.02	0.01	0.01	-0.02	-2.33	-1.19	-0.07
60	0.02	0.00	0.02	-0.01	-1.29	-2.23	0.00
90	0.02	0.01	0.02	0.00	0.14	-2.61	0.07
120	0.01	0.02	0.02	0.01	1.56	-2.23	0.12
150	0.00	0.02	0.01	0.02	2.60	-1.19	0.14
180	0.01	0.02	0.00	0.02	2.99	0.24	0.12
210	0.02	0.01	-0.01	0.02	2.60	1.66	0.07
240	0.02	0.00	-0.02	0.01	1.56	2.71	0.00
270	0.02	0.01	-0.02	0.00	0.14	3.09	-0.07
300	0.01	0.02	-0.02	-0.01	-1.29	2.71	-0.12
330	0.00	0.02	-0.01	-0.02	-2.33	1.66	-0.14

(2) L2.5x2.5x1/4 x 6.5' Mount Reinf - Elevation 138 - From Leg A							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.05	0.00	0.00	-0.05	-7.13	0.00	0.00
30	0.04	0.00	0.00	-0.04	-6.23	-0.01	-0.00
60	0.02	0.00	0.00	-0.02	-3.77	-0.02	-0.00
90	0.00	0.00	0.00	0.00	-0.41	-0.02	-0.00
120	0.02	0.00	0.00	0.02	2.94	-0.02	-0.00
150	0.04	0.00	0.00	0.04	5.40	-0.01	-0.00
180	0.05	0.00	0.00	0.05	6.30	0.00	0.00
210	0.04	0.00	-0.00	0.04	5.40	0.01	0.00
240	0.02	0.00	-0.00	0.02	2.94	0.02	0.00
270	0.00	0.00	-0.00	0.00	-0.41	0.02	0.00
300	0.02	0.00	-0.00	-0.02	-3.77	0.02	0.00
330	0.04	0.00	-0.00	-0.04	-6.23	0.01	0.00

(2) L2.5x2.5x1/4 x 6.5' Mount Reinf - Elevation 138 - From Leg B							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.02	0.00	-0.02	-0.01	-1.49	2.54	0.00
30	0.00	0.00	0.00	-0.00	0.19	-0.37	0.00
60	0.02	0.00	0.02	0.01	1.87	-3.28	0.00
90	0.04	0.00	0.04	0.02	3.10	-5.40	0.00
120	0.05	0.00	0.04	0.02	3.56	-6.17	0.00
150	0.04	0.00	0.04	0.02	3.12	-5.39	-0.00
180	0.02	0.00	0.02	0.01	1.90	-3.25	-0.00
210	0.00	0.00	-0.00	0.00	0.23	-0.35	-0.00
240	0.02	0.00	-0.02	-0.01	-1.45	2.56	-0.00
270	0.04	0.00	-0.04	-0.02	-2.69	4.68	-0.00
300	0.05	0.00	-0.04	-0.02	-3.15	5.46	0.00
330	0.04	0.00	-0.04	-0.02	-2.71	4.67	0.00

(2) L2.5x2.5x1/4 x 6.5' Mount Reinf - Elevation 138 - From Leg C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.02	0.00	0.02	-0.01	-1.49	-2.54	-0.00
30	0.04	0.00	0.04	-0.02	-2.71	-4.67	-0.00

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(2) L2.5x2.5x1/4 x 6.5' Mount Reinf - Elevation 138 - From Leg C							
Wind Azimuth °	F_a K	F_s K	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
60	0.05	0.00	0.04	-0.02	-3.15	-5.46	0.00
90	0.04	0.00	0.04	-0.02	-2.69	-4.68	0.00
120	0.02	0.00	0.02	-0.01	-1.45	-2.56	0.00
150	0.00	0.00	0.00	0.00	0.23	0.35	0.00
180	0.02	0.00	-0.02	0.01	1.90	3.25	0.00
210	0.04	0.00	-0.04	0.02	3.12	5.39	0.00
240	0.05	0.00	-0.04	0.02	3.56	6.17	0.00
270	0.04	0.00	-0.04	0.02	3.10	5.40	-0.00
300	0.02	0.00	-0.02	0.01	1.87	3.28	-0.00
330	0.00	0.00	-0.00	-0.00	0.19	0.37	-0.00

Discrete Appurtenance Totals - Service

Wind Azimuth °	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.00	-1.90	-224.45	-0.42	-0.09
30	0.95	-1.64	-194.71	-112.58	-0.18
60	1.65	-0.95	-112.95	-194.56	-0.22
90	1.90	-0.00	-1.08	-224.37	-0.20
120	1.64	0.94	110.92	-194.04	-0.13
150	0.95	1.64	193.06	-111.69	-0.02
180	-0.00	1.90	223.31	0.61	0.09
210	-0.95	1.64	193.57	112.78	0.18
240	-1.65	0.95	111.81	194.75	0.22
270	-1.90	0.00	-0.06	224.57	0.20
300	-1.64	-0.94	-112.06	194.24	0.13
330	-0.95	-1.64	-194.20	111.89	0.02

Dish Pressures - No Ice

Elevation ft	Dish Description	Aiming Azimuth °	Weight K	Offset _x ft	Offset _z ft	K_z	A_A ft ²	q_z psf
120.00	6' dish with radome	120.0000	0.25	4.23	2.44	1.315	28.27	52
83.00	4' dish with radome	0.0000	0.15	0.00	-5.77	1.217	12.57	48
	Sum		0.40					
	Weight:							

Dish Vectors - No Ice

6' dish with radome - Elevation 120 - From Leg B											
Wind Azimuth °	C_A	C_S	C_M	F_A K	F_S K	F_M kip-ft	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
0	0.002210	0.000000	0.000000	1.08	0.00	0.00	0.00	-1.08	-128.60	-1.06	4.56
30	0.002210	0.000000	0.000000	1.08	0.00	0.00	0.54	-0.93	-111.29	-65.66	5.26
60	0.002210	0.000000	0.000000	1.08	0.00	0.00	0.93	-0.54	-64.00	-112.96	4.56
90	0.002210	0.000000	0.000000	1.08	0.00	0.00	1.08	0.00	0.61	-130.27	2.63
120	0.002210	0.000000	0.000000	1.08	0.00	0.00	0.93	0.54	65.22	-112.96	0.00

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6' dish with radome - Elevation 120 - From Leg B											
Wind Azimuth °	C _A	C _S	C _M	F _A	F _S	F _M	V _x	V _z	OTM _x	OTM _z	Torque
				K	K	kip-ft	K	K	kip-ft	kip-ft	kip-ft
150	0.002210	0.000000	0.000000	1.08	0.00	0.00	0.54	0.93	112.51	-65.66	-2.63
180	0.002210	0.000000	0.000000	1.08	0.00	0.00	0.00	1.08	129.82	-1.06	-4.56
210	0.002210	0.000000	0.000000	1.08	0.00	0.00	-0.54	0.93	112.51	63.55	-5.26
240	0.002210	0.000000	0.000000	1.08	0.00	0.00	-0.93	0.54	65.22	110.84	-4.56
270	0.002210	0.000000	0.000000	1.08	0.00	0.00	-1.08	0.00	0.61	128.15	-2.63
300	0.002210	0.000000	0.000000	1.08	0.00	0.00	-0.93	-0.54	-64.00	110.84	0.00
330	0.002210	0.000000	0.000000	1.08	0.00	0.00	-0.54	-0.93	-111.29	63.55	2.63

4' dish with radome - Elevation 83 - From Leg A											
Wind Azimuth °	C _A	C _S	C _M	F _A	F _S	F _M	V _x	V _z	OTM _x	OTM _z	Torque
				K	K	kip-ft	K	K	kip-ft	kip-ft	kip-ft
0	0.002210	0.000000	0.000000	0.44	0.00	0.00	0.00	-0.44	-37.64	0.00	0.00
30	0.002210	0.000000	0.000000	0.44	0.00	0.00	0.22	-0.38	-32.71	-18.39	-1.28
60	0.002210	0.000000	0.000000	0.44	0.00	0.00	0.38	-0.22	-19.25	-31.84	-2.21
90	0.002210	0.000000	0.000000	0.44	0.00	0.00	0.44	0.00	-0.87	-36.77	-2.56
120	0.002210	0.000000	0.000000	0.44	0.00	0.00	0.38	0.22	17.52	-31.84	-2.21
150	0.002210	0.000000	0.000000	0.44	0.00	0.00	0.22	0.38	30.98	-18.39	-1.28
180	0.002210	0.000000	0.000000	0.44	0.00	0.00	0.00	0.44	35.91	0.00	0.00
210	0.002210	0.000000	0.000000	0.44	0.00	0.00	-0.22	0.38	30.98	18.39	1.28
240	0.002210	0.000000	0.000000	0.44	0.00	0.00	-0.38	0.22	17.52	31.84	2.21
270	0.002210	0.000000	0.000000	0.44	0.00	0.00	-0.44	0.00	-0.87	36.77	2.56
300	0.002210	0.000000	0.000000	0.44	0.00	0.00	-0.38	-0.22	-19.25	31.84	2.21
330	0.002210	0.000000	0.000000	0.44	0.00	0.00	-0.22	-0.38	-32.71	18.39	1.28

Dish Totals - No Ice

Wind Azimuth °	V _x	V _z	OTM _x	OTM _z	Torque
	K	K	kip-ft	kip-ft	kip-ft
0	0.00	-1.52	-166.24	-1.06	4.56
30	0.76	-1.32	-144.00	-84.05	3.98
60	1.32	-0.76	-83.25	-144.80	2.34
90	1.52	0.00	-0.25	-167.04	0.07
120	1.32	0.76	82.74	-144.80	-2.21
150	0.76	1.32	143.49	-84.05	-3.91
180	0.00	1.52	165.73	-1.06	-4.56
210	-0.76	1.32	143.49	81.93	-3.98
240	-1.32	0.76	82.74	142.69	-2.34
270	-1.52	0.00	-0.25	164.92	-0.07
300	-1.32	-0.76	-83.25	142.69	2.21
330	-0.76	-1.32	-144.00	81.93	3.91

Dish Pressures - With Ice

Elevation ft	Dish Description	Aiming Azimuth °	Weight K	Offset _x ft	Offset _z ft	K _z	A _A ft ²	q _z psf	t _z in
120.00	6' dish with radome	120.0000	0.59	4.23	2.44	1.315	30.08	7	1.1378
83.00	4' dish with radome	0.0000	0.29	0.00	-5.77	1.217	13.72	7	1.0966
	Sum		0.88						
	Weight:								

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Dish Vectors - With Ice

6' dish with radome - Elevation 120 - From Leg B											
Wind Azimuth °	C _A	C _S	C _M	F _A	F _S	F _M	V _x	V _z	OTM _x	OTM _z	Torque
				K	K	kip-ft	K	K	kip-ft	kip-ft	kip-ft
0	0.002210	0.000000	0.000000	0.16	0.00	0.00	0.00	-0.16	-17.41	-2.50	0.67
30	0.002210	0.000000	0.000000	0.16	0.00	0.00	0.08	-0.14	-14.89	-11.93	0.77
60	0.002210	0.000000	0.000000	0.16	0.00	0.00	0.14	-0.08	-7.98	-18.83	0.67
90	0.002210	0.000000	0.000000	0.16	0.00	0.00	0.16	0.00	1.44	-21.36	0.38
120	0.002210	0.000000	0.000000	0.16	0.00	0.00	0.14	0.08	10.87	-18.83	0.00
150	0.002210	0.000000	0.000000	0.16	0.00	0.00	0.08	0.14	17.78	-11.93	-0.38
180	0.002210	0.000000	0.000000	0.16	0.00	0.00	0.00	0.16	20.30	-2.50	-0.67
210	0.002210	0.000000	0.000000	0.16	0.00	0.00	-0.08	0.14	17.78	6.93	-0.77
240	0.002210	0.000000	0.000000	0.16	0.00	0.00	-0.14	0.08	10.87	13.83	-0.67
270	0.002210	0.000000	0.000000	0.16	0.00	0.00	-0.16	0.00	1.44	16.36	-0.38
300	0.002210	0.000000	0.000000	0.16	0.00	0.00	-0.14	-0.08	-7.98	13.83	0.00
330	0.002210	0.000000	0.000000	0.16	0.00	0.00	-0.08	-0.14	-14.89	6.93	0.38

4' dish with radome - Elevation 83 - From Leg A											
Wind Azimuth °	C _A	C _S	C _M	F _A	F _S	F _M	V _x	V _z	OTM _x	OTM _z	Torque
				K	K	kip-ft	K	K	kip-ft	kip-ft	kip-ft
0	0.002210	0.000000	0.000000	0.07	0.00	0.00	0.00	-0.07	-7.20	0.00	0.00
30	0.002210	0.000000	0.000000	0.07	0.00	0.00	0.03	-0.06	-6.46	-2.75	-0.19
60	0.002210	0.000000	0.000000	0.07	0.00	0.00	0.06	-0.03	-4.45	-4.77	-0.33
90	0.002210	0.000000	0.000000	0.07	0.00	0.00	0.07	0.00	-1.69	-5.51	-0.38
120	0.002210	0.000000	0.000000	0.07	0.00	0.00	0.06	0.03	1.06	-4.77	-0.33
150	0.002210	0.000000	0.000000	0.07	0.00	0.00	0.03	0.06	3.08	-2.75	-0.19
180	0.002210	0.000000	0.000000	0.07	0.00	0.00	0.00	0.07	3.81	0.00	0.00
210	0.002210	0.000000	0.000000	0.07	0.00	0.00	-0.03	0.06	3.08	2.75	0.19
240	0.002210	0.000000	0.000000	0.07	0.00	0.00	-0.06	0.03	1.06	4.77	0.33
270	0.002210	0.000000	0.000000	0.07	0.00	0.00	-0.07	0.00	-1.69	5.51	0.38
300	0.002210	0.000000	0.000000	0.07	0.00	0.00	-0.06	-0.03	-4.45	4.77	0.33
330	0.002210	0.000000	0.000000	0.07	0.00	0.00	-0.03	-0.06	-6.46	2.75	0.19

Dish Totals - With Ice

Wind Azimuth °	V _x	V _z	OTM _x	OTM _z	Torque
	K	K	kip-ft	kip-ft	kip-ft
0	0.00	-0.22	-24.61	-2.50	0.67
30	0.11	-0.19	-21.35	-14.68	0.58
60	0.19	-0.11	-12.43	-23.60	0.33
90	0.22	0.00	-0.25	-26.87	0.00
120	0.19	0.11	11.93	-23.60	-0.33
150	0.11	0.19	20.85	-14.68	-0.58
180	0.00	0.22	24.12	-2.50	-0.67
210	-0.11	0.19	20.85	9.68	-0.58
240	-0.19	0.11	11.93	18.60	-0.33
270	-0.22	0.00	-0.25	21.86	-0.00
300	-0.19	-0.11	-12.43	18.60	0.33
330	-0.11	-0.19	-21.35	9.68	0.58

Dish Pressures - Service

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Elevation ft	Dish Description	Aiming Azimuth °	Weight K	Offset _x ft	Offset _z ft	K _z	A _A ft ²	q _z psf
120.00	6' dish with radome	120.0000	0.25	4.23	2.44	1.315	28.27	10
83.00	4' dish with radome	0.0000	0.15	0.00	-5.77	1.217	12.57	9
	Sum		0.40					
	Weight:							

Dish Vectors - Service

6' dish with radome - Elevation 120 - From Leg B											
Wind Azimuth °	C _A	C _S	C _M	F _A	F _S	F _M	V _x	V _z	OTM _x	OTM _z	Torque
				K	K	kip-ft	K	K	kip-ft	kip-ft	kip-ft
0	0.002210	0.000000	0.000000	0.21	0.00	0.00	0.00	-0.21	-24.91	-1.06	0.90
30	0.002210	0.000000	0.000000	0.21	0.00	0.00	0.11	-0.18	-21.49	-13.82	1.04
60	0.002210	0.000000	0.000000	0.21	0.00	0.00	0.18	-0.11	-12.15	-23.16	0.90
90	0.002210	0.000000	0.000000	0.21	0.00	0.00	0.21	0.00	0.61	-26.58	0.52
120	0.002210	0.000000	0.000000	0.21	0.00	0.00	0.18	0.11	13.37	-23.16	0.00
150	0.002210	0.000000	0.000000	0.21	0.00	0.00	0.11	0.18	22.71	-13.82	-0.52
180	0.002210	0.000000	0.000000	0.21	0.00	0.00	0.00	0.21	26.13	-1.06	-0.90
210	0.002210	0.000000	0.000000	0.21	0.00	0.00	-0.11	0.18	22.71	11.70	-1.04
240	0.002210	0.000000	0.000000	0.21	0.00	0.00	-0.18	0.11	13.37	21.05	-0.90
270	0.002210	0.000000	0.000000	0.21	0.00	0.00	-0.21	0.00	0.61	24.47	-0.52
300	0.002210	0.000000	0.000000	0.21	0.00	0.00	-0.18	-0.11	-12.15	21.05	0.00
330	0.002210	0.000000	0.000000	0.21	0.00	0.00	-0.11	-0.18	-21.49	11.70	0.52

4' dish with radome - Elevation 83 - From Leg A											
Wind Azimuth °	C _A	C _S	C _M	F _A	F _S	F _M	V _x	V _z	OTM _x	OTM _z	Torque
				K	K	kip-ft	K	K	kip-ft	kip-ft	kip-ft
0	0.002210	0.000000	0.000000	0.09	0.00	0.00	0.00	-0.09	-8.13	0.00	0.00
30	0.002210	0.000000	0.000000	0.09	0.00	0.00	0.04	-0.08	-7.16	-3.63	-0.25
60	0.002210	0.000000	0.000000	0.09	0.00	0.00	0.08	-0.04	-4.50	-6.29	-0.44
90	0.002210	0.000000	0.000000	0.09	0.00	0.00	0.09	0.00	-0.87	-7.26	-0.50
120	0.002210	0.000000	0.000000	0.09	0.00	0.00	0.08	0.04	2.77	-6.29	-0.44
150	0.002210	0.000000	0.000000	0.09	0.00	0.00	0.04	0.08	5.42	-3.63	-0.25
180	0.002210	0.000000	0.000000	0.09	0.00	0.00	0.00	0.09	6.40	0.00	0.00
210	0.002210	0.000000	0.000000	0.09	0.00	0.00	-0.04	0.08	5.42	3.63	0.25
240	0.002210	0.000000	0.000000	0.09	0.00	0.00	-0.08	0.04	2.77	6.29	0.44
270	0.002210	0.000000	0.000000	0.09	0.00	0.00	-0.09	0.00	-0.87	7.26	0.50
300	0.002210	0.000000	0.000000	0.09	0.00	0.00	-0.08	-0.04	-4.50	6.29	0.44
330	0.002210	0.000000	0.000000	0.09	0.00	0.00	-0.04	-0.08	-7.16	3.63	0.25

Dish Totals - Service

Wind Azimuth °	V _x	V _z	OTM _x	OTM _z	Torque
	K	K	kip-ft	kip-ft	kip-ft
0	0.00	-0.30	-33.04	-1.06	0.90
30	0.15	-0.26	-28.65	-17.45	0.79
60	0.26	-0.15	-16.65	-29.45	0.46
90	0.30	0.00	-0.25	-33.84	0.01
120	0.26	0.15	16.14	-29.45	-0.44
150	0.15	0.26	28.14	-17.45	-0.77
180	0.00	0.30	32.53	-1.06	-0.90
210	-0.15	0.26	28.14	15.34	-0.79
240	-0.26	0.15	16.14	27.34	-0.46
270	-0.30	0.00	-0.25	31.73	-0.01

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Wind Azimuth °	V_x K	V_z K	OTM_x kip-ft	OTM_z kip-ft	Torque kip-ft
300	-0.26	-0.15	-16.65	27.34	0.44
330	-0.15	-0.26	-28.65	15.34	0.77

Force Totals

Load Case	Vertical Forces K	Sum of Forces X K	Sum of Forces Z K	Sum of Overturning Moments, M_x kip-ft	Sum of Overturning Moments, M_z kip-ft	Sum of Torques kip-ft
Leg Weight	14.44					
Bracing Weight	4.52					
Total Member Self-Weight	18.96			-17.82	-6.84	
Total Weight	32.24			-17.82	-6.84	
Wind 0 deg - No Ice		0.02	-36.03	-2894.80	-9.44	17.80
Wind 30 deg - No Ice		17.76	-30.73	-2475.63	-1428.86	5.84
Wind 60 deg - No Ice		31.78	-18.35	-1483.74	-2545.87	-15.27
Wind 90 deg - No Ice		38.30	-0.02	-20.43	-3064.03	-33.29
Wind 120 deg - No Ice		33.64	19.40	1527.24	-2688.18	-35.51
Wind 150 deg - No Ice		17.91	31.01	2507.32	-1464.73	-25.75
Wind 180 deg - No Ice		-0.02	34.64	2796.47	-4.24	-17.80
Wind 210 deg - No Ice		-17.76	30.73	2439.98	1415.18	-5.84
Wind 240 deg - No Ice		-32.99	19.05	1479.43	2586.48	15.27
Wind 270 deg - No Ice		-38.30	0.02	-15.22	3050.36	33.29
Wind 300 deg - No Ice		-32.44	-18.71	-1531.55	2620.22	35.51
Wind 330 deg - No Ice		-17.91	-31.01	-2542.97	1451.05	25.75
Member Ice	11.60					
Total Weight Ice	65.74			-45.48	-22.37	
Wind 0 deg - Ice		0.00	-8.26	-721.75	-22.75	5.10
Wind 30 deg - Ice		4.15	-7.18	-631.63	-361.21	2.95
Wind 60 deg - Ice		7.38	-4.26	-392.13	-622.77	-1.19
Wind 90 deg - Ice		8.67	-0.00	-45.86	-729.26	-5.51
Wind 120 deg - Ice		7.48	4.32	307.25	-634.07	-7.16
Wind 150 deg - Ice		4.12	7.14	545.54	-363.60	-6.39
Wind 180 deg - Ice		-0.00	8.09	623.36	-21.99	-5.10
Wind 210 deg - Ice		-4.15	7.18	540.66	316.48	-2.95
Wind 240 deg - Ice		-7.52	4.34	304.86	584.46	1.19
Wind 270 deg - Ice		-8.67	0.00	-45.11	684.53	5.51
Wind 300 deg - Ice		-7.34	-4.23	-394.51	582.92	7.16
Wind 330 deg - Ice		-4.12	-7.14	-636.51	318.86	6.39
Total Weight	32.24			-17.82	-6.84	
Wind 0 deg - Service		0.00	-7.16	-571.53	-1.47	3.52
Wind 30 deg - Service		3.53	-6.11	-488.41	-283.06	1.15
Wind 60 deg - Service		6.32	-3.65	-291.60	-504.59	-3.02
Wind 90 deg - Service		7.61	-0.00	-1.34	-607.27	-6.58
Wind 120 deg - Service		6.68	3.85	305.58	-532.70	-7.02
Wind 150 deg - Service		3.56	6.16	500.06	-290.15	-5.09
Wind 180 deg - Service		-0.00	6.89	557.50	-0.45	-3.52
Wind 210 deg - Service		-3.53	6.11	486.76	281.14	-1.15
Wind 240 deg - Service		-6.55	3.78	296.14	513.39	3.02
Wind 270 deg - Service		-7.61	0.00	-0.31	605.35	6.58
Wind 300 deg - Service		-6.44	-3.72	-301.04	520.06	7.02
Wind 330 deg - Service		-3.56	-6.16	-501.71	288.23	5.09

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Load Combinations

<i>Comb. No.</i>	<i>Description</i>
1	Dead Only
2	1.2 Dead+1.0 Wind 0 deg - No Ice
3	0.9 Dead+1.0 Wind 0 deg - No Ice
4	1.2 Dead+1.0 Wind 30 deg - No Ice
5	0.9 Dead+1.0 Wind 30 deg - No Ice
6	1.2 Dead+1.0 Wind 60 deg - No Ice
7	0.9 Dead+1.0 Wind 60 deg - No Ice
8	1.2 Dead+1.0 Wind 90 deg - No Ice
9	0.9 Dead+1.0 Wind 90 deg - No Ice
10	1.2 Dead+1.0 Wind 120 deg - No Ice
11	0.9 Dead+1.0 Wind 120 deg - No Ice
12	1.2 Dead+1.0 Wind 150 deg - No Ice
13	0.9 Dead+1.0 Wind 150 deg - No Ice
14	1.2 Dead+1.0 Wind 180 deg - No Ice
15	0.9 Dead+1.0 Wind 180 deg - No Ice
16	1.2 Dead+1.0 Wind 210 deg - No Ice
17	0.9 Dead+1.0 Wind 210 deg - No Ice
18	1.2 Dead+1.0 Wind 240 deg - No Ice
19	0.9 Dead+1.0 Wind 240 deg - No Ice
20	1.2 Dead+1.0 Wind 270 deg - No Ice
21	0.9 Dead+1.0 Wind 270 deg - No Ice
22	1.2 Dead+1.0 Wind 300 deg - No Ice
23	0.9 Dead+1.0 Wind 300 deg - No Ice
24	1.2 Dead+1.0 Wind 330 deg - No Ice
25	0.9 Dead+1.0 Wind 330 deg - No Ice
26	1.2 Dead+1.0 Ice+1.0 Temp
27	1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp
28	1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp
29	1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp
30	1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp
31	1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp
32	1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp
33	1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp
34	1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp
35	1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp
36	1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp
37	1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp
38	1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp
39	Dead+Wind 0 deg - Service
40	Dead+Wind 30 deg - Service
41	Dead+Wind 60 deg - Service
42	Dead+Wind 90 deg - Service
43	Dead+Wind 120 deg - Service
44	Dead+Wind 150 deg - Service
45	Dead+Wind 180 deg - Service
46	Dead+Wind 210 deg - Service
47	Dead+Wind 240 deg - Service
48	Dead+Wind 270 deg - Service
49	Dead+Wind 300 deg - Service
50	Dead+Wind 330 deg - Service

Maximum Member Forces

<i>Section No.</i>	<i>Elevation ft</i>	<i>Component Type</i>	<i>Condition</i>	<i>Gov. Load Comb.</i>	<i>Axial K</i>	<i>Major Axis Moment kip-ft</i>	<i>Minor Axis Moment kip-ft</i>
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Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T1	140 - 120	Leg	Max Tension	23	24.74	-0.43	-0.30
			Max. Compression	10	-27.64	-0.48	-0.35
			Max. Mx	8	-1.42	1.01	0.00
			Max. My	14	-1.75	0.02	1.01
			Max. Vy	20	-2.52	0.48	-0.18
			Max. Vx	2	-2.81	-0.04	0.55
		Diagonal	Max Tension	24	3.15	0.00	0.00
			Max. Compression	12	-3.15	0.00	0.00
			Max. Mx	38	0.78	-0.01	0.00
			Max. My	4	-2.44	-0.00	-0.00
			Max. Vy	38	0.01	-0.01	0.00
			Max. Vx	4	-0.00	0.00	0.00
		Top Girt	Max Tension	7	0.20	0.00	0.00
			Max. Compression	18	-0.21	0.00	0.00
			Max. Mx	33	0.02	0.02	0.00
			Max. My	10	0.09	0.00	-0.00
			Max. Vy	33	-0.01	0.00	0.00
			Max. Vx	10	0.00	0.00	0.00
		Bottom Girt	Max Tension	22	1.07	0.00	0.00
			Max. Compression	11	-1.07	0.00	0.00
			Max. Mx	26	0.03	0.02	0.00
			Max. My	10	0.59	0.00	-0.00
			Max. Vy	26	-0.01	0.00	0.00
			Max. Vx	10	0.00	0.00	0.00
T2	120 - 100	Leg	Max Tension	23	68.87	-0.16	-0.10
			Max. Compression	10	-74.15	-1.79	-1.28
			Max. Mx	18	-69.54	1.81	-1.00
			Max. My	2	-70.16	0.19	2.06
			Max. Vy	18	-5.33	1.81	-1.00
			Max. Vx	2	-5.98	0.19	2.06
		Diagonal	Max Tension	24	5.06	0.00	0.00
			Max. Compression	24	-5.13	0.00	0.00
			Max. Mx	28	0.57	-0.01	0.00
			Max. My	24	-4.72	-0.00	0.00
			Max. Vy	38	0.01	-0.01	0.00
			Max. Vx	24	-0.00	-0.00	0.00
		Top Girt	Max Tension	10	1.22	0.00	0.00
			Max. Compression	22	-1.20	0.00	0.00
			Max. Mx	26	0.01	0.02	0.00
			Max. My	24	-0.07	0.00	0.00
			Max. Vy	26	-0.01	0.00	0.00
			Max. Vx	24	-0.00	0.00	0.00
		Bottom Girt	Max Tension	11	0.55	0.00	0.00
			Max. Compression	22	-0.67	0.00	0.00
			Max. Mx	26	-0.09	0.02	0.00
			Max. My	22	0.25	0.00	0.00
			Max. Vy	26	-0.01	0.00	0.00
			Max. Vx	22	-0.00	0.00	0.00
T3	100 - 80	Leg	Max Tension	23	102.94	-0.22	-0.18
			Max. Compression	10	-111.97	0.29	0.18
			Max. Mx	10	-79.95	2.19	0.21
			Max. My	12	-3.18	-0.05	1.61
			Max. Vy	22	-1.46	-2.13	-0.19
			Max. Vx	20	-1.21	0.02	-0.82
		Diagonal	Max Tension	12	6.51	0.00	0.00
			Max. Compression	12	-6.53	0.00	0.00
			Max. Mx	10	4.08	0.03	0.00
			Max. My	24	-6.25	-0.01	-0.02
			Max. Vy	29	0.02	0.02	-0.00
			Max. Vx	24	0.01	0.00	0.00
T4	80 - 60	Leg	Max Tension	23	141.12	-0.24	-0.08

