

KENNETH C. BALDWIN

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Also admitted in Massachusetts
and New York

February 24, 2022

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
331 Route 80 (Killingworth Road), Guilford, 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 a tower and associated equipment on the ground near the base of the tower. The tower was approved by the Siting Council (“Council”) in June of 1985 (Docket No. 47). Cellco’s shared use of the tower was approved by the Council in July of 2007 (EM-VER-060-070605). A copy of the Council’s Docket No. 47 Decision and Order and EM-VER-060-070605 approval are included in [Attachment 1](#).

Cellco now intends to modify its facility by replacing nine (9) antennas with three (3) new Samsung MT6407-77A antennas and six (6) new NHH-65B-R2B antennas on new T-Arm antenna mounts. Cellco also intends to replace three (3) remote radio heads (“RRHs”) with six (6) new RRHs behind its antennas. A set of project plans showing Cellco’s proposed facility modifications and the specifications for Cellco’s new antennas and RRHs 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 Guilford’s Chief Elected Official and Land Use Officer.

Melanie A. Bachman, Esq.
February 24, 2022
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. Cellco's new antennas will be installed on new T-Arm antenna mounts at the same height on the tower.

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 new T-Arm antenna mounts 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.
February 24, 2022
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Sincerely,

A handwritten signature in black ink, appearing to read "Kenneth C. Baldwin". The signature is fluid and cursive, with a long horizontal stroke at the end.

Kenneth C. Baldwin

Enclosures

Copy to:

Matthew Hoey III, Guilford First Selectman
Jaime Stein, Town Planner
Kathleen Bloomquist, Property Owner
Alex Tyurin, Verizon Wireless

ATTACHMENT 1

DOCKET NO. 47

AN APPLICATION SUBMITTED BY COMMUNITY TV SYSTEMS, INC., D/B/A ROLLINS CABLEVISION OF CONNECTICUT, FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE CONSTRUCTION OF A MICROWAVE HUB SITE, TOWER, AND ASSOCIATED EQUIPMENT IN THE TOWN OF GUILFORD, CONNECTICUT. : CONNECTICUT SITING
: COUNCIL
: June 6, 1985

D E C I S I O N A N D O R D E R

Pursuant to the foregoing Opinion, the Council hereby orders that a Certificate of Environmental Compatibility and Public Need as required by section 16-50k of the General Statutes of Connecticut be issued to Rollins Cablevision for the construction, operation, and maintenance of a microwave hub site, tower, and associated equipment in the Town of Guilford, Connecticut.

The facility shall be constructed, operated, and maintained as specified in the Council's record on this matter, and subject to the following conditions:

1. The tower shall be no taller than necessary to provide the proposed service, and in no event shall exceed 150 feet;
2. The certificate holder shall notify the Council if any additional equipment other than that listed in the Findings of Fact accompanying this Decision and Order is added to this facility;
3. The facility construction shall be conducted in accordance with all applicable federal, state, and municipal laws and regulations;
4. The certificate holder shall comply with the reporting requirements of section 16-50j-77 of the Council's Rules of Practice;

5. Prior to the commencement of construction, the certificate holder shall provide plans for the plantings of evergreens around the base of the tower and within the applicant's leased area;
6. The tower site parcel shall be located as shown in Exhibit 7 of the application, immediately adjacent to the Connecticut State Forest boundary;
7. Construction activities shall take place during daylight working hours; and
8. This decision and order shall be void if all construction authorized is not completed within two years of the issuance of this decision.

Pursuant to section 16-50p of the General Statutes, we hereby direct that a copy of the Opinion and Decision and Order shall be served on each person listed below. A notice of the issuance shall be published in the New Haven Journal Courier.

The parties to this proceeding are:

Rollins Cablevision (Applicant)
P.O. Box 667
44 North Branford Road
Branford, Connecticut 06405
ATTN: Thomas E. Gallagher, General Manager

Byrne, Slater, Sandler, Shulman & Rouse, P.C. (its attorney)
P.O. Box 3216
111 Pearl Street
Hartford, Connecticut 06103
ATTN: Kevin B. Sullivan, Esquire


Mr. David B. Damer
Vice-Chairman
Guilford Conservation Commission
440 Great Hill Road
Guilford, Connecticut 06437

Mr. David W. Fisher
Chairman
Town of Guilford
Guilford Planning and
Zoning Commission
Guilford, Connecticut 06437

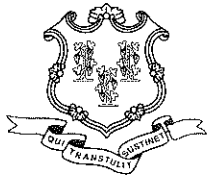
STATE OF CONNECTICUT)
 :
COUNTY OF HARTFORD) ss. New Britain, June 6, 1985

I hereby certify that the foregoing is a true and correct copy of the decision and order issued by the Connecticut Siting Council, State of Connecticut.

ATTEST:



Christopher S. Wood, Executive Director
Connecticut Siting Council



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

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

E-Mail: siting.council@ct.gov

Internet: ct.gov/csc

Daniel F. Caruso
Chairman

July 11, 2007

Kenneth C. Baldwin, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103-3597

RE: **EM-VER-060-070605** - Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 331 Route 80, Guilford, Connecticut.

Dear Attorney Baldwin:

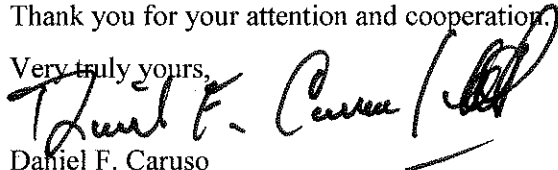
At a public meeting held on July 3, 2007, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated June 5, 2007, including the placement of all necessary equipment and shelters within the tower compound. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours,


Daniel F. Caruso
Chairman

DFC/MP/laf

- c: The Honorable Carl A. Balestracci, Jr., First Selectman, Town of Guilford
Regina Reid, Zoning Enforcement Officer, Town of Guilford
Keith E. Coppins, Optasite, Inc.
Thomas J. Regan, Esq., Brown Rudnick Berlack Israels LLP
Michele G. Briggs, New Cingular Wireless PCS, LLC
Christopher B. Fisher, Esq., Cuddy & Feder LLP

ATTACHMENT 2

verizon

GUILFORD NORTH CT
331 ROUTE 80
GUILFORD, CT 06437

GENERAL NOTES

- ALL WORK SHALL BE IN ACCORDANCE WITH THE 2015 INTERNATIONAL BUILDING CODE AS MODIFIED BY THE 2018 CONNECTICUT SUPPLEMENT, INCLUDING THE IA/DA-222 REVISION "C" STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND SUPPORTING STRUCTURES, 2017 CONNECTICUT FIRE SAFETY CODE, NATIONAL ELECTRICAL CODE, AND LOCAL CODES.
- SHOULD ANY FIELD CONDITIONS PRECLUDE COMPLIANCE WITH THE DRAWINGS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND SHALL NOT PROCEED WITH ANY AFFECTED WORK.
- CONTRACTOR SHALL REVIEW ALL DRAWINGS AND SPECIFICATIONS IN THE CONTRACT DOCUMENT SET. CONTRACTOR SHALL COORDINATE ALL WORK SHOWN IN THE SET OF DRAWINGS. THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF DRAWINGS TO ALL SUBCONTRACTORS AND ALL RELATED PARTIES. THE SUBCONTRACTORS SHALL EXAMINE ALL THE DRAWINGS AND SPECIFICATIONS FOR THE INFORMATION THAT AFFECTS THEIR WORK.
- CONTRACTOR SHALL PROVIDE A COMPLETE BUILD-OUT WITH ALL FINISHES, STRUCTURAL, MECHANICAL, AND ELECTRICAL COMPONENTS AND PROVIDE ALL ITEMS AS SHOWN OR INDICATED ON THE DRAWINGS OR IN THE WRITTEN SPECIFICATIONS.
- CONTRACTOR SHALL FURNISH ALL MATERIAL, LABOR AND EQUIPMENT TO COMPLETE THE WORK AND FURNISH A COMPLETED JOB ALL IN ACCORDANCE WITH LOCAL AND STATE GOVERNING AUTHORITIES AND OTHER AUTHORITIES HAVING LAWFUL JURISDICTION OVER THE WORK.
- CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND ALL INSPECTIONS REQUIRED AND SHALL ALSO PAY FEES REQUIRED FOR THE GENERAL CONSTRUCTION, AND ALL TRADES AS APPLICABLE. PERMITS SHALL BE PAID FOR BY THE RESPECTIVE SUBCONTRACTORS.
- CONTRACTOR SHALL MAINTAIN A CURRENT SET OF DRAWINGS AND SPECIFICATIONS ON SITE AT ALL TIMES AND INSURE DISTRIBUTION OF NEW DRAWINGS TO SUBCONTRACTORS AND OTHER RELEVANT PARTIES AS SOON AS THEY ARE MADE AVAILABLE. ALL OLD DRAWINGS SHALL BE MARKED VOID AND REMOVED FROM THE CONTRACT AREA. THE CONTRACTOR SHALL FURNISH AN "AS-BUILT" SET OF DRAWINGS TO OWNER UPON COMPLETION OF PROJECT.
- LOCATION OF EQUIPMENT, AND WORK SUPPLIED BY OTHERS THAT IS DIAGRAMMATICALLY INDICATED ON THE DRAWINGS SHALL BE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR SHALL DETERMINE LOCATIONS AND DIMENSIONS SUBJECT TO STRUCTURAL CONDITIONS AND WORK OF THE SUBCONTRACTORS.
- THE CONTRACTOR IS SOLELY RESPONSIBLE TO DETERMINE CONSTRUCTION PROCEDURE AND SEQUENCE, AND TO ENSURE THE SAFETY OF THE EXISTING STRUCTURES AND ITS COMPONENT PARTS DURING CONSTRUCTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, BRACING, UNDERPINNING, ETC. THAT MAY BE NECESSARY. MAINTAIN EXISTING BUILDING'S/PROPERTY'S OPERATIONS, COORDINATE WORK WITH BUILDING/PROPERTY OWNER.
- DRAWINGS INDICATE THE MINIMUM STANDARDS, BUT IF ANY WORK SHOULD BE INDICATED TO BE SUBSTANTIAL TO ANY ORDINANCES, LAWS, CODES, RULES, OR REGULATIONS BEARING ON THE WORK, THE CONTRACTOR SHALL INCLUDE IN HIS WORK AND SHALL EXECUTE THE WORK CORRECTLY IN ACCORDANCE WITH SUCH ORDINANCES, LAWS, CODES, RULES OR REGULATIONS WITH NO INCREASE IN COSTS.

- ALL UTILITY WORK SHALL BE IN ACCORDANCE WITH LOCAL UTILITY COMPANY REQUIREMENTS AND SPECIFICATIONS.
- ALL EQUIPMENT AND PRODUCTS PURCHASED ARE TO BE REVIEWED BY CONTRACTOR AND ALL APPLICABLE SUBCONTRACTORS FOR ANY CONDITION PER MFR'S RECOMMENDATIONS. CONTRACTOR TO SUPPLY THESE ITEMS AT NO COST TO OWNER OR CONSTRUCTION MANAGER.
- ANY AND ALL ERRORS, DISCREPANCIES, AND "MISSED" ITEMS ARE TO BE BROUGHT TO THE ATTENTION OF THE VERIZON WIRELESS CONSTRUCTION MANAGER DURING THE BIDDING PROCESS BY THE CONTRACTOR. ALL THESE ITEMS ARE TO BE INCLUDED IN THE BID. NO "EXTRA" WILL BE ALLOWED FOR MISSED ITEMS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE SAFETY FOR THE TIME THE JOB IS AWARDED UNTIL ALL WORK IS COMPLETE AND ACCEPTED BY THE OWNER.
- CONTRACTOR TO REVIEW ALL SHOP DRAWINGS AND SUBMIT COPY TO ENGINEER FOR APPROVAL. DRAWINGS MUST BEAR THE CHECKER'S INITIALS BEFORE SUBMITTING TO THE CONSTRUCTION MANAGER FOR REVIEW.
- THE 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.
- COORDINATION, LAYOUT, FURNISHING AND INSTALLATION OF CONDUIT AND ALL APPURTENANCES REQUIRED FOR PROPER INSTALLATION OF ELECTRICAL AND TELECOMMUNICATION SERVICE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- ALL EQUIPMENT AND PRODUCTS PURCHASED ARE TO BE REVIEWED BY CONTRACTOR AND ALL APPLICABLE SUB- CONTRACTORS FOR ANY CONDITION PER THE MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR TO SUPPLY THESE ITEMS AT NO COST TO OWNER OR CONSTRUCTION MANAGER.
- ALL DAMAGE CAUSED TO ANY EXISTING STRUCTURE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE HELD LIABLE FOR ALL REPAIRS REQUIRED FOR EXISTING STRUCTURES IF DAMAGED DURING CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" AT LEAST 48 HOURS PRIOR TO ANY EXCAVATIONS AT 1-800-922-4455. ALL UTILITIES SHALL BE IDENTIFIED AND CLEARLY MARKED PRIOR TO ANY EXCAVATION WORK. CONTRACTOR SHALL MAINTAIN AND PROTECT MARKED UTILITIES THROUGHOUT PROJECT COMPLETION.

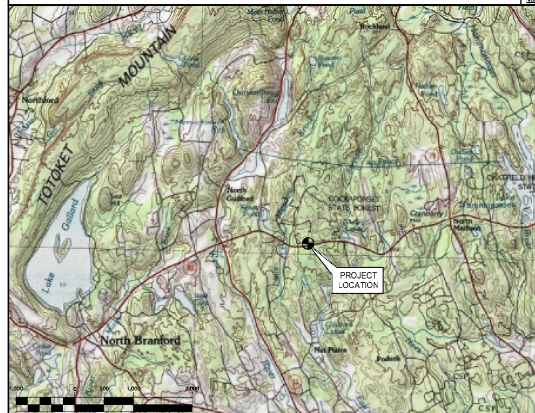
SITE DIRECTIONS

FROM: 20 ALEXANDER DRIVE WALLINGFORD, CONNECTICUT TO: 331 ROUTE 80 GUILFORD, CT 06437

- START OUT GOING NORTH ON ALEXANDER DR TOWARD BARNES INDUSTRIAL RD. 0.18 MI
- TURN RIGHT ONTO BARNES INDUSTRIAL RD. 0.11 MI
- TAKE FIRST RIGHT ONTO CT-68. 2.75 MI
- TURN SLIGHT LEFT ONTO DURHAM RD/CT-68. CONTINUE TO FOLLOW CT-68. 4.25 MI
- TURN RIGHT ONTO MAIN ST/CT-17. CONTINUE TO FOLLOW CT-17. 1.02 MI
- TURN SLIGHT LEFT ONTO GUILFORD RD/CT-77. CONTINUE TO FOLLOW CT-77. 6.22 MI
- TURN SHARP LEFT ONTO LAKE DR. 0.05 MI
- TAKE THE 1ST RIGHT ONTO HOOP POLE RD. 1.89 MI
- TURN LEFT ONTO ROUTE 80/CT-80. 0.99 MI
- 331 ROUTE 80, GUILFORD, CT 06437-1123, 331 ROUTE 80 IS ON THE LEFT.

VICINITY MAP

SCALE: 1" = 1000'



PROJECT SUMMARY

1. THE PROPOSED UPGRADE SCOPE OF WORK AT THE EXISTING UNMANNED TELECOMMUNICATIONS FACILITY GENERALLY INCLUDES THE FOLLOWING:
- A. AT THE EXISTING SELF-SUPPORTING LATTICE TOWER MOUNTED ANTENNA SECTORS:**
- REMOVE (4) EXISTING ANDREW - HBXX-6516DS-A2M ANTENNAS.
 - REMOVE (2) EXISTING ANDREW - HBXX-6517DS-A2M ANTENNAS.
 - REMOVE (2) EXISTING ANDREW - LNX-6513DS-A1M ANTENNAS.
 - REMOVE (1) EXISTING ANDREW - LNX-6514DS-A1M ANTENNAS.
 - REMOVE (2) EXISTING HYBRID CABLES.
 - RETAIN (2) EXISTING ANDREW - LNX-6513DS-A1M ANTENNAS.
 - RETAIN (1) EXISTING ANDREW - LNX-6514DS-A1M ANTENNAS.
 - RETAIN (12) EXISTING 1-5/8" COAXIAL CABLES.
 - INSTALL (6) COMMSCOPE - N88-658-R2B ANTENNAS.
 - INSTALL (3) SAMSUNG MT6407-77A ALL-IN-ONE ANTENNA/ RRU's.
 - INSTALL (3) SAMSUNG - RF4439d-25A RRU's.
 - INSTALL (3) SAMSUNG - RF4440d-13A RRU's.
 - INSTALL (3) JMA - 91900314-02 ANTENNA MOUNTS.
 - INSTALL (1) 12x24 HYBRIFLEX LI CABLE.
 - INSTALL (1) OVP-12 BOX.
- B. AT THE EXISTING VERIZON WIRELESS EQUIPMENT SHELTER**
- REMOVE (6) EXISTING NOKIA RADIOS.

PROJECT INFORMATION

SITE NAME: GUILFORD NORTH CT
 SITE ADDRESS: 331 ROUTE 80 GUILFORD, CT 06437
 LESSEE/TENANT: CELCO PARTNERSHIP
 20 ALEXANDER DRIVE WALLINGFORD, CT 06492
 CONTACT PERSON: WALTER CHARCZNSKI (CONSTRUCTION MANAGER)
 (860) 306-1806
 ENGINEER: CENTEK ENGINEERING, INC.
 63-2 NORTH BRANFORD RD, BRANFORD, CT, 06405
 (203) 498-0580
 PROJECT COORDINATES: LATITUDE: 41°21'11.300"N
 LONGITUDE: 72°41'11.7216"W
 COORDINATES BASED ON VERIZON WIRELESS RFDS, DATED JULY 19, 2021.

SHEET INDEX

SHT. NO.	DESCRIPTION	REV.
T-1	TITLE SHEET	0
N-1	NOTES AND SPECIFICATIONS	0
B-1	RF BILL OF MATERIALS	0
C-1	COMPOUND PLAN AND ELEVATION	0
C-2	ANTENNA SECTOR CONFIGURATION DETAILS	0
C-3	RF DETAILS	0
E-1	ELECTRICAL DETAILS AND SPECIFICATIONS	0

PROFESSIONAL ENGINEER SEAL

CENTEK Engineering
 63-2 North Branford Road
 Branford, CT 06405
 (203) 498-0580
 www.CentekEng.com

Celco Partnership d/b/a Verizon Wireless
GUILFORD NORTH CT
 331 ROUTE 80
 GUILFORD, CT 06437

DATE: 09/03/21
 SCALE: AS NOTED
 JOB NO. 210073P

TITLE SHEET

T-1
 Sheet No. 1 of 1

CONSTRUCTION DRAWINGS - ISSUED FOR CONSTRUCTION
 CONSTRUCTION DRAWINGS - ISSUED FOR CLIENT REVIEW

NOTES AND SPECIFICATIONS

DESIGN BASIS:

GOVERNING CODE: 2015 INTERNATIONAL BUILDING (IBC) AS MODIFIED BY THE 2018 CT STATE BUILDING CODE AND AMENDMENTS.

- 1. DESIGN CRITERIA:
 - RISK CATEGORY: II (BASED ON TABLE 1604.5 OF THE 2015 IBC)
 - NOMINAL DESIGN SPEED (TOWER): 101 MPH (Wind) (EXPOSURE B/IMPORTANCE FACTOR 1.0 BASED ON ASCE 7-10) PER 2015 INTERNATIONAL BUILDING CODE (IBC) AS MODIFIED BY THE 2018 CONNECTICUT STATE BUILDING CODE.
 - SEISMIC LOAD (DOES NOT CONTROL): PER ASCE 7-10 MINIMUM DESIGN LOADS FOR BUILDING AND OTHER STRUCTURES.

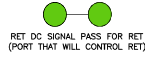
GENERAL NOTES:

- 1. ALL CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE GOVERNING BUILDING CODE.
- 2. DRAWINGS INDICATE THE MINIMUM STANDARDS, BUT IF ANY WORK SHOULD BE INDICATED TO BE SUBSTANDARD TO ANY ORDINANCES, LAWS, CODES, RULES, OR REGULATIONS BEARING ON THE WORK, THE CONTRACTOR SHALL INCLUDE IN HIS WORK AND SHALL EXECUTE THE WORK CORRECTLY IN ACCORDANCE WITH SUCH ORDINANCES, LAWS, CODES, RULES OR REGULATIONS WITH NO INCREASE IN COSTS.
- 3. BEFORE BEGINNING THE WORK, THE CONTRACTOR IS RESPONSIBLE FOR MAKING SUCH INVESTIGATIONS CONCERNING PHYSICAL CONDITIONS (SURFACE AND SUBSURFACE) AT OR CONTIGUOUS TO THE SITE WHICH MAY AFFECT PERFORMANCE AND COST OF THE WORK.
- 4. DIMENSIONS AND DETAILS SHALL BE CHECKED AGAINST EXISTING FIELD CONDITIONS.
- 5. THE CONTRACTOR SHALL VERIFY AND COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS, SLEEVES AND ANCHOR BOLTS AS REQUIRED BY ALL TRADES.
- 6. ALL DIMENSIONS, ELEVATIONS, AND OTHER REFERENCES TO EXISTING STRUCTURES, SURFACE, AND SUBSURFACE CONDITIONS ARE APPROXIMATE. NO GUARANTEE IS MADE FOR THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS, ELEVATIONS, ANGLES WITH EXISTING CONDITIONS AND WITH ARCHITECTURAL AND SITE DRAWINGS BEFORE PROCEEDING WITH ANY WORK.
- 7. AS THE WORK PROGRESSES, THE CONTRACTOR SHALL NOTIFY THE OWNER OF ANY CONDITIONS WHICH ARE IN CONFLICT OR OTHERWISE NOT CONSISTENT WITH THE CONSTRUCTION DOCUMENTS AND SHALL NOT PROCEED WITH SUCH WORK UNTIL THE CONFLICT IS SATISFACTORILY RESOLVED.
- 8. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING AND MAINTAINING ADEQUATE SHORING, BRACING, AND BARRICADES AS MAY BE REQUIRED FOR THE PROTECTION OF EXISTING PROPERTY, CONSTRUCTION WORKERS, AND FOR PUBLIC SAFETY.
- 9. THE CONTRACTOR IS SOLELY RESPONSIBLE TO DETERMINE CONSTRUCTION PROCEDURE AND SEQUENCE AND TO ENSURE THE SAFETY OF THE EXISTING STRUCTURES AND ITS COMPONENT PARTS DURING CONSTRUCTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, BRACING, UNDERPINNING, ETC. THAT MAY BE NECESSARY. MAINTAIN EXISTING SITE OPERATIONS, COORDINATE WORK WITH NORTHEAST UTILITIES.
- 10. ALL DAMAGE CAUSED TO ANY EXISTING STRUCTURE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE HELD LIABLE FOR ALL REPAIRS REQUIRED FOR EXISTING STRUCTURES IF DAMAGED DURING CONSTRUCTION ACTIVITIES.
- 11. REFER TO DRAWING T1 FOR ADDITIONAL NOTES AND REQUIREMENTS.

DATE: 09/05/21	
SCALE: AS NOTED	
JOB NO. 210073P	
NOTES AND SPECIFICATIONS	
N-1	
Sheet No. 2 of 1	
Cellco Partnership d/b/a Verizon Wireless GUILFORD NORTH CT 331 ROUTE 80 GUILFORD, CT 06437	
CENTEK Engineering Contractors & Builders 0203 888-4360 0203 888-8587 Fax 65-2 North Ironwood Road Meriden CT 06460 www.CentekEng.com	
verizon	
PROFESSIONAL ENGINEER SEAL 	
NO. 02/04/22	DATE
BY 02/04/22	DATE
CHK 02/04/22	DATE
APP 02/04/22	DATE
DWG BY 02/04/22	DATE
APP BY 02/04/22	DATE
CONSTRUCTION DRAWINGS - ISSUED FOR CONSTRUCTION	DWG
CONSTRUCTION DRAWINGS - ISSUED FOR CLIENT REVIEW	REV

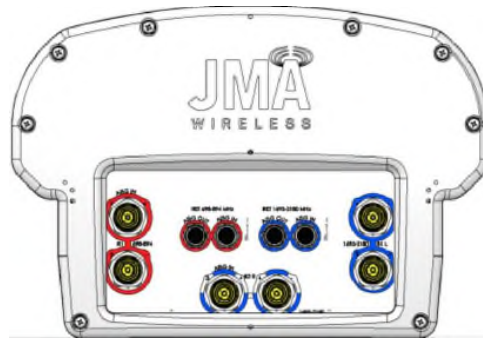
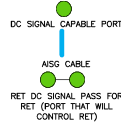
PLUMBING DIAGRAM NOTES:

1. PORTS 1 & 2 ARE FOR LOW BAND (898-896 MHz).
2. PORTS 3, 4, 5 & 5 ARE FOR HIGH BAND (1695-2360 MHz).
3. SMART BIAS TEE (SBT) IS THROUGH ANTENNA PORTS 1 & 3 (1 FOR LOW BAND AND 3 FOR HIGH BAND).
4. AISG CABLE IS ONLY NEEDED WHEN DRAWN IN THE DIAGRAMS ABOVE. IF IT IS NOT DRAWN THEN SBT IS ENOUGH TO CONTROL ALL RET MOTORS.
5. NOT ALL SBT PORTS ARE NEEDED TO CONTROL RET. ONLY GREEN PORT CONNECTION TO GREEN PORT WILL CONTROL RET.



PLUMBING DIAGRAM COMMENTS:

- DIAGRAMS SHOW ANTENNA PORT CONFIGURATIONS AS VIEWED FROM BELOW ANTENNAS.
- ANTENNA POSITIONS ARE INDICATED AS VIEWED FROM IN FRONT OF ANTENNAS.
- CAP AND WEATHERPROOF UNUSED ANTENNA PORTS.
- ALL PLUMBING DIAGRAM COLORS ARE IRRELEVANT EXCEPT FOR AISG AND HYBRIFLEX CABLE. (FOR THE COAX COLORS, FOLLOW COAX COLORS GUIDE ABOVE)



NOTES:

- INFORMATION SHOWN HEREIN IS FOR USE BY VERIZON WIRELESS EQUIPMENT OPERATIONS.
- THIS B.O.M. DRAWING IS BASED OFF FACILITY UPGRADE DESIGN DRAWINGS PREPARED BY CENTEK ENGINEERING (REV.0 DATED: 02.04.22), & VERIZON WIRELESS RF ANTENNA EQUIPMENT RECOMMENDATION (DATED 07.19.21).

BILL OF MATERIALS		
TECHNOLOGY	QUANTITY	ANTENNA
LTE 700	6	COMMSCOPE ANTENNA MODEL: NHH-65B-R2B
LTE 850		
LTE PCS 1900		
LTE AWS 2100		
5G	3	SAMSUNG ANTENNA MODEL: MT6407-77A

CABLES	QUANTITY	LENGTH	COMMENTS
HYBRID CABLE	1	±180FT	12X24 HYBRIFLEX U

RADIOS	QUANTITY	COMMENTS
LTE 700	3	SAMSUNG MODEL: RF4439d-25A
LTE 850		
LTE PCS 1900		
LTE AWS 2100	3	SAMSUNG MODEL: RF440d-13A
5G	3	INTEGRATED INTO MT6407-77A ANTENNA

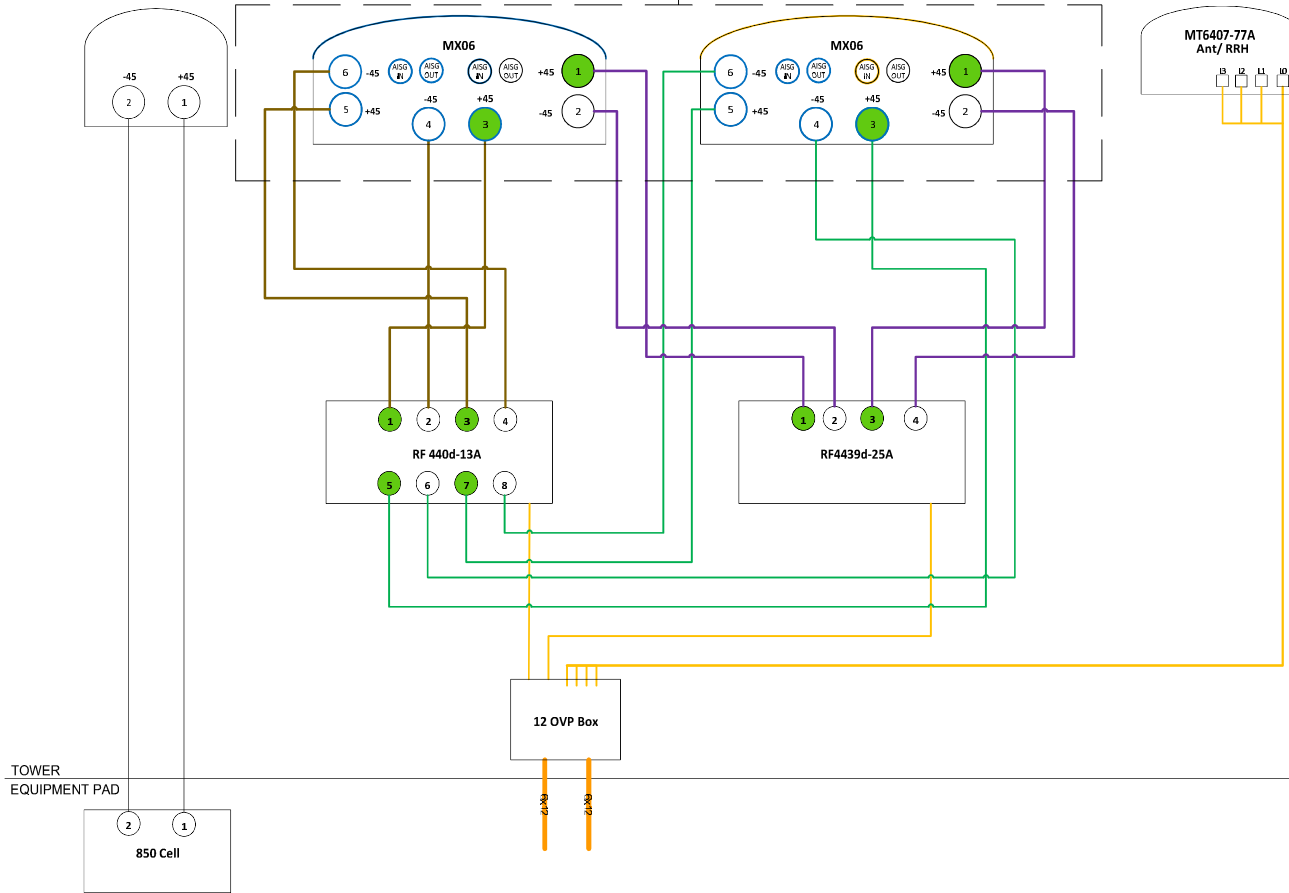
DIPLEXERS	QUANTITY	COMMENTS
-	-	-

OVP BOXES	QUANTITY	COMMENTS
TOWER OVP-12	1	RAYCAP MODEL: RHSDC-6627-PF-48

ANTENNA MOUNT	QUANTITY	COMMENTS
SIDE-BY-SIDE MOUNTING KIT	3	JMA MODEL: 91900314-02

A/G: LNX6513DS-A1M
B: LNX-6514DS-A1M

91900314-02



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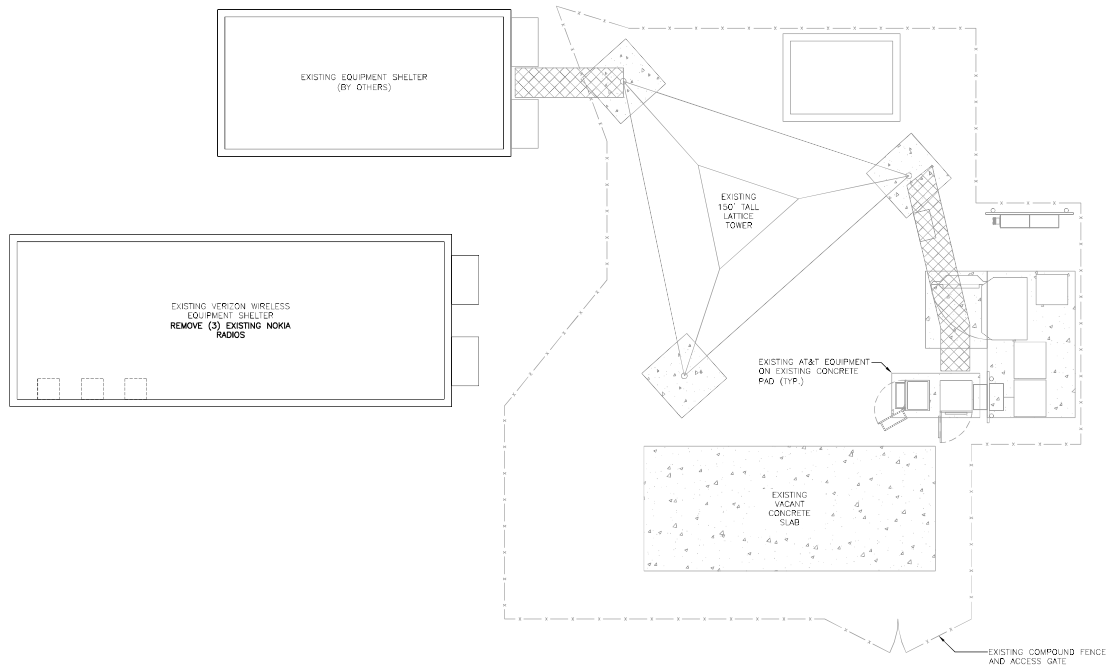
Cellco Partnership d/b/a Verizon Wireless
GUILFORD NORTH CT
331 ROUTE 80
GUILFORD, CT 06437

DATE: 09/05/21
SCALE: AS NOTED
JOB NO. 21007.3P

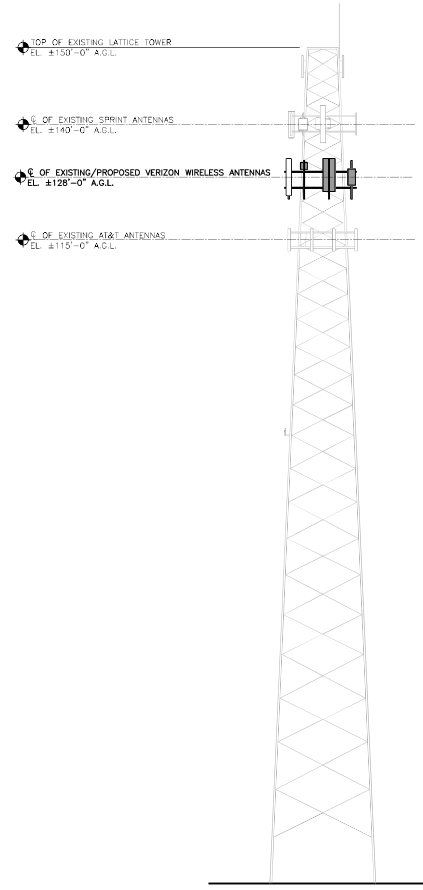
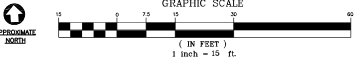
RF BILL OF MATERIALS

B-1
Sheet No. 2 of 1

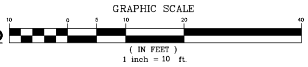
TOWER STRUCTURAL ANALYSIS REFERENCE NOTE:
 REFER TO PASSING TOWER STRUCTURAL ANALYSIS REPORT
 PREPARED FOR SBA COMMUNICATIONS CORPORATION, BY
 TOWER ENGINEERING SERVICES (TES), DATED 01/31/2022.
 TES PROJECT NO. 123167.



1
 C-1 **COMPOUND PLAN - PROPOSED**
 SCALE: 1" = 15'



2
 C-1 **TOWER ELEVATION - PROPOSED**
 SCALE: 1" = 10'



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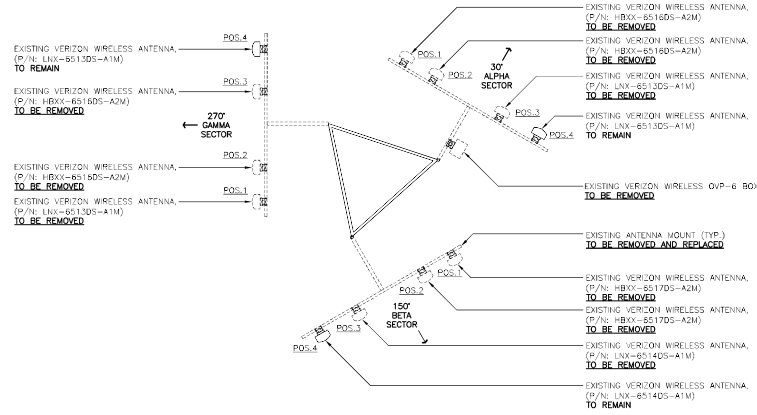
Cellco Partnership d/b/a Verizon Wireless
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 GUILFORD, CT 06437

DATE: 09/05/21
 SCALE: AS NOTED
 JOB NO.: 210073P

COMPOUND PLAN AND ELEVATION

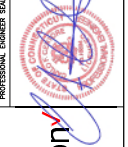
C-1
 Sheet No. 1 of 1

EXISTING ANTENNA CONFIGURATIONS



1 EXISTING SECTOR CONFIGURATION PLAN
SCALE: 1/4" = 1'-0"
APPROXIMATE

REV.	DATE	BY	CHKD BY	ISSUED FOR CONSTRUCTION
				CONSTRUCTION DRAWINGS - ISSUED FOR CLEAR REVIEW
	07/04/22			
1	DATE	ANZ	DMD	
	SCALE	AWC	AWC	
	SCALE	AWC	AWC	

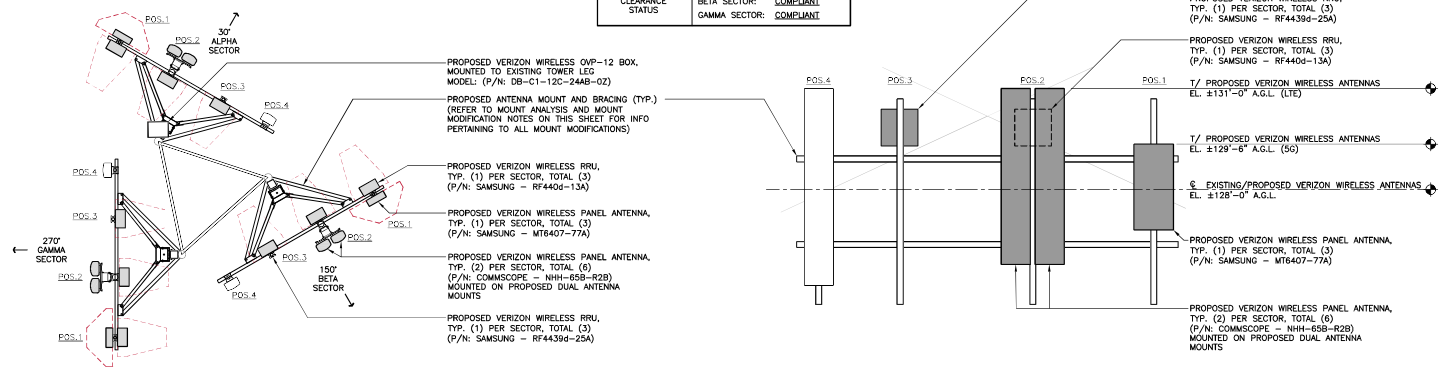


PROPOSED ANTENNA CONFIGURATIONS

LEGEND

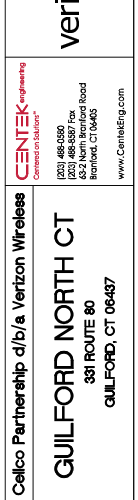
--- ---	VERIZON WIRELESS MT6407-77A REQUIRED ANTENNA CLEARANCE LIMITS (PER DETAILS ON SHEET C-3)
ANTENNA CLEARANCE STATUS	ALPHA SECTOR: COEPLIANT BETA SECTOR: COEPLIANT GAMMA SECTOR: COEPLIANT
--- ---	VERIZON WIRELESS RRU REQUIRED ANTENNA CLEARANCE LIMITS (PER DETAILS ON SHEET C-3)
RRU CLEARANCE STATUS	ALPHA SECTOR: COEPLIANT BETA SECTOR: COEPLIANT GAMMA SECTOR: COEPLIANT

ANTENNA MOUNT ANALYSIS AND MOD NOTE:
REFER TO PASSING VERIZON WIRELESS MOUNT ANALYSIS REPORT AND MOUNT MODIFICATION DESIGN PREPARED BY MASER CONSULTING CONNECTICUT DATED 08/06/2021 FOR ADDITIONAL INFORMATION.