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Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T5	60 - 40	Diagonal	Max. Compression	10	-153.65	0.23	0.06
			Max. Mx	14	106.55	-0.33	0.03
			Max. My	8	-6.85	-0.03	0.58
			Max. Vy	14	-0.08	-0.33	0.03
			Max. Vx	8	0.18	-0.03	0.58
			Max Tension	12	6.59	0.00	0.00
			Max. Compression	10	-6.70	0.00	0.00
			Max. Mx	27	0.75	0.04	-0.01
			Max. My	22	-6.23	-0.00	-0.01
			Max. Vy	29	0.03	0.04	-0.00
		Leg	Max. Vx	22	0.00	0.00	0.00
			Max Tension	23	175.48	-0.23	-0.06
			Max. Compression	10	-192.08	0.38	0.11
			Max. Mx	11	-189.75	0.38	0.11
			Max. My	8	-10.53	-0.00	0.43
			Max. Vy	14	0.08	-0.35	0.05
			Max. Vx	20	0.14	-0.00	-0.43
			Max Tension	10	6.82	0.00	0.00
			Max. Compression	10	-7.12	0.00	0.00
			Max. Mx	29	1.15	0.04	-0.00
T6	40 - 20	Leg	Max. My	22	-6.54	0.00	-0.01
			Max. Vy	29	0.03	0.04	-0.00
			Max. Vx	22	0.00	0.00	0.00
			Max Tension	23	207.33	-0.30	-0.06
			Max. Compression	10	-228.73	0.20	0.02
			Max. Mx	35	-66.17	0.70	0.00
			Max. My	8	-10.70	-0.00	0.43
			Max. Vy	33	-0.19	-0.48	0.01
		Diagonal	Max. Vx	20	-0.13	-0.00	-0.43
			Max Tension	10	7.38	0.00	0.00
			Max. Compression	10	-7.60	0.00	0.00
			Max. Mx	29	0.73	0.07	-0.01
			Max. My	10	-7.59	0.01	0.01
			Max. Vy	29	0.04	0.07	-0.01
			Max. Vx	22	0.00	0.00	0.00
			Max Tension	23	236.82	-0.31	-0.04
T7	20 - 0	Leg	Max. Compression	10	-263.33	-0.00	-0.00
			Max. Mx	35	-72.76	1.26	0.00
			Max. My	8	-14.16	-0.05	0.67
			Max. Vy	33	-0.36	-1.14	0.00
			Max. Vx	8	0.19	-0.05	0.67
			Max Tension	10	7.61	0.00	0.00
		Diagonal	Max. Compression	10	-8.13	0.00	0.00
			Max. Mx	29	0.07	0.10	0.01
			Max. My	22	-7.30	0.02	-0.02
			Max. Vy	29	0.05	0.10	0.01
			Max. Vx	22	0.00	0.00	0.00

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Leg C	Max. Vert	18	259.24	19.78	-12.15
	Max. H _x	18	259.24	19.78	-12.15
	Max. H _z	7	-233.87	-18.18	11.23
	Min. Vert	7	-233.87	-18.18	11.23

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<i>Location</i>	<i>Condition</i>	<i>Gov. Load Comb.</i>	<i>Vertical K</i>	<i>Horizontal, X K</i>	<i>Horizontal, Z K</i>
Leg B	Min. H _x	7	-233.87	-18.18	11.23
	Min. H _z	18	259.24	19.78	-12.15
	Max. Vert	10	268.72	-19.81	-13.10
	Max. H _x	23	-241.27	18.17	12.21
	Max. H _z	23	-241.27	18.17	12.21
	Min. Vert	23	-241.27	18.17	12.21
Leg A	Min. H _x	10	268.72	-19.81	-13.10
	Min. H _z	10	268.72	-19.81	-13.10
	Max. Vert	2	252.77	0.72	22.10
	Max. H _x	20	14.45	4.16	0.72
	Max. H _z	2	252.77	0.72	22.10
	Min. Vert	15	-221.72	-0.75	-20.14
	Min. H _x	9	11.22	-4.15	0.54
	Min. H _z	15	-221.72	-0.75	-20.14

Tower Mast Reaction Summary

<i>Load Combination</i>	<i>Vertical K</i>	<i>Shear_x K</i>	<i>Shear_z K</i>	<i>Overturning Moment, M_x kip-ft</i>	<i>Overturning Moment, M_z kip-ft</i>	<i>Torque kip-ft</i>
Dead Only	32.24	0.00	0.00	-17.82	-6.84	0.00
1.2 Dead+1.0 Wind 0 deg - No Ice	38.68	0.02	-36.03	-2908.32	-10.86	17.83
0.9 Dead+1.0 Wind 0 deg - No Ice	29.01	0.02	-36.03	-2900.45	-8.80	17.82
1.2 Dead+1.0 Wind 30 deg - No Ice	38.68	17.76	-30.73	-2487.68	-1435.13	5.83
0.9 Dead+1.0 Wind 30 deg - No Ice	29.01	17.76	-30.73	-2480.18	-1431.84	5.84
1.2 Dead+1.0 Wind 60 deg - No Ice	38.68	31.78	-18.35	-1492.40	-2555.96	-15.33
0.9 Dead+1.0 Wind 60 deg - No Ice	29.01	31.78	-18.35	-1485.76	-2551.70	-15.31
1.2 Dead+1.0 Wind 90 deg - No Ice	38.68	38.30	-0.02	-24.11	-3075.91	-33.38
0.9 Dead+1.0 Wind 90 deg - No Ice	29.01	38.30	-0.02	-18.74	-3071.21	-33.36
1.2 Dead+1.0 Wind 120 deg - No Ice	38.68	33.64	19.40	1528.85	-2698.81	-35.61
0.9 Dead+1.0 Wind 120 deg - No Ice	29.01	33.64	19.40	1532.90	-2694.43	-35.58
1.2 Dead+1.0 Wind 150 deg - No Ice	38.68	17.91	31.01	2512.43	-1471.24	-25.82
0.9 Dead+1.0 Wind 150 deg - No Ice	29.01	17.91	31.01	2515.60	-1467.90	-25.80
1.2 Dead+1.0 Wind 180 deg - No Ice	38.68	-0.02	34.64	2802.59	-5.68	-17.83
0.9 Dead+1.0 Wind 180 deg - No Ice	29.01	-0.02	34.64	2805.51	-3.61	-17.82
1.2 Dead+1.0 Wind 210 deg - No Ice	38.68	-17.76	30.73	2444.79	1418.63	-5.83
0.9 Dead+1.0 Wind 210 deg - No Ice	29.01	-17.76	30.73	2448.04	1419.47	-5.84
1.2 Dead+1.0 Wind 240 deg - No Ice	38.68	-32.99	19.05	1480.86	2593.91	15.33
0.9 Dead+1.0 Wind 240 deg - No Ice	29.01	-32.99	19.05	1484.96	2593.75	15.31

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Load Combination	Vertical K	Shear _x K	Shear _z K	Overturning Moment, M _x kip-ft	Overturning Moment, M _z kip-ft	Torque kip-ft
1.2 Dead+1.0 Wind 270 deg - No Ice	38.68	-38.30	0.02	-18.92	3059.44	33.38
0.9 Dead+1.0 Wind 270 deg - No Ice	29.01	-38.30	0.02	-13.54	3058.87	33.36
1.2 Dead+1.0 Wind 300 deg - No Ice	38.68	-32.44	-18.71	-1540.47	2627.88	35.61
0.9 Dead+1.0 Wind 300 deg - No Ice	29.01	-32.44	-18.71	-1533.77	2627.66	35.58
1.2 Dead+1.0 Wind 330 deg - No Ice	38.68	-17.91	-31.01	-2555.38	1454.70	25.82
0.9 Dead+1.0 Wind 330 deg - No Ice	29.01	-17.91	-31.01	-2547.80	1455.49	25.80
1.2 Dead+1.0 Ice+1.0 Temp	72.19	-0.00	0.00	-49.27	-23.85	-0.00
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	72.19	0.00	-8.26	-730.17	-24.26	5.12
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	72.19	4.15	-7.18	-639.43	-365.00	2.95
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	72.19	7.38	-4.26	-398.31	-628.30	-1.21
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	72.19	8.67	-0.00	-49.73	-735.52	-5.55
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	72.19	7.48	4.32	305.75	-639.72	-7.21
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	72.19	4.12	7.14	545.67	-367.45	-6.43
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	72.19	-0.00	8.09	624.01	-23.53	-5.12
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	72.19	-4.15	7.18	540.71	317.21	-2.95
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	72.19	-7.52	4.34	303.32	586.96	1.21
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	72.19	-8.67	0.00	-48.98	687.73	5.55
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	72.19	-7.34	-4.23	-400.74	585.48	7.21
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	72.19	-4.12	-7.14	-644.39	319.66	6.43
Dead+Wind 0 deg - Service	32.24	0.00	-7.16	-590.22	-7.37	3.52
Dead+Wind 30 deg - Service	32.24	3.53	-6.11	-506.85	-289.77	1.15
Dead+Wind 60 deg - Service	32.24	6.32	-3.65	-309.47	-511.93	-3.03
Dead+Wind 90 deg - Service	32.24	7.61	-0.00	-18.39	-614.90	-6.60
Dead+Wind 120 deg - Service	32.24	6.68	3.85	289.41	-540.13	-7.04
Dead+Wind 150 deg - Service	32.24	3.56	6.16	484.46	-296.89	-5.11
Dead+Wind 180 deg - Service	32.24	-0.00	6.89	542.07	-6.35	-3.52
Dead+Wind 210 deg - Service	32.24	-3.53	6.11	471.11	276.05	-1.15
Dead+Wind 240 deg - Service	32.24	-6.55	3.78	279.93	508.95	3.03
Dead+Wind 270 deg - Service	32.24	-7.61	0.00	-17.36	601.18	6.60
Dead+Wind 300 deg - Service	32.24	-6.44	-3.72	-318.95	515.64	7.04
Dead+Wind 330 deg - Service	32.24	-3.56	-6.16	-520.20	283.16	5.11

Solution Summary

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
1	0.00	-32.24	0.00	0.00	32.24	0.00	0.000%
2	0.02	-38.68	-36.03	-0.02	38.68	36.03	0.000%
3	0.02	-29.01	-36.03	-0.02	29.01	36.03	0.000%

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Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
4	17.76	-38.68	-30.73	-17.76	38.68	30.73	0.000%
5	17.76	-29.01	-30.73	-17.76	29.01	30.73	0.000%
6	31.78	-38.68	-18.35	-31.78	38.68	18.35	0.000%
7	31.78	-29.01	-18.35	-31.78	29.01	18.35	0.000%
8	38.30	-38.68	-0.02	-38.30	38.68	0.02	0.000%
9	38.30	-29.01	-0.02	-38.30	29.01	0.02	0.000%
10	33.64	-38.68	19.40	-33.64	38.68	-19.40	0.000%
11	33.64	-29.01	19.40	-33.64	29.01	-19.40	0.000%
12	17.91	-38.68	31.01	-17.91	38.68	-31.01	0.000%
13	17.91	-29.01	31.01	-17.91	29.01	-31.01	0.000%
14	-0.02	-38.68	34.64	0.02	38.68	-34.64	0.000%
15	-0.02	-29.01	34.64	0.02	29.01	-34.64	0.000%
16	-17.76	-38.68	30.73	17.76	38.68	-30.73	0.000%
17	-17.76	-29.01	30.73	17.76	29.01	-30.73	0.000%
18	-32.99	-38.68	19.05	32.99	38.68	-19.05	0.000%
19	-32.99	-29.01	19.05	32.99	29.01	-19.05	0.000%
20	-38.30	-38.68	0.02	38.30	38.68	-0.02	0.000%
21	-38.30	-29.01	0.02	38.30	29.01	-0.02	0.000%
22	-32.44	-38.68	-18.71	32.44	38.68	18.71	0.000%
23	-32.44	-29.01	-18.71	32.44	29.01	18.71	0.000%
24	-17.91	-38.68	-31.01	17.91	38.68	31.01	0.000%
25	-17.91	-29.01	-31.01	17.91	29.01	31.01	0.000%
26	0.00	-72.19	0.00	0.00	72.19	-0.00	0.000%
27	0.00	-72.19	-8.26	-0.00	72.19	8.26	0.000%
28	4.15	-72.19	-7.18	-4.15	72.19	7.18	0.000%
29	7.38	-72.19	-4.26	-7.38	72.19	4.26	0.000%
30	8.67	-72.19	-0.00	-8.67	72.19	0.00	0.000%
31	7.48	-72.19	4.32	-7.48	72.19	-4.32	0.000%
32	4.12	-72.19	7.14	-4.12	72.19	-7.14	0.000%
33	-0.00	-72.19	8.09	0.00	72.19	-8.09	0.000%
34	-4.15	-72.19	7.18	4.15	72.19	-7.18	0.000%
35	-7.52	-72.19	4.34	7.52	72.19	-4.34	0.000%
36	-8.67	-72.19	0.00	8.67	72.19	-0.00	0.000%
37	-7.34	-72.19	-4.23	7.34	72.19	4.23	0.000%
38	-4.12	-72.19	-7.14	4.12	72.19	7.14	0.000%
39	0.00	-32.24	-7.16	-0.00	32.24	7.16	0.000%
40	3.53	-32.24	-6.11	-3.53	32.24	6.11	0.000%
41	6.32	-32.24	-3.65	-6.32	32.24	3.65	0.000%
42	7.61	-32.24	-0.00	-7.61	32.24	0.00	0.000%
43	6.68	-32.24	3.85	-6.68	32.24	-3.85	0.000%
44	3.56	-32.24	6.16	-3.56	32.24	-6.16	0.000%
45	-0.00	-32.24	6.89	0.00	32.24	-6.89	0.000%
46	-3.53	-32.24	6.11	3.53	32.24	-6.11	0.000%
47	-6.55	-32.24	3.78	6.55	32.24	-3.78	0.000%
48	-7.61	-32.24	0.00	7.61	32.24	-0.00	0.000%
49	-6.44	-32.24	-3.72	6.44	32.24	3.72	0.000%
50	-3.56	-32.24	-6.16	3.56	32.24	6.16	0.000%

Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	4	0.00000001	0.00000001
2	Yes	4	0.00000001	0.00000001
3	Yes	4	0.00000001	0.00000001
4	Yes	4	0.00000001	0.00000001

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5	Yes	4	0.00000001	0.00000001
6	Yes	4	0.00000001	0.00000001
7	Yes	4	0.00000001	0.00000001
8	Yes	4	0.00000001	0.00000139
9	Yes	4	0.00000001	0.00000132
10	Yes	4	0.00000001	0.00000130
11	Yes	4	0.00000001	0.00000125
12	Yes	4	0.00000001	0.00000001
13	Yes	4	0.00000001	0.00000001
14	Yes	4	0.00000001	0.00000091
15	Yes	4	0.00000001	0.00000001
16	Yes	4	0.00000001	0.00000001
17	Yes	4	0.00000001	0.00000001
18	Yes	4	0.00000001	0.00000001
19	Yes	4	0.00000001	0.00000001
20	Yes	4	0.00000001	0.00000140
21	Yes	4	0.00000001	0.00000132
22	Yes	4	0.00000001	0.00000131
23	Yes	4	0.00000001	0.00000123
24	Yes	4	0.00000001	0.00000001
25	Yes	4	0.00000001	0.00000001
26	Yes	4	0.00000001	0.00000001
27	Yes	4	0.00000001	0.00000001
28	Yes	4	0.00000001	0.00000001
29	Yes	4	0.00000001	0.00000001
30	Yes	4	0.00000001	0.00000001
31	Yes	4	0.00000001	0.00000001
32	Yes	4	0.00000001	0.00000001
33	Yes	4	0.00000001	0.00000001
34	Yes	4	0.00000001	0.00000001
35	Yes	4	0.00000001	0.00000001
36	Yes	4	0.00000001	0.00000001
37	Yes	4	0.00000001	0.00000001
38	Yes	4	0.00000001	0.00000001
39	Yes	4	0.00000001	0.00000001
40	Yes	4	0.00000001	0.00000001
41	Yes	4	0.00000001	0.00000001
42	Yes	4	0.00000001	0.00000001
43	Yes	4	0.00000001	0.00000001
44	Yes	4	0.00000001	0.00000001
45	Yes	4	0.00000001	0.00000001
46	Yes	4	0.00000001	0.00000001
47	Yes	4	0.00000001	0.00000001
48	Yes	4	0.00000001	0.00000001
49	Yes	4	0.00000001	0.00000001
50	Yes	4	0.00000001	0.00000001

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Maximum Tower Deflections - Service Wind

<i>Section No.</i>	<i>Elevation ft</i>	<i>Horz. Deflection in</i>	<i>Gov. Load Comb.</i>	<i>Tilt °</i>	<i>Twist °</i>
T1	140 - 120	6.294	10	0.4060	0.2012
T2	120 - 100	4.592	10	0.3667	0.1825
T3	100 - 80	3.116	10	0.2836	0.1473
T4	80 - 60	1.998	10	0.2189	0.1145
T5	60 - 40	1.146	10	0.1560	0.0792
T6	40 - 20	0.541	10	0.0984	0.0474
T7	20 - 0	0.174	10	0.0462	0.0241

Critical Deflections and Radius of Curvature - Service Wind

<i>Elevation ft</i>	<i>Appurtenance</i>	<i>Gov. Load Comb.</i>	<i>Deflection in</i>	<i>Tilt °</i>	<i>Twist °</i>	<i>Radius of Curvature ft</i>
140.00	PD1142-2C	10	6.294	0.4060	0.2012	81502
138.00	(2) JAHH-65-R3B w/ SBS-2-2 Mount	10	6.120	0.4033	0.1998	81502
137.00	DB Spectra DS2C03F36D-D	10	6.033	0.4020	0.1991	81502
120.00	6' dish with radome	10	4.592	0.3667	0.1825	20586
98.00	HPA-65R-BUU-H6	10	2.989	0.2759	0.1438	12075
85.00	4'x4 1/2" Pipe Mount	10	2.248	0.2338	0.1227	17122
83.00	4' dish with radome	10	2.146	0.2278	0.1195	18257
81.00	4'x4 1/2" Pipe Mount	10	2.047	0.2219	0.1162	19306

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Bolt Design Data

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt K	Allowable Load per Bolt K	Ratio Load Allowable	Allowable Ratio	Criteria
T1	140	Leg	A325N	1.0000	4	6.18	54.52	0.113 ✓	1	Bolt Tension
T2	120	Leg	A325N	1.0000	6	11.48	54.52	0.211 ✓	1	Bolt Tension
T3	100	Leg	A325N	1.1250	6	17.16	68.69	0.250 ✓	1	Bolt Tension
		Diagonal	A325N	0.7500	1	6.51	9.24	0.704 ✓	1	Member Block Shear
T4	80	Leg	A325N	1.1250	6	23.52	68.69	0.342 ✓	1	Bolt Tension
		Diagonal	A325N	0.7500	1	6.59	8.97	0.735 ✓	1	Member Block Shear
T5	60	Leg	A325N	1.2500	6	29.25	87.22	0.335 ✓	1	Bolt Tension
		Diagonal	A325N	0.7500	1	6.82	8.97	0.760 ✓	1	Member Block Shear
T6	40	Leg	A325N	1.2500	6	34.55	87.22	0.396 ✓	1	Bolt Tension
		Diagonal	A325N	0.7500	1	7.38	11.96	0.617 ✓	1	Member Block Shear
T7	20	Leg	A449	1.2500	6	39.47	87.22	0.453 ✓	1	Bolt Tension
		Diagonal	A325N	0.7500	1	7.61	9.46	0.805 ✓	1	Member Bearing

Compression Checks

Leg Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	140 - 120	1 3/4	20.00	3.21	88.0 K=1.00	2.4053	-27.64	61.44	0.450 ¹ ✓
T2	120 - 100	2 1/2	20.00	3.21	61.6 K=1.00	4.9087	-74.15	167.37	0.443 ¹ ✓
T3	100 - 80	3 1/2	20.03	6.68	91.6 K=1.00	9.6211	-111.97	234.57	0.477 ¹ ✓
T4	80 - 60	3 3/4	20.03	6.68	85.4 K=1.00	11.0447	-153.65	291.42	0.527 ¹ ✓
T5	60 - 40	4	20.03	6.68	80.1 K=1.00	12.5664	-192.08	353.71	0.543 ¹ ✓
T6	40 - 20	4 1/4	20.03	6.68	75.4 K=1.00	14.1863	-228.73	421.28	0.543 ¹ ✓
T7	20 - 0	4 1/2	20.03	6.68	71.2 K=1.00	15.9043	-263.33	493.99	0.533 ¹ ✓

¹ P_u / φP_n controls

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Diagonal Design Data (Compression)

Section No.	Elevation <i>ft</i>	Size	<i>L</i> <i>ft</i>	<i>L_u</i> <i>ft</i>	<i>KL/r</i>	<i>A</i> <i>in²</i>	<i>P_u</i> <i>K</i>	ϕP_n <i>K</i>	Ratio $\frac{P_u}{\phi P_n}$
T1	140 - 120	3/4	5.94	2.88	166.1 K=0.90	0.4418	-3.15	3.62	0.870 ¹ ✓
T2	120 - 100	7/8	5.94	2.85	140.5 K=0.90	0.6013	-5.13	6.88	0.746 ¹ ✓
T3	100 - 80	L2x2x1/4	9.31	4.53	138.9 K=1.00	0.9380	-6.48	13.91	0.466 ¹ ✓
T4	80 - 60	L2 1/2x2 1/2x3/16	10.65	5.18	125.6 K=1.00	0.9020	-6.70	16.37	0.410 ¹ ✓
T5	60 - 40	L2 1/2x2 1/2x3/16	12.10	5.90	142.9 K=1.00	0.9020	-7.12	12.64	0.564 ¹ ✓
T6	40 - 20	L2 1/2x2 1/2x1/4	13.64	6.65	162.6 K=1.00	1.1900	-7.60	12.88	0.590 ¹ ✓
T7	20 - 0	L3x3x3/16	15.24	7.44	149.8 K=1.00	1.0900	-8.13	13.90	0.585 ¹ ✓

¹ $P_u / \phi P_n$ controls

Top Girt Design Data (Compression)

Section No.	Elevation <i>ft</i>	Size	<i>L</i> <i>ft</i>	<i>L_u</i> <i>ft</i>	<i>KL/r</i>	<i>A</i> <i>in²</i>	<i>P_u</i> <i>K</i>	ϕP_n <i>K</i>	Ratio $\frac{P_u}{\phi P_n}$
T1	140 - 120	3/4	5.00	4.85	217.5 K=0.70	0.4418	-0.21	2.11	0.100 ¹ ✓
T2	120 - 100	KL/R > 200 (C) - 5 7/8	5.00	4.79	184.0 K=0.70	0.6013	-1.28	4.01	0.320 ¹ ✓

¹ $P_u / \phi P_n$ controls

Bottom Girt Design Data (Compression)

Section No.	Elevation <i>ft</i>	Size	<i>L</i> <i>ft</i>	<i>L_u</i> <i>ft</i>	<i>KL/r</i>	<i>A</i> <i>in²</i>	<i>P_u</i> <i>K</i>	ϕP_n <i>K</i>	Ratio $\frac{P_u}{\phi P_n}$
T1	140 - 120	3/4	5.00	4.85	217.5 K=0.70	0.4418	-1.07	2.11	0.509 ¹ ✓
T2	120 - 100	KL/R > 200 (C) - 9 7/8	5.00	4.79	184.0 K=0.70	0.6013	-1.28	4.01	0.320 ¹ ✓

¹ $P_u / \phi P_n$ controls

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Tension Checks

Leg Design Data (Tension)

Section No.	Elevation <i>ft</i>	Size	<i>L</i> <i>ft</i>	<i>L_u</i> <i>ft</i>	<i>Kl/r</i>	<i>A</i> <i>in²</i>	<i>P_u</i> <i>K</i>	ϕP_n <i>K</i>	Ratio $\frac{P_u}{\phi P_n}$
T1	140 - 120	1 3/4	20.00	3.21	88.0	2.4053	24.74	108.24	0.229 ¹
T2	120 - 100	2 1/2	20.00	3.21	61.6	4.9087	68.87	220.89	0.312 ¹
T3	100 - 80	3 1/2	20.03	6.68	91.6	9.6211	102.94	432.95	0.238 ¹
T4	80 - 60	3 3/4	20.03	6.68	85.4	11.0447	141.12	497.01	0.284 ¹
T5	60 - 40	4	20.03	6.68	80.1	12.5664	175.48	565.49	0.310 ¹
T6	40 - 20	4 1/4	20.03	6.68	75.4	14.1863	207.33	638.38	0.325 ¹
T7	20 - 0	4 1/2	20.03	6.68	71.2	15.9043	236.82	715.69	0.331 ¹

¹ $P_u / \phi P_n$ controls

Diagonal Design Data (Tension)

Section No.	Elevation <i>ft</i>	Size	<i>L</i> <i>ft</i>	<i>L_u</i> <i>ft</i>	<i>Kl/r</i>	<i>A</i> <i>in²</i>	<i>P_u</i> <i>K</i>	ϕP_n <i>K</i>	Ratio $\frac{P_u}{\phi P_n}$
T1	140 - 120	3/4	5.94	2.88	184.6	0.4418	3.15	14.31	0.220 ¹
T2	120 - 100	7/8	5.94	2.85	156.2	0.6013	5.06	19.48	0.260 ¹
T3	100 - 80	L2x2x1/4	8.90	4.33	88.1	0.5394	6.51	23.47	0.277 ¹
T4	80 - 60	L2 1/2x2 1/2x3/16	9.74	4.74	75.2	0.5535	6.59	24.08	0.274 ¹
T5	60 - 40	L2 1/2x2 1/2x3/16	12.10	5.90	93.0	0.5535	6.82	24.08	0.283 ¹
T6	40 - 20	L2 1/2x2 1/2x1/4	13.64	6.65	105.9	0.7284	7.38	31.69	0.233 ¹
T7	20 - 0	L3x3x3/16	14.70	7.17	93.4	0.6945	7.61	30.21	0.252 ¹

¹ $P_u / \phi P_n$ controls

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	107 of 108
	Project	CT141_12840 Cheshire North 2 CT	Date	14:14:51 08/23/21
	Client	VzW; Site 468479	Designed by	M. Larson

Top Girt Design Data (Tension)

Section No.	Elevation <i>ft</i>	Size	<i>L</i> <i>ft</i>	<i>L_u</i> <i>ft</i>	<i>Kl/r</i>	<i>A</i> <i>in²</i>	<i>P_u</i> <i>K</i>	ϕP_n <i>K</i>	Ratio $\frac{P_u}{\phi P_n}$
T1	140 - 120	3/4	5.00	4.85	310.7	0.4418	0.20	14.31	0.014 ¹
T2	120 - 100	7/8	5.00	4.79	262.9	0.6013	1.28	19.48	0.066 ¹

¹ $P_u / \phi P_n$ controls

Bottom Girt Design Data (Tension)

Section No.	Elevation <i>ft</i>	Size	<i>L</i> <i>ft</i>	<i>L_u</i> <i>ft</i>	<i>Kl/r</i>	<i>A</i> <i>in²</i>	<i>P_u</i> <i>K</i>	ϕP_n <i>K</i>	Ratio $\frac{P_u}{\phi P_n}$
T1	140 - 120	3/4	5.00	4.85	310.7	0.4418	1.07	14.31	0.075 ¹
T2	120 - 100	7/8	5.00	4.79	262.9	0.6013	1.28	19.48	0.066 ¹

¹ $P_u / \phi P_n$ controls

Section Capacity Table

Section No.	Elevation <i>ft</i>	Component Type	Size	Critical Element	<i>P</i> <i>K</i>	ϕP_{allow} <i>K</i>	% Capacity	Pass Fail
T1	140 - 120	Leg	1 3/4	2	-27.64	61.44	45.0	Pass
T2	120 - 100	Leg	2 1/2	47	-74.15	167.37	44.3	Pass
T3	100 - 80	Leg	3 1/2	92	-111.97	234.57	47.7	Pass
T4	80 - 60	Leg	3 3/4	113	-153.65	291.42	52.7	Pass
T5	60 - 40	Leg	4	134	-192.08	353.71	54.3	Pass
T6	40 - 20	Leg	4 1/4	155	-228.73	421.28	54.3	Pass
T7	20 - 0	Leg	4 1/2	176	-263.33	493.99	53.3	Pass
T1	140 - 120	Diagonal	3/4	12	-3.15	3.62	87.0	Pass
T2	120 - 100	Diagonal	7/8	58	-5.13	6.88	74.6	Pass
T3	100 - 80	Diagonal	L2x2x1/4	96	-6.48	13.91	46.6	Pass
T4	80 - 60	Diagonal	L2 1/2x2 1/2x3/16	117	-6.70	16.37	70.4 (b)	Pass
T5	60 - 40	Diagonal	L2 1/2x2 1/2x3/16	138	-7.12	12.64	41.0	Pass
T6	40 - 20	Diagonal	L2 1/2x2 1/2x1/4	159	-7.60	12.88	73.5 (b)	Pass
T7	20 - 0	Diagonal	L3x3x3/16	180	-8.13	13.90	56.4	Pass
T1	140 - 120	Top Girt	3/4	5	-0.21	2.11	76.0 (b)	Pass
T2	120 - 100	Top Girt	7/8	49	-1.28	4.01	59.0	Pass
T1	140 - 120	Bottom Girt	3/4	9	-1.07	2.11	61.7 (b)	Pass
T2	120 - 100	Bottom Girt	7/8	52	-1.28	4.01	58.5	Pass

Summary

<i>tnxTower</i> <i>All-Points Technology Corp.</i> 567 Vauxhall St. Ext. Suite 311 Waterford, CT 06385 Phone: (860) 663-1697 FAX: (860) 663-0935	Job	140' Self-Supporting Tower	Page	108 of 108
	Project	CT141_12840 Cheshire North 2 CT	Date	14:14:51 08/23/21
	Client	VzW; Site 468479	Designed by	M. Larson

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
						Leg (T5)	54.3	Pass
						Diagonal (T1)	87.0	Pass
						Top Girt (T2)	32.0	Pass
						Bottom Girt (T1)	50.9	Pass
						Bolt Checks	80.5	Pass
						RATING =	87.0	Pass

Element Map

Section No.	Section Elevation ft	Component Type	Element List
T1	140.00-120.00	Leg	1-3
		Diagonal	10-45
		Top Girt	4-6
		Bottom Girt	7-9
T2	120.00-100.00	Leg	46-48
		Diagonal	55-90
		Top Girt	49-51
		Bottom Girt	52-54
T3	100.00-80.00	Leg	91-93
		Diagonal	94-111
T4	80.00-60.00	Leg	112-114
		Diagonal	115-132
T5	60.00-40.00	Leg	133-135
		Diagonal	136-153
T6	40.00-20.00	Leg	154-156
		Diagonal	157-174
T7	20.00-0.00	Leg	175-177
		Diagonal	178-195
			Total number of elements: 195

All-Points Technology Corp., P.C.

567 Vauxhall Street Extension - Suite 311
Waterford, CT 06385
(860) 663-1697

Client: **Verizon Wireless**
Job: **Cheshire, CT**
Calculated By: **M. Larson**

Site: **468479**
Job No.: **CT141_12840**
Date: **23-Aug-21**

Program assumes:

Mat is square in plan view.
Water table is below bottom of mat.
Unit weight of concrete = 82.6 pcf
Unit weight of soil = 62.6 pcf
Self-supporting tower with 3 piers

Information to be provided:

Pier is round or square in plan dimension ("R" or "S")	Shape =	R
OTM = Overturning Moment to be resisted	OTM =	3394.5 ft-kips
P = Dead load weight	P =	19 kips
H = Height from ground surface to top of mat (if buried)	H =	4.5 ft.
P _M = Projection of pier above mat	P _M =	5.0 ft.
y = Thickness of mat	y =	2.50 ft.
x = Width of mat	x =	30.00 ft.
d = Diameter of round pier	d =	4.0 ft.
s = Size of square pier	s =	0.0 ft.
S = Size of tension bars	S =	7
Mass of tower and appurtenances (below)		

Results:

<u>Component</u>	<u>Mass</u>	<u>Moment Arm</u>	<u>Moment Resist.</u>
Pier	4.7 kips	15 ft.	70.1 ft-kips
Overburden	267.9 kips	15 ft.	4018.6 ft-kips
Mat	167.3 kips	15 ft.	2509.0 ft-kips

Overturning Moment Resistance : 6882.64 ft-kips
Factor of Safety = 2.03
Concrete Quantity = 90.3 c.y.