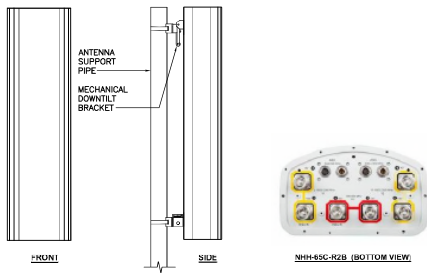
2 PROPOSED SECTOR CONFIGURATION PLAN
SCALE: 1/4" = 1'-0"
APPROXIMATE

2A PROPOSED SECTOR CONFIGURATION ELEVATION
SCALE: 1/2" = 1'-0"
APPROXIMATE



DATE:	09/05/21
SCALE:	AS NOTED
JOB NO.:	21007.39

ANTENNA SECTOR CONFIGURATION DETAILS



ALPHA/BETA/GAMMA ANTENNA		
EQUIPMENT	DIMENSIONS	WEIGHT (WITH MOUNTING KIT)
MAKE: COMSCOPE MODEL: NHH-86B-R28	72.0"L x 11.9"W x 7.0"D	43.7 LBS.

1 SECTOR ANTENNA DETAIL
C-3 NOT TO SCALE



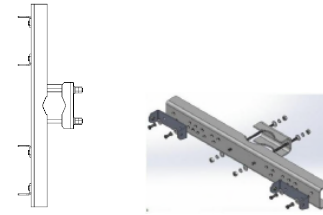
SECTOR ANTENNA		
EQUIPMENT	DIMENSIONS	WEIGHT
MAKE: SAMSUNG MODEL: MT6407-77A	35.1"H x 16.1"W x 5.5"D (NOT TO EXCEED)	87 LBS. (NOT TO EXCEED)

CLEARANCES AND SERVICE AREA

TOP:	31.5"	HORIZONTAL DISTANCE: 31.5" (ANT. TO ANT.)
FRONT, SIDES & BOTTOM:	15.7"	VERTICAL DISTANCE: 63.0" (ANT. TO ANT.)

NOTES:
1. THIS ANTENNA HAS ITS OWN BUILT-IN RRH.

2 SECTOR ANTENNA DETAIL
C-3 NOT TO SCALE



DUAL ANTENNA MOUNTING KIT	
EQUIPMENT	DESCRIPTION
MOUNT MAKE: JMA MODEL: 919003314-02	<ul style="list-style-type: none"> SIDE-BY-SIDE MOUNTING KIT, ACCOMMODATES (2) COMPATIBLE ANTENNAS 2 BRACKETS REQUIRED FOR 4'-6" ANTENNAS 3 BRACKETS REQUIRED FOR 6'-8" ANTENNAS

3 DUAL ANTENNA MOUNT DETAIL
C-3 NOT TO SCALE



OVP BOX		
EQUIPMENT	DIMENSIONS	WEIGHT
MAKE: RAYCAP MODEL: DB-C1-12C-24AB-0Z	29.5"H x 16.5"W x 12.6"D	32 LBS.

NOTES:
1. CONTRACTOR TO CONFIRM OVP BOX MAKE/MODEL AND QUANTITY WITH VERIZON WIRELESS CONSTRUCTION MANAGER PRIOR TO ORDERING.

4 PROPOSED OVER-VOLTAGE PROTECTION BOX
C-3 NOT TO SCALE



DUAL BAND RRU (REMOTE RADIO UNIT)			
EQUIPMENT	BANDS	DIMENSIONS	WEIGHT
MAKE: SAMSUNG MODEL: RF4439g-25A	B25: PCS (1900 MHz) B66: AWS (2100 MHz)	15.0"H x 15.0"W x 10.0"D	74.7 LBS.

NOTES:
1. CONTRACTOR TO COORDINATE FINAL EQUIPMENT MODEL SELECTION WITH VERIZON WIRELESS CONSTRUCTION MANAGER PRIOR TO ORDERING.

5 DUAL-BAND AWS/PCS MACRO RADIO UNIT DETAIL
C-3 NOT TO SCALE



DUAL BAND RRU (REMOTE RADIO UNIT)			
EQUIPMENT	BANDS	DIMENSIONS	WEIGHT
MAKE: SAMSUNG MODEL: RF440d-13A	B5: 850 MHz B13: 700 MHz	15.0"H x 15.0"W x 9.0"D	70.3 LBS.

NOTES:
1. CONTRACTOR TO COORDINATE FINAL EQUIPMENT MODEL SELECTION WITH VERIZON WIRELESS CONSTRUCTION MANAGER PRIOR TO ORDERING.

6 DUAL-BAND 700/850 MHZ MACRO RADIO UNIT DETAIL
C-3 NOT TO SCALE

DATE: 02/04/22
DND: []
ANC: []
DRAWN BY: []
DATE: []
REV: []

CONSTRUCTION DRAWINGS - ISSUED FOR CONSTRUCTION
CONSTRUCTION DRAWINGS - ISSUED FOR CLIENT REVIEW

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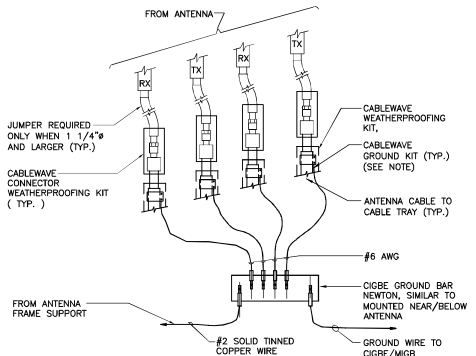
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DATE: 09/05/21
SCALE: AS NOTED
JOB NO. 21007.3P

RF DETAILS

C-3

Sheet No. 6 of 1

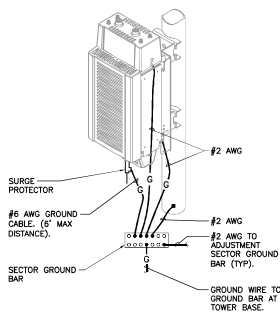


NOTES:

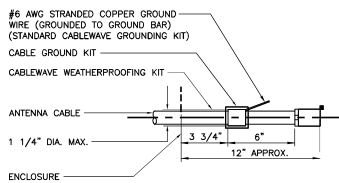
- DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO CIGBE

1 CONNECTION OF GROUND WIRES TO GROUND BAR
E-1 NOT TO SCALE

EACH RRH CABINET SHALL BE GROUNDED IN THE FOLLOWING MANNER:
1. AT TOP OF THE CABINET
2. AT RIGHT SIDE OF THE CABINET.



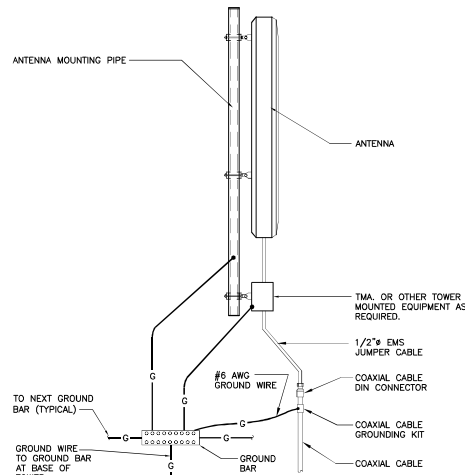
2 RRH POLE MOUNT GROUNTING
E-1 NOT TO SCALE



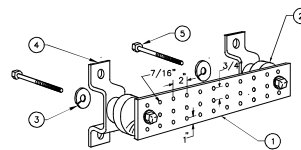
NOTES:

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

3 ANTENNA CABLE GROUNTING DETAIL
E-1 NOT TO SCALE



4 TYPICAL ANTENNA GROUNTING DETAIL
E-1 NOT TO SCALE



NOTES

- TINNED COPPER GROUND BAR, 1/4" x 4" x 20", NEWTON INSTRUMENT CO. HOLE CENTERS TO MATCH NEMA DOUBLE LUG CONFIGURATION.
- INSULATORS, NEWTON INSTRUMENT CAT. NO. 3061-4.
- 5/8" LOCK WASHERS, NEWTON INSTRUMENT CO. CAT. NO. 3015-8.
- WALL MOUNTING BRACKET, NEWTON INSTRUMENT CO. CAT. NO. A-6056.
- 5/8"-11 x 1" STAINLESS STEEL TRUSS SPANNER MACHINE SCREWS.

5 GROUND BAR DETAIL
E-1 NOT TO SCALE

ELECTRICAL SPECIFICATIONS

SECTION 16010

1.01. SCOPE OF WORK

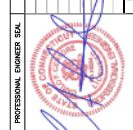
- WORK SHALL INCLUDE ALL LABOR, EQUIPMENT AND SERVICES REQUIRED TO COMPLETE (MAKE READY FOR OPERATION) ALL THE ELECTRICAL WORK INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:
 - CELLULAR GROUNTING SYSTEMS CONSISTING OF ANTENNA GROUNTING, GROUND BARS, ETC.
- GENERAL REQUIREMENTS
 - THE ENTIRE ELECTRICAL INSTALLATION SHALL BE MADE IN STRICT ACCORDANCE WITH ALL LOCAL, STATE AND NATIONAL CODES AND REGULATIONS WHICH MAY APPLY AND NOTHING IN THE DRAWINGS OR SPECIFICATIONS SHALL BE INTERPRETED AS AN INFRINGEMENT OF SUCH CODES OR REGULATIONS.
 - THE ELECTRICAL CONTRACTOR IS TO BE RESPONSIBLE FOR THE COMPLETE INSTALLATION AND COORDINATION OF THE ENTIRE ELECTRICAL SERVICE. ALL ACTIVITIES TO BE COORDINATED THROUGH OWNERS REPRESENTATIVE, DESIGN ENGINEER AND OTHER AUTHORITIES HAVING JURISDICTION OF TRADES.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND PAY ALL FEES THAT MAY BE REQUIRED FOR THE ELECTRICAL WORK AND FOR SCHEDULING OF ALL INSPECTIONS THAT MAY BE REQUIRED BY THE LOCAL AUTHORITY.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH THE BUILDING OWNER FOR NEW AND/OR DEMOLITION WORK INVOLVED.
 - NO MATERIAL OTHER THAN THAT CONTAINED IN THE "LATEST LIST OF ELECTRICAL FITTINGS" APPROVED BY THE UNDERWRITERS' LABORATORIES, SHALL BE USED IN ANY PART OF THE WORK. ALL MATERIAL FOR WHICH LABEL SERVICE HAS BEEN ESTABLISHED SHALL BEAR THE U.L. LABEL.
 - THE CONTRACTOR SHALL GUARANTEE ALL NEW WORK FOR A PERIOD OF ONE YEAR FROM THE ACCEPTANCE DATE BY THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING WARRANTIES FROM ALL EQUIPMENT MANUFACTURERS FOR SUBMISSION TO THE OWNER.
 - DRAWINGS INDICATE GENERAL ARRANGEMENT OF WORK INCLUDED IN CONTRACT. CONTRACTOR SHALL, WITHOUT EXTRA CHARGE, MAKE MODIFICATIONS TO THE LAYOUT OF THE WORK TO PREVENT CONFLICT WITH WORK OF OTHER TRADES AND FOR THE PROPER INSTALLATION OF WORK. CHECK ALL DRAWINGS AND VISIT JOB SITE TO VERIFY SPACE AND TYPE OF EXISTING CONDITIONS IN WHICH WORK WILL BE DONE, PRIOR TO SUBMITTAL OF BID.
 - THE ELECTRICAL CONTRACTOR SHALL SUPPLY THREE (3) COMPLETE SETS OF APPROVED DRAWINGS, ENGINEERING DATA SHEETS, MAINTENANCE AND OPERATING INSTRUCTION MANUALS FOR ALL SYSTEMS AND THEIR RESPECTIVE EQUIPMENT. THESE MANUALS SHALL BE INSERTED IN VINYL COVERED 3-RING BINDERS AND TURNED OVER TO OWNER'S REPRESENTATIVE ONE (1) WEEK PRIOR TO FINAL PUNCH LIST.
 - ALL WORK SHALL BE INSTALLED IN A NEAT AND WORKMAN LIKE MANNER AND WILL BE SUBJECT TO THE APPROVAL OF THE OWNER'S REPRESENTATIVE.
 - ALL EQUIPMENT AND MATERIALS TO BE INSTALLED SHALL BE NEW, UNLESS OTHERWISE NOTED.
 - BEFORE FINAL PAYMENT, THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF PRINTS (AS-BUILTS), LEGIBLY MARKED IN RED PENCIL TO SHOW ALL CHANGES FROM THE ORIGINAL PLANS.
 - ENTIRE ELECTRICAL INSTALLATION SHALL BE IN ACCORDANCE WITH OWNER'S SPECIFICATIONS, AND REQUIREMENTS OF ALL LOCAL AUTHORITIES HAVING JURISDICTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH APPROPRIATE INDIVIDUALS TO OBTAIN ALL SUCH SPECIFICATIONS AND REQUIREMENTS. NOTHING CONTAINED IN, OR OMITTED FROM, THESE DOCUMENTS SHALL RELIEVE CONTRACTOR FROM THIS OBLIGATION.

SECTION 16450

1.01. GROUNTING

- ALL NON-CURRENT CARRYING PARTS OF THE ELECTRICAL AND TELEPHONE CONDUIT SYSTEMS SHALL BE MECHANICALLY AND ELECTRICALLY CONNECTED TO PROVIDE AN INDEPENDENT RETURN PATH TO THE EQUIPMENT GROUNTING SOURCES.
- GROUNTING SYSTEM WILL BE IN ACCORDANCE WITH THE LATEST ACCEPTABLE EDITION OF THE NATIONAL ELECTRICAL CODE AND REQUIREMENTS PER LOCAL INSPECTOR HAVING JURISDICTION.
- EQUIPMENT GROUNTING CONDUCTOR:
 - EACH EQUIPMENT GROUND CONDUCTOR SHALL BE SIZED IN ACCORDANCE WITH THE N.E.C. ARTICLE 250-122.
 - THE MINIMUM SIZE OF EQUIPMENT GROUND CONDUCTOR SHALL BE #12 AWG COPPER.
- CELLULAR GROUNTING SYSTEM:
 - PROVIDE THE CELLULAR GROUNTING SYSTEM AS SPECIFIED ON DRAWINGS, INCLUDING, BUT NOT LIMITED TO:
 - GROUND BARS
 - ANTENNA GROUND CONNECTIONS AND PLATES.
- ALL EQUIPMENT SHALL BE BONDED TO GROUND AS REQUIRED BY N.E.C., MFG. SPECIFICATIONS, AND OWNER'S SPECIFICATIONS.

CONSTRUCTION DRAWINGS - ISSUED FOR CONSTRUCTION	DND	02/04/22	AWC	02/04/22
CONSTRUCTION DRAWINGS - ISSUED FOR CLIENT REVIEW	AWC	02/04/22	AWC	02/04/22
ISSUED FOR CLIENT REVIEW	AWC	02/04/22	AWC	02/04/22



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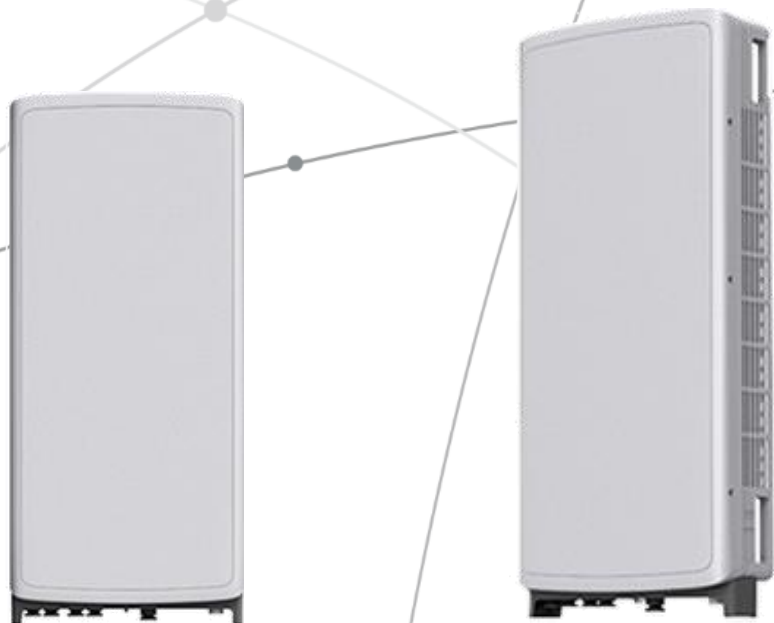
E-1
 Sheet No. 1 of 1

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



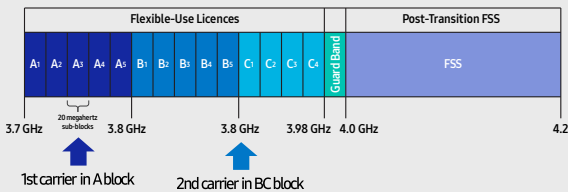
Points of Differentiation

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

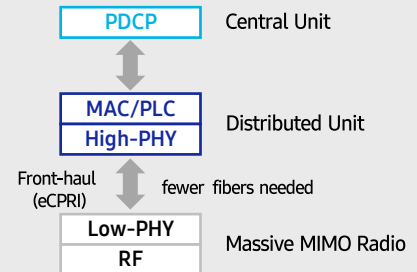
C-Band spectrum supported by Massive MIMO Radio



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.

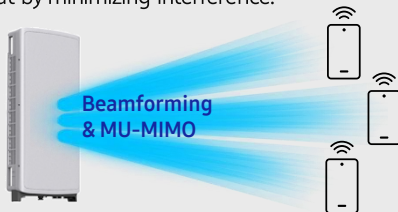


Enhanced Performance

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.

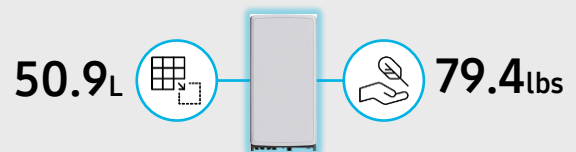
Furthermore, as C-Band massive MIMO Radio supports MU-MIMO (Multi-user MIMO), it enables to increase user throughput by minimizing interference.



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



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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.

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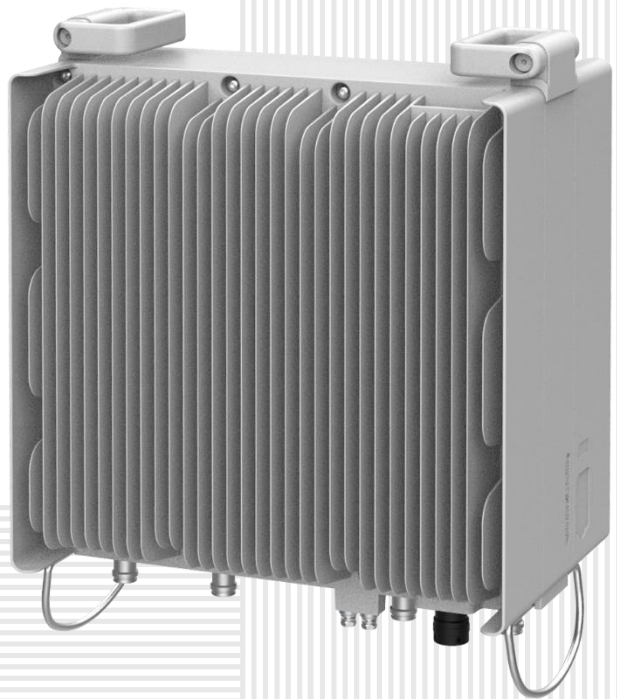
SAMSUNG

700/850MHZ MACRO RADIO

DUAL-BAND AND HIGH POWER
FOR MACRO COVERAGE

Samsung's future proof dual-band radio is designed to help effectively increase the coverage areas in wireless networks. This 700/850MHz 4T4R dual-band radio has 4Tx/4Rx to 2Tx/2Rx RF chains options and a total output power of 320W, making it ideal for macro sites.

Model Code RF4440d-13A



Homepage
samsungnetworks.com

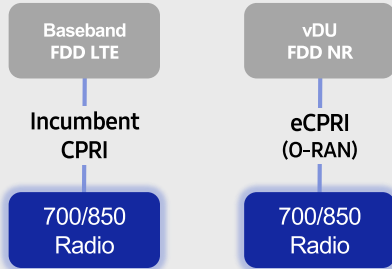


Youtube
www.youtube.com/samsung5g

Points of Differentiation

Continuous Migration

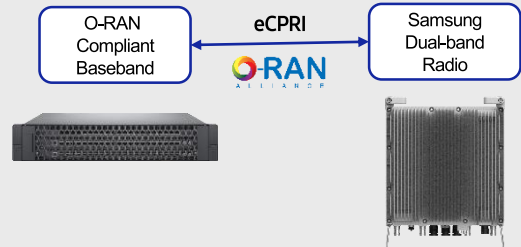
Samsung's 700/850MHz macro radio can support each incumbent CPRI interface as well as an advanced eCPRI interface. This feature provides installable options for both legacy LTE networks and added NR networks.



O-RAN Compliant

A standardized O-RAN radio can help when implementing cost-effective networks because it is capable of sending more data without compromising additional investments.

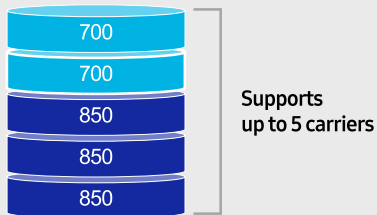
Samsung's state-of-the-art O-RAN technology will help accelerate the effort toward constructing a solid O-RAN ecosystem.



Optimum Spectrum Utilization

The number of required carriers varies according to site (region). The ability to support many carriers is essential for using all frequencies that the operator has available.

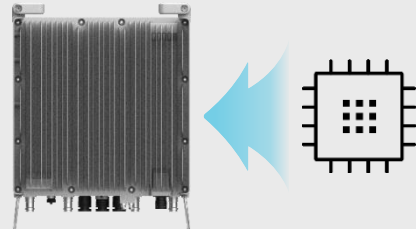
The new 700/850MHz dual-band radio can support up to 2 carriers in the B13 (700MHz) band and 3 carriers in the B5 (850MHz) band, respectively.



Secured Integrity

Access to sensitive data is allowed only to authorized software.

The Samsung radio's CPU can protect root of trust, which is credential information to verify SW integrity, and secure storage provides access control to sensitive data by using dedicated hardware (TPM).



Technical Specifications

Item	Specification
Tech	LTE / NR
Brand	B13(700MHz), B5(850MHz)
Frequency Band	DL: 746 – 756MHz, UL: 777 – 787MHz DL: 869 – 894MHz, UL: 824 – 849MHz
RF Power	(B13) 4 × 40W or 2 × 60W (B5) 4 × 40W or 2 × 60W
IBW/OBW	(B13) 10MHz / 10MHz (B5) 25MHz / 25MHz
Installation	Pole, Wall
Size/Weight	14.96 x 14.96 x 9.05inch (33.2L) / 70.33 lb

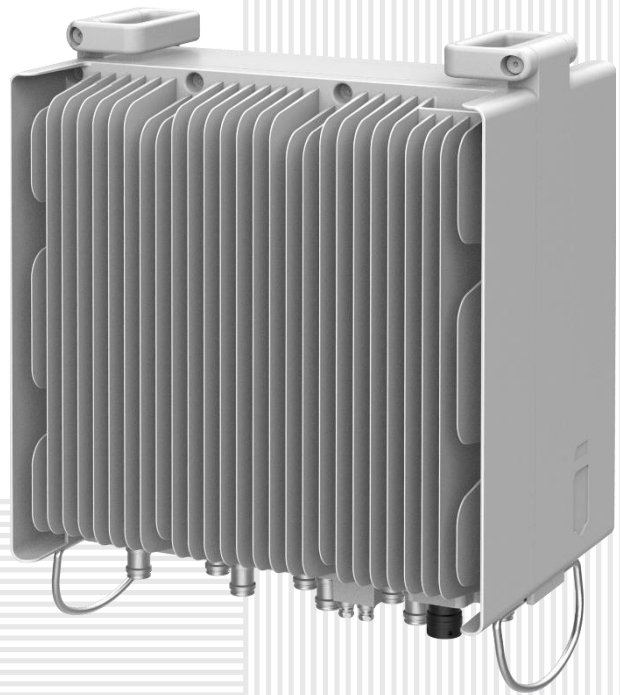
SAMSUNG

AWS/PCS MACRO RADIO

DUAL-BAND AND HIGH POWER
FOR MACRO COVERAGE

Samsung's future proof dual-band radio is designed to help effectively increase the coverage areas in wireless networks. This AWS/PCS 4T4R dual-band radio has 4Tx/4Rx to 2Tx/2Rx RF chains options and a total output power of 320W, making it ideal for macro sites.

Model Code RF4439d-25A



Homepage
samsungnetworks.com

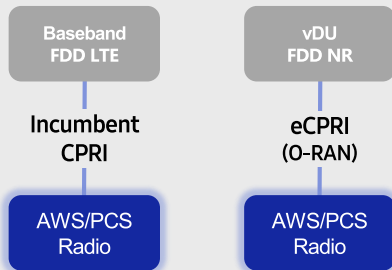


Youtube
www.youtube.com/samsung5g

Points of Differentiation

Continuous Migration

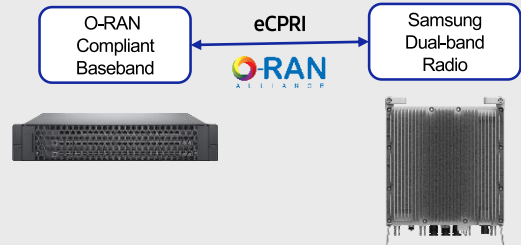
Samsung's AWS/PCS macro radio can support each incumbent CPRI interface as well as advanced eCPRI interfaces. This feature provides installable options for both legacy LTE networks and added NR networks.



O-RAN Compliant

A standardized O-RAN radio can help in implementing cost-effective networks, which are capable of sending more data without compromising additional investments.

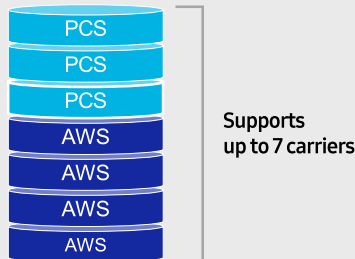
Samsung's state-of-the-art O-RAN technology will help accelerate the effort toward constructing a solid O-RAN ecosystem.



Optimum Spectrum Utilization

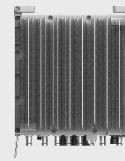
The number of required carriers varies according to site (region). Supporting many carriers is essential for using all frequencies that the operator has available.

The new AWS/PCS dual-band radio can support up to 3 carriers in the PCS (1.9GHz) band and 4 carriers in the AWS (2.1GHz) band, respectively.



Brand New Features in a Compact Size

Samsung's AWS/PCS macro radio offers several features, such as dual connectivity for baseband for both CDU and vDU, O-RAN capability, more carriers and an enlarged PCS spectrum, combined into an incumbent radio volume of 36.8L.



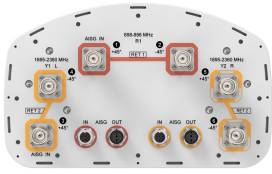
- 2 FH connectivity
- O-RAN capability
- More carriers and spectrum

Same as an incumbent radio volume

Technical Specifications

Item	Specification
Tech	LTE / NR
Brand	B25(PCS), B66(AWS)
Frequency Band	DL: 1930 – 1995MHz, UL: 1850 – 1915MHz DL: 2110 – 2200MHz, UL: 1710 – 1780MHz
RF Power	(B25) 4 × 40W or 2 × 60W (B66) 4 × 60W or 2 × 80W
IBW/OBW	(B25) 65MHz / 30MHz (B66) DL 90MHz, UL 70MHz / 60MHz
Installation	Pole, Wall
Size/Weight	14.96 x 14.96 x 10.04inch (36.8L) / 74.7lb

NHH-65B-R2B



6-port sector antenna, 2x 698–896 and 4x 1695–2360 MHz, 65° HPBW, 2x RET. Both high bands share the same electrical tilt.

- Interleaved dipole technology providing for attractive, low wind load mechanical package
- Internal SBT on low and high band allow remote RET control from the radio over the RF jumper cable
- Separate RS-485 RET input/output for low and high band
- One RET for low band and one RET for both high bands to ensure same tilt level for 4x Rx or 4x MIMO

General Specifications

Antenna Type	Sector
Band	Multiband
Color	Light gray
Grounding Type	RF connector body grounded to reflector and mounting bracket
Performance Note	Outdoor usage Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
Radome Material	Fiberglass, UV resistant
Radiator Material	Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	4
RF Connector Quantity, low band	2
RF Connector Quantity, total	6

Remote Electrical Tilt (RET) Information

RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	2 female 2 male
Input Voltage	10–30 Vdc
Internal Bias Tee	Port 1 Port 3
Internal RET	High band (1) Low band (1)
Power Consumption, idle state, maximum	2 W
Power Consumption, normal conditions, maximum	13 W

NHH-65B-R2B

Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

Width 301 mm | 11.85 in

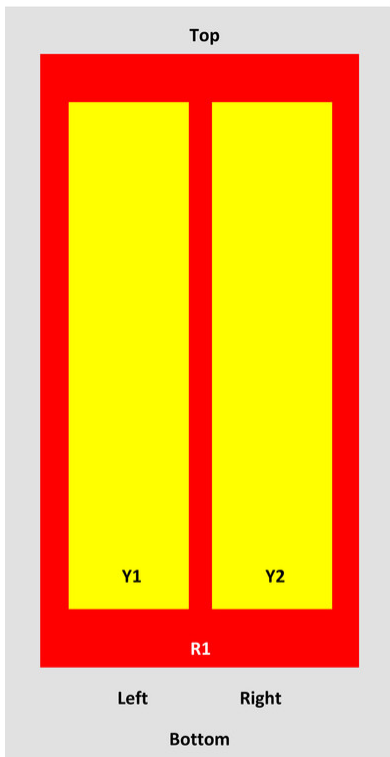
Depth 180 mm | 7.087 in

Length 1828 mm | 71.969 in

Net Weight, without mounting kit 19.8 kg | 43.651 lb

Array Layout

NHH



Array	Freq (MHz)	Coms	RET (SRET)	AISG RET UID
R1	698-896	1-2	1	ANXXXXXXXXXXXXXXX1
Y1	1695-2360	3-4	2	ANXXXXXXXXXXXXXXX2
Y2	1695-2360	5-6		

View from the front of the antenna

(Sizes of colored boxes are not true depictions of array sizes)

Electrical Specifications

Impedance 50 ohm

Operating Frequency Band 1695 – 2360 MHz | 698 – 896 MHz

NHH-65B-R2B

Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2200	2300–2360
Gain, dBi	14.9	15	17.7	17.9	18.4	18.7
Beamwidth, Horizontal, degrees	65	60	71	69	64	57
Beamwidth, Vertical, degrees	12.4	11.2	5.7	5.2	4.9	4.6
Beam Tilt, degrees	0–14	0–14	0–7	0–7	0–7	0–7
USLS (First Lobe), dB	13	14	18	18	19	18
Front-to-Back Ratio at 180°, dB	30	29	31	30	29	31
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	30	30	30	30	30	30
VSWR Return loss, dB	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	300	300	300	300	300	300

Electrical Specifications, BASTA

Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2200	2300–2360
Gain by all Beam Tilts, average, dBi	14.5	14.5	17.3	17.7	18.1	18.5
Gain by all Beam Tilts Tolerance, dB	±0.6	±1.1	±0.4	±0.4	±0.5	±0.3
Gain by Beam Tilt, average, dBi	0° 14.4 7° 14.6 14° 14.3	0° 14.7 7° 14.7 14° 14.1	0° 17.2 4° 17.3 7° 17.3	0° 17.6 4° 17.7 7° 17.7	0° 18.0 4° 18.2 7° 18.1	0° 18.3 4° 18.5 7° 18.6
Beamwidth, Horizontal Tolerance, degrees	±2	±2.1	±3	±4.1	±6.5	±2.9
Beamwidth, Vertical Tolerance, degrees	±0.7	±0.7	±0.3	±0.2	±0.3	±0.2
USLS, beampeak to 20° above beampeak, dB	13	14	16	16	17	15
Front-to-Back Total Power at 180° ± 30°, dB	23	22	27	27	25	25
CPR at Boresight, dB	22	21	23	23	22	19

NHH-65B-R2B

CPR at Sector, dB	10	7	16	13	11	4
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Mechanical Specifications

Effective Projective Area (EPA), frontal	0.26 m ² 2.799 ft ²
Effective Projective Area (EPA), lateral	0.22 m ² 2.368 ft ²
Wind Loading @ Velocity, frontal	278.0 N @ 150 km/h (62.5 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	230.0 N @ 150 km/h (51.7 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	537.0 N @ 150 km/h (120.7 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	282.0 N @ 150 km/h (63.4 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h 149.75 mph

Packaging and Weights

Width, packed	409 mm 16.102 in
Depth, packed	299 mm 11.772 in
Length, packed	1952 mm 76.85 in
Weight, gross	32.3 kg 71.209 lb

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
ROHS	Compliant



Included Products

BSAMNT-3	-	Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.
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* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance
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ATTACHMENT 3

	General	Power	Density					
Site Name: Guilford N 2								
Tower Height: Verizon @ 128ft								
CARRIER	# OF CHAN.	WATTS ERP	HEIGHT	FREQ.	CALC. POWER DENS	MAX. PERMISS.EXP.	FRACTION MPE	Total
*AT&T	1	566	145	850	0.010534911	0.566666667	0.19%	
*AT&T	1	6311	145	1900	0.117466115	1	1.17%	
*AT&T	1	7246	145	2100	0.134869191	1	1.35%	
*AT&T	1	2845	145	737	0.052953747	0.491333333	1.08%	
*AT&T	1	1841	145	850	0.034266379	0.566666667	0.60%	
*AT&T	1	3656	145	2300	0.068048822	1	0.68%	
*AT&T	1	1841	145	850	0.034266379	0.566666667	0.60%	
*Sprint	3	347	138.5	1990	0.021323721	1	0.21%	
*Sprint	1	195	138.5	850	0.003994357	0.566666667	0.07%	
*Sprint	2	195	138.5	2500	0.007988714	1	0.08%	
*Nextel	12	100	114	851	0.036997958	0.567333333	0.65%	
VZW 700	4	662	128	751	0.0058	0.5007	1.16%	
VZW CDMA	2	429	128	874.8	0.0019	0.5832	0.32%	
VZW Cellular	4	700	128	874	0.0061	0.5827	1.05%	
VZW PCS	4	1466	128	1975	0.0129	1.0000	1.29%	
VZW AWS	4	1626	128	2120	0.0143	1.0000	1.43%	
VZW CBAND	2	22131	128	3730.08	0.0972	1.0000	9.72%	
								21.66%
* Source: Siting Council								

ATTACHMENT 4



Tower Engineering Solutions

Phone (972) 483-0607, Fax (972) 975-9615
1320 Greenway Drive, Suite 600, Irving, Texas 75038

Structural Analysis Report

Existing 152 ft Rohn Self Supporting Tower

Customer Name: SBA Communications Corp

Customer Site Number: CT13065-A

Customer Site Name: Guilford

Carrier Name: Verizon (App#: 174347-1)

Carrier Site ID / Name: 467748 / GUILFORD_NORTH_CT

Site Location: 331 Killingworth Road (Rt 80)

Guilford, Connecticut

New Haven County

Latitude: 41.353164

Longitude: -72.688252

Analysis Result:

Max Structural Usage: 97.0% [Pass]

Max Foundation Usage: 71.0% [PASS]

Additional Usage Caused by New Mount/Mount Modification: N/A



Report Prepared By: Mohammed Al Rubaye



Tower Engineering Solutions

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Report Prepared By: Mohammed Al Rubaye

Introduction

The purpose of this report is to summarize the analysis results on the 152 ft Rohn Self Supporting Tower to support the proposed antennas and transmission lines in addition to those currently installed.

The pending modification by **TES** listed under Sources of Information was also considered completed and was included in this analysis.

Sources of Information

Tower Drawings	Rohn, Dwg # C851129, dated 8/6/1985
Foundation Drawing	FDH, Project # 09-03151E N1, dated 6/10/2009
Geotechnical Report	FDH, Project # 09-03151EG1, dated 5/5/2009
Mount Analysis	Maser Consulting Connecticut Project #: 2177792A, dated 08/06/2021
Modification Drawings	All-Points Technology Corp., Job # CT2001D1, dated 4/28/05 FDH, Project # 09-03151E S2, dated 9/4/09 FDH, Project # 11-10199E S2, dated 4/19/12 FDH, Project # 12-04638E S3, dated 2/6/13 FDH, Project # 15BEQG1400, dated 2/27/15 FDH, Project # 14664X1400, dated 5/29/14
Pending Modification	TES Pending Job # 121728. Dated 01/26/2022

Analysis Criteria

The rigorous analysis was performed in accordance with the requirements and stipulations of the TIA-222-G. In accordance with this standard, the structure was analyzed using **TESTowers**, a proprietary analysis software. The program considers the structure as an elastic 3-D model with second-order effects and temperature effects incorporated in the analysis. The analysis was performed using multiple wind directions.

Wind Speed Used in the Analysis:	Ultimate Design Wind Speed $V_{ult} = 130.0$ mph (3-Sec. Gust)/ Nominal Design Wind Speed $V_{asd} = 101.0$ mph (3-Sec. Gust)
Basic Wind Speed with Ice:	50 mph (3-Sec. Gust) with 3/4" radial ice concurrent
Operational Wind Speed:	60 mph + 0" Radial ice
Standard/Codes:	TIA-222-G-2 / 2015 IBC / 2018 Connecticut State Building Code
Exposure Category:	B
Structure Class:	II
Topographic Category:	1
Crest Height:	0 ft

This structural analysis is based upon the tower being classified as Structure Class II; however, if a different classification is required subsequent to the date hereof, the tower classification will be changed to meet such requirement and a new structural analysis will be run.

Existing Antennas, Mounts and Transmission Lines

The table below summarizes the antennas, mounts and transmission lines that were considered in the analysis as existing on the tower.

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
1	157.0	1	Phillips Dodge 201-7 Omni	Leg	(1) 7/8"	TCI Cablevision
2	149.0	3	Powerwave - 7770 - Panel	(3) Sector Frames w/ Mods	(12) 1 5/8" (1) 3" Conduit (Housing (1) 1/2" Fiber & (2) 3/4" DC) (1) 1/2" Fiber (2) 3/4" DC	AT&T
3		3	CCI - HPA-65R-BU6AA - Panel			
4		3	Kathrein - 800-10965 - Panel			
5		3	CCI - OPA65R-BU6DA - Panel			
6		6	Powerwave - LGP21401 TMA			
7		6	Powerwave - LGP21901 Diplexer			
8		6	Powerwave - 7020.00 RET			
9		3	Powerwave - 7070 RET			
10		3	Ericsson - 4449 B5/B12 RRU			
11		3	Ericsson - 4415 B30 RRU			
12		3	Ericsson - RRUS 8843 B2 B66A RRU			
13		3	Ericsson - RRUS-4478 B14 RRU			
14		2	Raycap - DC6-48-60-18-8F ("Squid") - OVP			
15		1	Raycap - DC6-48-60-18-8C-EV - OVP			
16	139.0	3	Alcatel Lucent 1900 MHz	(3) Sector Frames	(4) 1-1/4" Fiber	Sprint
17		3	Alcatel Lucent 800 MHz			
18		3	Alcatel Lucent TD-RRH8x20-25			
19		3	Alcatel Lucent 800 MHz Filters			
20		4	RFS ACU-A20-N RET			
21	138.0	3	RFS APXVSP18-C-A20 - Panel	(3) Sector Frames	(13) 1 5/8"	Verizon
22		3	RFS APXVTM14-C-I20 - Panel			
-	128.0	4	Andrew HBXX-6516DS-A2M - Panel	(3) Sector Frames	(13) 1 5/8"	Verizon
-		2	Andrew HBXX-6517DS-A2M - Panel			
-		4	Andrew LNX-6513DS-A1M - Panel			
-		2	Andrew LNX-6514DS-A1M - Panel			
-		6	RFS FD9R6004/2C-3L			
-		3	Alcatel Lucent RRH2x60-AWS			
-		3	Alcatel Lucent RRH2X60-PCS			
-		1	RFS DB-T1-6Z-8AB-OZ			
30	83.5	1	DB26 GPS	Leg	(1) 1/2"	Sprint

Proposed Carrier's Final Configuration of Antennas, Mounts and Transmission Lines

Information pertaining to the proposed carrier's final configuration of antennas and transmission lines was provided by SBA Communications Corp. The proposed antennas and lines are listed below.