SATISFACTORY



Maser Consulting Connecticut
2000 Midlantic Drive, Suite 100
Mt. Laurel, NJ 08054
856.797.0412
Greg.Dulnik@colliersengineering.com

Post-Modification Antenna Mount Analysis Report and PMI Requirements

Mount Fix

SMART Tool Project #: 10084893
Maser Consulting Connecticut Project #: 20777358A (REV 2)

October 15, 2021

Site Information

Site ID: 468479-VZW / Cheshire North 2 CT
Site Name: Cheshire North 2 CT
Carrier Name: Verizon Wireless
Address: 705 West Johnson Ave.
Cheshire, Connecticut 06410
New Haven County
Latitude: 41.555853°
Longitude: -72.917189°

Structure Information

Tower Type: Self-Support
Mount Type: 13.00-Ft T-Frame

FUZE ID # 16244097

Analysis Results

T-Frame: 67.8% Pass

***Contractor PMI Requirements:

Included at the end of this MA report

Available & Submitted via portal at <https://pmi.vzwsmart.com>

Contractor - Please Review Specific Site PMI Requirements Upon Award

Requirements also Noted on Mount Modification Drawings

Requirements may also be Noted on A & E drawings

For additional questions and support, please reach out to:

pmisupport@colliersengineering.com

Report Prepared By: Zachary Bandilla



Executive Summary:

The objective of this report is to summarize the analysis results of the antenna support mount including the proposed modifications at the subject facility for the final wireless telecommunications configuration, per the applicable codes and standards.

This analysis is inclusive of the mount structure only and does not address the structural capacity of the supporting structure. This mounting frame was not analyzed as an anchor attachment point for fall protection. All climbing activities are required to have a fall protection plan completed by a competent person.

Sources of Information:

Document Type	Remarks
Radio Frequency Data Sheet (RFDS)	Verizon RFDS Site ID: 674858, dated June 16, 2021
Mount Mapping Report	Tower Engineering Professionals, Site ID: 468479, dated December 7, 2020
Previous Mount Fix Analysis	Maser Consulting Connecticut, Project #: 20777358A (REV 1), Dated July 16, 2021
Mount Modification Drawings	Maser Consulting Connecticut, Project #: 20777358A (REV 2), Dated October 15, 2021

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT} : 118 mph Ice Wind Speed (3-sec. Gust): 50 mph Design Ice Thickness: 1.00 in Risk Category: II Exposure Category: C Topographic Category: 1 Topographic Feature Considered: N/A Topographic Method: N/A Ground Elevation Factor, K_e :
Seismic Parameters:	S_s : 0.197 S_1 : 0.055
Maintenance Parameters:	Wind Speed (3-sec. Gust): 30 mph Maintenance Live Load, L_v : 250 lbs. Maintenance Live Load, L_m : 500 lbs.
Analysis Software:	RISA-3D (V17)

Final Loading Configuration:

The following equipment has been considered for the analysis of the mounts:

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
138.00	138.00	3	Samsung	MT6407-77A	Added
		6	Commscope	JAHH-65B-R3B	Retained
		3	RFS	FDJ85020Q4-S1	
		3	Samsung	B2/B66A RRH-BR049	
		3	Samsung	B5/B13 RRH-BR04C	
		1	Raycap	RHSDC-6627-PF-48*	

* Equipment is mounted directly to the Self Support. They are not mounted on T-Frame mounts and are not included in this mount analysis.

Any proposed antennas not currently installed should be mounted such that the centerline of the antennas does not exceed 6 inches vertically from the center of the antenna mounts.

The recent mount mapping reported existing OVP units. It is acceptable to install up to any three (3) of the OVP model numbers listed below as required at any location other than the mount face without affecting the structural capacity of the mount. If OVP units are installed on the mount face, a mount re-analysis may be required unless replacing an existing OVP.

Model Number	Ports	AKA
DB-B1-6C-12AB-0Z	6	OVP-6
RVZDC-6627-PF-48	12	OVP-12

Standard Conditions:

1. All engineering services are performed on the basis that the information provided to Maser Consulting and used in this analysis is current and correct. The existing equipment loading has been applied at locations determined from the supplied documentation. Any deviation from the loading locations specified in this report shall be communicated to Maser Consulting to verify deviation will not adversely impact the analysis.
2. Mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer's specifications.

Obvious safety and structural issues/deficiencies noticed at the time of the mount mapping and reported in the Mount Mapping Report are assumed to be corrected and documented as part of the PMI process and are not considered in the mount analysis.

The mount analysis and the mount mapping are not a condition assessment of the mount. Proper maintenance and condition assessments are still required post analysis.

3. For mount analyses completed from other data sources (including new replacement mounts) and not specifically mapped in accordance with the NSTD-446 Standard, the mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer's specifications.
4. All member connections are assumed to have been designed to meet or exceed the load carrying capacity of the connected member unless otherwise specified in this report.

5. The mount was checked up to, and including, the bolts that fasten it to the mount collar/attachment and threaded rod connections in collar members if applicable. Local deformation and interaction between the mount collar/attachment and the supporting tower structure are outside the scope of this analysis.
6. All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. Maser Consulting is not responsible for the conclusion, opinions, and recommendations made by others based on the information supplied.
7. Structural Steel Grades have been assumed as follows, if applicable, unless otherwise noted in this analysis:
 - o Channel, Solid Round, Angle, Plate ASTM A36 (Gr. 36)
 - o HSS (Rectangular) ASTM 500 (Gr. B-46)
 - o Pipe ASTM A53 (Gr. B-35)
 - o Threaded Rod F1554 (Gr. 36)
 - o Bolts ASTM A325
8. Any mount modifications listed under Sources of Information are assumed to have been installed per the design specifications.

Discrepancies between in-field conditions and the assumptions listed above may render this analysis invalid unless explicitly approved by Maser Consulting.

Analysis Results:

Component	Utilization %	Pass/Fail
<i>Horizontal Face</i>	<i>67.8 %</i>	<i>Pass</i>
<i>Face Vertical</i>	<i>12.7 %</i>	<i>Pass</i>
<i>Standoff Horizontal</i>	<i>66.7 %</i>	<i>Pass</i>
<i>Standoff Vertical</i>	<i>14.5 %</i>	<i>Pass</i>
<i>Standoff Diagonal</i>	<i>24.8 %</i>	<i>Pass</i>
<i>Antenna Pipe</i>	<i>43.5 %</i>	<i>Pass</i>
<i>Stabilizer</i>	<i>11.1 %</i>	<i>Pass</i>
<i>P3 Mount Pipe</i>	<i>14.1 %</i>	<i>Pass</i>
<i>Mod Stabilizer</i>	<i>11.0 %</i>	<i>Pass</i>
<i>Connection Check</i>	<i>62.4 %</i>	<i>Pass</i>

Structure Rating – (Controlling Utilization of all Components)	67.8%
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Recommendation:

The existing mounts will be **SUFFICIENT** for the final loading after the proposed modifications are successfully completed.

ANSI/ASSP rigging plan review services compliant with the requirements of ANSI/TIA 322 are available for a Construction Class IV site or other, if required. Separate review fees will apply.

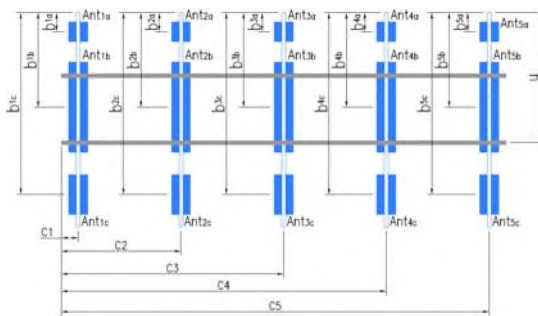
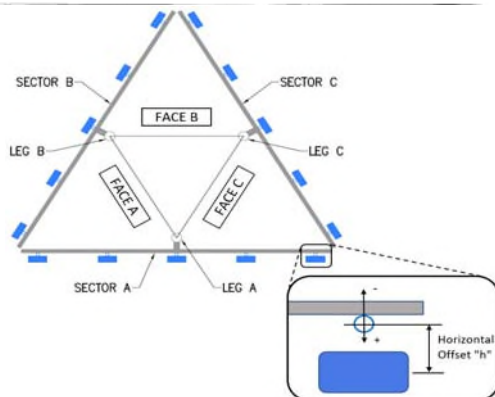
Attachments:

1. Mount Photos
2. Mount Mapping Report (for reference only)
3. Analysis Calculations
4. **Contractor Required PMI Report Deliverables**
5. Antenna Placement Diagrams
6. TIA Adoption and Wind Speed Usage Letter



N/A

Tower Owner:	Connecticut Light & Power Company	Mapping Date:	12/7/2020
Site Name:	Cheshire North 2 CT	Tower Type:	Self Support
Site Number or ID:	468479	Tower Height (Ft.):	
Mapping Contractor:	TEP	Mount Elevation (Ft.):	130

[illegible]

Mount Pipe Configuration and Geometries [Unit = Inches]							
Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "y"	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "y"	Horizontal Offset "C1, C2, C3, etc."
A1	2.4"Øx0.154"x84"	63.00	6.00	C1	2.4"Øx0.154"x84"	63.00	6.00
A2	2.4"Øx0.154"x84"	63.00	30.00	C2	2.4"Øx0.154"x84"	63.00	30.00
A3	2.9"Øx0.203"x103"	56.00	87.00	C3	2.9"Øx0.203"x103"	56.00	87.00
A4	2.4"Øx0.154"x84"	63.00	126.00	C4	2.4"Øx0.154"x84"	63.00	126.00
A5				C5			
A6				C6			
B1	2.4"Øx0.154"x84"	63.00	6.00	D1			
B2	2.4"Øx0.154"x84"	63.00	30.00	D2			
B3	2.9"Øx0.203"x103"	56.00	87.00	D3			
B4	2.4"Øx0.154"x84"	63.00	126.00	D4			
B5				D5			
B6				D6			
Distance between bottom rail and mount CL elevation (dim d). Unit is inches. See 'Mount Elev Ref' tab for details. :							
Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.) :							
Distance from top of bottom support rail to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.) :							
Please enter additional information or comments below.							
Tower Face Width at Mount Elev. (ft.):		5	Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):				1.8

[illegible]

Mount Azimuth (Degree) for Each Sector				Tower Leg Azimuth (Degree) for Each Sector				Sector B															
Sector A:	35.00	Deg	Leg A:	45.00	Deg	Ant _{1a}																	
Sector B:	160.00	Deg	Leg B:	165.00	Deg	Ant _{1b}	UNKNOWN	12.00	4.50	48.00		132.583	32.00	7.00	160.00	224							
Sector C:	275.00	Deg	Leg C:	285.00	Deg	Ant _{1c}																	
Sector D:		Deg	Leg D:		Deg	Ant _{2a}																	
Climbing Facility Information							Ant _{2b}	EMPTY				135.25											
Location:		Deg	Sector A				Ant _{2c}	RFV01U-D2A	14.96	10.04	14.96		134	15.00	-8.00		230						
Climbing Facility	Corrosion Type:		Minor corrosion observed.				Ant _{3a}																
	Access:		Climbing path was unobstructed.				Ant _{3b}	(2) JAHH-65B-R3B	12.78	8.19	71.97		131.333	40.00	13.00	160.00	233-235						
	Condition:		Good condition.				Ant _{3c}	(2) FDJ85020Q4-S1	7.60	12.60	6.80		128.583	73.00	-6.00		236-241						
							Ant _{4a}																
							Ant _{4b}	EMPTY					135.25										
							Ant _{4c}	RFV01U-D1A	14.96	10.04	14.96		131.5	45.00	-8.00			247					
							Ant _{5a}																
							Ant _{5b}																
							Ant _{5c}																
							Ant on Standoff																
							Ant on Standoff																
							Ant on Tower																
							Ant on Tower																
							Sector C																
							Ant _{1a}																
							Ant _{1b}	UNKNOWN										132.583	32.00	7.00	275.00	255	
							Ant _{1c}																
							Ant _{2a}																
							Ant _{2b}	EMPTY										135.25					
							Ant _{2c}	RFV01U-D2A	14.96	10.04	14.96							134	15.00	-8.00			261
							Ant _{3a}																
							Ant _{3b}	(2) JAHH-65B-R3B	12.78	8.19	71.97							131.333	40.00	13.00	275.00	264-266	
							Ant _{3c}	(2) FDJ85020Q4-S1	7.60	12.60	6.80							128.583	73.00	-6.00			267-270
Ant _{4a}																							
Ant _{4b}	EMPTY										135.25												
Ant _{4c}	RFV01U-D1A	14.96	10.04	14.96							131.5	45.00	-8.00			276							
Ant _{5a}																							
Ant _{5b}																							
Ant _{5c}																							
Ant on Standoff																							
Ant on Standoff																							
Ant on Tower																							
Ant on Tower																							
Sector D																							
Ant _{1a}																							
Ant _{1b}																							
Ant _{1c}																							
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Ant _{5a}																							
Ant _{5b}																							
Ant _{5c}																							
Ant on Standoff																							
Ant on Standoff																							
Ant on Tower																							
Ant on Tower																							

Observed Safety and Structural Issues During the Mount Mapping		
Issue #	Description of Issue	Photo #

1		
2		
3		
4		
5		
6		
7		
8		

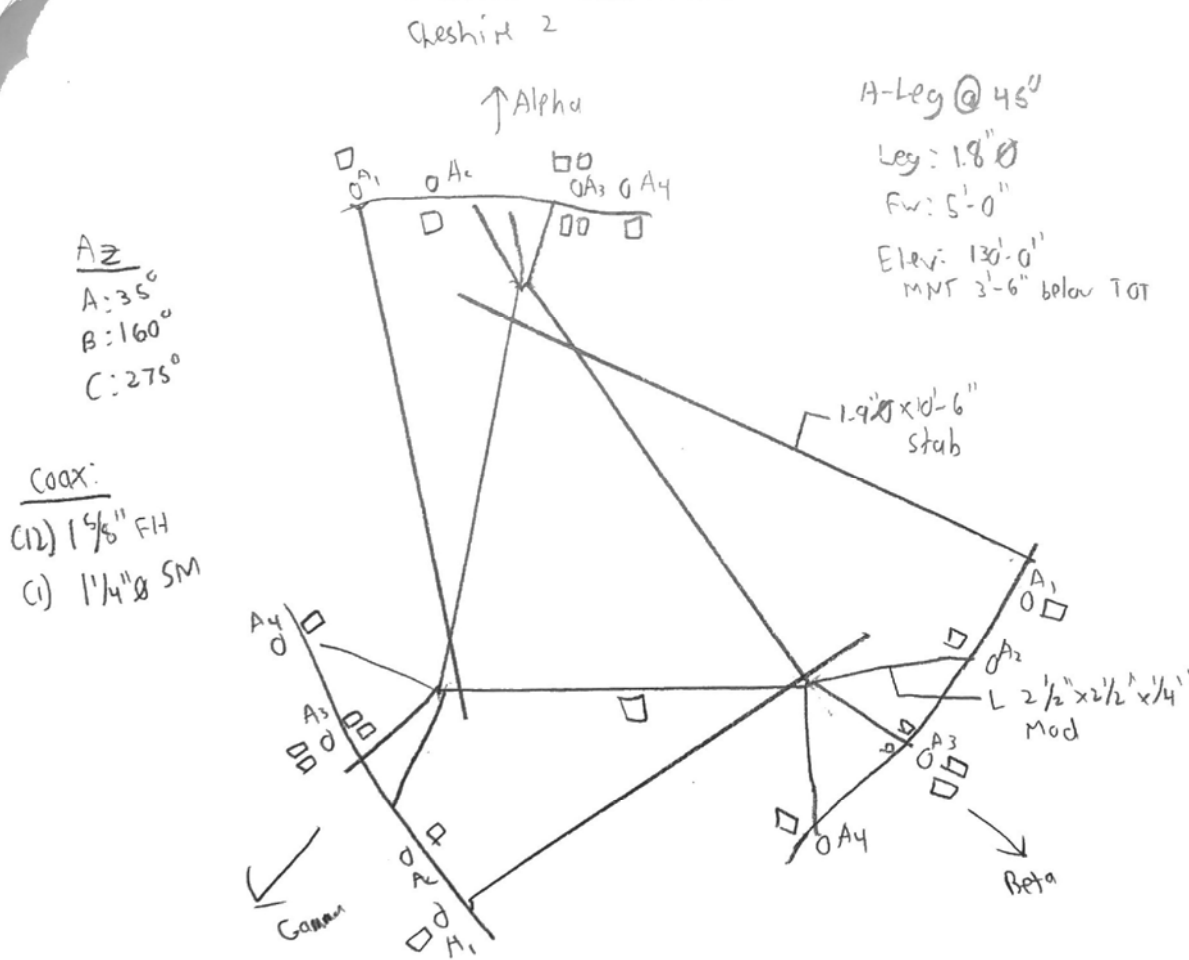
Mapping Notes
1. Please report any visible structural or safety issues observed on the antenna mounts (Damaged members, loose connections, tilting mounts, safety climb issues, etc.) 2. If the thickness of the existing pipes or tubing can't be obtained from a general tool (such as Caliper), please use an ultrasonic measurement tool (thickness gauge) to measure the thickness. 3. Please create all required detail sketches of the mounts and insert them into the "Sketches" tab. 4. Please measure and enter the bolt sizes and types under the Members Box in the spreadsheet of the mount type. 5. Take and label the photos of the tower, mounts, connections, antennas and all measurements. Minimum 50 photos are required. 6. Please measure and report the size and length of all existing antenna mounting pipes. 7. Please measure and report the antenna information for all sectors. 8. Don't delete or rearrange any sheet or contents of any sheet from this mapping form.
Standard Conditions
1. Obvious safety and structural issues/deficiencies noticed at the time of the mount mapping are to be reported in this mapping. However, this mount mapping is not a condition assessment of the mount.

N/A

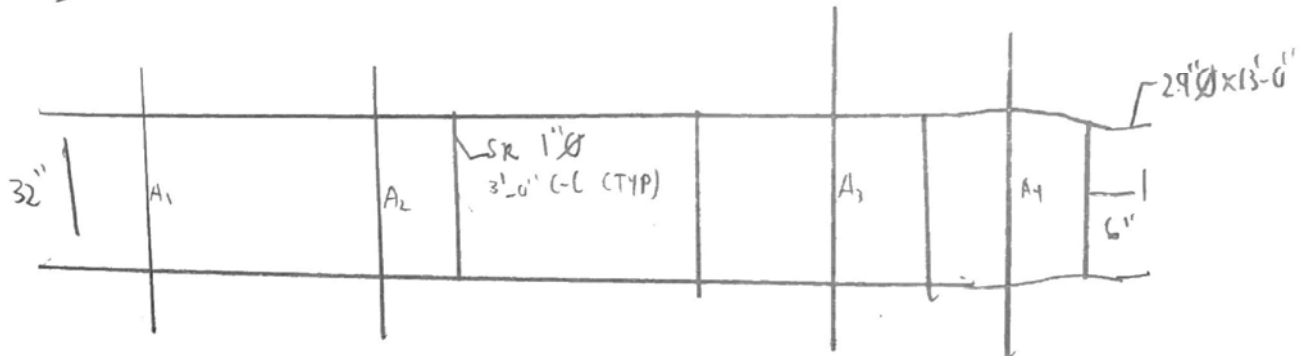
Tower Owner:	Connecticut Light & Power Company	Mapping Date:	12/7/2020
Site Name:	Cheshire North 2 CT	Tower Type:	Self Support
Site Number or ID:	468479	Tower Height (Ft.):	
Mapping Contractor:	TEP	Mount Elevation (Ft.):	130

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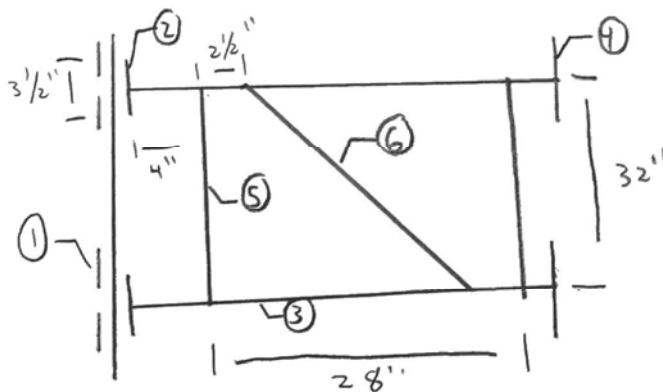
Please Insert Sketches of the Antenna Mount



Back



Side



- ①: BPL $8\frac{1}{2}'' \times 2'' \times \frac{1}{2}''$
w/ (2) $\frac{1}{2}'' \varnothing$ T.R. 6" C-C
- ②: PL 6T $\times 8''$ w $\times 9/16''$ Th
- ③: 2.9" $\varnothing \times 35''$
- ④: PL 8" w $\times 6''$ T $\times \frac{1}{2}''$ Th
w/ (2) $\frac{1}{2}'' \varnothing$ U-Bolts
6" C-C, $3\frac{1}{2}''$ C-C
- ⑤: 1" $\varnothing$ Solid Rod
- ⑥: $\frac{3}{4}'' \varnothing$ Solid Rod

MP ConnecPos 1/2/4

PL 6" T x 9" W x 3/8" Th
 w/c 3/8" Ø U-Bolts
 MP: 3" C-H, 4" C-V
 FP: 7 1/2" C-H, 3 1/2" C-V

Stub-MNT Connec

PL 6" W x 4" T x 3/8" Th
 w/c 1/2" Ø U-Bolts
 2 1/2" C-H, 2" C-V

Mod-TWR Connec

(2) BPL 8 1/2" W x 2" T x 9/16" Th
 w/c 5/8" Ø T.R. 6" C-C

(1) PL 8" x 8" x 1/2" Th
 w/c 1) PL 8" W x 4" D x 1/2" Th
 welded
 w/c 1/2" Ø Bolts 4" C-C

Alpha

	MP	Model	U	C	B	H
A ₁	2.4" Ø x 7'-0"	4' T x 12" W x 4 1/2" D panel	63"	6"	32"	7"
A ₂	2.4" Ø x 7'-0"	Empty	63"	30"	—	—
A ₃	2.4" Ø x 103"	(2) JAHH-65B-R3B	56"	67"	40"	13"
A ₄	2.4" Ø x 7'-0"	Empty	63"	126"	—	—
E ₁	Pos 2	RFV DIU-D2M	—	—	15"	8"
E ₂	Pos 3	FDS 8502024	—	—	73"	6"
E ₃	↓	↓	—	—	↓	↓
E ₄	Pos 4	RFV DIU-D2M	—	—	45"	8"

Beta & Gamma Same as Alpha

(1) RHSDC-6627-PF-44 MNTED ON TWR

Pos 3

PL 7" T x 7" W x 3/8" Th
 w/c 1/2" Ø U-Bolts
 FP: 5" C-H, 3 1/2" C-V
 MP: 3 1/4" C-H, 5" C-V

Stub-TWR Connec

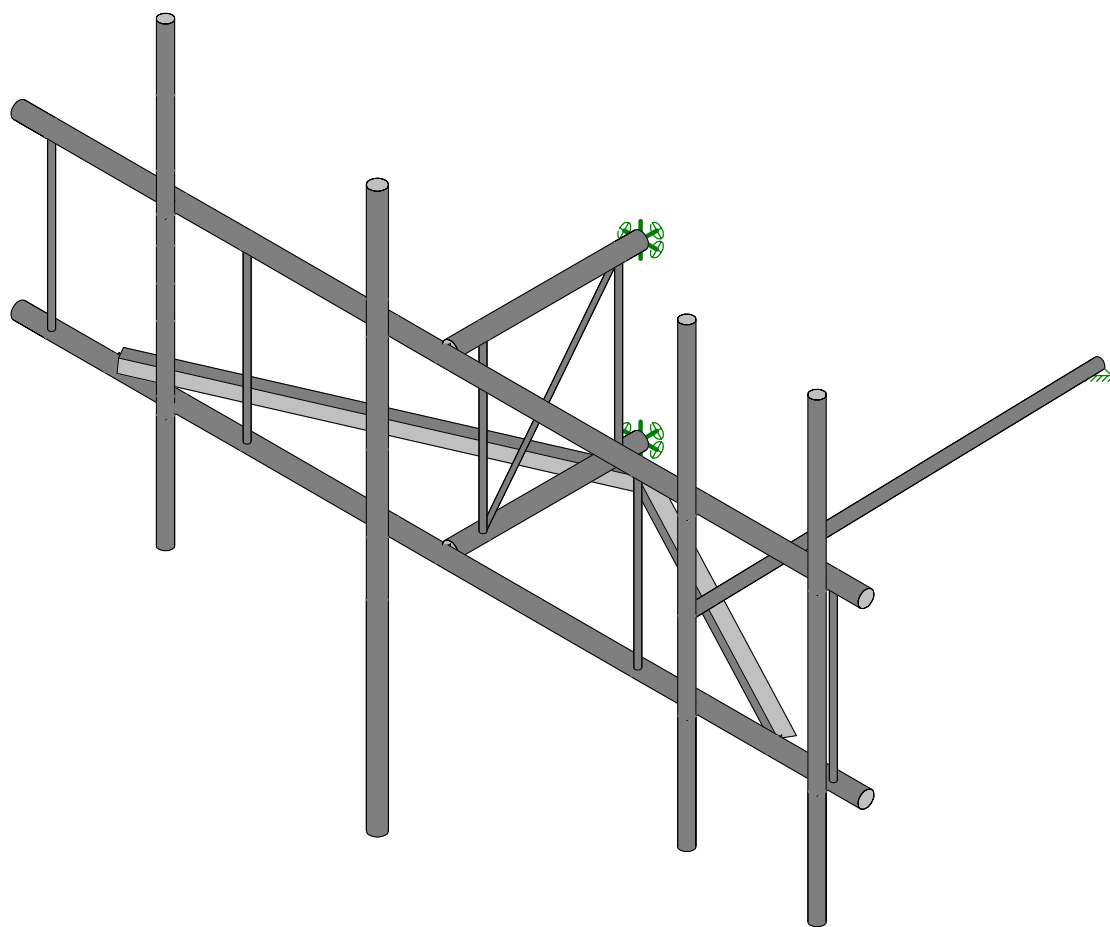
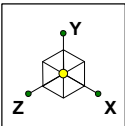
(1) BPL 8 1/2" W x 2" T x 1/2" Th
 w/c 1/2" Ø T.R. 6" C-C

(1) PL 9" W x 6" T x 3/8" Th
 w/c 1/2" Ø U-Bolts
 7" C-H, 2 1/2" C-V

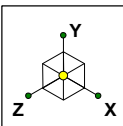
Wings-MNT Connec

C 8" D x 1 1/2" T x 1/2" W
 x 1/4" Th
 w/c 1/2" Ø TR
 6" C-C

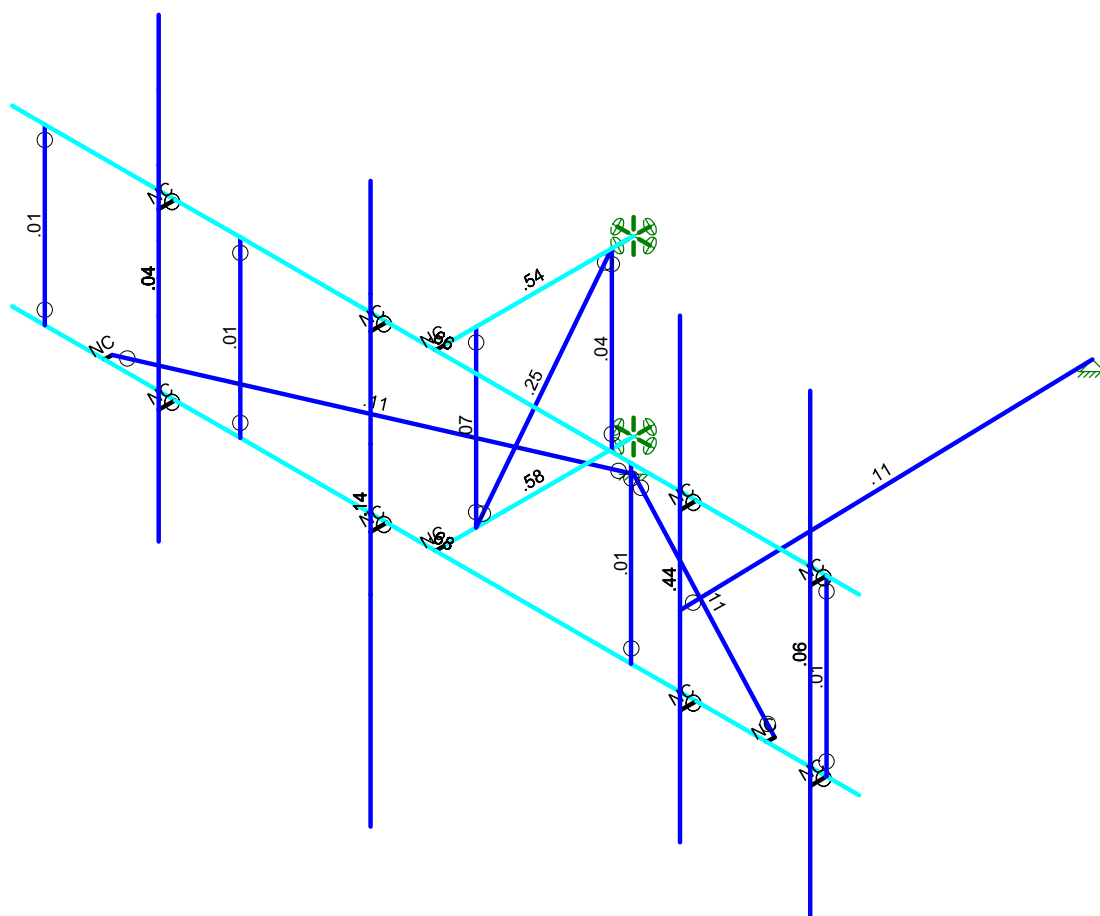




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AE		Oct 14, 2021 at 4:23 PM
Project No. 10084893		UPDATED_468479-VZW_MT_LO...