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
23	128.0	6	Commscope - NHH-65B-R2B - Panel	(3) V-Frames VFA12-HD	(12) 1 5/8" (1) 1 5/8" Hybrid	Verizon
24		3	Samsung - MT6407-77A - Panel			
25		2	Andrew - LNX-6513DS-A1M_0 - Panel			
26		1	Andrew - LNX-6514DS-A1M - Panel			
27		3	Samsung - RF4440d-13A RRU			
28		3	Samsung - RF4439d-25A RRU			
29		1	Commscope - FE-16148-OVP-B12			

See the attached coax layout for the line placement considered in the analysis.

Analysis Results

The results of the structural analysis, performed for the wind and ice loading and antenna equipment as defined above, are summarized as the following:

Tower Component	Legs	Diagonals	Horizontals
Max. Usage:	97.0%	94.8%	23.7%
Pass/Fail	Pass	Pass	Pass

Foundations

	Compression (Kips)	Uplift (Kips)	Shear (Kips)
Analysis Reactions	216.6	186.6	23.5

The foundation has been investigated using the supplied documents and soils report and was found adequate. Therefore, no modification to the foundation will be required.

Operational Condition (Rigidity):

Operational characteristics of the tower are found to be within the limits prescribed by TIA-222 for the installed antennas. The maximum twist/sway at the elevation of the proposed equipment is 0.2088 degrees under the operational wind speed as specified in the Analysis Criteria.

Conclusions

Based on the analysis results, the structure and its foundation will be adequate to safely support the existing and proposed equipment and meet the minimum requirements per the TIA-222-G-2 Standard after the following pending modification is successfully completed.

- Pending modification design drawing by **TES** Job # 121728

Standard Conditions

1. This analysis was performed based on the information supplied to **(TES) Tower Engineering Solutions, LLC**. Verification of the information provided was not included in the Scope of Work for **TES**. The accuracy of the analysis is dependent on the accuracy of the information provided.
2. The structural analysis was performance based upon the evidence available at the time of this report. All information provided by the client is considered to be accurate.
3. The analyses will be performed based on the codes as specified by the client or based on the best knowledge of the engineering staff of **TES**. In the absence of information to the contrary, all work will be performed in accordance with the latest relevant revision of ANSI/TIA-222. If wind speed and/or ice loads are different from the minimum values recommended by the ANSI/TIA-222 standard or other codes, **TES** should be notified in writing and the applicable minimum values provided by the client.
4. The configuration of the existing mounts, antennas, coax and other appurtenances were supplied by the customer for the current structural analysis. **TES** has not visited the tower site to verify the adequacy of the information provided. If there is any discrepancy found in the report regarding the existing conditions, **TES** should be notified immediately to evaluate the effect of the discrepancy on the analysis results.
5. The client will assume responsibility for rework associated with the differences in initially provided information, including tower and foundation information, existing and/or proposed equipment and transmission lines.
6. If a feasibility analysis was performed, final acceptance of changed conditions shall be based upon a rigorous structural analysis.

Structure: CT13065-A-SBA

Site Name: Guilford	Code: TIA-222-G	1/31/2022
Type: Self Support	Base Shape: Triangle	Basic WS: 101.00
Height: 152.00 (ft)	Base Width: 20.78	Basic Ice WS: 50.00
Base Elev: 0.00 (ft)	Top Width: 6.52	Operational WS: 60.00



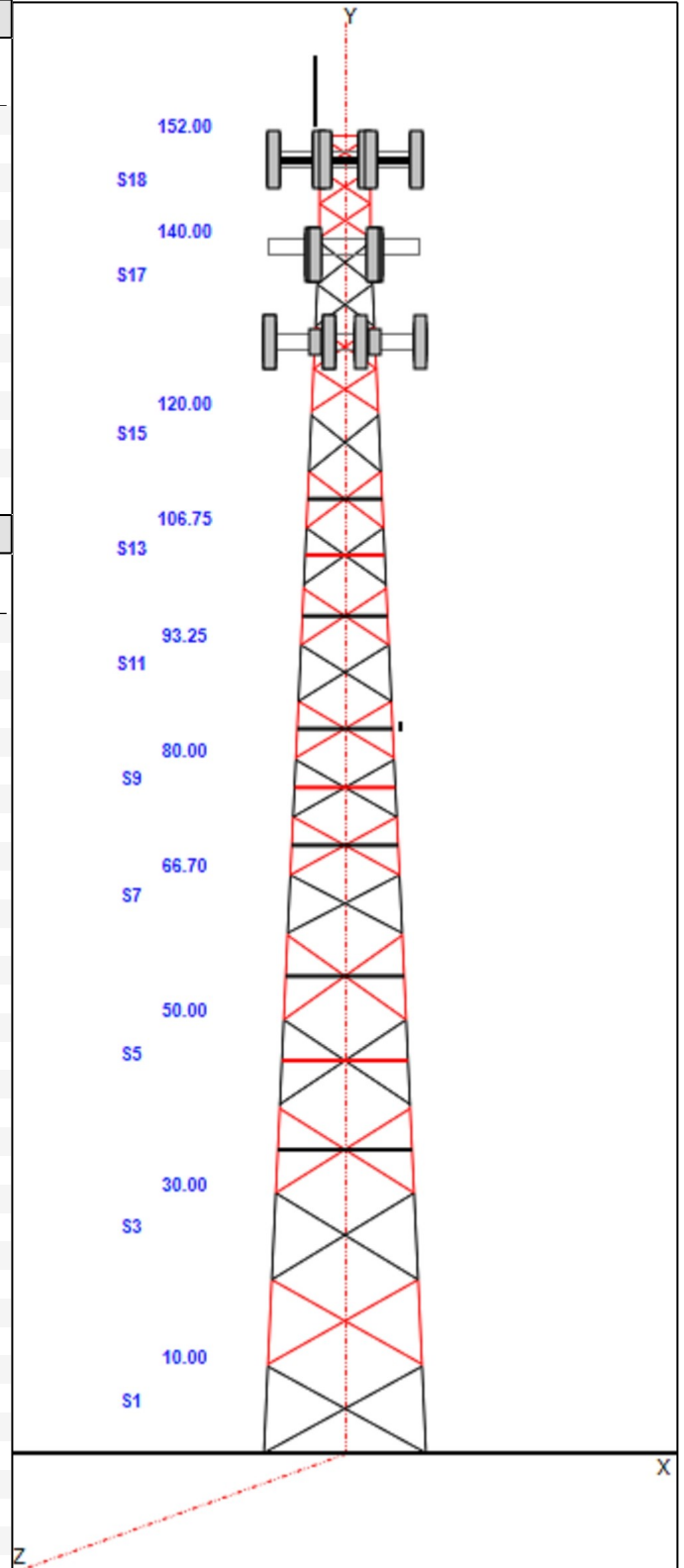
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Section Properties

Sect	Leg Members	Diagonal Members	Horizontal Members
1-2	MOD 5"PST+6"PX1/2P	SAE 3.5X3.5X0.25	
3	MOD 4"PX+5"PX1/2P	SAE 3X3X0.375	
4	PX 4" DIA PIPE	SAE 3X3X0.375	
5-6	PX 4" DIA PIPE	SAE 3X3X0.25	
7	MOD 3"PX+4"PX1/2P	SAE 2.5X2.5X0.25	
8	PX 3" DIA PIPE	SAE 2.5X2.5X0.25	
9	PX 3" DIA PIPE	SAE 2.5X2.5X0.1875	
10	MOD 2.5"PX+3"PX1/2P	SAE 2X2X0.375	
11	MOD 2.5"PX+3.5"PX1/2	SAE 2X2X0.375	
12	PX 2-1/2" DIA PIPE	SAE 2X2X0.375	
13-15	PX 2-1/2" DIA PIPE	MOD 2L2x2x1/8_Specia	
16	PST 2-1/2" DIA PIPE	SAE 1.75X1.75X0.25	
17	PST 2-1/2" DIA PIPE	SAE 1.75X1.75X0.125	
18	PST 2" DIA PIPE	SAE 1.5X1.5X0.125	SAE 2x2x0.125

Discrete Appurtenances

Attach Elev (ft)	Force Elev (ft)	Qty	Description
150.00	157.00	1	Phillips Dodge 201-7 Omni
149.00	149.00	3	Sector Frames
149.00	149.00	3	7770
149.00	149.00	3	HPA-65R-BU6AA
149.00	149.00	3	800-10965
149.00	149.00	3	OPA65R-BU6DA
149.00	149.00	6	LGP21401
149.00	149.00	6	LGP21901
149.00	149.00	6	7020.00 RET
149.00	149.00	3	7070
149.00	149.00	3	4449 B5/B12
149.00	149.00	3	4415 B30
149.00	149.00	3	RRUS 8843 B2 B66A
149.00	149.00	3	RRUS-4478 B14
149.00	149.00	2	DC6-48-60-18-8F ("Squid")
149.00	149.00	1	DC6-48-60-18-8C-EV
149.00	149.00	1	(3) SFS-H (V-Braces)
149.00	149.00	1	(3) 12.5' - 2" Horizontal Pipe
139.00	139.00	1	(3) Sector Frames
139.00	139.00	3	1900MHz RRH
139.00	139.00	3	800 MHz RRH
139.00	139.00	3	TD-RRH8x20-25
139.00	139.00	3	ALU 800MHz External Notch Filt
139.00	139.00	4	ACU-A20-N
138.00	138.00	3	APXVSPP18-C-A20
138.00	138.00	3	APXVTM14-C-I20
128.00	128.00	1	(3) VFA12-HD
128.00	128.00	6	NHH-65B-R2B
128.00	128.00	3	MT6407-77A
128.00	128.00	2	LNx-6513DS-A1M_0
128.00	128.00	1	LNx-6514DS-A1M
128.00	128.00	3	RF4440d-13A
128.00	128.00	3	RF4439d-25A
128.00	128.00	1	FE-16148-OVP-B12
83.50	83.50	1	DB26 GPS



Structure: CT13065-A-SBA

Site Name: Guilford	Code: TIA-222-G	1/31/2022
Type: Self Support	Base Shape: Triangle	Basic WS: 101.00
Height: 152.00 (ft)	Base Width: 20.78	Basic Ice WS: 50.00
Base Elev: 0.00 (ft)	Top Width: 6.52	Operational WS: 60.00



Page: 2

83.50 83.50 1 Pipe Mount

Linear Appurtenances

Elev From (ft)	Elev To (ft)	Qty	Description
0.00	152.00	1	Climbing Ladder
8.00	150.00	1	7/8" Coax
0.00	149.00	1	W/G Ladder
10.00	149.00	12	1 5/8" Coax
10.00	149.00	1	1/2" Fiber
10.00	149.00	1	1/2" Fiber
10.00	149.00	1	3" Innerduct
10.00	149.00	2	3/4" DC
10.00	149.00	2	3/4" DC
0.00	140.00	1	W/G Ladder
8.00	139.00	4	1-1/4" Fiber
8.00	128.00	12	1 5/8" Coax
8.00	128.00	1	1 5/8" Hybrid
0.00	120.00	1	Empty W/G Ladder
8.00	83.50	1	1/2" Coax

Base Reactions

Leg	Overturning
Max Uplift: -186.56 (kips)	Moment: 3669.48 (ft-kips)
Max Down: 216.60 (kips)	Total Down: 38.13 (kips)
Max Shear: 23.50 (kips)	Total Shear: 38.91 (kips)

Structure: CT13065-A-SBA

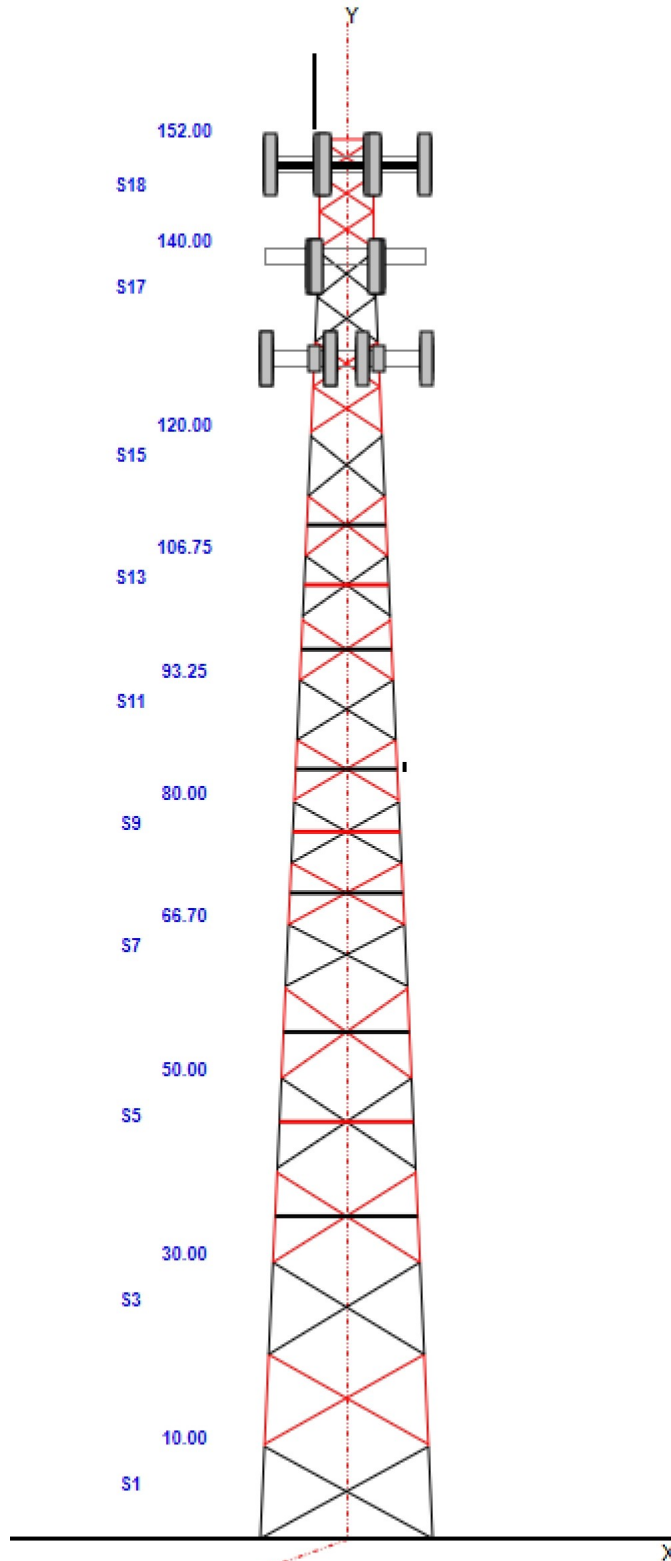
Site Name: Guilford
Type: Self Support
Height: 152.00 (ft)
Base Elev: 0.00 (ft)

Base Shape: Triangle
Base Width: 20.78
Top Width: 6.52

Code: TIA-222-G
Basic WS: 101.00
Basic Ice WS: 50.00
Operational WS: 60.00

1/31/2022

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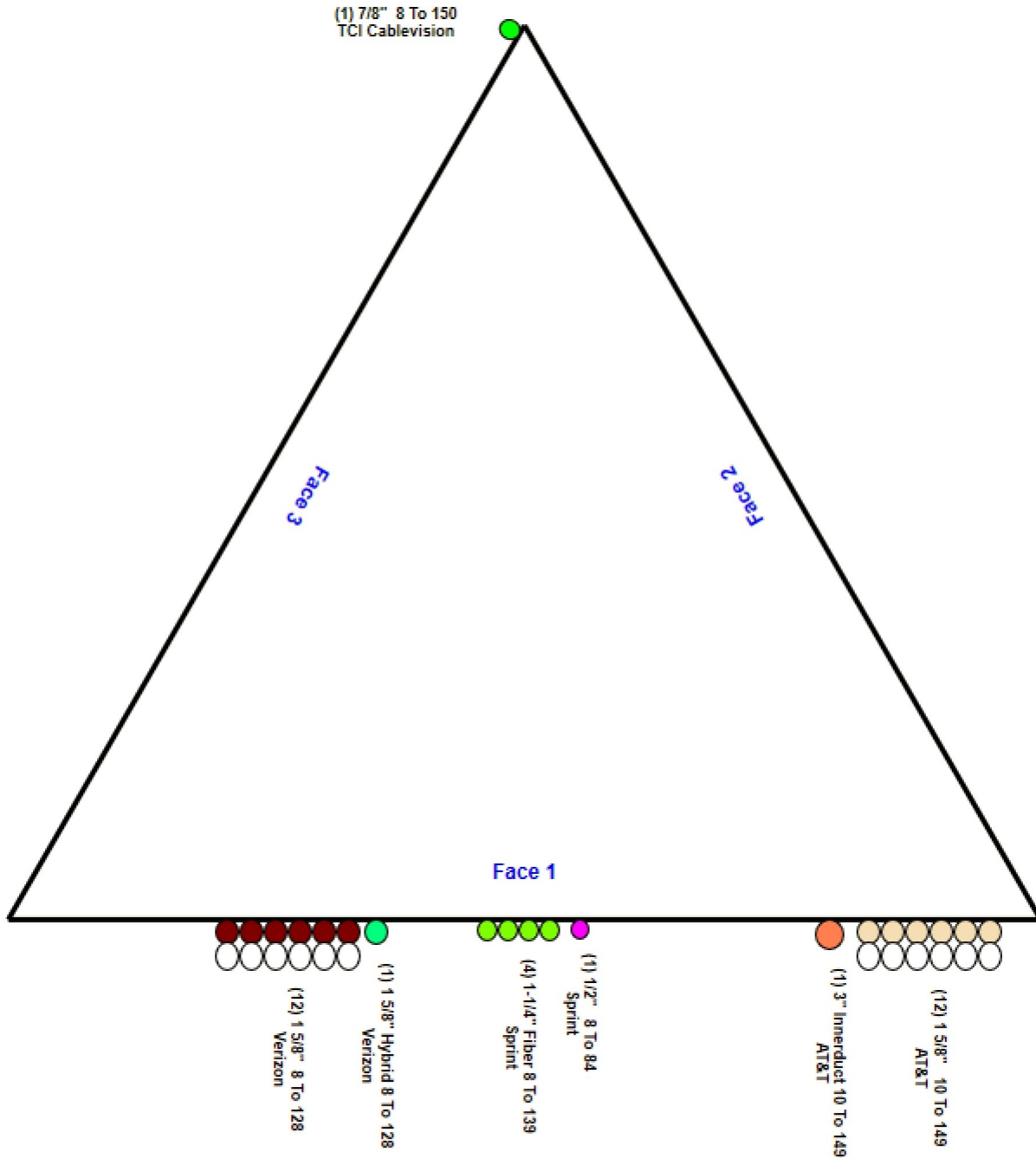
Structure: CT13065-A-SBA - Coax Line Placement

Type: Self Support
Site Name: Guilford
Height: 152.00 (ft)

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Loading Summary

Structure: CT13065-A-SBA	Code: TIA-222-G	1/31/2022
Site Name: Guilford	Exposure: B	
Height: 152.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 0.85	Topography: 1	Struct Class: II



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Discrete Appurtenances Properties