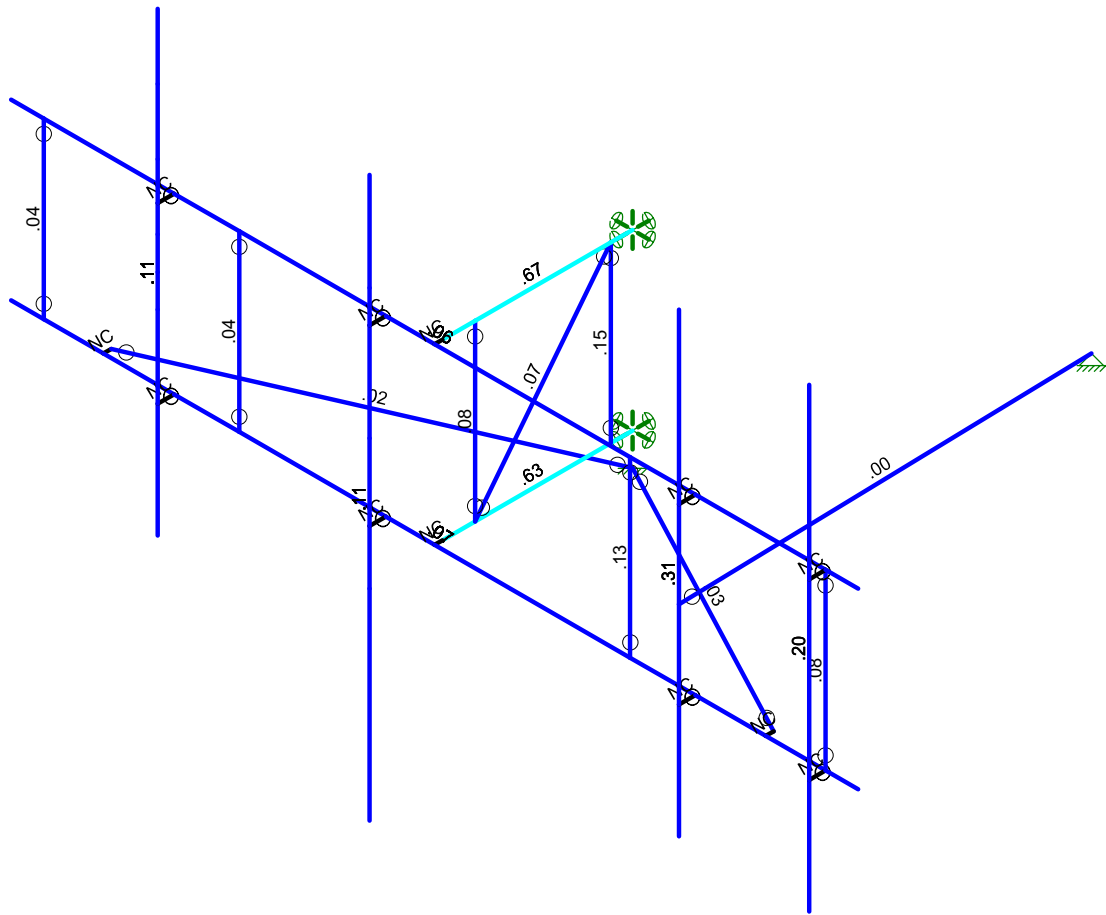
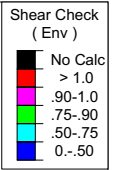
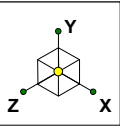


Code Check (Env)	
No Calc	
> 1.0	
.90-1.0	
.75-.90	
.50-.75	
0- .50	



Member Code Checks Displayed (Enveloped)
Results for LC 1, 1.2D+1.0Wo (0 Deg)

Maser Consulting	468479-VZW_MT_LOT_SectorA_H	SK - 2
AE		Oct 14, 2021 at 4:23 PM
Project No. 10084893		UPDATED_468479-VZW_MT_LO...



Member Shear Checks Displayed (Enveloped)
Results for LC 1, 1.2D+1.0Wo (0 Deg)

Maser Consulting

AE

Project No. 10084893

468479-VZW_MT_LOT_SectorA_H

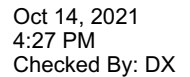
SK - 3

Oct 14, 2021 at 4:27 PM

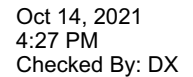
UPDATED_468479-VZW_MT_LO...

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...	Surface(P...
1	Antenna D	None					27		
2	Antenna Di	None					27		
3	Antenna Wo (0 Deg)	None					27		
4	Antenna Wo (30 Deg)	None					27		
5	Antenna Wo (60 Deg)	None					27		
6	Antenna Wo (90 Deg)	None					27		
7	Antenna Wo (120 Deg)	None					27		
8	Antenna Wo (150 Deg)	None					27		
9	Antenna Wo (180 Deg)	None					27		
10	Antenna Wo (210 Deg)	None					27		
11	Antenna Wo (240 Deg)	None					27		
12	Antenna Wo (270 Deg)	None					27		
13	Antenna Wo (300 Deg)	None					27		
14	Antenna Wo (330 Deg)	None					27		
15	Antenna Wi (0 Deg)	None					27		
16	Antenna Wi (30 Deg)	None					27		
17	Antenna Wi (60 Deg)	None					27		
18	Antenna Wi (90 Deg)	None					27		
19	Antenna Wi (120 Deg)	None					27		
20	Antenna Wi (150 Deg)	None					27		
21	Antenna Wi (180 Deg)	None					27		
22	Antenna Wi (210 Deg)	None					27		
23	Antenna Wi (240 Deg)	None					27		
24	Antenna Wi (270 Deg)	None					27		
25	Antenna Wi (300 Deg)	None					27		
26	Antenna Wi (330 Deg)	None					27		
27	Antenna Wm (0 Deg)	None					27		
28	Antenna Wm (30 Deg)	None					27		
29	Antenna Wm (60 Deg)	None					27		
30	Antenna Wm (90 Deg)	None					27		
31	Antenna Wm (120 Deg)	None					27		
32	Antenna Wm (150 Deg)	None					27		
33	Antenna Wm (180 Deg)	None					27		
34	Antenna Wm (210 Deg)	None					27		
35	Antenna Wm (240 Deg)	None					27		
36	Antenna Wm (270 Deg)	None					27		
37	Antenna Wm (300 Deg)	None					27		
38	Antenna Wm (330 Deg)	None					27		
39	Structure D	None		-1					
40	Structure Di	None						18	
41	Structure Wo (0 Deg)	None						36	
42	Structure Wo (30 Deg)	None						36	
43	Structure Wo (60 Deg)	None						36	
44	Structure Wo (90 Deg)	None						36	
45	Structure Wo (120 D...	None						36	
46	Structure Wo (150 D...	None						36	
47	Structure Wo (180 D...	None						36	
48	Structure Wo (210 D...	None						36	
49	Structure Wo (240 D...	None						36	
50	Structure Wo (270 D...	None						36	
51	Structure Wo (300 D...	None						36	
52	Structure Wo (330 D...	None						36	
53	Structure Wi (0 Deg)	None						36	
54	Structure Wi (30 Deg)	None						36	
55	Structure Wi (60 Deg)	None						36	
56	Structure Wi (90 Deg)	None						36	



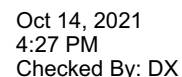
[R:\.....\UPDATED 468479-VZW MT LOT A H.r3dPage 2



RISA-3D Version 17.0.4 [R:\.....\UPDATED 468479-VZW MT LOT A H.r3dPage 3

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	-4	0	4	0	
2	N2	-10.5	0	4	0	
3	N3	2.5	0	4	0	
4	N4	2	0	4	0	
5	N5	-1	0	4	0	
6	N15	2	0	4.25	0	
7	N16	-4	2.666667	4	0	
8	N17	-10.5	2.666667	4	0	
9	N18	2.5	2.666667	4	0	
10	N19	2	2.666667	4	0	
11	N20	-1	2.666667	4	0	
12	N30	2	2.666667	4.25	0	
13	N31	-3.999999	0	3.879167	0	
14	N32	-3.999999	2.666667	3.879167	0	
15	N35	-3.999999	0	0.9625	0	
16	N36	-3.999999	2.666667	0.9625	0	
17	N40	2	5.25	4.25	0	
18	N44	2	-1.75	4.25	0	
19	N47	-3.999998	2.666667	3.379167	0	
20	N48	-3.999998	0	3.379167	0	
21	N49	-3.999991	2.666667	1.295833	0	
22	N50	-3.999991	0	1.295833	0	
23	N50A	-0.000009	1.333667	4.25	0	
24	N31A	0	0	4	0	
25	N32A	0	0	4.25	0	
26	N33	0	2.666667	4	0	
27	N34	0	2.666667	4.25	0	
28	N35A	0	5.25	4.25	0	
29	N36A	0	-1.75	4.25	0	
30	N37	-4.75	0	4	0	
31	N38	-4.75	0	4.25	0	
32	N39	-4.75	2.666667	4	0	
33	N40A	-4.75	2.666667	4.25	0	
34	N41	-4.75	4.666667	4.25	0	
35	N42	-4.75	-3.916667	4.25	0	
36	N43	-8	0	4	0	
37	N44A	-8	0	4.25	0	
38	N45	-8	2.666667	4	0	
39	N46	-8	2.666667	4.25	0	
40	N47A	-8	5.25	4.25	0	
41	N48A	-8	-1.75	4.25	0	
42	N45A	-10	0	4	0	
43	N46A	-7	0	4	0	
44	N48B	-10	2.666667	4	0	
45	N49A	-7	2.666667	4	0	
46	N48C	-0.169768	1.333667	-2.251438	0	
47	N47B	-3.99999	-.5	0.9625	0	
48	N48D	-9.083333	0	3.879167	0	
49	N50B	1.083333	0	3.879167	0	
50	N50C	-4.75	3.166667	4.25	0	
51	N51	-8	4.25	4.25	0	
52	N52	-4.75	-0.833333	4.25	0	
53	N53	-8	.25	4.25	0	
54	N54	-4.75	1.166667	4.25	0	
55	N55	-8	2.25	4.25	0	
56	N56	-8	3.25	4.25	0	



	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
57	N57	-8	1.25	4.25	0	
58	N58	-4.75	-.25	4	0	
59	N59	-8	1.75	4.25	0	
60	N60	-9.083333	0	4	0	
61	N61	1.083333	0	4	0	

	Label	Shape	Type	Design L...	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Antenna Pipe	PIPE 2.0	None	None	A53 Gr. B	Typical	1.02	.627	.627	1.25
2	P3 Mount Pipe	PIPE 2.5	None	None	A53 Gr. B	Typical	1.61	1.45	1.45	2.89
3	Horizontal Face	PIPE 2.5	None	None	A53 Gr. B	Typical	1.61	1.45	1.45	2.89
4	Face Vertical	SR 1	None	None	A36 Gr.36	Typical	.785	.049	.049	.098
5	Standoff Horizontal	PIPE 2.5	None	None	A53 Gr. B	Typical	1.61	1.45	1.45	2.89
6	Standoff Vertical	SR 1	None	None	A36 Gr.36	Typical	.785	.049	.049	.098
7	Standoff Diagonal	SR 0.75	None	None	A36 Gr.36	Typical	.442	.016	.016	.031
8	Stabilizer	PIPE 1.5	None	None	A53 Gr. B	Typical	.749	.293	.293	.586
9	Mod Stabilizer	L2.5x2.5x4	None	None	A36 Gr.36	Typical	1.19	.692	.692	.026
10	Mod Tieback	PIPE 2.0	None	None	A53 Gr. B	Typical	1.02	.627	.627	1.25

[illegible]

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N2	N3		180	Horizontal Face	None	None	A53 Gr. B	Typical
2	M6	N4	N15			RIGID	None	None	RIGID	Typical
3	M7A	N17	N18		180	Horizontal Face	None	None	A53 Gr. B	Typical
4	M12	N19	N30			RIGID	None	None	RIGID	Typical
5	M15	N5	N20			Face Vertical	None	None	A36 Gr.36	Typical
6	M16	N4	N19			Face Vertical	None	None	A36 Gr.36	Typical
7	M17	N16	N32			RIGID	None	None	RIGID	Typical
8	M18	N1	N31			RIGID	None	None	RIGID	Typical
9	M19	N32	N36		90	Standoff Horiz...	None	None	A53 Gr. B	Typical
10	M20	N31	N35		90	Standoff Horiz...	None	None	A53 Gr. B	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
11	M27	N50	N49			Standoff Vertical	None	None	A36 Gr.36	Typical
12	M28	N48	N47			Standoff Vertical	None	None	A36 Gr.36	Typical
13	M29	N49	N48			Standoff Diago...	None	None	A36 Gr.36	Typical
14	MP1A	N40	N44			Antenna Pipe	None	None	A53 Gr. B	Typical
15	M30	N50A	N48C			Stabilizer	None	None	A53 Gr. B	Typical
16	M18A	N31A	N32A			RIGID	None	None	RIGID	Typical
17	M19A	N33	N34			RIGID	None	None	RIGID	Typical
18	MP2A	N35A	N36A			Antenna Pipe	None	None	A53 Gr. B	Typical
19	M21	N37	N38			RIGID	None	None	RIGID	Typical
20	M22	N39	N40A			RIGID	None	None	RIGID	Typical
21	MP3A	N41	N42			P3 Mount Pipe	None	None	A53 Gr. B	Typical
22	M24	N43	N44A			RIGID	None	None	RIGID	Typical
23	M25	N45	N46			RIGID	None	None	RIGID	Typical
24	MP4A	N47A	N48A			Antenna Pipe	None	None	A53 Gr. B	Typical
25	M25A	N46A	N49A			Face Vertical	None	None	A36 Gr.36	Typical
26	M26	N45A	N48B			Face Vertical	None	None	A36 Gr.36	Typical
27	M27A	N48D	N47B		180	Mod Stabilizer	None	None	A36 Gr.36	Typical
28	M28A	N50B	N47B		90	Mod Stabilizer	None	None	A36 Gr.36	Typical
29	M29A	N60	N48D			RIGID	None	None	RIGID	Typical
30	M30A	N61	N50B			RIGID	None	None	RIGID	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M1						Yes	** NA **			None
2	M6		OOOXOO				Yes	** NA **			None
3	M7A						Yes	** NA **			None
4	M12		OOOXOO				Yes	** NA **			None
5	M15	BenPIN	BenPIN				Yes	** NA **			None
6	M16	BenPIN	BenPIN				Yes	** NA **			None
7	M17						Yes	** NA **			None
8	M18						Yes	** NA **			None
9	M19						Yes	** NA **			None
10	M20						Yes	** NA **			None
11	M27	BenPIN	BenPIN				Yes	** NA **			None
12	M28	BenPIN	BenPIN				Yes	** NA **			None
13	M29	BenPIN	BenPIN				Yes	** NA **			None
14	MP1A						Yes	** NA **			None
15	M30	BenPIN					Yes	** NA **			None
16	M18A		OOOXOO				Yes	** NA **			None
17	M19A		OOOXOO				Yes	** NA **			None
18	MP2A						Yes	** NA **			None
19	M21		OOOXOO				Yes	** NA **			None
20	M22		OOOXOO				Yes	** NA **			None
21	MP3A						Yes	** NA **			None
22	M24		OOOXOO				Yes	** NA **			None
23	M25		OOOXOO				Yes	** NA **			None
24	MP4A						Yes	** NA **			None
25	M25A	BenPIN	BenPIN				Yes	** NA **			None
26	M26	BenPIN	BenPIN				Yes	** NA **			None
27	M27A	BenPIN	BenPIN				Yes	** NA **			None
28	M28A	BenPIN	BenPIN				Yes	** NA **			None
29	M29A						Yes	** NA **			None
30	M30A						Yes	** NA **			None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Y	-43.55	2
2	MP1A	My	-.022	2
3	MP1A	Mz	0	2
4	MP1A	Y	-43.55	4
5	MP1A	My	-.022	4
6	MP1A	Mz	0	4
7	MP3A	Y	-31.65	1.5
8	MP3A	My	-.034	1.5
9	MP3A	Mz	.024	1.5
10	MP3A	Y	-31.65	5.5
11	MP3A	My	-.034	5.5
12	MP3A	Mz	.024	5.5
13	MP3A	Y	-31.65	1.5
14	MP3A	My	-.034	1.5
15	MP3A	Mz	-.024	1.5
16	MP3A	Y	-31.65	5.5
17	MP3A	My	-.034	5.5
18	MP3A	Mz	-.024	5.5
19	MP3A	Y	-8.88	5.75
20	MP3A	My	.004	5.75
21	MP3A	Mz	0	5.75
22	MP2A	Y	-84.4	2
23	MP2A	My	.056	2
24	MP2A	Mz	0	2
25	MP4A	Y	-70.3	3.5
26	MP4A	My	.047	3.5
27	MP4A	Mz	0	3.5

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Y	-35.607	2
2	MP1A	My	-.018	2
3	MP1A	Mz	0	2
4	MP1A	Y	-35.607	4
5	MP1A	My	-.018	4
6	MP1A	Mz	0	4
7	MP3A	Y	-69.935	1.5
8	MP3A	My	-.076	1.5
9	MP3A	Mz	.052	1.5
10	MP3A	Y	-69.935	5.5
11	MP3A	My	-.076	5.5
12	MP3A	Mz	.052	5.5
13	MP3A	Y	-69.935	1.5
14	MP3A	My	-.076	1.5
15	MP3A	Mz	-.052	1.5
16	MP3A	Y	-69.935	5.5
17	MP3A	My	-.076	5.5
18	MP3A	Mz	-.052	5.5
19	MP3A	Y	-21.302	5.75
20	MP3A	My	.011	5.75
21	MP3A	Mz	0	5.75
22	MP2A	Y	-44.892	2
23	MP2A	My	.03	2
24	MP2A	Mz	0	2
25	MP4A	Y	-40.372	3.5

Member Point Loads (BLC 2 : Antenna Di) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
26	MP4A	My	.027	3.5
27	MP4A	Mz	0	3.5

Member Point Loads (BLC 3 : Antenna Wo (0 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	2
2	MP1A	Z	-96.517	2
3	MP1A	Mx	0	2
4	MP1A	X	0	4
5	MP1A	Z	-96.517	4
6	MP1A	Mx	0	4
7	MP3A	X	0	1.5
8	MP3A	Z	-187.078	1.5
9	MP3A	Mx	-.14	1.5
10	MP3A	X	0	5.5
11	MP3A	Z	-187.078	5.5
12	MP3A	Mx	-.14	5.5
13	MP3A	X	0	1.5
14	MP3A	Z	-187.078	1.5
15	MP3A	Mx	.14	1.5
16	MP3A	X	0	5.5
17	MP3A	Z	-187.078	5.5
18	MP3A	Mx	.14	5.5
19	MP3A	X	0	5.75
20	MP3A	Z	-29.16	5.75
21	MP3A	Mx	0	5.75
22	MP2A	X	0	2
23	MP2A	Z	-76.803	2
24	MP2A	Mx	0	2
25	MP4A	X	0	3.5
26	MP4A	Z	-76.803	3.5
27	MP4A	Mx	0	3.5

Member Point Loads (BLC 4 : Antenna Wo (30 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	40.917	2
2	MP1A	Z	-70.87	2
3	MP1A	Mx	-.02	2
4	MP1A	X	40.917	4
5	MP1A	Z	-70.87	4
6	MP1A	Mx	-.02	4
7	MP3A	X	85.513	1.5
8	MP3A	Z	-148.113	1.5
9	MP3A	Mx	-.204	1.5
10	MP3A	X	85.513	5.5
11	MP3A	Z	-148.113	5.5
12	MP3A	Mx	-.204	5.5
13	MP3A	X	85.513	1.5
14	MP3A	Z	-148.113	1.5
15	MP3A	Mx	.018	1.5
16	MP3A	X	85.513	5.5
17	MP3A	Z	-148.113	5.5
18	MP3A	Mx	.018	5.5
19	MP3A	X	13.146	5.75
20	MP3A	Z	-22.77	5.75
21	MP3A	Mx	.007	5.75

Member Point Loads (BLC 4 : Antenna Wo (30 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
22	MP2A	X	35.218	2
23	MP2A	Z	-61	2
24	MP2A	Mx	.023	2
25	MP4A	X	33.999	3.5
26	MP4A	Z	-58.888	3.5
27	MP4A	Mx	.023	3.5

Member Point Loads (BLC 5 : Antenna Wo (60 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
1	MP1A	X	45.439	2
2	MP1A	Z	-26.234	2
3	MP1A	Mx	-.023	2
4	MP1A	X	45.439	4
5	MP1A	Z	-26.234	4
6	MP1A	Mx	-.023	4
7	MP3A	X	120.31	1.5
8	MP3A	Z	-69.461	1.5
9	MP3A	Mx	-.182	1.5
10	MP3A	X	120.31	5.5
11	MP3A	Z	-69.461	5.5
12	MP3A	Mx	-.182	5.5
13	MP3A	X	120.31	1.5
14	MP3A	Z	-69.461	1.5
15	MP3A	Mx	-.078	1.5
16	MP3A	X	120.31	5.5
17	MP3A	Z	-69.461	5.5
18	MP3A	Mx	-.078	5.5
19	MP3A	X	17.802	5.75
20	MP3A	Z	-10.278	5.75
21	MP3A	Mx	.009	5.75
22	MP2A	X	49.974	2
23	MP2A	Z	-28.852	2
24	MP2A	Mx	.033	2
25	MP4A	X	43.638	3.5
26	MP4A	Z	-25.194	3.5
27	MP4A	Mx	.029	3.5

Member Point Loads (BLC 6 : Antenna Wo (90 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
1	MP1A	X	37.786	2
2	MP1A	Z	0	2
3	MP1A	Mx	-.019	2
4	MP1A	X	37.786	4
5	MP1A	Z	0	4
6	MP1A	Mx	-.019	4
7	MP3A	X	122.871	1.5
8	MP3A	Z	0	1.5
9	MP3A	Mx	-.133	1.5
10	MP3A	X	122.871	5.5
11	MP3A	Z	0	5.5
12	MP3A	Mx	-.133	5.5
13	MP3A	X	122.871	1.5
14	MP3A	Z	0	1.5
15	MP3A	Mx	-.133	1.5
16	MP3A	X	122.871	5.5
17	MP3A	Z	0	5.5

Member Point Loads (BLC 6 : Antenna Wo (90 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP3A	Mx	-.133	5.5
19	MP3A	X	17.688	5.75
20	MP3A	Z	0	5.75
21	MP3A	Mx	.009	5.75
22	MP2A	X	51.339	2
23	MP2A	Z	0	2
24	MP2A	Mx	.034	2
25	MP4A	X	41.584	3.5
26	MP4A	Z	0	3.5
27	MP4A	Mx	.028	3.5

Member Point Loads (BLC 7 : Antenna Wo (120 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	45.439	2
2	MP1A	Z	26.234	2
3	MP1A	Mx	-.023	2
4	MP1A	X	45.439	4
5	MP1A	Z	26.234	4
6	MP1A	Mx	-.023	4
7	MP3A	X	120.31	1.5
8	MP3A	Z	69.461	1.5
9	MP3A	Mx	-.078	1.5
10	MP3A	X	120.31	5.5
11	MP3A	Z	69.461	5.5
12	MP3A	Mx	-.078	5.5
13	MP3A	X	120.31	1.5
14	MP3A	Z	69.461	1.5
15	MP3A	Mx	-.182	1.5
16	MP3A	X	120.31	5.5
17	MP3A	Z	69.461	5.5
18	MP3A	Mx	-.182	5.5
19	MP3A	X	17.802	5.75
20	MP3A	Z	10.278	5.75
21	MP3A	Mx	.009	5.75
22	MP2A	X	49.974	2
23	MP2A	Z	28.852	2
24	MP2A	Mx	.033	2
25	MP4A	X	43.638	3.5
26	MP4A	Z	25.194	3.5
27	MP4A	Mx	.029	3.5

Member Point Loads (BLC 8 : Antenna Wo (150 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	40.917	2
2	MP1A	Z	70.87	2
3	MP1A	Mx	-.02	2
4	MP1A	X	40.917	4
5	MP1A	Z	70.87	4
6	MP1A	Mx	-.02	4
7	MP3A	X	85.513	1.5
8	MP3A	Z	148.113	1.5
9	MP3A	Mx	.018	1.5
10	MP3A	X	85.513	5.5
11	MP3A	Z	148.113	5.5
12	MP3A	Mx	.018	5.5
13	MP3A	X	85.513	1.5

Member Point Loads (BLC 8 : Antenna Wo (150 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
14	MP3A	Z	148.113	1.5
15	MP3A	Mx	-.204	1.5
16	MP3A	X	85.513	5.5
17	MP3A	Z	148.113	5.5
18	MP3A	Mx	-.204	5.5
19	MP3A	X	13.146	5.75
20	MP3A	Z	22.77	5.75
21	MP3A	Mx	.007	5.75
22	MP2A	X	35.218	2
23	MP2A	Z	61	2
24	MP2A	Mx	.023	2
25	MP4A	X	33.999	3.5
26	MP4A	Z	58.888	3.5
27	MP4A	Mx	.023	3.5

Member Point Loads (BLC 9 : Antenna Wo (180 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
1	MP1A	X	0	2
2	MP1A	Z	96.517	2
3	MP1A	Mx	0	2
4	MP1A	X	0	4
5	MP1A	Z	96.517	4
6	MP1A	Mx	0	4
7	MP3A	X	0	1.5
8	MP3A	Z	187.078	1.5
9	MP3A	Mx	.14	1.5
10	MP3A	X	0	5.5
11	MP3A	Z	187.078	5.5
12	MP3A	Mx	.14	5.5
13	MP3A	X	0	1.5
14	MP3A	Z	187.078	1.5
15	MP3A	Mx	-.14	1.5
16	MP3A	X	0	5.5
17	MP3A	Z	187.078	5.5
18	MP3A	Mx	-.14	5.5
19	MP3A	X	0	5.75
20	MP3A	Z	29.16	5.75
21	MP3A	Mx	0	5.75
22	MP2A	X	0	2
23	MP2A	Z	76.803	2
24	MP2A	Mx	0	2
25	MP4A	X	0	3.5
26	MP4A	Z	76.803	3.5
27	MP4A	Mx	0	3.5

Member Point Loads (BLC 10 : Antenna Wo (210 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
1	MP1A	X	-40.917	2
2	MP1A	Z	70.87	2
3	MP1A	Mx	.02	2
4	MP1A	X	-40.917	4
5	MP1A	Z	70.87	4
6	MP1A	Mx	.02	4
7	MP3A	X	-85.513	1.5
8	MP3A	Z	148.113	1.5
9	MP3A	Mx	.204	1.5

Member Point Loads (BLC 10 : Antenna Wo (210 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
10	MP3A	X	-85.513	5.5
11	MP3A	Z	148.113	5.5
12	MP3A	Mx	.204	5.5
13	MP3A	X	-85.513	1.5
14	MP3A	Z	148.113	1.5
15	MP3A	Mx	-.018	1.5
16	MP3A	X	-85.513	5.5
17	MP3A	Z	148.113	5.5
18	MP3A	Mx	-.018	5.5
19	MP3A	X	-13.146	5.75
20	MP3A	Z	22.77	5.75
21	MP3A	Mx	-.007	5.75
22	MP2A	X	-35.218	2
23	MP2A	Z	61	2
24	MP2A	Mx	-.023	2
25	MP4A	X	-33.999	3.5
26	MP4A	Z	58.888	3.5
27	MP4A	Mx	-.023	3.5

Member Point Loads (BLC 11 : Antenna Wo (240 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-45.439	2
2	MP1A	Z	26.234	2
3	MP1A	Mx	.023	2
4	MP1A	X	-45.439	4
5	MP1A	Z	26.234	4
6	MP1A	Mx	.023	4
7	MP3A	X	-120.31	1.5
8	MP3A	Z	69.461	1.5
9	MP3A	Mx	.182	1.5
10	MP3A	X	-120.31	5.5
11	MP3A	Z	69.461	5.5
12	MP3A	Mx	.182	5.5
13	MP3A	X	-120.31	1.5
14	MP3A	Z	69.461	1.5
15	MP3A	Mx	.078	1.5
16	MP3A	X	-120.31	5.5
17	MP3A	Z	69.461	5.5
18	MP3A	Mx	.078	5.5
19	MP3A	X	-17.802	5.75
20	MP3A	Z	10.278	5.75
21	MP3A	Mx	-.009	5.75
22	MP2A	X	-49.974	2
23	MP2A	Z	28.852	2
24	MP2A	Mx	-.033	2
25	MP4A	X	-43.638	3.5
26	MP4A	Z	25.194	3.5
27	MP4A	Mx	-.029	3.5

Member Point Loads (BLC 12 : Antenna Wo (270 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-37.786	2
2	MP1A	Z	0	2
3	MP1A	Mx	.019	2
4	MP1A	X	-37.786	4
5	MP1A	Z	0	4

Member Point Loads (BLC 12 : Antenna Wo (270 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
6	MP1A	Mx	.019	4
7	MP3A	X	-122.871	1.5
8	MP3A	Z	0	1.5
9	MP3A	Mx	.133	1.5
10	MP3A	X	-122.871	5.5
11	MP3A	Z	0	5.5
12	MP3A	Mx	.133	5.5
13	MP3A	X	-122.871	1.5
14	MP3A	Z	0	1.5
15	MP3A	Mx	.133	1.5
16	MP3A	X	-122.871	5.5
17	MP3A	Z	0	5.5
18	MP3A	Mx	.133	5.5
19	MP3A	X	-17.688	5.75
20	MP3A	Z	0	5.75
21	MP3A	Mx	-.009	5.75
22	MP2A	X	-51.339	2
23	MP2A	Z	0	2
24	MP2A	Mx	-.034	2
25	MP4A	X	-41.584	3.5
26	MP4A	Z	0	3.5
27	MP4A	Mx	-.028	3.5

Member Point Loads (BLC 13 : Antenna Wo (300 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-45.439	2
2	MP1A	Z	-26.234	2
3	MP1A	Mx	.023	2
4	MP1A	X	-45.439	4
5	MP1A	Z	-26.234	4
6	MP1A	Mx	.023	4
7	MP3A	X	-120.31	1.5
8	MP3A	Z	-69.461	1.5
9	MP3A	Mx	.078	1.5
10	MP3A	X	-120.31	5.5
11	MP3A	Z	-69.461	5.5
12	MP3A	Mx	.078	5.5
13	MP3A	X	-120.31	1.5
14	MP3A	Z	-69.461	1.5
15	MP3A	Mx	.182	1.5
16	MP3A	X	-120.31	5.5
17	MP3A	Z	-69.461	5.5
18	MP3A	Mx	.182	5.5
19	MP3A	X	-17.802	5.75
20	MP3A	Z	-10.278	5.75
21	MP3A	Mx	-.009	5.75
22	MP2A	X	-49.974	2
23	MP2A	Z	-28.852	2
24	MP2A	Mx	-.033	2
25	MP4A	X	-43.638	3.5
26	MP4A	Z	-25.194	3.5
27	MP4A	Mx	-.029	3.5

Member Point Loads (BLC 14 : Antenna Wo (330 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-40.917	2

Member Point Loads (BLC 14 : Antenna Wo (330 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
2	MP1A	Z	-70.87	2
3	MP1A	Mx	.02	2
4	MP1A	X	-40.917	4
5	MP1A	Z	-70.87	4
6	MP1A	Mx	.02	4
7	MP3A	X	-85.513	1.5
8	MP3A	Z	-148.113	1.5
9	MP3A	Mx	-.018	1.5
10	MP3A	X	-85.513	5.5
11	MP3A	Z	-148.113	5.5
12	MP3A	Mx	-.018	5.5
13	MP3A	X	-85.513	1.5
14	MP3A	Z	-148.113	1.5
15	MP3A	Mx	.204	1.5
16	MP3A	X	-85.513	5.5
17	MP3A	Z	-148.113	5.5
18	MP3A	Mx	.204	5.5
19	MP3A	X	-13.146	5.75
20	MP3A	Z	-22.77	5.75
21	MP3A	Mx	-.007	5.75
22	MP2A	X	-35.218	2
23	MP2A	Z	-61	2
24	MP2A	Mx	-.023	2
25	MP4A	X	-33.999	3.5
26	MP4A	Z	-58.888	3.5
27	MP4A	Mx	-.023	3.5

Member Point Loads (BLC 15 : Antenna Wi (0 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	2
2	MP1A	Z	-19.576	2
3	MP1A	Mx	0	2
4	MP1A	X	0	4
5	MP1A	Z	-19.576	4
6	MP1A	Mx	0	4
7	MP3A	X	0	1.5
8	MP3A	Z	-36.807	1.5
9	MP3A	Mx	-.028	1.5
10	MP3A	X	0	5.5
11	MP3A	Z	-36.807	5.5
12	MP3A	Mx	-.028	5.5
13	MP3A	X	0	1.5
14	MP3A	Z	-36.807	1.5
15	MP3A	Mx	.028	1.5
16	MP3A	X	0	5.5
17	MP3A	Z	-36.807	5.5
18	MP3A	Mx	.028	5.5
19	MP3A	X	0	5.75
20	MP3A	Z	-7.061	5.75
21	MP3A	Mx	0	5.75
22	MP2A	X	0	2
23	MP2A	Z	-16.499	2
24	MP2A	Mx	0	2
25	MP4A	X	0	3.5
26	MP4A	Z	-16.499	3.5
27	MP4A	Mx	0	3.5

Member Point Loads (BLC 16 : Antenna Wi (30 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	8.383	2
2	MP1A	Z	-14.521	2
3	MP1A	Mx	-.004	2
4	MP1A	X	8.383	4
5	MP1A	Z	-14.521	4
6	MP1A	Mx	-.004	4
7	MP3A	X	16.941	1.5
8	MP3A	Z	-29.343	1.5
9	MP3A	Mx	-.04	1.5
10	MP3A	X	16.941	5.5
11	MP3A	Z	-29.343	5.5
12	MP3A	Mx	-.04	5.5
13	MP3A	X	16.941	1.5
14	MP3A	Z	-29.343	1.5
15	MP3A	Mx	.004	1.5
16	MP3A	X	16.941	5.5
17	MP3A	Z	-29.343	5.5
18	MP3A	Mx	.004	5.5
19	MP3A	X	3.218	5.75
20	MP3A	Z	-5.573	5.75
21	MP3A	Mx	.002	5.75
22	MP2A	X	7.622	2
23	MP2A	Z	-13.201	2
24	MP2A	Mx	.005	2
25	MP4A	X	7.383	3.5
26	MP4A	Z	-12.788	3.5
27	MP4A	Mx	.005	3.5

Member Point Loads (BLC 17 : Antenna Wi (60 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	9.655	2
2	MP1A	Z	-5.574	2
3	MP1A	Mx	-.005	2
4	MP1A	X	9.655	4
5	MP1A	Z	-5.574	4
6	MP1A	Mx	-.005	4
7	MP3A	X	24.277	1.5
8	MP3A	Z	-14.016	1.5
9	MP3A	Mx	-.037	1.5
10	MP3A	X	24.277	5.5
11	MP3A	Z	-14.016	5.5
12	MP3A	Mx	-.037	5.5
13	MP3A	X	24.277	1.5
14	MP3A	Z	-14.016	1.5
15	MP3A	Mx	-.016	1.5
16	MP3A	X	24.277	5.5
17	MP3A	Z	-14.016	5.5
18	MP3A	Mx	-.016	5.5
19	MP3A	X	4.489	5.75
20	MP3A	Z	-2.592	5.75
21	MP3A	Mx	.002	5.75
22	MP2A	X	11.026	2
23	MP2A	Z	-6.366	2
24	MP2A	Mx	.007	2
25	MP4A	X	9.787	3.5
26	MP4A	Z	-5.65	3.5

Member Point Loads (BLC 17 : Antenna Wi (60 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
27	MP4A	Mx	.007	3.5

Member Point Loads (BLC 18 : Antenna Wi (90 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	8.339	2
2	MP1A	Z	0	2
3	MP1A	Mx	-.004	2
4	MP1A	X	8.339	4
5	MP1A	Z	0	4
6	MP1A	Mx	-.004	4
7	MP3A	X	25.108	1.5
8	MP3A	Z	0	1.5
9	MP3A	Mx	-.027	1.5
10	MP3A	X	25.108	5.5
11	MP3A	Z	0	5.5
12	MP3A	Mx	-.027	5.5
13	MP3A	X	25.108	1.5
14	MP3A	Z	0	1.5
15	MP3A	Mx	-.027	1.5
16	MP3A	X	25.108	5.5
17	MP3A	Z	0	5.5
18	MP3A	Mx	-.027	5.5
19	MP3A	X	4.558	5.75
20	MP3A	Z	0	5.75
21	MP3A	Mx	.002	5.75
22	MP2A	X	11.477	2
23	MP2A	Z	0	2
24	MP2A	Mx	.008	2
25	MP4A	X	9.568	3.5
26	MP4A	Z	0	3.5
27	MP4A	Mx	.006	3.5

Member Point Loads (BLC 19 : Antenna Wi (120 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	9.655	2
2	MP1A	Z	5.574	2
3	MP1A	Mx	-.005	2
4	MP1A	X	9.655	4
5	MP1A	Z	5.574	4
6	MP1A	Mx	-.005	4
7	MP3A	X	24.277	1.5
8	MP3A	Z	14.016	1.5
9	MP3A	Mx	-.016	1.5
10	MP3A	X	24.277	5.5
11	MP3A	Z	14.016	5.5
12	MP3A	Mx	-.016	5.5
13	MP3A	X	24.277	1.5
14	MP3A	Z	14.016	1.5
15	MP3A	Mx	-.037	1.5
16	MP3A	X	24.277	5.5
17	MP3A	Z	14.016	5.5
18	MP3A	Mx	-.037	5.5
19	MP3A	X	4.489	5.75
20	MP3A	Z	2.592	5.75
21	MP3A	Mx	.002	5.75
22	MP2A	X	11.026	2

Member Point Loads (BLC 19 : Antenna Wi (120 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
23	MP2A	Z	6.366	2
24	MP2A	Mx	.007	2
25	MP4A	X	9.787	3.5
26	MP4A	Z	5.65	3.5
27	MP4A	Mx	.007	3.5

Member Point Loads (BLC 20 : Antenna Wi (150 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
1	MP1A	X	8.383	2
2	MP1A	Z	14.521	2
3	MP1A	Mx	-.004	2
4	MP1A	X	8.383	4
5	MP1A	Z	14.521	4
6	MP1A	Mx	-.004	4
7	MP3A	X	16.941	1.5
8	MP3A	Z	29.343	1.5
9	MP3A	Mx	.004	1.5
10	MP3A	X	16.941	5.5
11	MP3A	Z	29.343	5.5
12	MP3A	Mx	.004	5.5
13	MP3A	X	16.941	1.5
14	MP3A	Z	29.343	1.5
15	MP3A	Mx	-.04	1.5
16	MP3A	X	16.941	5.5
17	MP3A	Z	29.343	5.5
18	MP3A	Mx	-.04	5.5
19	MP3A	X	3.218	5.75
20	MP3A	Z	5.573	5.75
21	MP3A	Mx	.002	5.75
22	MP2A	X	7.622	2
23	MP2A	Z	13.201	2
24	MP2A	Mx	.005	2
25	MP4A	X	7.383	3.5
26	MP4A	Z	12.788	3.5
27	MP4A	Mx	.005	3.5

Member Point Loads (BLC 21 : Antenna Wi (180 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
1	MP1A	X	0	2
2	MP1A	Z	19.576	2
3	MP1A	Mx	0	2
4	MP1A	X	0	4
5	MP1A	Z	19.576	4
6	MP1A	Mx	0	4
7	MP3A	X	0	1.5
8	MP3A	Z	36.807	1.5
9	MP3A	Mx	.028	1.5
10	MP3A	X	0	5.5
11	MP3A	Z	36.807	5.5
12	MP3A	Mx	.028	5.5
13	MP3A	X	0	1.5
14	MP3A	Z	36.807	1.5
15	MP3A	Mx	-.028	1.5
16	MP3A	X	0	5.5
17	MP3A	Z	36.807	5.5
18	MP3A	Mx	-.028	5.5

Member Point Loads (BLC 21 : Antenna Wi (180 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
19	MP3A	X	0	5.75
20	MP3A	Z	7.061	5.75
21	MP3A	Mx	0	5.75
22	MP2A	X	0	2
23	MP2A	Z	16.499	2
24	MP2A	Mx	0	2
25	MP4A	X	0	3.5
26	MP4A	Z	16.499	3.5
27	MP4A	Mx	0	3.5

Member Point Loads (BLC 22 : Antenna Wi (210 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
1	MP1A	X	-8.383	2
2	MP1A	Z	14.521	2
3	MP1A	Mx	.004	2
4	MP1A	X	-8.383	4
5	MP1A	Z	14.521	4
6	MP1A	Mx	.004	4
7	MP3A	X	-16.941	1.5
8	MP3A	Z	29.343	1.5
9	MP3A	Mx	.04	1.5
10	MP3A	X	-16.941	5.5
11	MP3A	Z	29.343	5.5
12	MP3A	Mx	.04	5.5
13	MP3A	X	-16.941	1.5
14	MP3A	Z	29.343	1.5
15	MP3A	Mx	-.004	1.5
16	MP3A	X	-16.941	5.5
17	MP3A	Z	29.343	5.5
18	MP3A	Mx	-.004	5.5
19	MP3A	X	-3.218	5.75
20	MP3A	Z	5.573	5.75
21	MP3A	Mx	-.002	5.75
22	MP2A	X	-7.622	2
23	MP2A	Z	13.201	2
24	MP2A	Mx	-.005	2
25	MP4A	X	-7.383	3.5
26	MP4A	Z	12.788	3.5
27	MP4A	Mx	-.005	3.5

Member Point Loads (BLC 23 : Antenna Wi (240 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
1	MP1A	X	-9.655	2
2	MP1A	Z	5.574	2
3	MP1A	Mx	.005	2
4	MP1A	X	-9.655	4
5	MP1A	Z	5.574	4
6	MP1A	Mx	.005	4
7	MP3A	X	-24.277	1.5
8	MP3A	Z	14.016	1.5
9	MP3A	Mx	.037	1.5
10	MP3A	X	-24.277	5.5
11	MP3A	Z	14.016	5.5
12	MP3A	Mx	.037	5.5
13	MP3A	X	-24.277	1.5
14	MP3A	Z	14.016	1.5

Member Point Loads (BLC 23 : Antenna Wi (240 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
15	MP3A	Mx	.016	1.5
16	MP3A	X	-24.277	5.5
17	MP3A	Z	14.016	5.5
18	MP3A	Mx	.016	5.5
19	MP3A	X	-4.489	5.75
20	MP3A	Z	2.592	5.75
21	MP3A	Mx	-.002	5.75
22	MP2A	X	-11.026	2
23	MP2A	Z	6.366	2
24	MP2A	Mx	-.007	2
25	MP4A	X	-9.787	3.5
26	MP4A	Z	5.65	3.5
27	MP4A	Mx	-.007	3.5

Member Point Loads (BLC 24 : Antenna Wi (270 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
1	MP1A	X	-8.339	2
2	MP1A	Z	0	2
3	MP1A	Mx	.004	2
4	MP1A	X	-8.339	4
5	MP1A	Z	0	4
6	MP1A	Mx	.004	4
7	MP3A	X	-25.108	1.5
8	MP3A	Z	0	1.5
9	MP3A	Mx	.027	1.5
10	MP3A	X	-25.108	5.5
11	MP3A	Z	0	5.5
12	MP3A	Mx	.027	5.5
13	MP3A	X	-25.108	1.5
14	MP3A	Z	0	1.5
15	MP3A	Mx	.027	1.5
16	MP3A	X	-25.108	5.5
17	MP3A	Z	0	5.5
18	MP3A	Mx	.027	5.5
19	MP3A	X	-4.558	5.75
20	MP3A	Z	0	5.75
21	MP3A	Mx	-.002	5.75
22	MP2A	X	-11.477	2
23	MP2A	Z	0	2
24	MP2A	Mx	-.008	2
25	MP4A	X	-9.568	3.5
26	MP4A	Z	0	3.5
27	MP4A	Mx	-.006	3.5

Member Point Loads (BLC 25 : Antenna Wi (300 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
1	MP1A	X	-9.655	2
2	MP1A	Z	-5.574	2
3	MP1A	Mx	.005	2
4	MP1A	X	-9.655	4
5	MP1A	Z	-5.574	4
6	MP1A	Mx	.005	4
7	MP3A	X	-24.277	1.5
8	MP3A	Z	-14.016	1.5
9	MP3A	Mx	.016	1.5
10	MP3A	X	-24.277	5.5

Member Point Loads (BLC 25 : Antenna Wi (300 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
11	MP3A	Z	-14.016	5.5
12	MP3A	Mx	.016	5.5
13	MP3A	X	-24.277	1.5
14	MP3A	Z	-14.016	1.5
15	MP3A	Mx	.037	1.5
16	MP3A	X	-24.277	5.5
17	MP3A	Z	-14.016	5.5
18	MP3A	Mx	.037	5.5
19	MP3A	X	-4.489	5.75
20	MP3A	Z	-2.592	5.75
21	MP3A	Mx	-.002	5.75
22	MP2A	X	-11.026	2
23	MP2A	Z	-6.366	2
24	MP2A	Mx	-.007	2
25	MP4A	X	-9.787	3.5
26	MP4A	Z	-5.65	3.5
27	MP4A	Mx	-.007	3.5

Member Point Loads (BLC 26 : Antenna Wi (330 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-8.383	2
2	MP1A	Z	-14.521	2
3	MP1A	Mx	.004	2
4	MP1A	X	-8.383	4
5	MP1A	Z	-14.521	4
6	MP1A	Mx	.004	4
7	MP3A	X	-16.941	1.5
8	MP3A	Z	-29.343	1.5
9	MP3A	Mx	-.004	1.5
10	MP3A	X	-16.941	5.5
11	MP3A	Z	-29.343	5.5
12	MP3A	Mx	-.004	5.5
13	MP3A	X	-16.941	1.5
14	MP3A	Z	-29.343	1.5
15	MP3A	Mx	.04	1.5
16	MP3A	X	-16.941	5.5
17	MP3A	Z	-29.343	5.5
18	MP3A	Mx	.04	5.5
19	MP3A	X	-3.218	5.75
20	MP3A	Z	-5.573	5.75
21	MP3A	Mx	-.002	5.75
22	MP2A	X	-7.622	2
23	MP2A	Z	-13.201	2
24	MP2A	Mx	-.005	2
25	MP4A	X	-7.383	3.5
26	MP4A	Z	-12.788	3.5
27	MP4A	Mx	-.005	3.5

Member Point Loads (BLC 27 : Antenna Wm (0 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	2
2	MP1A	Z	-6.239	2
3	MP1A	Mx	0	2
4	MP1A	X	0	4
5	MP1A	Z	-6.239	4
6	MP1A	Mx	0	4

Member Point Loads (BLC 27 : Antenna Wm (0 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
7	MP3A	X	0	1.5
8	MP3A	Z	-12.092	1.5
9	MP3A	Mx	-.009	1.5
10	MP3A	X	0	5.5
11	MP3A	Z	-12.092	5.5
12	MP3A	Mx	-.009	5.5
13	MP3A	X	0	1.5
14	MP3A	Z	-12.092	1.5
15	MP3A	Mx	.009	1.5
16	MP3A	X	0	5.5
17	MP3A	Z	-12.092	5.5
18	MP3A	Mx	.009	5.5
19	MP3A	X	0	5.75
20	MP3A	Z	-1.885	5.75
21	MP3A	Mx	0	5.75
22	MP2A	X	0	2
23	MP2A	Z	-4.964	2
24	MP2A	Mx	0	2
25	MP4A	X	0	3.5
26	MP4A	Z	-4.964	3.5
27	MP4A	Mx	0	3.5

Member Point Loads (BLC 28 : Antenna Wm (30 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	2.645	2
2	MP1A	Z	-4.581	2
3	MP1A	Mx	-.001	2
4	MP1A	X	2.645	4
5	MP1A	Z	-4.581	4
6	MP1A	Mx	-.001	4
7	MP3A	X	5.527	1.5
8	MP3A	Z	-9.574	1.5
9	MP3A	Mx	-.013	1.5
10	MP3A	X	5.527	5.5
11	MP3A	Z	-9.574	5.5
12	MP3A	Mx	-.013	5.5
13	MP3A	X	5.527	1.5
14	MP3A	Z	-9.574	1.5
15	MP3A	Mx	.001	1.5
16	MP3A	X	5.527	5.5
17	MP3A	Z	-9.574	5.5
18	MP3A	Mx	.001	5.5
19	MP3A	X	.85	5.75
20	MP3A	Z	-1.472	5.75
21	MP3A	Mx	.000425	5.75
22	MP2A	X	2.276	2
23	MP2A	Z	-3.943	2
24	MP2A	Mx	.002	2
25	MP4A	X	2.198	3.5
26	MP4A	Z	-3.806	3.5
27	MP4A	Mx	.001	3.5

Member Point Loads (BLC 29 : Antenna Wm (60 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	2.937	2
2	MP1A	Z	-1.696	2

Member Point Loads (BLC 29 : Antenna Wm (60 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
3	MP1A	Mx	-.001	2
4	MP1A	X	2.937	4
5	MP1A	Z	-1.696	4
6	MP1A	Mx	-.001	4
7	MP3A	X	7.776	1.5
8	MP3A	Z	-4.49	1.5
9	MP3A	Mx	-.012	1.5
10	MP3A	X	7.776	5.5
11	MP3A	Z	-4.49	5.5
12	MP3A	Mx	-.012	5.5
13	MP3A	X	7.776	1.5
14	MP3A	Z	-4.49	1.5
15	MP3A	Mx	-.005	1.5
16	MP3A	X	7.776	5.5
17	MP3A	Z	-4.49	5.5
18	MP3A	Mx	-.005	5.5
19	MP3A	X	1.151	5.75
20	MP3A	Z	-.664	5.75
21	MP3A	Mx	.000576	5.75
22	MP2A	X	3.23	2
23	MP2A	Z	-1.865	2
24	MP2A	Mx	.002	2
25	MP4A	X	2.821	3.5
26	MP4A	Z	-1.628	3.5
27	MP4A	Mx	.002	3.5

Member Point Loads (BLC 30 : Antenna Wm (90 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
1	MP1A	X	2.442	2
2	MP1A	Z	0	2
3	MP1A	Mx	-.001	2
4	MP1A	X	2.442	4
5	MP1A	Z	0	4
6	MP1A	Mx	-.001	4
7	MP3A	X	7.942	1.5
8	MP3A	Z	0	1.5
9	MP3A	Mx	-.009	1.5
10	MP3A	X	7.942	5.5
11	MP3A	Z	0	5.5
12	MP3A	Mx	-.009	5.5
13	MP3A	X	7.942	1.5
14	MP3A	Z	0	1.5
15	MP3A	Mx	-.009	1.5
16	MP3A	X	7.942	5.5
17	MP3A	Z	0	5.5
18	MP3A	Mx	-.009	5.5
19	MP3A	X	1.143	5.75
20	MP3A	Z	0	5.75
21	MP3A	Mx	.000572	5.75
22	MP2A	X	3.318	2
23	MP2A	Z	0	2
24	MP2A	Mx	.002	2
25	MP4A	X	2.688	3.5
26	MP4A	Z	0	3.5
27	MP4A	Mx	.002	3.5

Member Point Loads (BLC 31 : Antenna Wm (120 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	2.937	2
2	MP1A	Z	1.696	2
3	MP1A	Mx	-.001	2
4	MP1A	X	2.937	4
5	MP1A	Z	1.696	4
6	MP1A	Mx	-.001	4
7	MP3A	X	7.776	1.5
8	MP3A	Z	4.49	1.5
9	MP3A	Mx	-.005	1.5
10	MP3A	X	7.776	5.5
11	MP3A	Z	4.49	5.5
12	MP3A	Mx	-.005	5.5
13	MP3A	X	7.776	1.5
14	MP3A	Z	4.49	1.5
15	MP3A	Mx	-.012	1.5
16	MP3A	X	7.776	5.5
17	MP3A	Z	4.49	5.5
18	MP3A	Mx	-.012	5.5
19	MP3A	X	1.151	5.75
20	MP3A	Z	.664	5.75
21	MP3A	Mx	.000576	5.75
22	MP2A	X	3.23	2
23	MP2A	Z	1.865	2
24	MP2A	Mx	.002	2
25	MP4A	X	2.821	3.5
26	MP4A	Z	1.628	3.5
27	MP4A	Mx	.002	3.5

Member Point Loads (BLC 32 : Antenna Wm (150 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	2.645	2
2	MP1A	Z	4.581	2
3	MP1A	Mx	-.001	2
4	MP1A	X	2.645	4
5	MP1A	Z	4.581	4
6	MP1A	Mx	-.001	4
7	MP3A	X	5.527	1.5
8	MP3A	Z	9.574	1.5
9	MP3A	Mx	.001	1.5
10	MP3A	X	5.527	5.5
11	MP3A	Z	9.574	5.5
12	MP3A	Mx	.001	5.5
13	MP3A	X	5.527	1.5
14	MP3A	Z	9.574	1.5
15	MP3A	Mx	-.013	1.5
16	MP3A	X	5.527	5.5
17	MP3A	Z	9.574	5.5
18	MP3A	Mx	-.013	5.5
19	MP3A	X	.85	5.75
20	MP3A	Z	1.472	5.75
21	MP3A	Mx	.000425	5.75
22	MP2A	X	2.276	2
23	MP2A	Z	3.943	2
24	MP2A	Mx	.002	2
25	MP4A	X	2.198	3.5
26	MP4A	Z	3.806	3.5

Member Point Loads (BLC 32 : Antenna Wm (150 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
27	MP4A	Mx	.001	3.5

Member Point Loads (BLC 33 : Antenna Wm (180 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	2
2	MP1A	Z	6.239	2
3	MP1A	Mx	0	2
4	MP1A	X	0	4
5	MP1A	Z	6.239	4
6	MP1A	Mx	0	4
7	MP3A	X	0	1.5
8	MP3A	Z	12.092	1.5
9	MP3A	Mx	.009	1.5
10	MP3A	X	0	5.5
11	MP3A	Z	12.092	5.5
12	MP3A	Mx	.009	5.5
13	MP3A	X	0	1.5
14	MP3A	Z	12.092	1.5
15	MP3A	Mx	-.009	1.5
16	MP3A	X	0	5.5
17	MP3A	Z	12.092	5.5
18	MP3A	Mx	-.009	5.5
19	MP3A	X	0	5.75
20	MP3A	Z	1.885	5.75
21	MP3A	Mx	0	5.75
22	MP2A	X	0	2
23	MP2A	Z	4.964	2
24	MP2A	Mx	0	2
25	MP4A	X	0	3.5
26	MP4A	Z	4.964	3.5
27	MP4A	Mx	0	3.5

Member Point Loads (BLC 34 : Antenna Wm (210 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-2.645	2
2	MP1A	Z	4.581	2
3	MP1A	Mx	.001	2
4	MP1A	X	-2.645	4
5	MP1A	Z	4.581	4
6	MP1A	Mx	.001	4
7	MP3A	X	-5.527	1.5
8	MP3A	Z	9.574	1.5
9	MP3A	Mx	.013	1.5
10	MP3A	X	-5.527	5.5
11	MP3A	Z	9.574	5.5
12	MP3A	Mx	.013	5.5
13	MP3A	X	-5.527	1.5
14	MP3A	Z	9.574	1.5
15	MP3A	Mx	-.001	1.5
16	MP3A	X	-5.527	5.5
17	MP3A	Z	9.574	5.5
18	MP3A	Mx	-.001	5.5
19	MP3A	X	-.85	5.75
20	MP3A	Z	1.472	5.75
21	MP3A	Mx	-.000425	5.75
22	MP2A	X	-2.276	2

Member Point Loads (BLC 34 : Antenna Wm (210 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
23	MP2A	Z	3.943	2
24	MP2A	Mx	-.002	2
25	MP4A	X	-2.198	3.5
26	MP4A	Z	3.806	3.5
27	MP4A	Mx	-.001	3.5

Member Point Loads (BLC 35 : Antenna Wm (240 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
1	MP1A	X	-2.937	2
2	MP1A	Z	1.696	2
3	MP1A	Mx	.001	2
4	MP1A	X	-2.937	4
5	MP1A	Z	1.696	4
6	MP1A	Mx	.001	4
7	MP3A	X	-7.776	1.5
8	MP3A	Z	4.49	1.5
9	MP3A	Mx	.012	1.5
10	MP3A	X	-7.776	5.5
11	MP3A	Z	4.49	5.5
12	MP3A	Mx	.012	5.5
13	MP3A	X	-7.776	1.5
14	MP3A	Z	4.49	1.5
15	MP3A	Mx	.005	1.5
16	MP3A	X	-7.776	5.5
17	MP3A	Z	4.49	5.5
18	MP3A	Mx	.005	5.5
19	MP3A	X	-1.151	5.75
20	MP3A	Z	.664	5.75
21	MP3A	Mx	-.000576	5.75
22	MP2A	X	-3.23	2
23	MP2A	Z	1.865	2
24	MP2A	Mx	-.002	2
25	MP4A	X	-2.821	3.5
26	MP4A	Z	1.628	3.5
27	MP4A	Mx	-.002	3.5

Member Point Loads (BLC 36 : Antenna Wm (270 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
1	MP1A	X	-2.442	2
2	MP1A	Z	0	2
3	MP1A	Mx	.001	2
4	MP1A	X	-2.442	4
5	MP1A	Z	0	4
6	MP1A	Mx	.001	4
7	MP3A	X	-7.942	1.5
8	MP3A	Z	0	1.5
9	MP3A	Mx	.009	1.5
10	MP3A	X	-7.942	5.5
11	MP3A	Z	0	5.5
12	MP3A	Mx	.009	5.5
13	MP3A	X	-7.942	1.5
14	MP3A	Z	0	1.5
15	MP3A	Mx	.009	1.5
16	MP3A	X	-7.942	5.5
17	MP3A	Z	0	5.5
18	MP3A	Mx	.009	5.5

Member Point Loads (BLC 36 : Antenna Wm (270 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
19	MP3A	X	-1.143	5.75
20	MP3A	Z	0	5.75
21	MP3A	Mx	-.000572	5.75
22	MP2A	X	-3.318	2
23	MP2A	Z	0	2
24	MP2A	Mx	-.002	2
25	MP4A	X	-2.688	3.5
26	MP4A	Z	0	3.5
27	MP4A	Mx	-.002	3.5

Member Point Loads (BLC 37 : Antenna Wm (300 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
1	MP1A	X	-2.937	2
2	MP1A	Z	-1.696	2
3	MP1A	Mx	.001	2
4	MP1A	X	-2.937	4
5	MP1A	Z	-1.696	4
6	MP1A	Mx	.001	4
7	MP3A	X	-7.776	1.5
8	MP3A	Z	-4.49	1.5
9	MP3A	Mx	.005	1.5
10	MP3A	X	-7.776	5.5
11	MP3A	Z	-4.49	5.5
12	MP3A	Mx	.005	5.5
13	MP3A	X	-7.776	1.5
14	MP3A	Z	-4.49	1.5
15	MP3A	Mx	.012	1.5
16	MP3A	X	-7.776	5.5
17	MP3A	Z	-4.49	5.5
18	MP3A	Mx	.012	5.5
19	MP3A	X	-1.151	5.75
20	MP3A	Z	-.664	5.75
21	MP3A	Mx	-.000576	5.75
22	MP2A	X	-3.23	2
23	MP2A	Z	-1.865	2
24	MP2A	Mx	-.002	2
25	MP4A	X	-2.821	3.5
26	MP4A	Z	-1.628	3.5
27	MP4A	Mx	-.002	3.5

Member Point Loads (BLC 38 : Antenna Wm (330 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
1	MP1A	X	-2.645	2
2	MP1A	Z	-4.581	2
3	MP1A	Mx	.001	2
4	MP1A	X	-2.645	4
5	MP1A	Z	-4.581	4
6	MP1A	Mx	.001	4
7	MP3A	X	-5.527	1.5
8	MP3A	Z	-9.574	1.5
9	MP3A	Mx	-.001	1.5
10	MP3A	X	-5.527	5.5
11	MP3A	Z	-9.574	5.5
12	MP3A	Mx	-.001	5.5
13	MP3A	X	-5.527	1.5
14	MP3A	Z	-9.574	1.5

Member Point Loads (BLC 38 : Antenna Wm (330 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
15	MP3A	Mx	.013	1.5
16	MP3A	X	-5.527	5.5
17	MP3A	Z	-9.574	5.5
18	MP3A	Mx	.013	5.5
19	MP3A	X	-.85	5.75
20	MP3A	Z	-1.472	5.75
21	MP3A	Mx	-.000425	5.75
22	MP2A	X	-2.276	2
23	MP2A	Z	-3.943	2
24	MP2A	Mx	-.002	2
25	MP4A	X	-2.198	3.5
26	MP4A	Z	-3.806	3.5
27	MP4A	Mx	-.001	3.5

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M18A	Y	-500	0

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M21	Y	-500	0

Member Point Loads (BLC 79 : Lv1)

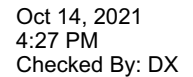
	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	Y	-250	0

Member Point Loads (BLC 80 : Lv2)

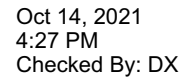
	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	Y	-250	%50

Member Point Loads (BLC 81 : Antenna Ev)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Y	0	2
2	MP1A	My	0	2
3	MP1A	Mz	0	2
4	MP1A	Y	0	4
5	MP1A	My	0	4
6	MP1A	Mz	0	4
7	MP3A	Y	0	1.5
8	MP3A	My	0	1.5
9	MP3A	Mz	0	1.5
10	MP3A	Y	0	5.5
11	MP3A	My	0	5.5
12	MP3A	Mz	0	5.5
13	MP3A	Y	0	1.5
14	MP3A	My	0	1.5
15	MP3A	Mz	0	1.5
16	MP3A	Y	0	5.5
17	MP3A	My	0	5.5
18	MP3A	Mz	0	5.5
19	MP3A	Y	0	5.75
20	MP3A	My	0	5.75
21	MP3A	Mz	0	5.75
22	MP2A	Y	0	2



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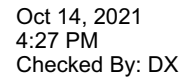
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Member Distributed Loads (BLC 43 : Structure Wo (60 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
18	M29	Z	-1.394	-1.394	0	%100
19	MP1A	X	8.448	8.448	0	%100
20	MP1A	Z	-4.877	-4.877	0	%100
21	M30	X	5.219	5.219	0	%100
22	M30	Z	-3.013	-3.013	0	%100
23	MP2A	X	8.448	8.448	0	%100
24	MP2A	Z	-4.877	-4.877	0	%100
25	MP3A	X	10.226	10.226	0	%100
26	MP3A	Z	-5.904	-5.904	0	%100
27	MP4A	X	8.448	8.448	0	%100
28	MP4A	Z	-4.877	-4.877	0	%100
29	M25A	X	3.557	3.557	0	%100
30	M25A	Z	-2.054	-2.054	0	%100
31	M26	X	3.557	3.557	0	%100
32	M26	Z	-2.054	-2.054	0	%100
33	M27A	X	.107	.107	0	%100
34	M27A	Z	-.062	-.062	0	%100
35	M28A	X	11.108	11.108	0	%100
36	M28A	Z	-6.413	-6.413	0	%100