Attach Elev (ft)	Description	Qty	No Ice		Ice		Len (in)	Width (in)	Depth (in)	Ka	Orientation Factor	Vert Ecc (ft)
			Weight (lb)	CaAa (sf)	Weight (lb)	CaAa (sf)						
150.00	Phillips Dodge 201-7 Omni	1	4.00	1.070	74.90	3.845	99.600	1.300	1.300	1.00	1.00	7.000
149.00	Sector Frames	3	350.00	14.000	622.91	21.018	0.000	0.000	0.000	0.75	0.75	0.000
149.00	7770	3	35.00	5.500	169.73	6.562	55.000	11.000	5.000	0.80	0.73	0.000
149.00	HPA-65R-BU6AA	3	51.00	9.660	298.33	11.022	72.000	14.800	9.000	0.80	0.85	0.000
149.00	800-10965	3	108.60	13.810	405.83	15.386	78.700	20.000	6.900	0.80	0.71	0.000
149.00	OPA65R-BU6DA	3	79.40	12.710	373.15	14.170	71.200	20.700	7.700	0.80	0.72	0.000
149.00	LGP21401	6	14.10	1.290	39.03	2.123	14.400	9.200	2.600	0.80	0.67	0.000
149.00	LGP21901	6	5.50	0.230	13.17	0.597	4.000	6.000	3.000	0.80	0.67	0.000
149.00	7020.00 RET	6	2.20	0.400	12.41	0.883	4.900	8.300	2.400	0.80	0.67	0.000
149.00	7070	3	5.50	0.150	10.69	0.538	8.300	1.800	0.000	0.80	0.67	0.000
149.00	4449 B5/B12	3	71.00	1.970	124.24	2.516	17.900	13.200	9.400	0.80	0.67	0.000
149.00	4415 B30	3	44.10	1.860	91.41	2.431	13.500	16.500	4.800	0.80	0.67	0.000
149.00	RRUS 8843 B2 B66A	3	72.00	1.640	118.72	2.135	14.900	13.200	10.900	0.80	0.67	0.000
149.00	RRUS-4478 B14	3	59.90	1.840	106.77	2.365	16.500	13.400	7.700	0.80	0.67	0.000
149.00	DC6-48-60-18-8F ("Squid")	2	31.80	0.920	93.46	1.357	24.000	11.000	11.000	0.80	1.00	0.000
149.00	DC6-48-60-18-8C-EV	1	16.00	4.780	139.40	5.662	31.400	18.300	10.200	1.00	1.00	0.000
149.00	(3) SFS-H (V-Braces)	1	197.00	6.300	471.30	12.879	0.000	0.000	0.000	0.75	1.00	0.000
149.00	(3) 12.5' - 2" Horizontal Pipe	1	137.25	5.938	271.03	13.378	0.000	0.000	0.000	0.75	1.00	0.000
139.00	(3) Sector Frames	1	1470.0	52.000	3500.86	105.88	0.000	0.000	0.000	0.75	1.00	0.000
139.00	1900MHz RRH	3	44.00	3.800	152.02	5.176	23.000	13.000	17.000	0.80	0.67	0.000
139.00	800 MHz RRH	3	53.00	2.490	126.19	3.622	19.700	13.000	10.800	0.80	0.67	0.000
139.00	TD-RRH8x20-25	3	70.00	4.050	179.07	4.854	26.100	18.600	6.700	0.80	0.67	0.000
139.00	ALU 800MHz External Notch Filt	3	8.80	0.780	26.26	1.420	10.000	8.000	3.000	0.80	0.67	0.000
139.00	ACU-A20-N	4	1.00	0.140	5.25	0.434	4.000	2.000	3.500	0.80	0.67	0.000
138.00	APXVSP18-C-A20	3	57.00	8.020	228.04	10.784	72.000	11.800	7.000	0.80	0.83	0.000
138.00	APXVTM14-C-I20	3	56.20	6.340	214.59	7.441	56.300	12.600	6.300	0.80	0.77	0.000
128.00	(3) VFA12-HD	1	2322.0	50.700	4550.34	113.25	0.000	0.000	0.000	0.75	1.00	0.000
128.00	NHH-65B-R2B	6	43.70	8.080	240.98	9.347	72.000	11.900	7.100	0.80	0.83	0.000
128.00	MT6407-77A	3	79.40	4.690	196.34	5.619	35.100	16.100	5.500	0.80	0.70	0.000
128.00	LNx-6513DS-A1M_0	2	30.40	5.830	163.52	7.904	54.700	11.900	7.100	0.80	0.83	0.000
128.00	LNx-6514DS-A1M	1	33.10	8.090	204.65	10.835	72.000	11.900	7.100	0.80	0.80	0.000
128.00	RF4440d-13A	3	70.30	1.870	138.09	2.432	15.000	15.000	8.100	0.80	0.67	0.000
128.00	RF4439d-25A	3	84.40	1.870	159.25	2.432	15.000	15.000	10.000	0.80	0.67	0.000
128.00	FE-16148-OVP-B12	1	21.90	2.010	74.19	2.568	16.600	14.600	8.500	1.00	1.00	0.000
83.50	DB26 GPS	1	10.00	1.000	37.65	1.671	12.000	9.000	6.000	1.00	1.00	0.000
83.50	Pipe Mount	1	45.00	2.000	80.55	3.317	0.000	0.000	0.000	1.00	1.00	0.000
Totals:		99	8,976.45		22,998.17						Number of Appurtenances :	36

Loading Summary

Structure: CT13065-A-SBA	Code: TIA-222-G	1/31/2022
Site Name: Guilford	Exposure: B	
Height: 152.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 0.85	Topography: 1	Struct Class: II



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Linear Appurtenances Properties

Elev. From (ft)	Elev. To (ft)	Description	Qty	Width (in)	Weight (lb/ft)	Pct In Block	Spread On Faces	Bundling Arrangement	Cluster Dia (in)	Out of Zone	Spacing (in)	Orientation Factor	Ka Override
0.00	152.00	Climbing Ladder	1	2.00	6.90	100.00	2	Individual NR		N	1.00	1.00	
8.00	150.00	7/8" Coax	1	1.11	0.52	100.00	3	Individual NR		N	1.00	1.00	
0.00	149.00	W/G Ladder	1	2.00	6.00	100.00	1	Individual NR		N	1.00	1.00	
10.00	149.00	1 5/8" Coax	12	1.98	1.04	50.00	1	Block		N	0.50	1.00	
10.00	149.00	1/2" Fiber	1	0.50	0.16	100.00	1	Individual NR		N	1.00	1.00	0
10.00	149.00	1/2" Fiber	1	0.50	0.16	100.00	1	Individual NR		N	1.00	1.00	
10.00	149.00	3" Innerduct	1	3.00	0.25	100.00	1	Individual NR		N	1.00	1.00	
10.00	149.00	3/4" DC	2	0.75	0.40	100.00	1	Individual IR		N	1.00	1.00	0
10.00	149.00	3/4" DC	2	0.75	0.40	100.00	1	Individual IR		N	1.00	1.00	
0.00	140.00	W/G Ladder	1	2.00	6.00	100.00	1	Individual NR		N	1.00	1.00	
8.00	139.00	1-1/4" Fiber	4	1.25	0.95	100.00	1	Individual IR		N	1.00	1.00	
8.00	128.00	1 5/8" Coax	12	1.98	1.04	50.00	1	Block		N	0.50	1.00	
8.00	128.00	1 5/8" Hybrid	1	2.00	1.10	100.00	1	Individual NR		N	1.00	1.00	
0.00	120.00	Empty W/G Ladder	1	2.00	6.00	100.00	3	Individual NR		N	1.00	1.00	
8.00	83.50	1/2" Coax	1	0.65	0.16	100.00	1	Individual NR		N	1.00	1.00	

Section Forces

Structure: CT13065-A-SBA

Code: TIA-222-G

1/31/2022

Site Name: Guilford

Exposure: B



Height: 152.00 (ft)

Crest Height: 0.00

Base Elev: 0.000 (ft)

Site Class: D - Stiff Soil

Gh: 0.85

Topography: 1

Struct Class: II

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Load Case: 1.2D + 1.6W Normal Wind

1.2D + 1.6W 101 mph Wind at Normal To Face

Wind Load Factor: 1.60

Wind Importance Factor: 1.00

Dead Load Factor: 1.20

Ice Dead Load Factor: 0.00

Ice Importance Factor: 1.00

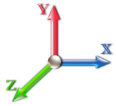
Sect Seq	Wind Height (ft)	Total Flat Area (psf) (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)	
											Area (sqft)	Linear Area (sqft)						
1	5.0	15.54	12.899	10.01	0.00	0.11	2.92	1.00	1.00	0.00	18.02	10.52	0.00	2,306.9	0.0	1113.32	236.85	1,350.17
2	15.0	15.54	12.303	10.01	0.00	0.11	2.91	1.00	1.00	0.00	17.43	43.77	0.00	2,613.6	0.0	1073.03	799.76	1,872.79
3	25.0	15.54	10.180	8.14	0.00	0.10	2.97	1.00	1.00	0.00	14.67	43.77	0.00	2,663.6	0.0	921.29	799.76	1,721.04
4	35.0	16.25	14.003	7.51	0.00	0.12	2.88	1.00	1.00	0.00	18.24	43.77	0.00	2,464.9	0.0	1159.07	836.47	1,995.55
5	45.0	17.46	12.625	7.51	0.00	0.12	2.88	1.00	1.00	0.00	16.81	43.77	0.00	2,054.0	0.0	1149.34	898.75	2,048.09
6	55.0	18.49	12.008	7.51	0.00	0.13	2.86	1.00	1.00	0.00	16.16	43.77	0.00	2,014.0	0.0	1163.97	951.78	2,115.75
7	63.4	19.25	6.441	5.03	0.00	0.12	2.90	1.00	1.00	0.00	9.20	29.32	0.00	1,344.6	0.0	698.53	663.97	1,362.50
8	70.0	19.81	9.039	3.92	0.00	0.14	2.81	1.00	1.00	0.00	11.26	29.32	0.00	1,295.4	0.0	853.53	683.32	1,536.85
9	76.7	20.34	8.631	3.86	0.00	0.14	2.80	1.00	1.00	0.00	10.82	28.89	0.00	1,149.7	0.0	837.02	690.79	1,527.81
10	83.4	20.83	6.572	3.58	0.00	0.12	2.88	1.00	1.00	0.00	8.59	29.37	0.00	1,371.9	0.0	702.11	719.95	1,422.06
11	90.0	21.29	4.327	4.34	0.00	0.11	2.92	1.00	1.00	0.00	6.76	28.10	0.00	1,209.2	0.0	570.49	704.79	1,275.28
12	96.6	21.72	6.412	3.24	0.00	0.13	2.85	1.00	1.00	0.00	8.25	29.18	0.00	1,262.9	0.0	694.89	746.90	1,441.80
13	103.4	22.15	2.125	10.79	0.00	0.18	2.65	1.00	1.00	0.00	8.38	29.18	0.00	1,040.1	0.0	669.56	761.45	1,431.01
14	110.0	22.54	1.591	10.32	0.00	0.19	2.64	1.00	1.00	0.00	7.57	28.10	0.00	1,000.4	0.0	612.99	746.38	1,359.37
15	116.6	22.92	0.000	10.10	0.00	0.16	2.72	1.00	1.00	0.00	5.82	29.18	0.00	901.6	0.0	493.39	788.15	1,281.53
16	125.0	23.38	5.350	4.80	0.00	0.12	2.88	1.00	1.00	0.00	8.06	38.83	0.00	1,146.4	0.0	737.38	1051.18	1,788.56
17	135.0	23.90	4.872	4.80	0.00	0.13	2.84	1.00	1.00	0.00	7.59	27.49	0.00	814.2	0.0	699.79	753.15	1,452.94
18	146.0	24.44	6.622	4.75	0.00	0.14	2.81	1.00	1.00	0.00	9.31	20.46	0.00	700.2	0.0	868.78	574.73	1,443.51
												27,353.5	0.0			28,426.63		

Section Forces

Structure: CT13065-A-SBA
Site Name: Guilford
Height: 152.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Topography: 1

Code: TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

1/31/2022

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Load Case: 1.2D + 1.6W 60° Wind

1.2D + 1.6W 101 mph Wind at 60° From Face

Wind Load Factor: 1.60

Wind Importance Factor: 1.00

Dead Load Factor: 1.20

Ice Dead Load Factor: 0.00

Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	Total		Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)	
		Flat Area (sqft)	Round Area (sqft)								Linear Area (sqft)	Linear Area (sqft)						
1	5.0	15.54	12.899	10.01	0.00	0.11	2.92	0.80	1.00	0.00	15.44	10.52	0.00	2,306.9	0.0	953.96	236.85	1,190.81
2	15.0	15.54	12.303	10.01	0.00	0.11	2.91	0.80	1.00	0.00	14.97	43.77	0.00	2,613.6	0.0	921.56	799.76	1,721.32
3	25.0	15.54	10.180	8.14	0.00	0.10	2.97	0.80	1.00	0.00	12.64	43.77	0.00	2,663.6	0.0	793.45	799.76	1,593.20
4	35.0	16.25	14.003	7.51	0.00	0.12	2.88	0.80	1.00	0.00	15.43	43.77	0.00	2,464.9	0.0	981.06	836.47	1,817.53
5	45.0	17.46	12.625	7.51	0.00	0.12	2.88	0.80	1.00	0.00	14.29	43.77	0.00	2,054.0	0.0	976.72	898.75	1,875.46
6	55.0	18.49	12.008	7.51	0.00	0.13	2.86	0.80	1.00	0.00	13.76	43.77	0.00	2,014.0	0.0	991.00	951.78	1,942.78
7	63.4	19.25	6.441	5.03	0.00	0.12	2.90	0.80	1.00	0.00	7.91	29.32	0.00	1,344.6	0.0	600.73	663.97	1,264.71
8	70.0	19.81	9.039	3.92	0.00	0.14	2.81	0.80	1.00	0.00	9.45	29.32	0.00	1,295.4	0.0	716.46	683.32	1,399.78
9	76.7	20.34	8.631	3.86	0.00	0.14	2.80	0.80	1.00	0.00	9.09	28.89	0.00	1,149.7	0.0	703.45	690.79	1,394.25
10	83.4	20.83	6.572	3.58	0.00	0.12	2.88	0.80	1.00	0.00	7.28	29.37	0.00	1,371.9	0.0	594.73	719.95	1,314.68
11	90.0	21.29	4.327	4.34	0.00	0.11	2.92	0.80	1.00	0.00	5.89	28.10	0.00	1,209.2	0.0	497.42	704.79	1,202.22
12	96.6	21.72	6.412	3.24	0.00	0.13	2.85	0.80	1.00	0.00	6.96	29.18	0.00	1,262.9	0.0	586.81	746.90	1,333.71
13	103.4	22.15	2.125	10.79	0.00	0.18	2.65	0.80	1.00	0.00	7.95	29.18	0.00	1,040.1	0.0	635.58	761.45	1,397.04
14	110.0	22.54	1.591	10.32	0.00	0.19	2.64	0.80	1.00	0.00	7.26	28.10	0.00	1,000.4	0.0	587.23	746.38	1,333.61
15	116.6	22.92	0.000	10.10	0.00	0.16	2.72	0.80	1.00	0.00	5.82	29.18	0.00	901.6	0.0	493.39	788.15	1,281.53
16	125.0	23.38	5.350	4.80	0.00	0.12	2.88	0.80	1.00	0.00	6.99	38.83	0.00	1,146.4	0.0	639.53	1051.18	1,690.71
17	135.0	23.90	4.872	4.80	0.00	0.13	2.84	0.80	1.00	0.00	6.61	27.49	0.00	814.2	0.0	609.93	753.15	1,363.08
18	146.0	24.44	6.622	4.75	0.00	0.14	2.81	0.80	1.00	0.00	7.99	20.46	0.00	700.2	0.0	745.24	574.73	1,319.97
													27,353.5	0.0	26,436.39			

Section Forces

Structure: CT13065-A-SBA
Site Name: Guilford
Height: 152.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Topography: 1

Code: TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

1/31/2022



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Load Case: 1.2D + 1.6W 90° Wind

1.2D + 1.6W 101 mph Wind at 90° From Face

Wind Load Factor: 1.60

Wind Importance Factor: 1.00

Dead Load Factor: 1.20

Ice Dead Load Factor: 0.00

Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	Total Flat Area (psf) (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)	
											Linear Area (sqft)	Linear Area (sqft)						
1	5.0	15.54	12.899	10.01	0.00	0.11	2.92	0.85	1.00	0.00	16.09	10.52	0.00	2,306.9	0.0	993.80	236.85	1,230.65
2	15.0	15.54	12.303	10.01	0.00	0.11	2.91	0.85	1.00	0.00	15.59	43.77	0.00	2,613.6	0.0	959.43	799.76	1,759.19
3	25.0	15.54	10.180	8.14	0.00	0.10	2.97	0.85	1.00	0.00	13.15	43.77	0.00	2,663.6	0.0	825.41	799.76	1,625.16
4	35.0	16.25	14.003	7.51	0.00	0.12	2.88	0.85	1.00	0.00	16.13	43.77	0.00	2,464.9	0.0	1025.56	836.47	1,862.04
5	45.0	17.46	12.625	7.51	0.00	0.12	2.88	0.85	1.00	0.00	14.92	43.77	0.00	2,054.0	0.0	1019.87	898.75	1,918.62
6	55.0	18.49	12.008	7.51	0.00	0.13	2.86	0.85	1.00	0.00	14.36	43.77	0.00	2,014.0	0.0	1034.24	951.78	1,986.02
7	63.4	19.25	6.441	5.03	0.00	0.12	2.90	0.85	1.00	0.00	8.24	29.32	0.00	1,344.6	0.0	625.18	663.97	1,289.16
8	70.0	19.81	9.039	3.92	0.00	0.14	2.81	0.85	1.00	0.00	9.90	29.32	0.00	1,295.4	0.0	750.73	683.32	1,434.05
9	76.7	20.34	8.631	3.86	0.00	0.14	2.80	0.85	1.00	0.00	9.52	28.89	0.00	1,149.7	0.0	736.85	690.79	1,427.64
10	83.4	20.83	6.572	3.58	0.00	0.12	2.88	0.85	1.00	0.00	7.61	29.37	0.00	1,371.9	0.0	621.58	719.95	1,341.53
11	90.0	21.29	4.327	4.34	0.00	0.11	2.92	0.85	1.00	0.00	6.11	28.10	0.00	1,209.2	0.0	515.69	704.79	1,220.48
12	96.6	21.72	6.412	3.24	0.00	0.13	2.85	0.85	1.00	0.00	7.28	29.18	0.00	1,262.9	0.0	613.83	746.90	1,360.73
13	103.4	22.15	2.125	10.79	0.00	0.18	2.65	0.85	1.00	0.00	8.06	29.18	0.00	1,040.1	0.0	644.08	761.45	1,405.53
14	110.0	22.54	1.591	10.32	0.00	0.19	2.64	0.85	1.00	0.00	7.34	28.10	0.00	1,000.4	0.0	593.67	746.38	1,340.05
15	116.6	22.92	0.000	10.10	0.00	0.16	2.72	0.85	1.00	0.00	5.82	29.18	0.00	901.6	0.0	493.39	788.15	1,281.53
16	125.0	23.38	5.350	4.80	0.00	0.12	2.88	0.85	1.00	0.00	7.26	38.83	0.00	1,146.4	0.0	664.00	1051.18	1,715.18
17	135.0	23.90	4.872	4.80	0.00	0.13	2.84	0.85	1.00	0.00	6.86	27.49	0.00	814.2	0.0	632.39	753.15	1,385.54
18	146.0	24.44	6.622	4.75	0.00	0.14	2.81	0.85	1.00	0.00	8.32	20.46	0.00	700.2	0.0	776.12	574.73	1,350.85
													27,353.5	0.0	26,933.95			

Section Forces

Structure: CT13065-A-SBA	Code: TIA-222-G	1/31/2022
Site Name: Guilford	Exposure: B	
Height: 152.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 0.85	Topography: 1	Struct Class: II
		Page: 10



Load Case: 0.9D + 1.6W Normal Wind	0.9D + 1.6W 101 mph Wind at Normal To Face
Wind Load Factor: 1.60	Wind Importance Factor: 1.00
Dead Load Factor: 0.90	
Ice Dead Load Factor: 0.00	Ice Importance Factor: 1.00