Member Distributed Loads (BLC 44 : Structure Wo (90 Deg))

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M7A	X	0	0	0	%100
4	M7A	Z	0	0	0	%100
5	M15	X	4.107	4.107	0	%100
6	M15	Z	0	0	0	%100
7	M16	X	4.107	4.107	0	%100
8	M16	Z	0	0	0	%100
9	M19	X	9.003	9.003	0	%100
10	M19	Z	0	0	0	%100
11	M20	X	9.003	9.003	0	%100
12	M20	Z	0	0	0	%100
13	M27	X	4.107	4.107	0	%100
14	M27	Z	0	0	0	%100
15	M28	X	4.107	4.107	0	%100
16	M28	Z	0	0	0	%100
17	M29	X	3.08	3.08	0	%100
18	M29	Z	0	0	0	%100
19	MP1A	X	9.754	9.754	0	%100
20	MP1A	Z	0	0	0	%100
21	M30	X	7.798	7.798	0	%100
22	M30	Z	0	0	0	%100
23	MP2A	X	9.754	9.754	0	%100
24	MP2A	Z	0	0	0	%100
25	MP3A	X	11.808	11.808	0	%100
26	MP3A	Z	0	0	0	%100
27	MP4A	X	9.754	9.754	0	%100
28	MP4A	Z	0	0	0	%100
29	M25A	X	4.107	4.107	0	%100
30	M25A	Z	0	0	0	%100
31	M26	X	4.107	4.107	0	%100
32	M26	Z	0	0	0	%100
33	M27A	X	4.331	4.331	0	%100
34	M27A	Z	0	0	0	%100



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Member Distributed Loads (BLC 46 : Structure Wo (150 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
13	M27	X	2.054	2.054	0	%100
14	M27	Z	3.557	3.557	0	%100
15	M28	X	2.054	2.054	0	%100
16	M28	Z	3.557	3.557	0	%100
17	M29	X	1.102	1.102	0	%100
18	M29	Z	1.909	1.909	0	%100
19	MP1A	X	4.877	4.877	0	%100
20	MP1A	Z	8.448	8.448	0	%100
21	M30	X	.889	.889	0	%100
22	M30	Z	1.539	1.539	0	%100
23	MP2A	X	4.877	4.877	0	%100
24	MP2A	Z	8.448	8.448	0	%100
25	MP3A	X	5.904	5.904	0	%100
26	MP3A	Z	10.226	10.226	0	%100
27	MP4A	X	4.877	4.877	0	%100
28	MP4A	Z	8.448	8.448	0	%100
29	M25A	X	2.054	2.054	0	%100
30	M25A	Z	3.557	3.557	0	%100
31	M26	X	2.054	2.054	0	%100
32	M26	Z	3.557	3.557	0	%100
33	M27A	X	8.556	8.556	0	%100
34	M27A	Z	14.82	14.82	0	%100
35	M28A	X	2.205	2.205	0	%100
36	M28A	Z	3.82	3.82	0	%100

Member Distributed Loads (BLC 47 : Structure Wo (180 Deg))

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	0	0	0	%100
2	M1	Z	11.808	11.808	0	%100
3	M7A	X	0	0	0	%100
4	M7A	Z	11.808	11.808	0	%100
5	M15	X	0	0	0	%100
6	M15	Z	4.107	4.107	0	%100
7	M16	X	0	0	0	%100
8	M16	Z	4.107	4.107	0	%100
9	M19	X	0	0	0	%100
10	M19	Z	0	0	0	%100
11	M20	X	0	0	0	%100
12	M20	Z	0	0	0	%100
13	M27	X	0	0	0	%100
14	M27	Z	4.107	4.107	0	%100
15	M28	X	0	0	0	%100
16	M28	Z	4.107	4.107	0	%100
17	M29	X	0	0	0	%100
18	M29	Z	1.913	1.913	0	%100
19	MP1A	X	0	0	0	%100
20	MP1A	Z	9.754	9.754	0	%100
21	M30	X	0	0	0	%100
22	M30	Z	.005	.005	0	%100
23	MP2A	X	0	0	0	%100
24	MP2A	Z	9.754	9.754	0	%100
25	MP3A	X	0	0	0	%100
26	MP3A	Z	11.808	11.808	0	%100
27	MP4A	X	0	0	0	%100
28	MP4A	Z	9.754	9.754	0	%100
29	M25A	X	0	0	0	%100

Member Distributed Loads (BLC 47 : Structure Wo (180 Deg)) (Continued)

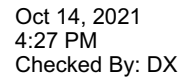
	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft,%]	End Location[ft,%]
30	M25A	Z	4.107	4.107	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	4.107	4.107	0	%100
33	M27A	X	0	0	0	%100
34	M27A	Z	12.905	12.905	0	%100
35	M28A	X	0	0	0	%100
36	M28A	Z	12.905	12.905	0	%100

Member Distributed Loads (BLC 48 : Structure Wo (210 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-4.428	-4.428	0	%100
2	M1	Z	7.669	7.669	0	%100
3	M7A	X	-4.428	-4.428	0	%100
4	M7A	Z	7.669	7.669	0	%100
5	M15	X	-2.054	-2.054	0	%100
6	M15	Z	3.557	3.557	0	%100
7	M16	X	-2.054	-2.054	0	%100
8	M16	Z	3.557	3.557	0	%100
9	M19	X	-1.125	-1.125	0	%100
10	M19	Z	1.949	1.949	0	%100
11	M20	X	-1.125	-1.125	0	%100
12	M20	Z	1.949	1.949	0	%100
13	M27	X	-2.054	-2.054	0	%100
14	M27	Z	3.557	3.557	0	%100
15	M28	X	-2.054	-2.054	0	%100
16	M28	Z	3.557	3.557	0	%100
17	M29	X	-1.102	-1.102	0	%100
18	M29	Z	1.909	1.909	0	%100
19	MP1A	X	-4.877	-4.877	0	%100
20	MP1A	Z	8.448	8.448	0	%100
21	M30	X	-1.065	-1.065	0	%100
22	M30	Z	1.845	1.845	0	%100
23	MP2A	X	-4.877	-4.877	0	%100
24	MP2A	Z	8.448	8.448	0	%100
25	MP3A	X	-5.904	-5.904	0	%100
26	MP3A	Z	10.226	10.226	0	%100
27	MP4A	X	-4.877	-4.877	0	%100
28	MP4A	Z	8.448	8.448	0	%100
29	M25A	X	-2.054	-2.054	0	%100
30	M25A	Z	3.557	3.557	0	%100
31	M26	X	-2.054	-2.054	0	%100
32	M26	Z	3.557	3.557	0	%100
33	M27A	X	-2.205	-2.205	0	%100
34	M27A	Z	3.82	3.82	0	%100
35	M28A	X	-8.556	-8.556	0	%100
36	M28A	Z	14.82	14.82	0	%100

Member Distributed Loads (BLC 49 : Structure Wo (240 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-2.556	-2.556	0	%100
2	M1	Z	1.476	1.476	0	%100
3	M7A	X	-2.556	-2.556	0	%100
4	M7A	Z	1.476	1.476	0	%100
5	M15	X	-3.557	-3.557	0	%100
6	M15	Z	2.054	2.054	0	%100
7	M16	X	-3.557	-3.557	0	%100



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Member Distributed Loads (BLC 52 : Structure Wo (330 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
3	M7A	X	-4.428	-4.428	0	%100
4	M7A	Z	-7.669	-7.669	0	%100
5	M15	X	-2.054	-2.054	0	%100
6	M15	Z	-3.557	-3.557	0	%100
7	M16	X	-2.054	-2.054	0	%100
8	M16	Z	-3.557	-3.557	0	%100
9	M19	X	-1.125	-1.125	0	%100
10	M19	Z	-1.949	-1.949	0	%100
11	M20	X	-1.125	-1.125	0	%100
12	M20	Z	-1.949	-1.949	0	%100
13	M27	X	-2.054	-2.054	0	%100
14	M27	Z	-3.557	-3.557	0	%100
15	M28	X	-2.054	-2.054	0	%100
16	M28	Z	-3.557	-3.557	0	%100
17	M29	X	-1.102	-1.102	0	%100
18	M29	Z	-1.909	-1.909	0	%100
19	MP1A	X	-4.877	-4.877	0	%100
20	MP1A	Z	-8.448	-8.448	0	%100
21	M30	X	-.889	-.889	0	%100
22	M30	Z	-1.539	-1.539	0	%100
23	MP2A	X	-4.877	-4.877	0	%100
24	MP2A	Z	-8.448	-8.448	0	%100
25	MP3A	X	-5.904	-5.904	0	%100
26	MP3A	Z	-10.226	-10.226	0	%100
27	MP4A	X	-4.877	-4.877	0	%100
28	MP4A	Z	-8.448	-8.448	0	%100
29	M25A	X	-2.054	-2.054	0	%100
30	M25A	Z	-3.557	-3.557	0	%100
31	M26	X	-2.054	-2.054	0	%100
32	M26	Z	-3.557	-3.557	0	%100
33	M27A	X	-8.556	-8.556	0	%100
34	M27A	Z	-14.82	-14.82	0	%100
35	M28A	X	-2.205	-2.205	0	%100
36	M28A	Z	-3.82	-3.82	0	%100

Member Distributed Loads (BLC 53 : Structure Wi (0 Deg))

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	0	0	0	%100
2	M1	Z	-3.822	-3.822	0	%100
3	M7A	X	0	0	0	%100
4	M7A	Z	-3.822	-3.822	0	%100
5	M15	X	0	0	0	%100
6	M15	Z	-2.088	-2.088	0	%100
7	M16	X	0	0	0	%100
8	M16	Z	-2.088	-2.088	0	%100
9	M19	X	0	0	0	%100
10	M19	Z	0	0	0	%100
11	M20	X	0	0	0	%100
12	M20	Z	0	0	0	%100
13	M27	X	0	0	0	%100
14	M27	Z	-2.088	-2.088	0	%100
15	M28	X	0	0	0	%100
16	M28	Z	-2.088	-2.088	0	%100
17	M29	X	0	0	0	%100
18	M29	Z	-1.255	-1.255	0	%100
19	MP1A	X	0	0	0	%100

Member Distributed Loads (BLC 53 : Structure Wi (0 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
20	MP1A	Z	-3.453	-3.453	0	%100
21	M30	X	0	0	0	%100
22	M30	Z	-.002	-.002	0	%100
23	MP2A	X	0	0	0	%100
24	MP2A	Z	-3.453	-3.453	0	%100
25	MP3A	X	0	0	0	%100
26	MP3A	Z	-3.822	-3.822	0	%100
27	MP4A	X	0	0	0	%100
28	MP4A	Z	-3.453	-3.453	0	%100
29	M25A	X	0	0	0	%100
30	M25A	Z	-2.088	-2.088	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	-2.088	-2.088	0	%100
33	M27A	X	0	0	0	%100
34	M27A	Z	-3.6	-3.6	0	%100
35	M28A	X	0	0	0	%100
36	M28A	Z	-3.6	-3.6	0	%100

Member Distributed Loads (BLC 54 : Structure Wi (30 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	1.433	1.433	0	%100
2	M1	Z	-2.482	-2.482	0	%100
3	M7A	X	1.433	1.433	0	%100
4	M7A	Z	-2.482	-2.482	0	%100
5	M15	X	1.044	1.044	0	%100
6	M15	Z	-1.808	-1.808	0	%100
7	M16	X	1.044	1.044	0	%100
8	M16	Z	-1.808	-1.808	0	%100
9	M19	X	.376	.376	0	%100
10	M19	Z	-.651	-.651	0	%100
11	M20	X	.376	.376	0	%100
12	M20	Z	-.651	-.651	0	%100
13	M27	X	1.044	1.044	0	%100
14	M27	Z	-1.808	-1.808	0	%100
15	M28	X	1.044	1.044	0	%100
16	M28	Z	-1.808	-1.808	0	%100
17	M29	X	.723	.723	0	%100
18	M29	Z	-1.253	-1.253	0	%100
19	MP1A	X	1.727	1.727	0	%100
20	MP1A	Z	-2.99	-2.99	0	%100
21	M30	X	.423	.423	0	%100
22	M30	Z	-.733	-.733	0	%100
23	MP2A	X	1.727	1.727	0	%100
24	MP2A	Z	-2.99	-2.99	0	%100
25	MP3A	X	1.911	1.911	0	%100
26	MP3A	Z	-3.31	-3.31	0	%100
27	MP4A	X	1.727	1.727	0	%100
28	MP4A	Z	-2.99	-2.99	0	%100
29	M25A	X	1.044	1.044	0	%100
30	M25A	Z	-1.808	-1.808	0	%100
31	M26	X	1.044	1.044	0	%100
32	M26	Z	-1.808	-1.808	0	%100
33	M27A	X	.615	.615	0	%100
34	M27A	Z	-1.066	-1.066	0	%100
35	M28A	X	2.387	2.387	0	%100
36	M28A	Z	-4.135	-4.135	0	%100

Member Distributed Loads (BLC 55 : Structure Wi (60 Deg))

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	.827	.827	0	%100
2	M1	Z	-.478	-.478	0	%100
3	M7A	X	.827	.827	0	%100
4	M7A	Z	-.478	-.478	0	%100
5	M15	X	1.808	1.808	0	%100
6	M15	Z	-1.044	-1.044	0	%100
7	M16	X	1.808	1.808	0	%100
8	M16	Z	-1.044	-1.044	0	%100
9	M19	X	1.954	1.954	0	%100
10	M19	Z	-1.128	-1.128	0	%100
11	M20	X	1.954	1.954	0	%100
12	M20	Z	-1.128	-1.128	0	%100
13	M27	X	1.808	1.808	0	%100
14	M27	Z	-1.044	-1.044	0	%100
15	M28	X	1.808	1.808	0	%100
16	M28	Z	-1.044	-1.044	0	%100
17	M29	X	1.585	1.585	0	%100
18	M29	Z	-.915	-.915	0	%100
19	MP1A	X	2.99	2.99	0	%100
20	MP1A	Z	-1.727	-1.727	0	%100
21	M30	X	2.075	2.075	0	%100
22	M30	Z	-1.198	-1.198	0	%100
23	MP2A	X	2.99	2.99	0	%100
24	MP2A	Z	-1.727	-1.727	0	%100
25	MP3A	X	3.31	3.31	0	%100
26	MP3A	Z	-1.911	-1.911	0	%100
27	MP4A	X	2.99	2.99	0	%100
28	MP4A	Z	-1.727	-1.727	0	%100
29	M25A	X	1.808	1.808	0	%100
30	M25A	Z	-1.044	-1.044	0	%100
31	M26	X	1.808	1.808	0	%100
32	M26	Z	-1.044	-1.044	0	%100
33	M27A	X	.03	.03	0	%100
34	M27A	Z	-.017	-.017	0	%100
35	M28A	X	3.099	3.099	0	%100
36	M28A	Z	-1.789	-1.789	0	%100

Member Distributed Loads (BLC 56 : Structure Wi (90 Deg))

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M7A	X	0	0	0	%100
4	M7A	Z	0	0	0	%100
5	M15	X	2.088	2.088	0	%100
6	M15	Z	0	0	0	%100
7	M16	X	2.088	2.088	0	%100
8	M16	Z	0	0	0	%100
9	M19	X	3.008	3.008	0	%100
10	M19	Z	0	0	0	%100
11	M20	X	3.008	3.008	0	%100
12	M20	Z	0	0	0	%100
13	M27	X	2.088	2.088	0	%100
14	M27	Z	0	0	0	%100
15	M28	X	2.088	2.088	0	%100
16	M28	Z	0	0	0	%100
17	M29	X	2.021	2.021	0	%100

Member Distributed Loads (BLC 57 : Structure Wi (120 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
35	M28A	X	.03	.03	0	%100
36	M28A	Z	.017	.017	0	%100

Member Distributed Loads (BLC 58 : Structure Wi (150 Deg))

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	1.433	1.433	0	%100
2	M1	Z	2.482	2.482	0	%100
3	M7A	X	1.433	1.433	0	%100
4	M7A	Z	2.482	2.482	0	%100
5	M15	X	1.044	1.044	0	%100
6	M15	Z	1.808	1.808	0	%100
7	M16	X	1.044	1.044	0	%100
8	M16	Z	1.808	1.808	0	%100
9	M19	X	.376	.376	0	%100
10	M19	Z	.651	.651	0	%100
11	M20	X	.376	.376	0	%100
12	M20	Z	.651	.651	0	%100
13	M27	X	1.044	1.044	0	%100
14	M27	Z	1.808	1.808	0	%100
15	M28	X	1.044	1.044	0	%100
16	M28	Z	1.808	1.808	0	%100
17	M29	X	.723	.723	0	%100
18	M29	Z	1.253	1.253	0	%100
19	MP1A	X	1.727	1.727	0	%100
20	MP1A	Z	2.99	2.99	0	%100
21	M30	X	.353	.353	0	%100
22	M30	Z	.612	.612	0	%100
23	MP2A	X	1.727	1.727	0	%100
24	MP2A	Z	2.99	2.99	0	%100
25	MP3A	X	1.911	1.911	0	%100
26	MP3A	Z	3.31	3.31	0	%100
27	MP4A	X	1.727	1.727	0	%100
28	MP4A	Z	2.99	2.99	0	%100
29	M25A	X	1.044	1.044	0	%100
30	M25A	Z	1.808	1.808	0	%100
31	M26	X	1.044	1.044	0	%100
32	M26	Z	1.808	1.808	0	%100
33	M27A	X	2.387	2.387	0	%100
34	M27A	Z	4.135	4.135	0	%100
35	M28A	X	.615	.615	0	%100
36	M28A	Z	1.066	1.066	0	%100

Member Distributed Loads (BLC 59 : Structure Wi (180 Deg))

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	3.822	3.822	0	%100
3	M7A	X	0	0	0	%100
4	M7A	Z	3.822	3.822	0	%100
5	M15	X	0	0	0	%100
6	M15	Z	2.088	2.088	0	%100
7	M16	X	0	0	0	%100
8	M16	Z	2.088	2.088	0	%100
9	M19	X	0	0	0	%100
10	M19	Z	0	0	0	%100
11	M20	X	0	0	0	%100
12	M20	Z	0	0	0	%100

Member Distributed Loads (BLC 59 : Structure Wi (180 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
13	M27	X	0	0	0	%100
14	M27	Z	2.088	2.088	0	%100
15	M28	X	0	0	0	%100
16	M28	Z	2.088	2.088	0	%100
17	M29	X	0	0	0	%100
18	M29	Z	1.255	1.255	0	%100
19	MP1A	X	0	0	0	%100
20	MP1A	Z	3.453	3.453	0	%100
21	M30	X	0	0	0	%100
22	M30	Z	.002	.002	0	%100
23	MP2A	X	0	0	0	%100
24	MP2A	Z	3.453	3.453	0	%100
25	MP3A	X	0	0	0	%100
26	MP3A	Z	3.822	3.822	0	%100
27	MP4A	X	0	0	0	%100
28	MP4A	Z	3.453	3.453	0	%100
29	M25A	X	0	0	0	%100
30	M25A	Z	2.088	2.088	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	2.088	2.088	0	%100
33	M27A	X	0	0	0	%100
34	M27A	Z	3.6	3.6	0	%100
35	M28A	X	0	0	0	%100
36	M28A	Z	3.6	3.6	0	%100

Member Distributed Loads (BLC 60 : Structure Wi (210 Deg))

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	-1.433	-1.433	0	%100
2	M1	Z	2.482	2.482	0	%100
3	M7A	X	-1.433	-1.433	0	%100
4	M7A	Z	2.482	2.482	0	%100
5	M15	X	-1.044	-1.044	0	%100
6	M15	Z	1.808	1.808	0	%100
7	M16	X	-1.044	-1.044	0	%100
8	M16	Z	1.808	1.808	0	%100
9	M19	X	-.376	-.376	0	%100
10	M19	Z	.651	.651	0	%100
11	M20	X	-.376	-.376	0	%100
12	M20	Z	.651	.651	0	%100
13	M27	X	-1.044	-1.044	0	%100
14	M27	Z	1.808	1.808	0	%100
15	M28	X	-1.044	-1.044	0	%100
16	M28	Z	1.808	1.808	0	%100
17	M29	X	-.723	-.723	0	%100
18	M29	Z	1.253	1.253	0	%100
19	MP1A	X	-1.727	-1.727	0	%100
20	MP1A	Z	2.99	2.99	0	%100
21	M30	X	-.423	-.423	0	%100
22	M30	Z	.733	.733	0	%100
23	MP2A	X	-1.727	-1.727	0	%100
24	MP2A	Z	2.99	2.99	0	%100
25	MP3A	X	-1.911	-1.911	0	%100
26	MP3A	Z	3.31	3.31	0	%100
27	MP4A	X	-1.727	-1.727	0	%100
28	MP4A	Z	2.99	2.99	0	%100
29	M25A	X	-1.044	-1.044	0	%100

Member Distributed Loads (BLC 60 : Structure Wi (210 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,....	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
30	M25A	Z	1.808	1.808	0	%100
31	M26	X	-1.044	-1.044	0	%100
32	M26	Z	1.808	1.808	0	%100
33	M27A	X	-.615	-.615	0	%100
34	M27A	Z	1.066	1.066	0	%100
35	M28A	X	-2.387	-2.387	0	%100
36	M28A	Z	4.135	4.135	0	%100

Member Distributed Loads (BLC 61 : Structure Wi (240 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,....	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-.827	-.827	0	%100
2	M1	Z	.478	.478	0	%100
3	M7A	X	-.827	-.827	0	%100
4	M7A	Z	.478	.478	0	%100
5	M15	X	-1.808	-1.808	0	%100
6	M15	Z	1.044	1.044	0	%100
7	M16	X	-1.808	-1.808	0	%100
8	M16	Z	1.044	1.044	0	%100
9	M19	X	-1.954	-1.954	0	%100
10	M19	Z	1.128	1.128	0	%100
11	M20	X	-1.954	-1.954	0	%100
12	M20	Z	1.128	1.128	0	%100
13	M27	X	-1.808	-1.808	0	%100
14	M27	Z	1.044	1.044	0	%100
15	M28	X	-1.808	-1.808	0	%100
16	M28	Z	1.044	1.044	0	%100
17	M29	X	-1.585	-1.585	0	%100
18	M29	Z	.915	.915	0	%100
19	MP1A	X	-2.99	-2.99	0	%100
20	MP1A	Z	1.727	1.727	0	%100
21	M30	X	-2.075	-2.075	0	%100
22	M30	Z	1.198	1.198	0	%100
23	MP2A	X	-2.99	-2.99	0	%100
24	MP2A	Z	1.727	1.727	0	%100
25	MP3A	X	-3.31	-3.31	0	%100
26	MP3A	Z	1.911	1.911	0	%100
27	MP4A	X	-2.99	-2.99	0	%100
28	MP4A	Z	1.727	1.727	0	%100
29	M25A	X	-1.808	-1.808	0	%100
30	M25A	Z	1.044	1.044	0	%100
31	M26	X	-1.808	-1.808	0	%100
32	M26	Z	1.044	1.044	0	%100
33	M27A	X	-.03	-.03	0	%100
34	M27A	Z	.017	.017	0	%100
35	M28A	X	-3.099	-3.099	0	%100
36	M28A	Z	1.789	1.789	0	%100

Member Distributed Loads (BLC 62 : Structure Wi (270 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,....	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M7A	X	0	0	0	%100
4	M7A	Z	0	0	0	%100
5	M15	X	-2.088	-2.088	0	%100
6	M15	Z	0	0	0	%100
7	M16	X	-2.088	-2.088	0	%100

Member Distributed Loads (BLC 63 : Structure Wi (300 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
25	MP3A	X	-3.31	-3.31	0	%100
26	MP3A	Z	-1.911	-1.911	0	%100
27	MP4A	X	-2.99	-2.99	0	%100
28	MP4A	Z	-1.727	-1.727	0	%100
29	M25A	X	-1.808	-1.808	0	%100
30	M25A	Z	-1.044	-1.044	0	%100
31	M26	X	-1.808	-1.808	0	%100
32	M26	Z	-1.044	-1.044	0	%100
33	M27A	X	-3.099	-3.099	0	%100
34	M27A	Z	-1.789	-1.789	0	%100
35	M28A	X	-.03	-.03	0	%100
36	M28A	Z	-.017	-.017	0	%100

Member Distributed Loads (BLC 64 : Structure Wi (330 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-1.433	-1.433	0	%100
2	M1	Z	-2.482	-2.482	0	%100
3	M7A	X	-1.433	-1.433	0	%100
4	M7A	Z	-2.482	-2.482	0	%100
5	M15	X	-1.044	-1.044	0	%100
6	M15	Z	-1.808	-1.808	0	%100
7	M16	X	-1.044	-1.044	0	%100
8	M16	Z	-1.808	-1.808	0	%100
9	M19	X	-.376	-.376	0	%100
10	M19	Z	-.651	-.651	0	%100
11	M20	X	-.376	-.376	0	%100
12	M20	Z	-.651	-.651	0	%100
13	M27	X	-1.044	-1.044	0	%100
14	M27	Z	-1.808	-1.808	0	%100
15	M28	X	-1.044	-1.044	0	%100
16	M28	Z	-1.808	-1.808	0	%100
17	M29	X	-.723	-.723	0	%100
18	M29	Z	-1.253	-1.253	0	%100
19	MP1A	X	-1.727	-1.727	0	%100
20	MP1A	Z	-2.99	-2.99	0	%100
21	M30	X	-.353	-.353	0	%100
22	M30	Z	-.612	-.612	0	%100
23	MP2A	X	-1.727	-1.727	0	%100
24	MP2A	Z	-2.99	-2.99	0	%100
25	MP3A	X	-1.911	-1.911	0	%100
26	MP3A	Z	-3.31	-3.31	0	%100
27	MP4A	X	-1.727	-1.727	0	%100
28	MP4A	Z	-2.99	-2.99	0	%100
29	M25A	X	-1.044	-1.044	0	%100
30	M25A	Z	-1.808	-1.808	0	%100
31	M26	X	-1.044	-1.044	0	%100
32	M26	Z	-1.808	-1.808	0	%100
33	M27A	X	-2.387	-2.387	0	%100
34	M27A	Z	-4.135	-4.135	0	%100
35	M28A	X	-.615	-.615	0	%100
36	M28A	Z	-1.066	-1.066	0	%100

Member Distributed Loads (BLC 65 : Structure Wm (0 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	-.763	-.763	0	%100

Member Distributed Loads (BLC 66 : Structure Wm (30 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
20	MP1A	Z	-.546	-.546	0	%100
21	M30	X	.069	.069	0	%100
22	M30	Z	-.119	-.119	0	%100
23	MP2A	X	.315	.315	0	%100
24	MP2A	Z	-.546	-.546	0	%100
25	MP3A	X	.382	.382	0	%100
26	MP3A	Z	-.661	-.661	0	%100
27	MP4A	X	.315	.315	0	%100
28	MP4A	Z	-.546	-.546	0	%100
29	M25A	X	.133	.133	0	%100
30	M25A	Z	-.23	-.23	0	%100
31	M26	X	.133	.133	0	%100
32	M26	Z	-.23	-.23	0	%100
33	M27A	X	.143	.143	0	%100
34	M27A	Z	-.247	-.247	0	%100
35	M28A	X	.553	.553	0	%100
36	M28A	Z	-.958	-.958	0	%100

Member Distributed Loads (BLC 67 : Structure Wm (60 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	.165	.165	0	%100
2	M1	Z	-.095	-.095	0	%100
3	M7A	X	.165	.165	0	%100
4	M7A	Z	-.095	-.095	0	%100
5	M15	X	.23	.23	0	%100
6	M15	Z	-.133	-.133	0	%100
7	M16	X	.23	.23	0	%100
8	M16	Z	-.133	-.133	0	%100
9	M19	X	.378	.378	0	%100
10	M19	Z	-.218	-.218	0	%100
11	M20	X	.378	.378	0	%100
12	M20	Z	-.218	-.218	0	%100
13	M27	X	.23	.23	0	%100
14	M27	Z	-.133	-.133	0	%100
15	M28	X	.23	.23	0	%100
16	M28	Z	-.133	-.133	0	%100
17	M29	X	.156	.156	0	%100
18	M29	Z	-.09	-.09	0	%100
19	MP1A	X	.546	.546	0	%100
20	MP1A	Z	-.315	-.315	0	%100
21	M30	X	.337	.337	0	%100
22	M30	Z	-.195	-.195	0	%100
23	MP2A	X	.546	.546	0	%100
24	MP2A	Z	-.315	-.315	0	%100
25	MP3A	X	.661	.661	0	%100
26	MP3A	Z	-.382	-.382	0	%100
27	MP4A	X	.546	.546	0	%100
28	MP4A	Z	-.315	-.315	0	%100
29	M25A	X	.23	.23	0	%100
30	M25A	Z	-.133	-.133	0	%100
31	M26	X	.23	.23	0	%100
32	M26	Z	-.133	-.133	0	%100
33	M27A	X	.007	.007	0	%100
34	M27A	Z	-.004	-.004	0	%100
35	M28A	X	.718	.718	0	%100
36	M28A	Z	-.415	-.415	0	%100

Member Distributed Loads (BLC 68 : Structure Wm (90 Deg))

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M7A	X	0	0	0	%100
4	M7A	Z	0	0	0	%100
5	M15	X	.265	.265	0	%100
6	M15	Z	0	0	0	%100
7	M16	X	.265	.265	0	%100
8	M16	Z	0	0	0	%100
9	M19	X	.582	.582	0	%100
10	M19	Z	0	0	0	%100
11	M20	X	.582	.582	0	%100
12	M20	Z	0	0	0	%100
13	M27	X	.265	.265	0	%100
14	M27	Z	0	0	0	%100
15	M28	X	.265	.265	0	%100
16	M28	Z	0	0	0	%100
17	M29	X	.199	.199	0	%100
18	M29	Z	0	0	0	%100
19	MP1A	X	.63	.63	0	%100
20	MP1A	Z	0	0	0	%100
21	M30	X	.504	.504	0	%100
22	M30	Z	0	0	0	%100
23	MP2A	X	.63	.63	0	%100
24	MP2A	Z	0	0	0	%100
25	MP3A	X	.763	.763	0	%100
26	MP3A	Z	0	0	0	%100
27	MP4A	X	.63	.63	0	%100
28	MP4A	Z	0	0	0	%100
29	M25A	X	.265	.265	0	%100
30	M25A	Z	0	0	0	%100
31	M26	X	.265	.265	0	%100
32	M26	Z	0	0	0	%100
33	M27A	X	.28	.28	0	%100
34	M27A	Z	0	0	0	%100
35	M28A	X	.28	.28	0	%100
36	M28A	Z	0	0	0	%100

Member Distributed Loads (BLC 69 : Structure Wm (120 Deg))

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	.165	.165	0	%100
2	M1	Z	.095	.095	0	%100
3	M7A	X	.165	.165	0	%100
4	M7A	Z	.095	.095	0	%100
5	M15	X	.23	.23	0	%100
6	M15	Z	.133	.133	0	%100
7	M16	X	.23	.23	0	%100
8	M16	Z	.133	.133	0	%100
9	M19	X	.378	.378	0	%100
10	M19	Z	.218	.218	0	%100
11	M20	X	.378	.378	0	%100
12	M20	Z	.218	.218	0	%100
13	M27	X	.23	.23	0	%100
14	M27	Z	.133	.133	0	%100
15	M28	X	.23	.23	0	%100
16	M28	Z	.133	.133	0	%100
17	M29	X	.156	.156	0	%100

Member Distributed Loads (BLC 69 : Structure Wm (120 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
18	M29	Z	.09	.09	0	%100
19	MP1A	X	.546	.546	0	%100
20	MP1A	Z	.315	.315	0	%100
21	M30	X	.318	.318	0	%100
22	M30	Z	.183	.183	0	%100
23	MP2A	X	.546	.546	0	%100
24	MP2A	Z	.315	.315	0	%100
25	MP3A	X	.661	.661	0	%100
26	MP3A	Z	.382	.382	0	%100
27	MP4A	X	.546	.546	0	%100
28	MP4A	Z	.315	.315	0	%100
29	M25A	X	.23	.23	0	%100
30	M25A	Z	.133	.133	0	%100
31	M26	X	.23	.23	0	%100
32	M26	Z	.133	.133	0	%100
33	M27A	X	.718	.718	0	%100
34	M27A	Z	.415	.415	0	%100
35	M28A	X	.007	.007	0	%100
36	M28A	Z	.004	.004	0	%100

Member Distributed Loads (BLC 70 : Structure Wm (150 Deg))

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	.286	.286	0	%100
2	M1	Z	.496	.496	0	%100
3	M7A	X	.286	.286	0	%100
4	M7A	Z	.496	.496	0	%100
5	M15	X	.133	.133	0	%100
6	M15	Z	.23	.23	0	%100
7	M16	X	.133	.133	0	%100
8	M16	Z	.23	.23	0	%100
9	M19	X	.073	.073	0	%100
10	M19	Z	.126	.126	0	%100
11	M20	X	.073	.073	0	%100
12	M20	Z	.126	.126	0	%100
13	M27	X	.133	.133	0	%100
14	M27	Z	.23	.23	0	%100
15	M28	X	.133	.133	0	%100
16	M28	Z	.23	.23	0	%100
17	M29	X	.071	.071	0	%100
18	M29	Z	.123	.123	0	%100
19	MP1A	X	.315	.315	0	%100
20	MP1A	Z	.546	.546	0	%100
21	M30	X	.057	.057	0	%100
22	M30	Z	.099	.099	0	%100
23	MP2A	X	.315	.315	0	%100
24	MP2A	Z	.546	.546	0	%100
25	MP3A	X	.382	.382	0	%100
26	MP3A	Z	.661	.661	0	%100
27	MP4A	X	.315	.315	0	%100
28	MP4A	Z	.546	.546	0	%100
29	M25A	X	.133	.133	0	%100
30	M25A	Z	.23	.23	0	%100
31	M26	X	.133	.133	0	%100
32	M26	Z	.23	.23	0	%100
33	M27A	X	.553	.553	0	%100
34	M27A	Z	.958	.958	0	%100

Member Distributed Loads (BLC 70 : Structure Wm (150 Deg)) (Continued)

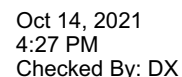
	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
35	M28A	X	.143	.143	0	%100
36	M28A	Z	.247	.247	0	%100

Member Distributed Loads (BLC 71 : Structure Wm (180 Deg))

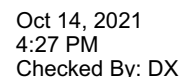
	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	.763	.763	0	%100
3	M7A	X	0	0	0	%100
4	M7A	Z	.763	.763	0	%100
5	M15	X	0	0	0	%100
6	M15	Z	.265	.265	0	%100
7	M16	X	0	0	0	%100
8	M16	Z	.265	.265	0	%100
9	M19	X	0	0	0	%100
10	M19	Z	0	0	0	%100
11	M20	X	0	0	0	%100
12	M20	Z	0	0	0	%100
13	M27	X	0	0	0	%100
14	M27	Z	.265	.265	0	%100
15	M28	X	0	0	0	%100
16	M28	Z	.265	.265	0	%100
17	M29	X	0	0	0	%100
18	M29	Z	.124	.124	0	%100
19	MP1A	X	0	0	0	%100
20	MP1A	Z	.63	.63	0	%100
21	M30	X	0	0	0	%100
22	M30	Z	.000344	.000344	0	%100
23	MP2A	X	0	0	0	%100
24	MP2A	Z	.63	.63	0	%100
25	MP3A	X	0	0	0	%100
26	MP3A	Z	.763	.763	0	%100
27	MP4A	X	0	0	0	%100
28	MP4A	Z	.63	.63	0	%100
29	M25A	X	0	0	0	%100
30	M25A	Z	.265	.265	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	.265	.265	0	%100
33	M27A	X	0	0	0	%100
34	M27A	Z	.834	.834	0	%100
35	M28A	X	0	0	0	%100
36	M28A	Z	.834	.834	0	%100

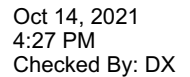
Member Distributed Loads (BLC 72 : Structure Wm (210 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-.286	-.286	0	%100
2	M1	Z	.496	.496	0	%100
3	M7A	X	-.286	-.286	0	%100
4	M7A	Z	.496	.496	0	%100
5	M15	X	-.133	-.133	0	%100
6	M15	Z	.23	.23	0	%100
7	M16	X	-.133	-.133	0	%100
8	M16	Z	.23	.23	0	%100
9	M19	X	-.073	-.073	0	%100
10	M19	Z	.126	.126	0	%100
11	M20	X	-.073	-.073	0	%100
12	M20	Z	.126	.126	0	%100



IR:\.....\UPDATED 468479-VZW MT LOT A H.r3dPage 52







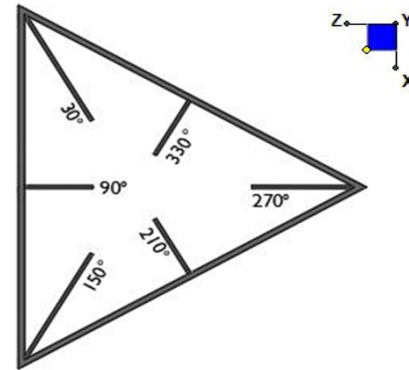
Client:	Verizon Wireless	Date:	10/14/2021
Site Name:	Cheshire North 2 CT		
Project No.	20777358A		
Title:	Antenna Mount Analysis	Page:	1

Version 3.1

I. Mount-to-Tower Connection Check

RISA Model Data

Nodes (labeled per RISA)	Orientation (per graphic of typical platform)
N36	90
N35	90



TYPICAL PLATFORM

Tower Connection Bolt Checks

Any moment resistance?:

Bolt Quantity per Reaction:

d_x (in) (Delta X of typ. bolt config. sketch):

d_y (in) (Delta Y of typ. bolt config. sketch):

Bolt Type:

Bolt Diameter (in):

Required Tensile Strength (kips):

Required Shear Strength (kips):

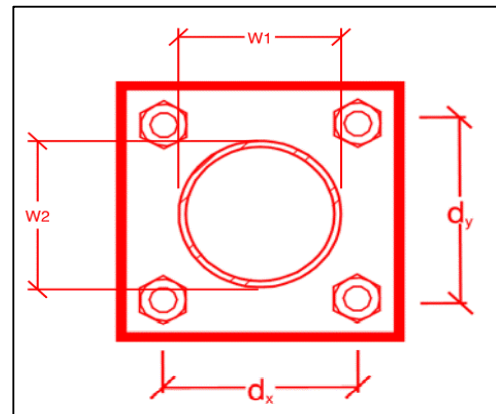
Tensile Strength / bolt (kips):

Shear Strength / bolt (kips):

Tensile Capacity Overall:

Shear Capacity Overall:

yes
4
5.75
4
A307
0.5
4.7
9.0
6.4
3.8
18.3%*
58.6%



*Note: Tension reduction not required if tension or shear capacity < 30%

Tower Connection Plate and Weld Check

Connecting Standoff Member Shape:

Plate Width (in):

Plate Height (in):

W1 (in):

W2 (in):

Fy (ksi, plate):

t_{plate} (in):

Weld Size (1/16 in):

ΦR_n (kip/in):

Required Weld Strength (kip/in):

Plate Bending Capacity:

Weld Capacity:

Round
8
6
2.9
2.9
36
0.56
3
4.18
2.61
6.3%
62.4%

Max Plate Bending Strengths

$M_{u_{xx}}$ (kip-in):	1.3
$\Phi M_{n_{xx}}$ (kip-in):	20.3
$M_{u_{yy}}$ (kip-in):	0.0
$\Phi M_{n_{yy}}$ (kip-in):	15.2

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Mount Modification

Electronic pdf version of this can be downloaded at <https://pmi.vzwsmart.com>

For additional questions and support, please reach out to pmisupport@colliersengineering.com

Purpose – to upload the proper documentation to the SMART Tool in order to allow the SMART Tool engineering vendor to complete the required Mount Desktop review of the Post Modification Inspection Report.

- Contractor is responsible for making certain the photos provided as noted below provide confirmation that the modification was completed in accordance with the modification drawings.
- Contractor shall relay any data that can impact the performance of the mount or the mount modification, this includes safety issues.

Base Requirements:

- If installation of the modification will cause damage to the structure, the climbing facility, or safety climb if present or any installed system, SMART Tool vendor to be notified prior to install. Any special photos outside of the standard requirements will be indicated on the drawings.
- Provide “as built drawings” showing contractor’s name, preparer’s signature, and date. Any deviations from the drawings (proposed modification) shall be shown. NOTE: If loading is different than what is conveyed in the post-modification passing mount analysis (MA) contact the SMART Tool vendor immediately.
- Each photo shall be time and date stamped.
- Photos should be high resolution.
- Contractor shall ensure that the safety climb wire rope is not adversely impacted by the install of the modification components. This may involve the install of wire rope guides, or other items to protect the wire rope. If there is conflict, contact the SMART Tool engineer for recommendations.
- The PMI can be accessed at the following portal: <https://pmi.vzwsmart.com>

Photo Requirements:

- *Photos taken at ground level*
 - Photo of Gate Signs showing the tower owner, site name, and number.
 - Overall tower structure after installation of the modifications.
 - Photos of the mount after installation of the modifications; if the mounts are at different rad elevations, pictures must be provided for all elevations that the modifications were installed
- *Photos taken at Mount Elevation*
 - Photos showing the safety climb wire rope above and below the mount prior to modification.
 - Photos showing the climbing facility and safety climb if present.
 - Photos showing each individual sector after installation of modifications. Each entire sector must be in one photo to show the interconnection of members.

These photos shall also certify that the placement and geometry of the equipment on the mount is as depicted in the antenna placement diagram in this form.

- Photos that show the model number of each antenna and piece of equipment installed per sector.
- Photos of each installed modification per the modification drawings; pictures shall also include connection hardware (U-bolts, bolts, nuts, all-threaded rods, etc.)
- Photos showing the distances (relative distance between collars) of the installed modifications from the appropriate reference locations shown in the modification drawings.
- Photos showing the installed modifications onto the tower (i.e. ring/collar mounts, tie-backs, V-bracing kits, etc.); if the existing mount elevation needs to be changed according to the modification drawings, an elevation measurement shall be provided before the elevation change.

Material Certification:

- Materials utilized must be as per specification on the drawings or the equivalent as validated by the SMART Tool vendor.
 - If the materials are as specified on the drawings
The contractor shall provide the packing list, or the materials certifications for the materials utilized to perform the mount modification
Commscope, Metrosite, Perfect Vision, Sabre, and Site Pro have all agreed to support Verizon vendors with the necessary material certifications
 - If seeking permission to use an equivalent
It is required that the SMART Tool engineering vendor approval of such is included in the contractor submission package. There may be an additional charge for approval if the equivalent submission doesn't meet specifications as prescribed in the drawings.

☐ All hardware has been properly installed, and the existing hardware was inspected.

☐ The material utilized was as specified on the SMART Tool engineering vendor Mount Modification Drawings and included in the material certification folder is a packing list or invoice for these materials.

OR

☐ The material utilized was approved by a SMART Tool as an "equivalent" and this approval is included as part of the contractor submission.

Antenna & equipment placement and Geometry Confirmation:

☐ The contractor certifies that the photos support and the equipment on the mount is as depicted on the sketch and table included in this form and with the mount analysis provided.

OR

☐ The contractor notes that the equipment on the mount is not in accordance with the sketch and has noted the differences below and provided photo documentation of any alterations.

Comments:

--

Certifying Individual:

Company:	
Employee Name:	
Contact Phone:	
Email:	
Date:	

Was the mount modification completed in conjunction with the equipment change / installation?

☐ Yes ☐ No

Special Instructions / Validation as required from the MA or Mod Drawings:

Issue:

contractor shall inspect climbing facilities and ensure that the safety climb is in good condition. Contractor shall install safety climb wire rope guide (Part #: Site Pro 1 - 120-203/317 or EOR approved equal) in locations where the wire rope is rubbing against mount to tower attachments. Contractor shall provide photos of safety climb wire rope guide installation.

Response:

--

Contractor certifies that the climbing facility / safety climb was not damaged or obstructed prior to starting work:

☐ Yes ☐ No

Contractor certifies no new damage/obstructions created during the current installation:

☐ Yes ☐ No

Contractor to certify the condition of the safety climb and verify no obstructions when leaving the site:

☐ Safety climb in good condition with no obstructions ☐ Safety Climb Damaged

☐ Safety Climb Obstructed

Comments:

--

Sector: **A**

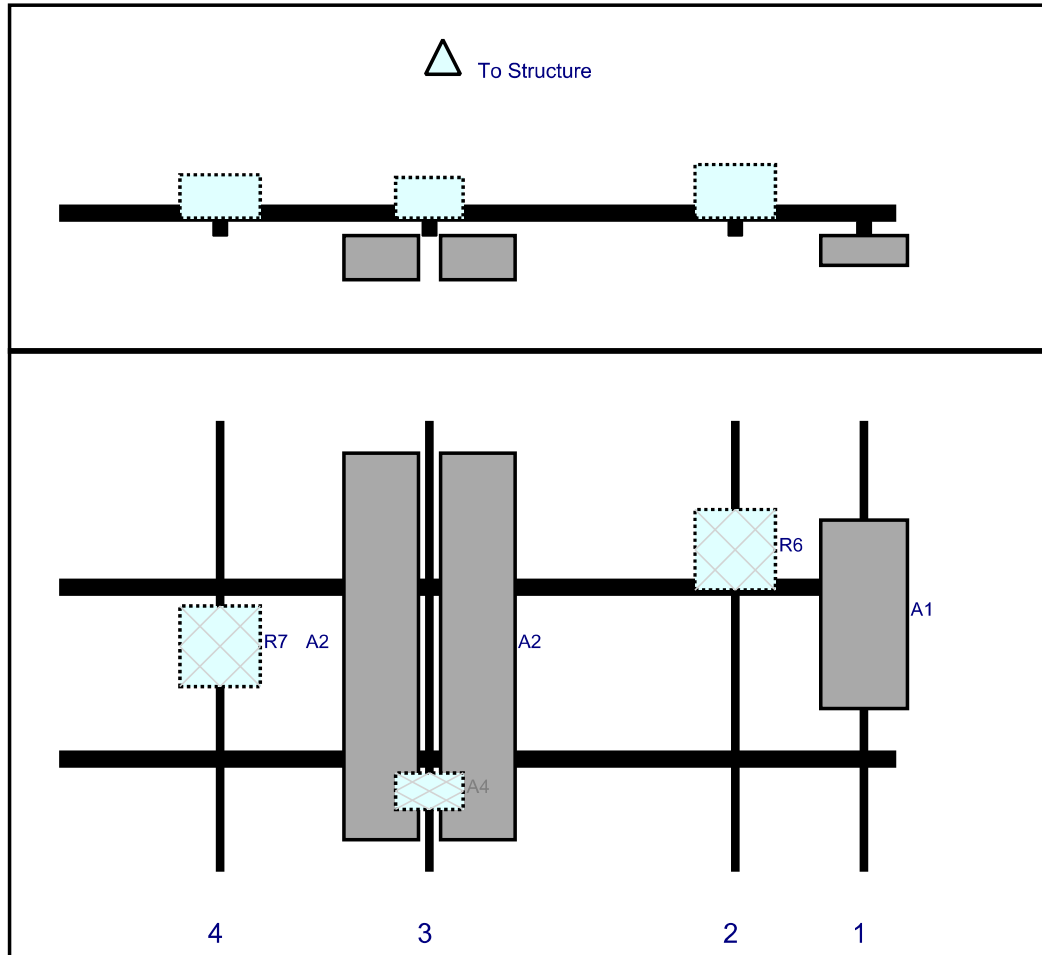
10/14/2021

Structure Type: Self Support

10084893

Mount Elev: 138.00

Page: 1

Plan View**Front View**
Looking at Structure

Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A1	MT6407-77A	35.1	16.1	150	1	a	Front	36	0	Added	
R6	B2/B66A RRH-BR049	15	15	126	2	a	Behind	24	0	Retained	12/07/2020
A2	JAHH-65B-R3B	72	13.8	69	3	a	Front	42	9	Retained	12/07/2020
A2	JAHH-65B-R3B	72	13.8	69	3	b	Front	42	-9	Retained	12/07/2020
A4	FDJ85020Q4-S1	6.8	12.6	69	3	a	Behind	69	0	Retained	12/07/2020
R7	B5/B13 RRH-BR04C	15	15	30	4	a	Behind	42	0	Retained	12/07/2020

Sector: **B**

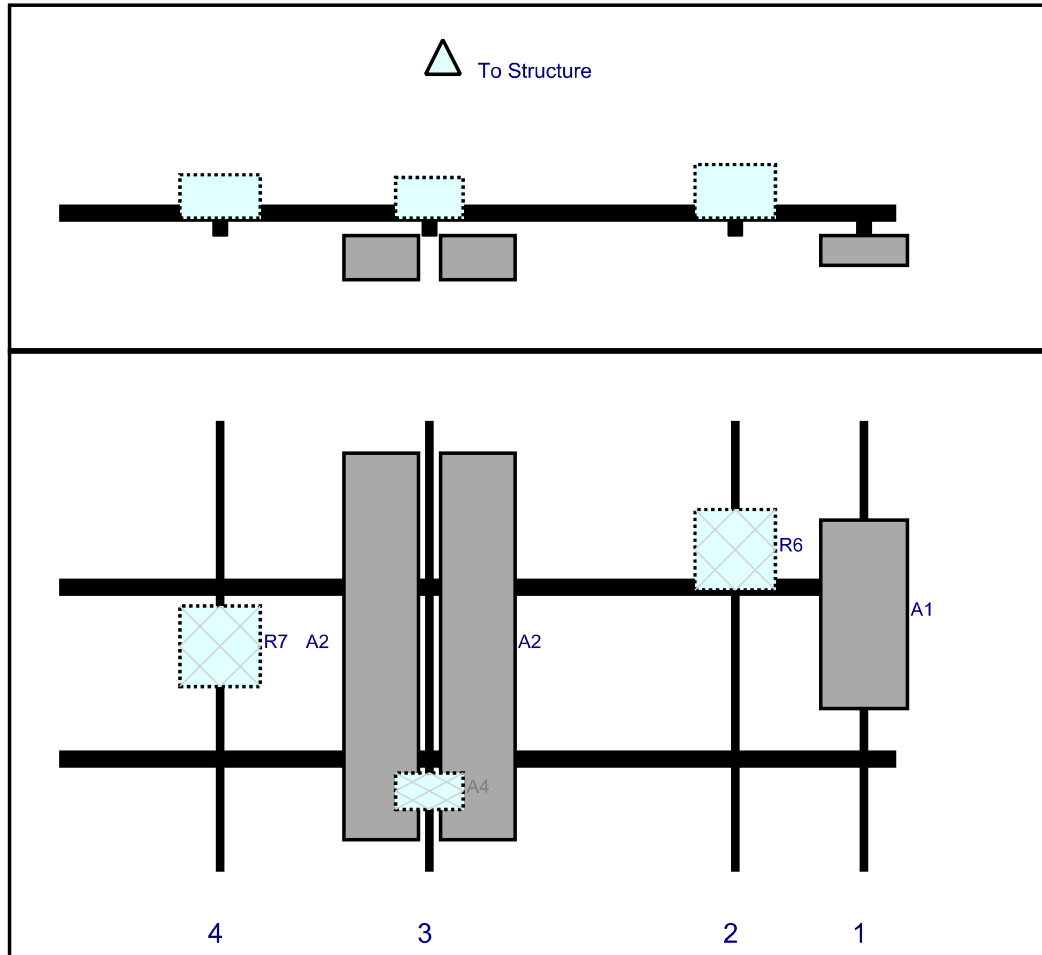
10/14/2021

Structure Type: Self Support

10084893

Mount Elev: 138.00

Page: 2

Plan View**Front View**
Looking at Structure

Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A1	MT6407-77A	35.1	16.1	150	1	a	Front	36	0	Added	
R6	B2/B66A RRH-BR049	15	15	126	2	a	Behind	24	0	Retained	12/07/2020
A2	JAHH-65B-R3B	72	13.8	69	3	a	Front	42	9	Retained	12/07/2020
A2	JAHH-65B-R3B	72	13.8	69	3	b	Front	42	-9	Retained	12/07/2020
A4	FDJ85020Q4-S1	6.8	12.6	69	3	a	Behind	69	0	Retained	12/07/2020
R7	B5/B13 RRH-BR04C	15	15	30	4	a	Behind	42	0	Retained	12/07/2020

Sector: C

10/14/2021

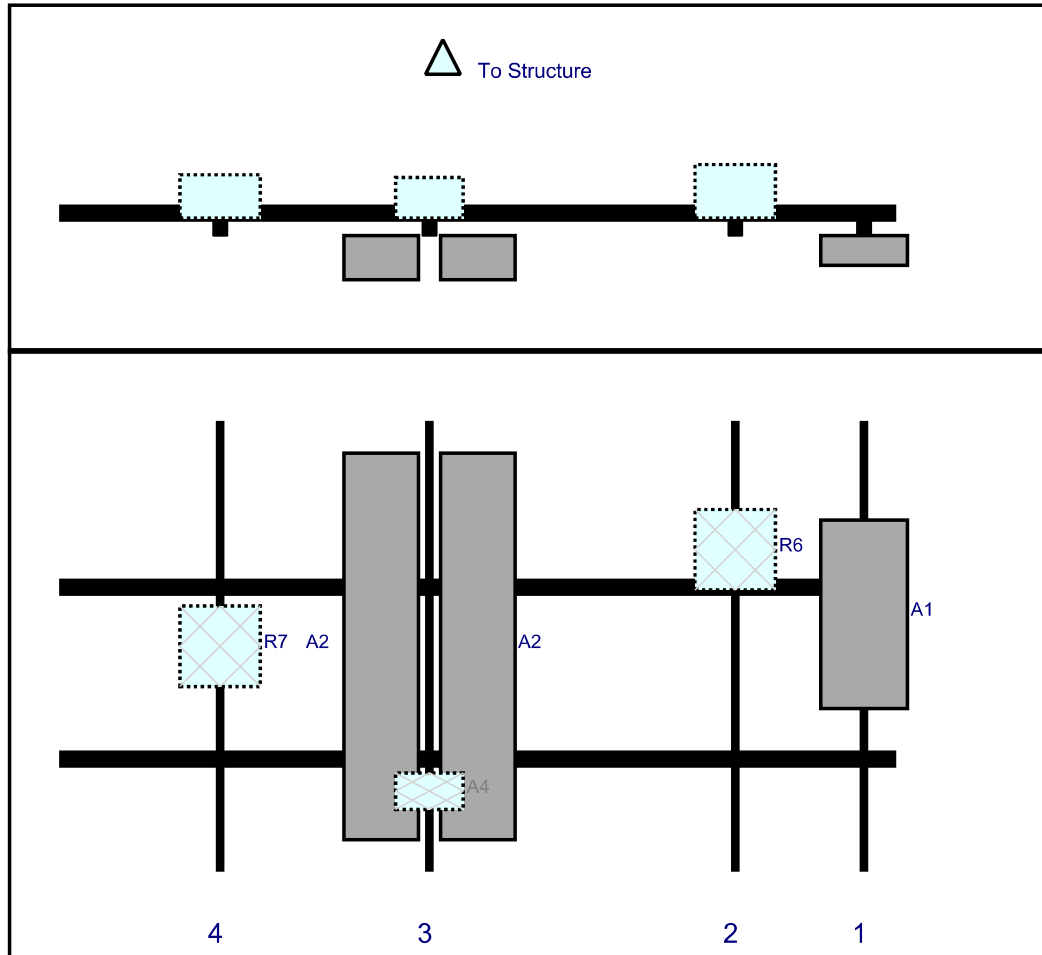
Structure Type: Self Support

10084893

Mount Elev: 138.00

Page: 3

Plan View

Front View
Looking at Structure

Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A1	MT6407-77A	35.1	16.1	150	1	a	Front	36	0	Added	
R6	B2/B66A RRH-BR049	15	15	126	2	a	Behind	24	0	Retained	12/07/2020
A2	JAHH-65B-R3B	72	13.8	69	3	a	Front	42	9	Retained	12/07/2020
A2	JAHH-65B-R3B	72	13.8	69	3	b	Front	42	-9	Retained	12/07/2020
A4	FDJ85020Q4-S1	6.8	12.6	69	3	a	Behind	69	0	Retained	12/07/2020
R7	B5/B13 RRH-BR04C	15	15	30	4	a	Behind	42	0	Retained	12/07/2020

Subject

TIA-222-H Usage

Site Information

Site ID: 468479-VZW / Cheshire North 2 CT
Site Name: Cheshire North 2 CT
Carrier Name: Verizon Wireless
Address: 705 West Johnson Ave.
Cheshire, Connecticut 06410
New Haven County
Latitude: 41.555853°
Longitude: -72.917189°

Structure Information

Tower Type: Self-Support
Mount Type: 13.00-Ft T-Frame

To Whom It May Concern,

We respectfully submit the above referenced Antenna Mount Structural Analysis report in conformance with ANSI/TIA-222-H, Structural Standard for Antenna Supporting Structures and Antennas and Small Wind Turbine Support Structures.

The 2015 International Building Code states that, in Section 3108, telecommunication towers shall be designed and constructed in accordance with the provisions of TIA-222. The TIA-222-H is the latest revision of the TIA-222 Standard, effective as of January 01, 2018.

As with all ANSI standards and engineering best practice is to apply the most current revision of the standard. This ensures the engineer is applying all updates. As an example, the TIA-222-H standard includes updates to bring it in line with the latest AISC and ACI standards and it also incorporates the latest wind speed map by ASCE 7 based on updated studies of the wind data.

The TIA-222-H standard clarifies these specific requirements for the antenna mount analysis such as modeling method, seismic analysis, 30-degree increment wind direction and maintenance loading. Therefore, it is our opinion that TIA-222-H is the most appropriate standard for antenna mount structural analysis and is acceptable for use at this site to ensure the engineer is taking into account the most current engineering standard available.

Sincerely,



Peter Albano, PE
Technical Specialist

I. SEE MODIFICATION NOTES

2. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, LAWS AND REGULATIONS OF ALL MUNICIPALITIES, UTILITY COMPANIES OR OTHER PUBLIC GOVERNING AUTHORITIES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS THAT MAY BE REQUIRED BY ANY FEDERAL, STATE, COUNTY OR MUNICIPAL AUTHORITIES.
4. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER, IN WRITING, OF ANY CONFLICTS, ERRORS OR OMISSIONS PRIOR TO THE SUBMISSION OF BIDS OR PERFORMANCE OF WORK.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING SITE IMPROVEMENTS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL REPAIR ANY DAMAGE AS A RESULT OF CONSTRUCTION OF THE FACILITY AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
6. THE SCOPE OF WORK FOR THIS PROJECT SHALL INCLUDE PROVIDING ALL MATERIALS, EQUIPMENT AND LABOR REQUIRED TO CONSTRUCT AND COMMISSION THE FACILITY IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
7. THE CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO CONSTRUCTION AND SHALL BE RESPONSIBLE FOR THE FACILITY BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND CONSTRUCTION DRAWINGS.
8. THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK.
9. THE DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THESE DRAWINGS MUST BE VERIFIED. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
10. SINCE THE CELL SITE MAY BE ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF RADIATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RADIATION MONITORS ARE REQUIRED TO BE WORN TO ALERT OF ANY POTENTIALLY DANGEROUS EXPOSURE LEVELS.
11. NO NOISE, SMOKE, DUST OR ODOUR WILL RESULT FROM THIS FACILITY AS TO CAUSE A NUISANCE.
12. THE FACILITY IS UNLICENSED AND NOT FOR HUMAN HABITATION (NO HANDICAP ACCESS IS REQUIRED).