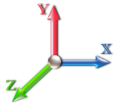
Sect Seq	Wind Height (ft)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)	
											Area (sqft)	Linear Area (sqft)						
1	5.0	15.54	12.899	10.01	0.00	0.11	2.92	1.00	1.00	0.00	18.02	10.52	0.00	1,730.2	0.0	1113.32	236.85	1,350.17
2	15.0	15.54	12.303	10.01	0.00	0.11	2.91	1.00	1.00	0.00	17.43	43.77	0.00	1,960.2	0.0	1073.03	799.76	1,872.79
3	25.0	15.54	10.180	8.14	0.00	0.10	2.97	1.00	1.00	0.00	14.67	43.77	0.00	1,997.7	0.0	921.29	799.76	1,721.04
4	35.0	16.25	14.003	7.51	0.00	0.12	2.88	1.00	1.00	0.00	18.24	43.77	0.00	1,848.7	0.0	1159.07	836.47	1,995.55
5	45.0	17.46	12.625	7.51	0.00	0.12	2.88	1.00	1.00	0.00	16.81	43.77	0.00	1,540.5	0.0	1149.34	898.75	2,048.09
6	55.0	18.49	12.008	7.51	0.00	0.13	2.86	1.00	1.00	0.00	16.16	43.77	0.00	1,510.5	0.0	1163.97	951.78	2,115.75
7	63.4	19.25	6.441	5.03	0.00	0.12	2.90	1.00	1.00	0.00	9.20	29.32	0.00	1,008.4	0.0	698.53	663.97	1,362.50
8	70.0	19.81	9.039	3.92	0.00	0.14	2.81	1.00	1.00	0.00	11.26	29.32	0.00	971.5	0.0	853.53	683.32	1,536.85
9	76.7	20.34	8.631	3.86	0.00	0.14	2.80	1.00	1.00	0.00	10.82	28.89	0.00	862.3	0.0	837.02	690.79	1,527.81
10	83.4	20.83	6.572	3.58	0.00	0.12	2.88	1.00	1.00	0.00	8.59	29.37	0.00	1,028.9	0.0	702.11	719.95	1,422.06
11	90.0	21.29	4.327	4.34	0.00	0.11	2.92	1.00	1.00	0.00	6.76	28.10	0.00	906.9	0.0	570.49	704.79	1,275.28
12	96.6	21.72	6.412	3.24	0.00	0.13	2.85	1.00	1.00	0.00	8.25	29.18	0.00	947.1	0.0	694.89	746.90	1,441.80
13	103.4	22.15	2.125	10.79	0.00	0.18	2.65	1.00	1.00	0.00	8.38	29.18	0.00	780.1	0.0	669.56	761.45	1,431.01
14	110.0	22.54	1.591	10.32	0.00	0.19	2.64	1.00	1.00	0.00	7.57	28.10	0.00	750.3	0.0	612.99	746.38	1,359.37
15	116.6	22.92	0.000	10.10	0.00	0.16	2.72	1.00	1.00	0.00	5.82	29.18	0.00	676.2	0.0	493.39	788.15	1,281.53
16	125.0	23.38	5.350	4.80	0.00	0.12	2.88	1.00	1.00	0.00	8.06	38.83	0.00	859.8	0.0	737.38	1051.18	1,788.56
17	135.0	23.90	4.872	4.80	0.00	0.13	2.84	1.00	1.00	0.00	7.59	27.49	0.00	610.7	0.0	699.79	753.15	1,452.94
18	146.0	24.44	6.622	4.75	0.00	0.14	2.81	1.00	1.00	0.00	9.31	20.46	0.00	525.1	0.0	868.78	574.73	1,443.51
														20,515.1	0.0			28,426.63

Section Forces

Structure: CT13065-A-SBA
Site Name: Guilford
Height: 152.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Topography: 1

Code: TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

1/31/2022

 Page: 11



Load Case: 0.9D + 1.6W 60° Wind

0.9D + 1.6W 101 mph Wind at 60° From Face

Wind Load Factor: 1.60

Wind Importance Factor: 1.00

Dead Load Factor: 0.90

Ice Dead Load Factor: 0.00

Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	Total Flat Area (psf) (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)	
											Linear Area (sqft)	Linear Area (sqft)						
1	5.0	15.54	12.899	10.01	0.00	0.11	2.92	0.80	1.00	0.00	15.44	10.52	0.00	1,730.2	0.0	953.96	236.85	1,190.81
2	15.0	15.54	12.303	10.01	0.00	0.11	2.91	0.80	1.00	0.00	14.97	43.77	0.00	1,960.2	0.0	921.56	799.76	1,721.32
3	25.0	15.54	10.180	8.14	0.00	0.10	2.97	0.80	1.00	0.00	12.64	43.77	0.00	1,997.7	0.0	793.45	799.76	1,593.20
4	35.0	16.25	14.003	7.51	0.00	0.12	2.88	0.80	1.00	0.00	15.43	43.77	0.00	1,848.7	0.0	981.06	836.47	1,817.53
5	45.0	17.46	12.625	7.51	0.00	0.12	2.88	0.80	1.00	0.00	14.29	43.77	0.00	1,540.5	0.0	976.72	898.75	1,875.46
6	55.0	18.49	12.008	7.51	0.00	0.13	2.86	0.80	1.00	0.00	13.76	43.77	0.00	1,510.5	0.0	991.00	951.78	1,942.78
7	63.4	19.25	6.441	5.03	0.00	0.12	2.90	0.80	1.00	0.00	7.91	29.32	0.00	1,008.4	0.0	600.73	663.97	1,264.71
8	70.0	19.81	9.039	3.92	0.00	0.14	2.81	0.80	1.00	0.00	9.45	29.32	0.00	971.5	0.0	716.46	683.32	1,399.78
9	76.7	20.34	8.631	3.86	0.00	0.14	2.80	0.80	1.00	0.00	9.09	28.89	0.00	862.3	0.0	703.45	690.79	1,394.25
10	83.4	20.83	6.572	3.58	0.00	0.12	2.88	0.80	1.00	0.00	7.28	29.37	0.00	1,028.9	0.0	594.73	719.95	1,314.68
11	90.0	21.29	4.327	4.34	0.00	0.11	2.92	0.80	1.00	0.00	5.89	28.10	0.00	906.9	0.0	497.42	704.79	1,202.22
12	96.6	21.72	6.412	3.24	0.00	0.13	2.85	0.80	1.00	0.00	6.96	29.18	0.00	947.1	0.0	586.81	746.90	1,333.71
13	103.4	22.15	2.125	10.79	0.00	0.18	2.65	0.80	1.00	0.00	7.95	29.18	0.00	780.1	0.0	635.58	761.45	1,397.04
14	110.0	22.54	1.591	10.32	0.00	0.19	2.64	0.80	1.00	0.00	7.26	28.10	0.00	750.3	0.0	587.23	746.38	1,333.61
15	116.6	22.92	0.000	10.10	0.00	0.16	2.72	0.80	1.00	0.00	5.82	29.18	0.00	676.2	0.0	493.39	788.15	1,281.53
16	125.0	23.38	5.350	4.80	0.00	0.12	2.88	0.80	1.00	0.00	6.99	38.83	0.00	859.8	0.0	639.53	1051.18	1,690.71
17	135.0	23.90	4.872	4.80	0.00	0.13	2.84	0.80	1.00	0.00	6.61	27.49	0.00	610.7	0.0	609.93	753.15	1,363.08
18	146.0	24.44	6.622	4.75	0.00	0.14	2.81	0.80	1.00	0.00	7.99	20.46	0.00	525.1	0.0	745.24	574.73	1,319.97
													20,515.1	0.0			26,436.39	

Section Forces

Structure: CT13065-A-SBA

Code: TIA-222-G

1/31/2022

Site Name: Guilford

Exposure: B



Height: 152.00 (ft)

Crest Height: 0.00

Base Elev: 0.000 (ft)

Site Class: D - Stiff Soil

Gh: 0.85

Topography: 1

Struct Class: II

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Load Case: 0.9D + 1.6W 90° Wind

0.9D + 1.6W 101 mph Wind at 90° From Face

Wind Load Factor: 1.60

Wind Importance Factor: 1.00

Dead Load Factor: 0.90

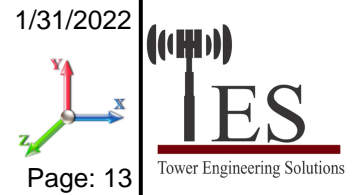
Ice Dead Load Factor: 0.00

Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	Total Flat Area (psf) (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)	
											Linear Area (sqft)	Linear Area (sqft)						
1	5.0	15.54	12.899	10.01	0.00	0.11	2.92	0.85	1.00	0.00	16.09	10.52	0.00	1,730.2	0.0	993.80	236.85	1,230.65
2	15.0	15.54	12.303	10.01	0.00	0.11	2.91	0.85	1.00	0.00	15.59	43.77	0.00	1,960.2	0.0	959.43	799.76	1,759.19
3	25.0	15.54	10.180	8.14	0.00	0.10	2.97	0.85	1.00	0.00	13.15	43.77	0.00	1,997.7	0.0	825.41	799.76	1,625.16
4	35.0	16.25	14.003	7.51	0.00	0.12	2.88	0.85	1.00	0.00	16.13	43.77	0.00	1,848.7	0.0	1025.56	836.47	1,862.04
5	45.0	17.46	12.625	7.51	0.00	0.12	2.88	0.85	1.00	0.00	14.92	43.77	0.00	1,540.5	0.0	1019.87	898.75	1,918.62
6	55.0	18.49	12.008	7.51	0.00	0.13	2.86	0.85	1.00	0.00	14.36	43.77	0.00	1,510.5	0.0	1034.24	951.78	1,986.02
7	63.4	19.25	6.441	5.03	0.00	0.12	2.90	0.85	1.00	0.00	8.24	29.32	0.00	1,008.4	0.0	625.18	663.97	1,289.16
8	70.0	19.81	9.039	3.92	0.00	0.14	2.81	0.85	1.00	0.00	9.90	29.32	0.00	971.5	0.0	750.73	683.32	1,434.05
9	76.7	20.34	8.631	3.86	0.00	0.14	2.80	0.85	1.00	0.00	9.52	28.89	0.00	862.3	0.0	736.85	690.79	1,427.64
10	83.4	20.83	6.572	3.58	0.00	0.12	2.88	0.85	1.00	0.00	7.61	29.37	0.00	1,028.9	0.0	621.58	719.95	1,341.53
11	90.0	21.29	4.327	4.34	0.00	0.11	2.92	0.85	1.00	0.00	6.11	28.10	0.00	906.9	0.0	515.69	704.79	1,220.48
12	96.6	21.72	6.412	3.24	0.00	0.13	2.85	0.85	1.00	0.00	7.28	29.18	0.00	947.1	0.0	613.83	746.90	1,360.73
13	103.4	22.15	2.125	10.79	0.00	0.18	2.65	0.85	1.00	0.00	8.06	29.18	0.00	780.1	0.0	644.08	761.45	1,405.53
14	110.0	22.54	1.591	10.32	0.00	0.19	2.64	0.85	1.00	0.00	7.34	28.10	0.00	750.3	0.0	593.67	746.38	1,340.05
15	116.6	22.92	0.000	10.10	0.00	0.16	2.72	0.85	1.00	0.00	5.82	29.18	0.00	676.2	0.0	493.39	788.15	1,281.53
16	125.0	23.38	5.350	4.80	0.00	0.12	2.88	0.85	1.00	0.00	7.26	38.83	0.00	859.8	0.0	664.00	1051.18	1,715.18
17	135.0	23.90	4.872	4.80	0.00	0.13	2.84	0.85	1.00	0.00	6.86	27.49	0.00	610.7	0.0	632.39	753.15	1,385.54
18	146.0	24.44	6.622	4.75	0.00	0.14	2.81	0.85	1.00	0.00	8.32	20.46	0.00	525.1	0.0	776.12	574.73	1,350.85
													20,515.1	0.0			26,933.95	

Section Forces

Structure: CT13065-A-SBA	Code: TIA-222-G	1/31/2022
Site Name: Guilford	Exposure: B	
Height: 152.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 0.85	Topography: 1	Struct Class: II



Load Case: 1.2D + 1.0Di + 1.0Wi Normal Wind	1.2D + 1.0Di + 1.0Wi 50 mph Wind at Normal From Face
Wind Load Factor: 1.00	Wind Importance Factor: 1.00
Dead Load Factor: 1.20	
Ice Dead Load Factor: 1.00	Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	qz (psf)	Total Area		Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice Area		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)	
			Flat (sqft)	Round (sqft)								Linear Area (sqft)	Linear Area (sqft)						
1	5.0	3.81	12.899	23.52	13.51	0.17	2.69	1.00	1.00	1.24	26.31	20.13	1.24	4,019.1	1712.2	228.82	77.33	306.15	
2	15.0	3.81	12.303	24.61	14.61	0.18	2.65	1.00	1.00	1.39	26.38	68.73	13.86	5,560.1	2946.5	226.15	240.09	466.24	
3	25.0	3.81	10.180	23.13	14.99	0.18	2.68	1.00	1.00	1.46	23.38	69.82	14.59	5,544.3	2880.7	202.63	245.90	448.53	
4	35.0	3.98	14.003	22.51	14.99	0.20	2.58	1.00	1.00	1.51	26.95	70.57	15.09	5,843.3	3378.4	235.45	258.80	494.25	
5	45.0	4.28	12.625	22.42	14.91	0.21	2.57	1.00	1.00	1.55	25.54	71.14	15.47	5,399.6	3345.6	238.60	280.84	519.44	
6	55.0	4.53	12.008	22.29	14.78	0.22	2.54	1.00	1.00	1.58	24.88	71.61	15.79	5,371.7	3357.8	243.56	299.33	542.89	
7	63.4	4.72	6.441	17.07	12.03	0.23	2.49	1.00	1.00	1.60	16.36	48.21	10.73	3,475.9	2131.3	163.14	209.04	372.18	
8	70.0	4.86	9.039	15.73	11.82	0.26	2.41	1.00	1.00	1.62	18.28	48.37	10.84	3,722.6	2427.2	181.67	214.42	396.09	
9	76.7	4.98	8.631	15.36	11.50	0.27	2.38	1.00	1.00	1.63	17.69	47.79	10.77	3,532.6	2382.9	178.51	217.06	395.57	
10	83.4	5.10	6.572	14.89	11.31	0.25	2.44	1.00	1.00	1.65	15.28	48.84	10.22	3,575.7	2203.8	161.85	225.45	387.30	
11	90.0	5.22	4.327	15.28	10.94	0.25	2.45	1.00	1.00	1.66	13.26	46.97	8.98	3,107.7	1898.5	143.73	218.26	361.99	
12	96.6	5.32	6.412	14.08	10.84	0.27	2.39	1.00	1.00	1.67	14.70	48.90	9.39	3,440.9	2178.0	159.10	230.91	390.01	
13	103.4	5.43	2.125	21.36	10.57	0.32	2.23	1.00	1.00	1.68	15.18	49.01	9.46	3,471.9	2431.7	156.44	232.48	388.92	
14	110.0	5.52	1.591	20.51	10.19	0.34	2.20	1.00	1.00	1.69	14.23	47.30	9.16	3,309.1	2308.6	147.07	227.68	374.74	
15	116.6	5.62	0.000	20.20	10.09	0.32	2.25	1.00	1.00	1.70	12.30	49.22	9.57	3,025.1	2123.5	132.18	242.32	374.50	
16	125.0	5.73	5.350	21.27	16.47	0.31	2.27	1.00	1.00	1.71	18.16	65.27	13.71	3,802.5	2656.1	200.72	324.96	525.67	
17	135.0	5.86	4.872	20.46	15.66	0.33	2.21	1.00	1.00	1.73	17.36	51.27	11.51	3,049.0	2234.8	190.95	259.00	449.94	
18	146.0	5.99	6.622	26.87	22.12	0.40	2.07	1.00	1.00	1.74	23.69	35.88	10.73	2,958.7	2258.5	249.59	184.06	433.64	
															72,209.6	44856.2			7,628.09

Section Forces

Structure: CT13065-A-SBA
Site Name: Guilford
Height: 152.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Topography: 1

Code: TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

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Load Case: 1.2D + 1.0Di + 1.0Wi 60° Wind

1.2D + 1.0Di + 1.0Wi 50 mph Wind at 60° From Face

Wind Load Factor: 1.00

Wind Importance Factor: 1.00

Dead Load Factor: 1.20

Ice Dead Load Factor: 1.00

Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	Total		Ice		Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)	
		Flat Area (sqft)	Round Area (sqft)	Round Area (sqft)	Linear Area (sqft)							Linear Area (sqft)							
1	5.0	3.81	12.899	23.52	13.51	0.17	2.69	0.80	1.00	1.24	23.73	20.13	1.24	4,019.1	1712.2	206.38	77.33	283.72	
2	15.0	3.81	12.303	24.61	14.61	0.18	2.65	0.80	1.00	1.39	23.92	68.73	13.86	5,560.1	2946.5	205.05	240.09	445.14	
3	25.0	3.81	10.180	23.13	14.99	0.18	2.68	0.80	1.00	1.46	21.35	69.82	14.59	5,544.3	2880.7	184.98	245.90	430.88	
4	35.0	3.98	14.003	22.51	14.99	0.20	2.58	0.80	1.00	1.51	24.15	70.57	15.09	5,843.3	3378.4	210.98	258.80	469.78	
5	45.0	4.28	12.625	22.42	14.91	0.21	2.57	0.80	1.00	1.55	23.01	71.14	15.47	5,399.6	3345.6	215.01	280.84	495.85	
6	55.0	4.53	12.008	22.29	14.78	0.22	2.54	0.80	1.00	1.58	22.48	71.61	15.79	5,371.7	3357.8	220.06	299.33	519.38	
7	63.4	4.72	6.441	17.07	12.03	0.23	2.49	0.80	1.00	1.60	15.07	48.21	10.73	3,475.9	2131.3	150.30	209.04	359.34	
8	70.0	4.86	9.039	15.73	11.82	0.26	2.41	0.80	1.00	1.62	16.47	48.37	10.84	3,722.6	2427.2	163.71	214.42	378.13	
9	76.7	4.98	8.631	15.36	11.50	0.27	2.38	0.80	1.00	1.63	15.97	47.79	10.77	3,532.6	2382.9	161.09	217.06	378.15	
10	83.4	5.10	6.572	14.89	11.31	0.25	2.44	0.80	1.00	1.65	13.96	48.84	10.22	3,575.7	2203.8	147.93	225.45	373.38	
11	90.0	5.22	4.327	15.28	10.94	0.25	2.45	0.80	1.00	1.66	12.39	46.97	8.98	3,107.7	1898.5	134.35	218.26	352.61	
12	96.6	5.32	6.412	14.08	10.84	0.27	2.39	0.80	1.00	1.67	13.42	48.90	9.39	3,440.9	2178.0	145.22	230.91	376.14	
13	103.4	5.43	2.125	21.36	10.57	0.32	2.23	0.80	1.00	1.68	14.75	49.01	9.46	3,471.9	2431.7	152.06	232.48	384.54	
14	110.0	5.52	1.591	20.51	10.19	0.34	2.20	0.80	1.00	1.69	13.91	47.30	9.16	3,309.1	2308.6	143.78	227.68	371.45	
15	116.6	5.62	0.000	20.20	10.09	0.32	2.25	0.80	1.00	1.70	12.30	49.22	9.57	3,025.1	2123.5	132.18	242.32	374.50	
16	125.0	5.73	5.350	21.27	16.47	0.31	2.27	0.80	1.00	1.71	17.09	65.27	13.71	3,802.5	2656.1	188.89	324.96	513.85	
17	135.0	5.86	4.872	20.46	15.66	0.33	2.21	0.80	1.00	1.73	16.38	51.27	11.51	3,049.0	2234.8	180.22	259.00	439.22	
18	146.0	5.99	6.622	26.87	22.12	0.40	2.07	0.80	1.00	1.74	22.36	35.88	10.73	2,958.7	2258.5	235.63	184.06	419.69	
															72,209.6	44856.2			7,365.77

Section Forces

Structure: CT13065-A-SBA	Code: TIA-222-G	1/31/2022
Site Name: Guilford	Exposure: B	
Height: 152.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 0.85	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.0Di + 1.0Wi 90° Wind	1.2D + 1.0Di + 1.0Wi 50 mph Wind at 90° From Face
Wind Load Factor: 1.00	Wind Importance Factor: 1.00
Dead Load Factor: 1.20	
Ice Dead Load Factor: 1.00	Ice Importance Factor: 1.00