**MASER CONSULTING CONNECTICUT
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MOUNT MODIFICATION DRAWINGS EXISTING 13.0' T-FRAME MOUNT

SITE NAME: CHESHIRE NORTH 2 CT
SITE NUMBER: 468479

705 WEST JOHNSON AVE
CHESHIRE, CT 6410
NEW HAVEN COUNTY

SITE INFORMATION

41.55853° N	VERIZON WIRELESS
72.917189° W	VERIZON WIRELESS
NEW HAVEN COUNTY	118 FLANDERS ROAD, 3RD FLOOR
	WESTBOROUGH, MA 01518
	ANDREW CANDIELLO
	ANDREW.CANDIELLO@VERIZONWIRELESS.COM

SHEET	DESCRIPTION
-------	-------------

SHEET NO.	TITLE SHEET
S-1	BILL OF MATERIALS
S-2	MODIFICATION NOTES
S-3	MODIFICATION NOTES
S-4	MODIFICATION DETAILS
S-5	MODIFICATION DETAILS
S-6	MOUNT PHOTOS SPECIFICATION SHEETS

PMI LOCATION
[HTTPS://PMI.VZW.SMART.COM](https://pmi.vzw.smart.com)

SMART TOOL PROJECT #	10084893
VZW LOCATION CODE (PSLC)	468479
FLITE ID	16244097

FAILING MOMENT ANALYSIS REPORT

SMART TOOL PROJECT #	10080861
MASER CONSULTING PROJECT #	20779009A
ANALYSIS DATE	7/2/2021

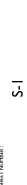
 MASTER CONSULTING - CONNECTICUT 2000 WESTERN AVENUE, SUITE 200 WESTPORT, CT 06881 WWW.MASTERCONSULTING.COM	NEW JERSEY ■ NEW MEXICO NEW YORK ■ MARYLAND PENNSYLVANIA ■ TEXAS VIRGINIA ■ CALIFORNIA NORTH CAROLINA ■ COLORADO SOUTH CAROLINA		PROTECT YOURSELF ALL STATES RECALL INDEPENDENT OF THE OTHERS. TO YOURS, WE RECALL RECALLS. ADVISE YOURS IN THE FOLLOWING: FOR STATE: <u>NEW JERSEY</u> CALL: <u>800-551-1111</u>	811 Call before you dig	AS SHOWN 2077358A <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>QTY</th> <th>DESCRIPTION</th> <th>UNIT</th> <th>PRICE</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>10/15/2008</td> <td>10/15/2008</td> <td>10/15/2008</td> </tr> <tr> <td>1</td> <td>10/15/2008</td> <td>10/15/2008</td> <td>10/15/2008</td> </tr> <tr> <td>0</td> <td>10/15/2008</td> <td>10/15/2008</td> <td>10/15/2008</td> </tr> <tr> <td>REV</td> <td>DATE</td> <td>DESCRIPTION</td> <td>PRICE</td> </tr> </tbody> </table>	QTY	DESCRIPTION	UNIT	PRICE	2	10/15/2008	10/15/2008	10/15/2008	1	10/15/2008	10/15/2008	10/15/2008	0	10/15/2008	10/15/2008	10/15/2008	REV	DATE	DESCRIPTION	PRICE	 Peter Marino No. 1015121 State of Connecticut Professional Engineer	SITE NAME: CHESHIRE NORTH 2 CT 468479 705 WEST THORNSEN AVE CHESHIRE, CT 06410 NEW HAVEN COUNTY	CLIENT: CHESHIRE NORTH 2 CT 705 WEST THORNSEN AVE CHESHIRE, CT 06410 NEW HAVEN COUNTY	TITLE SHEET
QTY	DESCRIPTION	UNIT	PRICE																										
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0	10/15/2008	10/15/2008	10/15/2008																										
REV	DATE	DESCRIPTION	PRICE																										

[illegible]

VZWSMART KITS - APPROVED VENDORS

CONTACT PHONE FAX EMAIL WEBSITE	COMMSCOPE	
	SALVADOR ANGUANO	
	(817) 304-7492	
	SALVADOR.ANGUANO@COMMSCOPE.COM	
CONTACT PHONE FAX EMAIL WEBSITE	WWW.COMMSCOPE.COM	
	METROSITE FABRICATORS, LLC	
	KENT TAMEY	
	(706) 335-7045 (O), (706) 982-9788 (M)	
CONTACT PHONE FAX EMAIL WEBSITE	KENT@METROSTELLC.COM	
	METROSITEFABRICATORS.COM	
	PERFECTVISION	
	WIRELESS SALES	
CONTACT PHONE FAX EMAIL WEBSITE	(844) 887-4723	
	WWW.PERFECT-VISION.COM	
	WIRELESS@PERFECT-VISION.COM	
	SABRE INDUSTRIES, INC.	
CONTACT PHONE FAX EMAIL WEBSITE	ANGIE WELCH	
	(866) 498-4937	
	AKWELCH@SABREINDUSTRIES.COM	
	WWW.SABRESOLUTIONS.COM	
CONTACT PHONE FAX EMAIL WEBSITE	SITE PRO 1	
	PAULA BOSWELL	
	(972) 236-9843	
	PAULA.BOSWELL@VALMONT.COM	
CONTACT PHONE FAX EMAIL WEBSITE	WWW.SITEPRO1.COM	

NOTE: WHEN SPECIFIED, VZWSMART KITS SHALL BE REQUIRED AND WILL BE VERIFIED DURING THE DESKTOP PMI



GENERAL NOTES

1. THESE MODIFICATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE TELECOMMUNICATIONS INDUSTRY STANDARD TIA-222-H MATERIALS AND SERVICES PROVIDED BY THE CONTRACTOR SHALL CONFORM TO THE ABOVE MENTIONED CODES.
2. CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT DAMAGE TO EXISTING STRUCTURES, ANY DAMAGE TO EXISTING STRUCTURES AS A RESULT OF THE CONTRACTOR'S WORK OR FROM ANY OTHER CAUSE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS BEFORE BEGINNING WORK, ORDERING MATERIAL AND PREPARING OF SHOP DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER. IF THE CONTRACTOR DISCOVERS ANY EXISTING CONDITIONS THAT ARE NOT REPRESENTED ON THESE DRAWINGS, OR ANY CONDITIONS THAT WOULD INTERFERE WITH THE INSTALLATION OF THE MODIFICATIONS, NOTIFY THE ENGINEER IMMEDIATELY.
4. IT IS ASSUMED THAT ANY STRUCTURAL MODIFICATION WORK SPECIFIED ON THESE PLANS WILL BE ACCOMPLISHED BY KNOWLEDGEABLE WORKMEN WITH TOWER CONSTRUCTION EXPERIENCE.
5. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION METHODS, MEANS, TECHNIQUES, SEQUENCES, AND PROCEDURES.
6. ALL CONSTRUCTION MEANS AND METHODS, INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN AND SHALL MEET ANSITIA-322 (LATEST EDITION), OSHA, AND GENERAL INDUSTRY STANDARDS. ALL RIGGING PLANS SHALL ADHERE TO ANSITIA-322 (LATEST EDITION) INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION.
7. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PROGRAMS IN ACCORDANCE WITH APPLICABLE SAFETY CODES.
8. WORK SHALL ONLY BE PERFORMED DURING CALM DRY DAYS (WINDS LESS THAN 30-MPH). THE STRUCTURE SHOWN ON THE DRAWINGS IS STRUCTURALLY SOUND ONLY IN THE COMPLETED FORM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE STRUCTURE DURING ERECTION. CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT, SHORING BRACING AND ANY OTHER STRUCTURAL HANDLING AND ERECTION UNTIL THE STRUCTURE IS FULLY COMPLETED. TEMPORARY SUPPORTS BRACING AND OTHER STRUCTURAL SYSTEMS REQUIRED DURING CONSTRUCTION SHALL REMAIN THE CONTRACTOR'S PROPERTY AFTER THEIR USE.
9. ALL INSTALLATIONS PERFORMED ON THIS STRUCTURE SHALL BE COMPLETED IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE STANDARD FOR INSTALLATION, ALTERATION AND MAINTENANCE OF THE ANTENNA SUPPORTING STRUCTURES AND ANTENNAS, ANSITIA-322.
10. CONTRACTOR SHALL SECURE SITE BACK TO EXISTING CONDITION UNDER SUPERVISION OF OWNER. ALL FENCE, STONE, GEOPAPRIC, GROUNDING, AND SURROUNDING GRADE SHALL BE REPLACED AND REPAIRED AS REQUIRED TO ACHIEVE OWNER APPROVAL. POSITIVE DRAINAGE AWAY FROM TOWER SITE SHALL BE MAINTAINED.
11. CONNECTIONS BETWEEN ITEMS SUPPORTED BY THE STRUCTURE AND THE STRUCTURE NOT SPECIFICALLY DETAILED IN THE CONTRACT DOCUMENTS ARE THE RESPONSIBILITY OF THE CONTRACTOR. SUCH CONNECTIONS SHALL BE DESIGNED, COORDINATED AND INSPECTED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF THE PROJECT. SUBMIT SIGNED AND SEALED CALCULATIONS DURING SHOP DRAWING REVIEW.
12. DO NOT SCALE DRAWINGS.
13. DO NOT USE THESE DRAWINGS FOR ANY OTHER SITE.
14. ALL MATERIAL UTILIZED FOR THIS PROJECT MUST BE NEW AND FREE OF ANY DEFECTS. ALL MATERIALS AND SERVICES PROVIDED BY THE CONTRACTOR TO ALTERED SITE AND/OR STRENGTHS, MUST BE APPROVED BY THE OWNER AND ENGINEER IN WRITING.
15. THE POINT UNDER NO CIRCUMSTANCES SHOULD BE USED AS A TIE OFF POINT.

DESIGN LOADS

- WIND LOADS
- a. BASIC WIND SPEED (3 SECOND GUST) $V = 118$ MPH
 - b. EXPOSURE CATEGORY C
 - c. TOPOGRAPHIC CATEGORY 1
- ICE LOADS
- a. ICE WIND SPEED (3 SECOND GUST), $V = 50$ MPH
 - b. ICE THICKNESS = 1.0 IN
- SEISMIC LOADS
- a. SEISMIC DESIGN CATEGORY B
 - b. SHORT TERM MCEER GROUND MOTION $S_s = .197$
 - c. LONG TERM MCEER GROUND MOTION $S_1 = .055$

STRUCTURAL STEEL

1. DESIGN, DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING PUBLICATIONS EXCEPT AS SPECIFICALLY INDICATED IN THE CONTRACT DOCUMENTS.
- a. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) MANUAL OF STEEL CONSTRUCTION (15TH EDITION)
 - b. SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS
 - c. AISC CODE OF STANDARD PRACTICE
2. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING UNLESS OTHERWISE SHOWN:
- CHANNELS, ANGLES, PLATES, ETC. ASTM A36 (GR 36)
 - STEEL PIPE ASTM A53 (GR 35)
 - BOLTS ASTM A325
 - NUTS ASTM A325
 - LOCK WASHERS ASTM A463
3. ALL SUBSTITUTIONS PROPOSED BY THE CONTRACTOR SHALL BE APPROVED IN WRITING BY THE ENGINEER. CONTRACTOR SHALL PROVIDE DOCUMENTATION TO ENGINEER FOR VERIFYING THE SUBSTITUTE IS SUITABLE FOR USE AND MEETS ORIGINAL DESIGN CRITERIA. DIFFERENCES BETWEEN THE SUBSTITUTE AND THE ORIGINAL DESIGN SHALL BE NOTED. SUBSTITUTES OF EQUIVALENTS ASSOCIATED WITH THE SUBSTITUTE (INCLUDING REDESIGN COSTS AND COSTS TO SUB-CONTRACTORS) SHALL BE PROVIDED TO THE ENGINEER. CONTRACTOR SHALL PROVIDE ADDITIONAL DOCUMENTATION AND/OR SPECIFICATIONS TO THE ENGINEER AS REQUESTED.
4. PROVIDE STRUCTURAL STEEL SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
- a. SUBMIT SHOP DRAWINGS TO GREG.DULINK@COLLIERENGINEERING.COM
 - b. PROVIDE MASER CONSULTING CONNECTICUT PROJECT # AND MASER CONSULTING CONNECTICUT PROJECT ENGINEER CONTACT IN THE BODY OF THE EMAIL
5. DRILL NO HOLES IN ANY NEW OR EXISTING STRUCTURAL STEEL MEMBERS OTHER THAN THOSE SHOWN ON STRUCTURAL DRAWINGS WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD.
6. GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
7. ALL NEW STEEL SHALL BE HOT BEDDIPED GALVANIZED FOR FULL WEATHER PROTECTION. IN ADDITION ALL NEW STEEL SHALL BE PAINTED TO MATCH EXISTING STEEL. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
8. ALL BOLT ASSEMBLIES FOR STRUCTURAL MEMBERS REPRESENTED IN THIS DRAWING REQUIRE LOCKING DEVICES TO BE INSTALLED IN ACCORDANCE WITH TIA-222-H SECTION 4.9.2 REQUIREMENTS.
9. WHERE CONNECTIONS ARE NOT FULLY DETAILED ON THESE DRAWINGS, FABRICATOR SHALL DESIGN CONNECTIONS TO RESIST LOADS AND FORCES WHERE SHOWN ON DRAWINGS AND AS OUTLINED IN SPECIFICATIONS.
10. FOR MEMBERS BEING REPLACED, PROVIDE NEW BOLTS AND MATCH EXISTING SIZE AND GRADE. MAINTAIN AISC REQUIREMENTS FOR MINIMUM BOLT DISTANCE AND SPACING.
11. ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT IS AT LEAST FLUSH WITH THE FACE OF THE NUT. IT IS NOT PERMITTED FOR THE BOLT END TO BE BELOW THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETED.
12. GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.

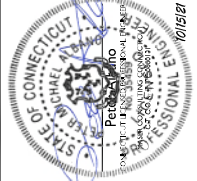
13. ALL NEW STEEL SHALL BE HOT BEDDIPED GALVANIZED FOR FULL WEATHER PROTECTION. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
14. ALL EXISTING PAINTED GALVANIZED SURFACES DAMAGED DURING REHAB INCLUDING AREAS UNDER STIFFENER PLATES SHALL BE WIRE BRUSHED CLEAN, REPAIRED BY COLD GALVANIZING (ZINGA OR ZINC COTE), AND REPAINTED TO MATCH THE EXISTING FINISH (IF APPLICABLE).
15. ALL HOLES IN STEEL MEMBERS SHALL BE SIZED $1/16"$ LARGER THAN THE BOLT DIAMETER. STANDARD HOLES SHALL BE USED UNLESS NOTED OTHERWISE.



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- NEW YORK
- GEORGIA
- PENNSYLVANIA
- FLORIDA
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- MISSISSIPPI
- ALABAMA
- TENNESSEE
- COLORADO

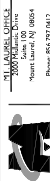


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9	9.000000	10/15/21	JA
10	10.000000	10/15/21	JA



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A PROFESSIONAL ENGINEER, TO SIGN OR SEAL THIS DRAWING.

SITE NAME:
CHESHIRE NORTH 2 CT
468479
705 WEST JOHNSON AVE
CHESHIRE, CT 06410
NEW HAVEN COUNTY



MODIFICATION NOTES

5-2





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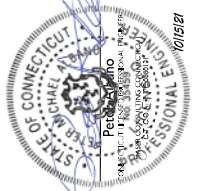
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THE STATE OF NEW JERSEY ARE THE PROPERTY OF
THE STATE OF NEW JERSEY. IT IS THE RESPONSIBILITY
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PERMITS AND TO FOLLOW THE RULES AND
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1-800-4-A- Dig
www.callbeforeyoudig.com

AS SHOWN	DATE	DESCRIPTION	REVISION
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100	10/01/2018	DESIGN	100A



STATE OF NEW JERSEY
MICHAEL A. PETRUCCI
No. 1015121
Professional Engineer
10/15/21

THE SIGNATURE OF ANYONE FOR ANY PERSON
UNLESS THEY ARE ACTING UNDER THE DIRECTION
OF AN ENGINEER OR ARCHITECT, IS UNLAWFUL
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Sheet Title:
MODIFICATION DETAILS

Sheet Number:
S-5

1 PROPOSED FRONT ELEVATION VIEW (TYP. ALL SECTORS)
SCALE: N.T.S.

MODIFICATION NOTES:

1. MOUNT MEMBERS NOT SHOWN FOR CLARITY U.N.O.
2. RADIO AND/OR THE POSITIONS SHALL BE ADJUSTED VERTICALLY AS NEEDED IN ORDER TO ACHIEVE INSTALLATION OF TIEBACK AS SHOWN. FOR SHALL BE NOTIFIED IF EQUIPMENT NEEDS TO BE RELOCATED TO ANOTHER MOUNT PIPE.
3. CONNECT NEW TIE BACK TO MOUNT PIPE WITH CROSSOVER PLATES (PART# VZWSMART-MSK1). CONNECT OTHER END TO ADJACENT TOWER LEG. PROPOSED TIE-BACK SHALL EXTEND NO MORE THAN 12" BEYOND THE TOWER LEG. CONTRACTOR SHALL TRIM AS REQUIRED AND PROTECT CUT END WITH TWO COATS OF ZINGA OR ZINC COTE..



MOUNT PHOTO 1



MOUNT PHOTO 2



MOUNT PHOTO 3



MOUNT PHOTO 4

SEE DETAIL "A"

EXISTING TOWER LEG

TIE BACK PIPE
(2" PST 10'-0" LONG)

FIELD DRILL
11/16" DIA HOLES

HORIZONTAL ANGLE
VARIES

PLAN VIEW
TIE BACK ASSEMBLY

DETAIL "A"

EXISTING TOWER LEG

TOWER LEG ATTACHMENT
(FIT 1 1/2" TO 8 5/8" O.D. LEG)

ROUND TOWER LEG ATTACHMENT DETAIL

EXISTING ANGLE TOWER LEG

TOWER LEG ATTACHMENT
(FIT 1 1/2" TO 8" 60° ANGLE LEG)
(FIT 1 1/2" TO 6" 90° ANGLE LEG)

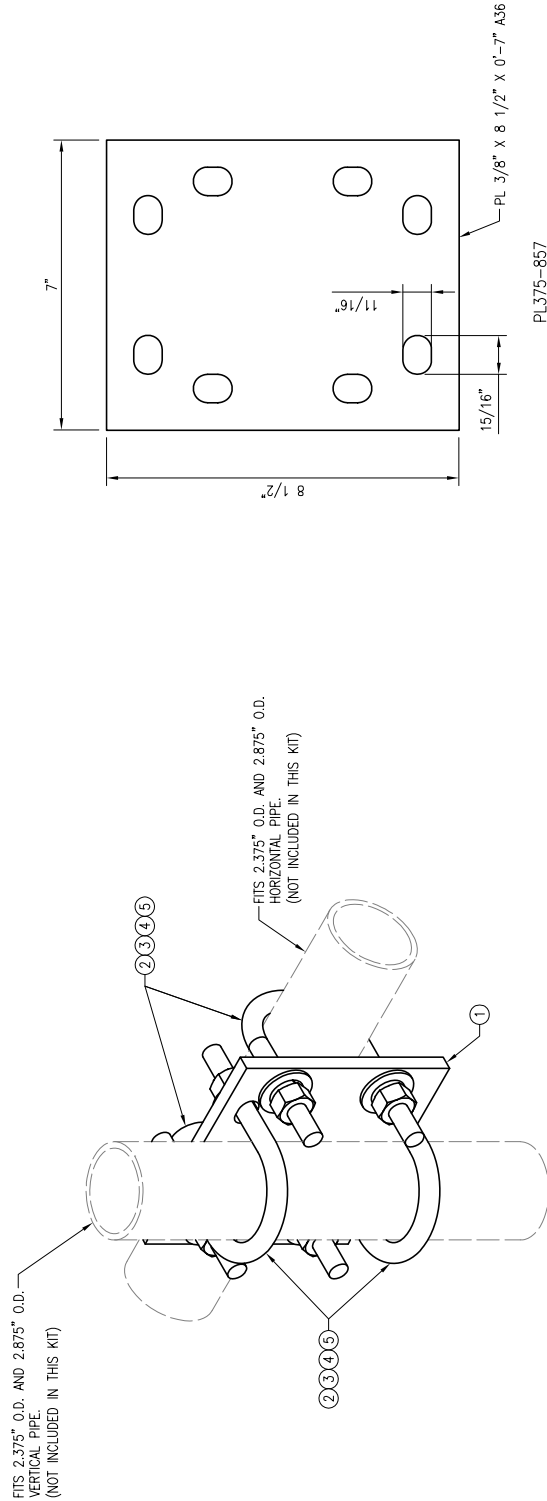
ANGLE TOWER LEG ATTACHMENT DETAIL

ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	1	PST2375-10	2" PST (2.375" O.D. X 0.154" THK) X 10'-0" A53 GR-B 35KSI	SFK1-F1	38
2	1	BP825-12	PL 3/8" X 8 1/4" X 1'-0" A36 BENT PLATE	SFK1-F2	11
3	1	BP1125-12	PL 3/8" X 11 1/8" X 1'-0" A36 BENT PLATE	SFK1-F3	14
4	1	BP6-9375	PL 3/8" X 6" X 9 3/8" A36 BENT PLATE	SFK1-F4	6
5	1	BP2-875	PL 1/4" X 2" X 8 3/4" A36 BENT PLATE	SFK1-F4	1
6	2	MS02-625-300-500	RU-BOLT 5/8" X 3" LW. X 5" I.L. A36 (OR EQUIV.)	RBC-1	2
7	2	---	THREADED ROD 5/8" DIA. X 1'-6" F1554-36 HDG	---	0
8	2	---	BOLT 5/8" X 2" A325	---	0
9	1	---	BOLT 5/8" X 4 1/4" A325	---	0
10	11	FW-625	5/8" HDG USS FLAT WASHER	---	1
11	11	LW-625	5/8" HDG LOCK WASHER	---	0
12	11	NUT-625	5/8" HDG HEX NUT	---	1
GALVANIZED WT					72

VZWSMART-SFK1 (TIE BACK ASSEMBLY)

NOTES:

1. HOT-DIPPED GALVANIZED PER ASTM A123.



VZWSMART-MSK1 (CROSSOVER PLATE)				
ITEM NO.	QTY.	PART NO.	DESCRIPTION	WT
1	1	PL375-85Z	PL 3/8" X 8 1/2" X 0'-7" A36	6
2	4	MS02-625-300-500	RU-BOLT 5/8" X 3" LW X 5" LL A36 (OR EQUIV.)	5
3	8	FW-625	5/8" HDG USS FLAT WASHER	1
4	8	LW-625	5/8" HDG LOCK WASHER	0
5	8	NUT-625	5/8" HDG HEX NUT	1
GALVANIZED				14

NOTES:
1. HOT-DIPPED GALVANIZED PER ASTM A123.

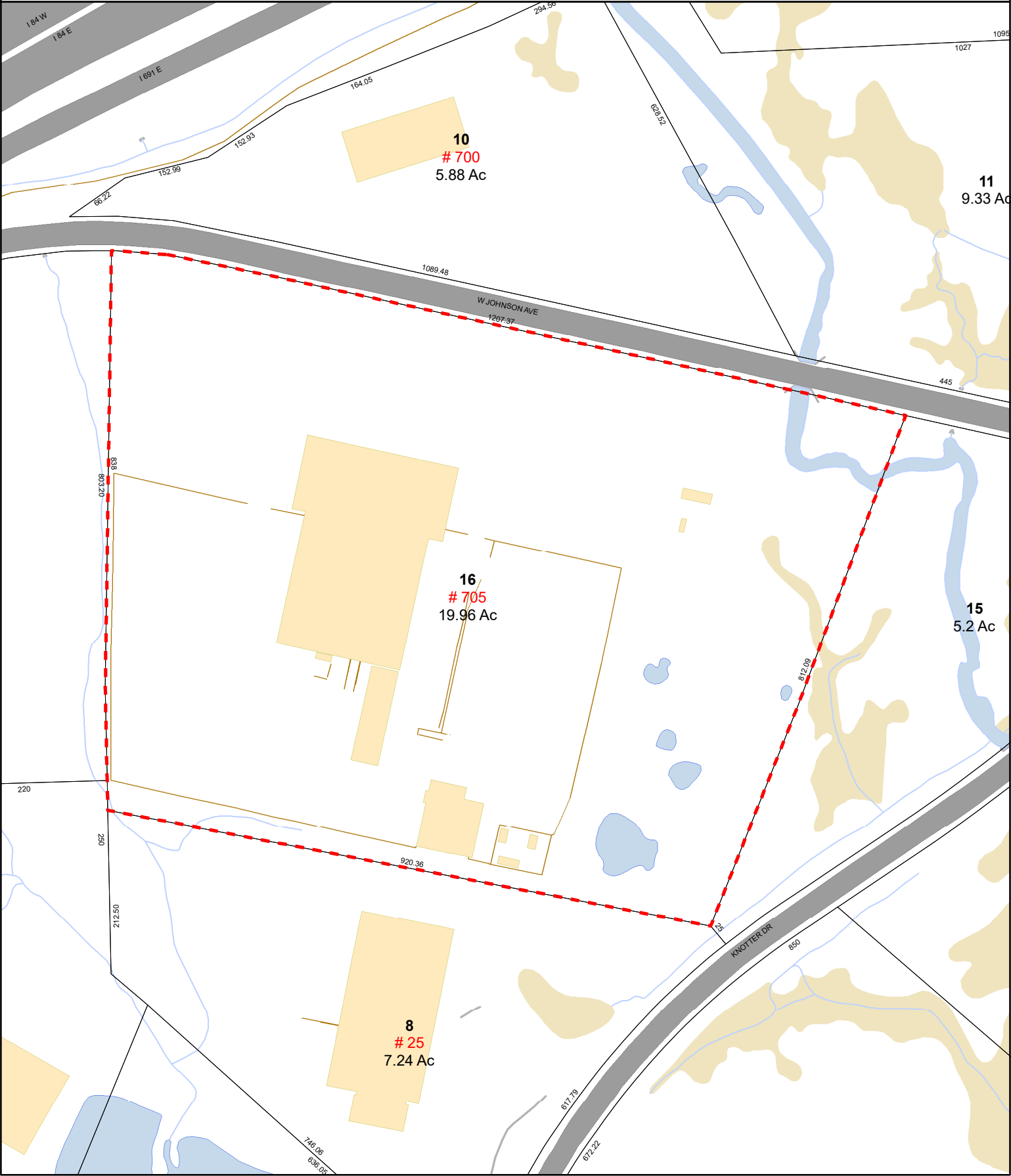
ATTACHMENT 5

Town of Cheshire, Connecticut - Assessment Parcel Map

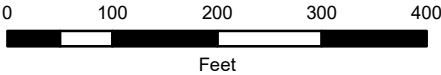


Parcel: 00001900

Location: 705 W JOHNSON AVE



Approximate Scale: 1 inch = 183 feet



Map Produced: July 2021

Disclaimer: This map is for informational purposes only All information is subject to verification by any user. The Town of Cheshire and its mapping contractors assume no legal responsibility for the information contained herein.



Town of Cheshire, CT

Property Listing Report

Map Block Lot **2 16**

Building # **1** Unique Identifier **00001900**

Property Information

Property Location	705 W JOHNSON AVE
Mailing Address	P O BOX 270 HARTFORD CT 06141
Land Use	Office Building
Zoning Code	I-2
Neighborhood	I-3C

Owner	CONN LIGHT & POWER CO
Co-Owner	
Book / Page	2227/0294
Land Class	Commercial
Census Tract	3432
Acreage	19.96

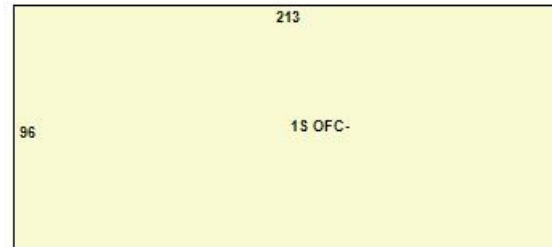
Valuation Summary

(Assessed value = 70% of Appraised Value)

Item	Appraised	Assessed
Buildings	2503627	1752540
Outbuildings	133450	93420
Land	646393	452470
Total	3283470	2298430

Utility Information

Electric	No
Gas	No
Sewer	No
Public Water	No
Well	No



Primary Construction Details

Year Built	1978
Building Desc.	Commercial
Building Style	
Stories	1.00
Exterior Walls	Glass
Exterior Walls 2	B. V. Solid
Interior Walls	Drywall
Interior Walls 2	
Interior Floors 1	Carpet
Interior Floors 2	

Heating Fuel	Heat Pump
Heating Type	FHA
AC Type	Central
Bedrooms	0
Full Bathrooms	0
Half Bathrooms	0
Extra Fixtures	0
Total Rooms	0
Bath Style	NA
Kitchen Style	
Occupancy	0

Building Use	Office Building
Building Condition	Good
Frame Type	Average/Low
Fireplaces	0
Bsmt Gar	0
Fin Bsmt Area	
Fin Bsmt Quality	
Building Grade	-30
Roof Style	Flat
Roof Cover	Composite Built Up

Report Created On **12/3/2021**



Town of Cheshire, CT

Property Listing Report

Map Block Lot

2 16

Building #

1

Unique Identifier

00001900

Detached Outbuildings

Type	Description	Area (sq ft)	Condition	Year Built
Paving	Paving	132780	Average	1978
Fencing	Fencing	1600	Average	1978
Canopy	Metal	5320	Average	1978
Fencing	Fencing	7200	Average	1978
Fencing	Fencing	7200	Average	1978
Shed	Metal	414	Average	2018

Attached Extra Features

Type	Description	Area (sq ft)	Condition	Year Built

Sales History

Owner of Record	Book/ Page	Sale Date	Sale Price
CONN LIGHT & POWER CO	2227_0294	1/19/2016	0
CONNECTICUT LIGHT AND POWER COMPANY THE	2227_294	7/21/2008	790220
INTERET REALTY CORP	321_173	12:00:00 AM	0



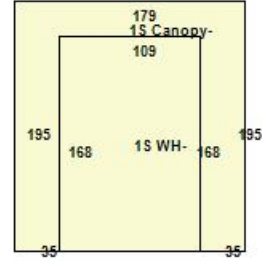
Town of Cheshire, CT

Property Listing Report

Map Block Lot 2 16

Building # 2

Unique Identifier 00001900



Primary Construction Details

Year Built	1978
Building Desc.	Warehouse
Building Style	
Stories	1.00
Exterior Walls	Concrete Block
Exterior Walls 2	
Interior Walls	Other
Interior Walls 2	
Interior Floors 1	Concrete
Interior Floors 2	

Heating Fuel	
Heating Type	Electric Baseboard
AC Type	
Bedrooms	0
Full Bathrooms	0
Half Bathrooms	0
Extra Fixtures	0
Total Rooms	0
Bath Style	NA
Kitchen Style	
Occupancy	0

Building Use	Commercial
Building Condition	Average
Frame Type	Average
Fireplaces	0
Bsmt Gar	0
Fin Bsmt Area	
Fin Bsmt Quality	
Building Grade	-10
Roof Style	
Roof Cover	

Attached Extra Features

Type	Description	Area (sq ft)	Condition	Year Built
Canopy	Canopy	16593	Average	1978



Town of Cheshire, CT

Property Listing Report

Map Block Lot 2 16

Building # 3

Unique Identifier 00001900



Primary Construction Details

Year Built	1978
Building Desc.	Commercial Garage
Building Style	
Stories	0.00
Exterior Walls	
Exterior Walls 2	
Interior Walls	
Interior Walls 2	
Interior Floors 1	
Interior Floors 2	

Heating Fuel	
Heating Type	
AC Type	
Bedrooms	0
Full Bathrooms	0
Half Bathrooms	0
Extra Fixtures	0
Total Rooms	0
Bath Style	NA
Kitchen Style	
Occupancy	0

Building Use	Commercial
Building Condition	Average
Frame Type	Average
Fireplaces	0
Bsmt Gar	0
Fin Bsmt Area	
Fin Bsmt Quality	
Building Grade	0
Roof Style	
Roof Cover	

Attached Extra Features

Type	Description	Area (sq ft)	Condition	Year Built

ATTACHMENT 6



CHESHIRE NORTH 2
Certificate of Mailing — Firm

Name and Address of Sender Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103	TOTAL NO. of Pieces Listed by Sender 3	TOTAL NO. of Pieces Received at Post Office™ 3	Affix Stamp Here <i>Postmark with Date of Receipt.</i> neopost SM 12/07/2021 US POSTAGE \$002.99⁰  ZIP 06103 041L12203937
	Postmaster, per (name of receiving employee) 		

USPS® Tracking Number Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift
1.	Sean M. Kimball, Town Manager Town of Cheshire 84 South Main Street Cheshire, CT 06410				
2.	William Voelker, Town Planner Town of Cheshire 84 South Main Street Cheshire, CT 06410				
3.	Connecticut Light and Power Company P.O. Box 270 Hartford, CT 06141				
4.					
5.					
6.					