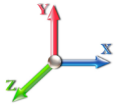
Sect Seq	Wind Height (ft)	qz (psf)	Total Area		Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice Area		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)	
			Flat (sqft)	Round (sqft)								Linear Area (sqft)	Linear Area (sqft)						
1	5.0	3.81	12.899	23.52	13.51	0.17	2.69	0.85	1.00	1.24	24.38	20.13	1.24	4,019.1	1712.2	211.99	77.33	289.33	
2	15.0	3.81	12.303	24.61	14.61	0.18	2.65	0.85	1.00	1.39	24.53	68.73	13.86	5,560.1	2946.5	210.32	240.09	450.42	
3	25.0	3.81	10.180	23.13	14.99	0.18	2.68	0.85	1.00	1.46	21.86	69.82	14.59	5,544.3	2880.7	189.39	245.90	435.29	
4	35.0	3.98	14.003	22.51	14.99	0.20	2.58	0.85	1.00	1.51	24.85	70.57	15.09	5,843.3	3378.4	217.10	258.80	475.90	
5	45.0	4.28	12.625	22.42	14.91	0.21	2.57	0.85	1.00	1.55	23.65	71.14	15.47	5,399.6	3345.6	220.91	280.84	501.75	
6	55.0	4.53	12.008	22.29	14.78	0.22	2.54	0.85	1.00	1.58	23.08	71.61	15.79	5,371.7	3357.8	225.93	299.33	525.26	
7	63.4	4.72	6.441	17.07	12.03	0.23	2.49	0.85	1.00	1.60	15.40	48.21	10.73	3,475.9	2131.3	153.51	209.04	362.55	
8	70.0	4.86	9.039	15.73	11.82	0.26	2.41	0.85	1.00	1.62	16.93	48.37	10.84	3,722.6	2427.2	168.20	214.42	382.62	
9	76.7	4.98	8.631	15.36	11.50	0.27	2.38	0.85	1.00	1.63	16.40	47.79	10.77	3,532.6	2382.9	165.45	217.06	382.51	
10	83.4	5.10	6.572	14.89	11.31	0.25	2.44	0.85	1.00	1.65	14.29	48.84	10.22	3,575.7	2203.8	151.41	225.45	376.86	
11	90.0	5.22	4.327	15.28	10.94	0.25	2.45	0.85	1.00	1.66	12.61	46.97	8.98	3,107.7	1898.5	136.69	218.26	354.96	
12	96.6	5.32	6.412	14.08	10.84	0.27	2.39	0.85	1.00	1.67	13.74	48.90	9.39	3,440.9	2178.0	148.69	230.91	379.60	
13	103.4	5.43	2.125	21.36	10.57	0.32	2.23	0.85	1.00	1.68	14.86	49.01	9.46	3,471.9	2431.7	153.15	232.48	385.63	
14	110.0	5.52	1.591	20.51	10.19	0.34	2.20	0.85	1.00	1.69	13.99	47.30	9.16	3,309.1	2308.6	144.60	227.68	372.28	
15	116.6	5.62	0.000	20.20	10.09	0.32	2.25	0.85	1.00	1.70	12.30	49.22	9.57	3,025.1	2123.5	132.18	242.32	374.50	
16	125.0	5.73	5.350	21.27	16.47	0.31	2.27	0.85	1.00	1.71	17.36	65.27	13.71	3,802.5	2656.1	191.85	324.96	516.80	
17	135.0	5.86	4.872	20.46	15.66	0.33	2.21	0.85	1.00	1.73	16.62	51.27	11.51	3,049.0	2234.8	182.90	259.00	441.90	
18	146.0	5.99	6.622	26.87	22.12	0.40	2.07	0.85	1.00	1.74	22.69	35.88	10.73	2,958.7	2258.5	239.12	184.06	423.18	
															72,209.6	44856.2			7,431.35

Section Forces

Structure: CT13065-A-SBA
Site Name: Guilford
Height: 152.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Topography: 1

Code: TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

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Load Case: 1.0D + 1.0W Normal Wind

1.0D + 1.0W 60 mph Wind at Normal To Face

Wind Load Factor: 1.00
Dead Load Factor: 1.00
Ice Dead Load Factor: 0.00

Wind Importance Factor: 1.00
Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	qz (psf)	Total	Total	Ice	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear	Linear	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Flat Area (sqft)	Round Area (sqft)	Round Area (sqft)							Area (sqft)	Area (sqft)					
1	5.0	5.48	12.899	10.01	0.00	0.11	2.92	1.00	1.00	0.00	18.55	10.52	0.00	1,922.4	0.0	252.74	52.24	304.98
2	15.0	5.48	12.303	10.01	0.00	0.11	2.91	1.00	1.00	0.00	17.96	43.77	0.00	2,178.0	0.0	243.78	176.40	420.18
3	25.0	5.48	10.180	8.14	0.00	0.10	2.97	1.00	1.00	0.00	14.77	43.77	0.00	2,219.7	0.0	204.60	176.40	381.00
4	35.0	5.74	14.003	7.51	0.00	0.12	2.88	1.00	1.00	0.00	18.25	43.77	0.00	2,054.1	0.0	255.87	184.50	440.37
5	45.0	6.16	12.625	7.51	0.00	0.12	2.88	1.00	1.00	0.00	16.87	43.77	0.00	1,711.7	0.0	254.41	198.23	452.64
6	55.0	6.53	12.008	7.51	0.00	0.13	2.86	1.00	1.00	0.00	16.26	43.77	0.00	1,678.3	0.0	258.26	209.93	468.19
7	63.4	6.79	6.441	5.03	0.00	0.12	2.90	1.00	1.00	0.00	9.29	29.32	0.00	1,120.5	0.0	155.47	146.45	301.92
8	70.0	6.99	9.039	3.92	0.00	0.14	2.81	1.00	1.00	0.00	11.26	29.32	0.00	1,079.5	0.0	188.26	150.72	338.98
9	76.7	7.18	8.631	3.86	0.00	0.14	2.80	1.00	1.00	0.00	10.82	28.89	0.00	958.1	0.0	184.62	152.37	336.98
10	83.4	7.35	6.572	3.58	0.00	0.12	2.88	1.00	1.00	0.00	8.59	29.37	0.00	1,143.3	0.0	154.86	158.80	313.66
11	90.0	7.51	4.327	4.34	0.00	0.11	2.92	1.00	1.00	0.00	6.78	28.10	0.00	1,007.6	0.0	126.23	155.45	281.69
12	96.6	7.67	6.412	3.24	0.00	0.13	2.85	1.00	1.00	0.00	8.25	29.18	0.00	1,052.4	0.0	153.27	164.74	318.01
13	103.4	7.82	2.125	10.79	0.00	0.18	2.65	1.00	1.00	0.00	8.38	29.18	0.00	866.8	0.0	147.73	167.95	315.68
14	110.0	7.96	1.591	10.32	0.00	0.19	2.64	1.00	1.00	0.00	7.59	28.10	0.00	833.7	0.0	135.41	164.63	300.03
15	116.6	8.09	0.000	10.10	0.00	0.16	2.72	1.00	1.00	0.00	5.84	29.18	0.00	751.3	0.0	109.20	173.84	283.04
16	125.0	8.25	5.350	4.80	0.00	0.12	2.88	1.00	1.00	0.00	8.06	38.83	0.00	955.3	0.0	162.64	231.86	394.50
17	135.0	8.43	4.872	4.80	0.00	0.13	2.84	1.00	1.00	0.00	7.59	27.49	0.00	678.5	0.0	154.35	166.12	320.47
18	146.0	8.63	6.622	4.75	0.00	0.14	2.81	1.00	1.00	0.00	9.31	20.46	0.00	583.5	0.0	191.62	126.77	318.39
														22,794.6	0.0			6,290.72

Section Forces

Structure: CT13065-A-SBA	Code: TIA-222-G	1/31/2022
Site Name: Guilford	Exposure: B	
Height: 152.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 0.85	Topography: 1	Struct Class: II



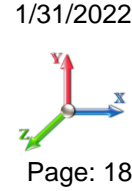
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Load Case: 1.0D + 1.0W 60° Wind	1.0D + 1.0W 60 mph Wind at 60° From Face
Wind Load Factor: 1.00	Wind Importance Factor: 1.00
Dead Load Factor: 1.00	
Ice Dead Load Factor: 0.00	Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
												Area (sqft)	Linear Area (sqft)					
1	5.0	5.48	12.899	10.01	0.00	0.11	2.92	0.80	1.00	0.00	15.97	10.52	0.00	1,922.4	0.0	217.59	52.24	269.83
2	15.0	5.48	12.303	10.01	0.00	0.11	2.91	0.80	1.00	0.00	15.49	43.77	0.00	2,178.0	0.0	210.38	176.40	386.78
3	25.0	5.48	10.180	8.14	0.00	0.10	2.97	0.80	1.00	0.00	12.74	43.77	0.00	2,219.7	0.0	176.40	176.40	352.80
4	35.0	5.74	14.003	7.51	0.00	0.12	2.88	0.80	1.00	0.00	15.45	43.77	0.00	2,054.1	0.0	216.60	184.50	401.10
5	45.0	6.16	12.625	7.51	0.00	0.12	2.88	0.80	1.00	0.00	14.35	43.77	0.00	1,711.7	0.0	216.34	198.23	414.57
6	55.0	6.53	12.008	7.51	0.00	0.13	2.86	0.80	1.00	0.00	13.85	43.77	0.00	1,678.3	0.0	220.10	209.93	430.03
7	63.4	6.79	6.441	5.03	0.00	0.12	2.90	0.80	1.00	0.00	8.00	29.32	0.00	1,120.5	0.0	133.90	146.45	280.35
8	70.0	6.99	9.039	3.92	0.00	0.14	2.81	0.80	1.00	0.00	9.45	29.32	0.00	1,079.5	0.0	158.03	150.72	308.75
9	76.7	7.18	8.631	3.86	0.00	0.14	2.80	0.80	1.00	0.00	9.09	28.89	0.00	958.1	0.0	155.16	152.37	307.52
10	83.4	7.35	6.572	3.58	0.00	0.12	2.88	0.80	1.00	0.00	7.28	29.37	0.00	1,143.3	0.0	131.18	158.80	289.98
11	90.0	7.51	4.327	4.34	0.00	0.11	2.92	0.80	1.00	0.00	5.91	28.10	0.00	1,007.6	0.0	110.12	155.45	265.57
12	96.6	7.67	6.412	3.24	0.00	0.13	2.85	0.80	1.00	0.00	6.96	29.18	0.00	1,052.4	0.0	129.43	164.74	294.17
13	103.4	7.82	2.125	10.79	0.00	0.18	2.65	0.80	1.00	0.00	7.95	29.18	0.00	866.8	0.0	140.23	167.95	308.19
14	110.0	7.96	1.591	10.32	0.00	0.19	2.64	0.80	1.00	0.00	7.27	28.10	0.00	833.7	0.0	129.72	164.63	294.35
15	116.6	8.09	0.000	10.10	0.00	0.16	2.72	0.80	1.00	0.00	5.84	29.18	0.00	751.3	0.0	109.20	173.84	283.04
16	125.0	8.25	5.350	4.80	0.00	0.12	2.88	0.80	1.00	0.00	6.99	38.83	0.00	955.3	0.0	141.06	231.86	372.91
17	135.0	8.43	4.872	4.80	0.00	0.13	2.84	0.80	1.00	0.00	6.61	27.49	0.00	678.5	0.0	134.53	166.12	300.65
18	146.0	8.63	6.622	4.75	0.00	0.14	2.81	0.80	1.00	0.00	7.99	20.46	0.00	583.5	0.0	164.37	126.77	291.14
														22,794.6	0.0			5,851.74

Section Forces

Structure: CT13065-A-SBA	Code: TIA-222-G	1/31/2022
Site Name: Guilford	Exposure: B	
Height: 152.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 0.85	Topography: 1	Struct Class: II



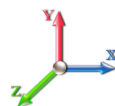
Load Case: 1.0D + 1.0W 90° Wind	1.0D + 1.0W 60 mph Wind at 90° From Face
Wind Load Factor: 1.00	Wind Importance Factor: 1.00
Dead Load Factor: 1.00	
Ice Dead Load Factor: 0.00	Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	Wind qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
												Area (sqft)	Linear Area (sqft)					
1	5.0	5.48	12.899	10.01	0.00	0.11	2.92	0.85	1.00	0.00	16.62	10.52	0.00	1,922.4	0.0	226.38	52.24	278.62
2	15.0	5.48	12.303	10.01	0.00	0.11	2.91	0.85	1.00	0.00	16.11	43.77	0.00	2,178.0	0.0	218.73	176.40	395.13
3	25.0	5.48	10.180	8.14	0.00	0.10	2.97	0.85	1.00	0.00	13.25	43.77	0.00	2,219.7	0.0	183.45	176.40	359.85
4	35.0	5.74	14.003	7.51	0.00	0.12	2.88	0.85	1.00	0.00	16.15	43.77	0.00	2,054.1	0.0	226.42	184.50	410.92
5	45.0	6.16	12.625	7.51	0.00	0.12	2.88	0.85	1.00	0.00	14.98	43.77	0.00	1,711.7	0.0	225.85	198.23	424.09
6	55.0	6.53	12.008	7.51	0.00	0.13	2.86	0.85	1.00	0.00	14.45	43.77	0.00	1,678.3	0.0	229.64	209.93	439.57
7	63.4	6.79	6.441	5.03	0.00	0.12	2.90	0.85	1.00	0.00	8.32	29.32	0.00	1,120.5	0.0	139.30	146.45	285.75
8	70.0	6.99	9.039	3.92	0.00	0.14	2.81	0.85	1.00	0.00	9.90	29.32	0.00	1,079.5	0.0	165.59	150.72	316.30
9	76.7	7.18	8.631	3.86	0.00	0.14	2.80	0.85	1.00	0.00	9.52	28.89	0.00	958.1	0.0	162.52	152.37	314.89
10	83.4	7.35	6.572	3.58	0.00	0.12	2.88	0.85	1.00	0.00	7.61	29.37	0.00	1,143.3	0.0	137.10	158.80	295.90
11	90.0	7.51	4.327	4.34	0.00	0.11	2.92	0.85	1.00	0.00	6.13	28.10	0.00	1,007.6	0.0	114.15	155.45	269.60
12	96.6	7.67	6.412	3.24	0.00	0.13	2.85	0.85	1.00	0.00	7.28	29.18	0.00	1,052.4	0.0	135.39	164.74	300.13
13	103.4	7.82	2.125	10.79	0.00	0.18	2.65	0.85	1.00	0.00	8.06	29.18	0.00	866.8	0.0	142.11	167.95	310.06
14	110.0	7.96	1.591	10.32	0.00	0.19	2.64	0.85	1.00	0.00	7.35	28.10	0.00	833.7	0.0	131.14	164.63	295.77
15	116.6	8.09	0.000	10.10	0.00	0.16	2.72	0.85	1.00	0.00	5.84	29.18	0.00	751.3	0.0	109.20	173.84	283.04
16	125.0	8.25	5.350	4.80	0.00	0.12	2.88	0.85	1.00	0.00	7.26	38.83	0.00	955.3	0.0	146.46	231.86	378.31
17	135.0	8.43	4.872	4.80	0.00	0.13	2.84	0.85	1.00	0.00	6.86	27.49	0.00	678.5	0.0	139.48	166.12	305.60
18	146.0	8.63	6.622	4.75	0.00	0.14	2.81	0.85	1.00	0.00	8.32	20.46	0.00	583.5	0.0	171.19	126.77	297.95
														22,794.6	0.0			5,961.48

Force/Stress Compression Summary

Structure: CT13065-A-SBA
Site Name: Guilford
Height: 152.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Code: TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II
Topography: 1

1/31/2022

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LEG MEMBERS

Sect	Top Elev	Member	Force		Load Case	Len (ft)	Bracing %			Fy (ksi)	Mem Cap (kips)	Leg Use %	Controls	
			(kips)				X	Y	Z					KL/R
1	10	MOD - 5"PST+6"PX1/2P	-210.16	1.2D + 1.6W	Normal Wind	10.02	100	100	100	68.10	50.00	272.55	77.1	Member X
2	20	MOD - 5"PST+6"PX1/2P	-197.36	1.2D + 1.6W	Normal Wind	9.77	100	100	100	66.40	50.00	277.15	71.2	Member X
3	30	MOD - 4"PX+5"PX1/2P	-184.80	1.2D + 1.6W	Normal Wind	10.02	100	100	100	76.37	50.00	219.25	84.3	Member X
4	40	PX - 4" DIA PIPE	-170.16	1.2D + 1.6W	Normal Wind	9.77	50	50	50	39.60	50.00	176.95	96.2	Member X
5	50	PX - 4" DIA PIPE	-156.46	1.2D + 1.6W	Normal Wind	9.77	50	50	50	39.59	50.00	176.96	88.4	Member X
6	60	PX - 4" DIA PIPE	-142.13	1.2D + 1.6W	Normal Wind	9.77	50	50	50	39.59	50.00	176.96	80.3	Member X
7	66.7	MOD - 3"PX+4"PX1/2P	-130.33	1.2D + 1.6W	Normal Wind	6.71	100	100	100	71.98	50.00	160.76	81.1	Member X
8	73.4	PX - 3" DIA PIPE	-120.29	1.2D + 1.6W	Normal Wind	6.71	50	50	50	35.33	50.00	124.05	97.0	Member X
9	80	PX - 3" DIA PIPE	-110.64	1.2D + 1.6W	Normal Wind	6.61	50	50	50	34.80	50.00	124.38	89.0	Member X
10	86.75	MOD - 2.5"PX+3"PX1/2P	-100.64	1.2D + 1.6W	Normal Wind	6.51	50	50	50	39.86	50.00	150.70	66.8	Member X
11	93.25	MOD - 2.5"PX+3.5"PX1/2P	-91.58	1.2D + 1.6W	Normal Wind	6.51	100	100	100	85.72	50.00	107.59	85.1	Member X
12	100	PX - 2-1/2" DIA PIPE	-80.99	1.2D + 1.6W	Normal Wind	6.51	50	50	50	42.28	50.00	88.84	91.2	Member X
13	106.7	PX - 2-1/2" DIA PIPE	-70.46	1.2D + 1.6W	Normal Wind	6.51	50	50	50	42.28	50.00	88.85	79.3	Member X
14	113.2	PX - 2-1/2" DIA PIPE	-60.44	1.2D + 1.6W	Normal Wind	6.51	50	50	50	42.28	50.00	88.85	68.0	Member X
15	120	PX - 2-1/2" DIA PIPE	-48.85	1.2D + 1.6W	Normal Wind	6.51	100	100	100	84.56	50.00	60.03	81.4	Member X
16	130	PST - 2-1/2" DIA PIPE	-39.30	1.2D + 1.6W	Normal Wind	4.88	100	100	100	61.88	50.00	57.96	67.8	Member X
17	140	PST - 2-1/2" DIA PIPE	-21.70	1.2D + 1.6W	Normal Wind	4.88	100	100	100	61.88	50.00	57.96	37.4	Member X
18	152	PST - 2" DIA PIPE	-9.46	1.2D + 1.6W	Normal Wind	0.25	100	100	100	3.81	50.00	48.10	19.7	Member X

Splices

Sect	Top Elev	Load Case	Top Splice				Bottom Splice					
			Force (kips)	Cap (kips)	Use %	Bolt Type	Num Bolts	Force (kips)	Cap (kips)	Use %	Bolt Type	Num Bolts
1	10	1.2D + 1.6W Normal Wind	203.78	0.00	0.0			1.2D + 1.6W Normal Wind	217.20	0.00		
2	20	1.2D + 1.6W Normal Wind	190.82	0.00	0.0			1.2D + 1.6W Normal Wind	203.78	0.00		
3	30	1.2D + 1.6W Normal Wind	177.74	0.00	0.0			1.2D + 1.6W Normal Wind	190.82	0.00	1 A325-X	4
4	40	1.2D + 1.6W Normal Wind	164.23	0.00	0.0			1.2D + 1.6W Normal Wind	177.74	0.00		
5	50	1.2D + 1.6W Normal Wind	149.25	0.00	0.0			1.2D + 1.6W Normal Wind	164.23	0.00	7/8 A325	4
6	60	1.2D + 1.6W Normal Wind	135.79	0.00	0.0			1.2D + 1.6W Normal Wind	149.25	0.00		
7	66.7	1.2D + 1.6W Normal Wind	125.05	0.00	0.0			1.2D + 1.6W Normal Wind	135.79	0.00	/8 A325-X	4
8	73.4	1.2D + 1.6W Normal Wind	115.40	0.00	0.0			1.2D + 1.6W Normal Wind	125.05	0.00		
9	80	1.2D + 1.6W Normal Wind	105.61	0.00	0.0			1.2D + 1.6W Normal Wind	115.40	0.00		
10	86.75	1.2D + 1.6W Normal Wind	95.90	0.00	0.0			1.2D + 1.6W Normal Wind	105.61	0.00	/4 A325-X	4
11	93.25	1.2D + 1.6W Normal Wind	86.47	0.00	0.0			1.2D + 1.6W Normal Wind	95.90	0.00		
12	100	1.2D + 1.6W Normal Wind	76.30	0.00	0.0			1.2D + 1.6W Normal Wind	86.47	0.00		
13	106.7	1.2D + 1.6W Normal Wind	65.21	0.00	0.0			1.2D + 1.6W Normal Wind	76.30	0.00	/8 A325-X	4
14	113.2	1.2D + 1.6W Normal Wind	54.92	0.00	0.0			1.2D + 1.6W Normal Wind	65.21	0.00		
15	120	1.2D + 1.6W Normal Wind	43.90	0.00	0.0			1.2D + 1.6W Normal Wind	54.92	0.00		
16	130	1.2D + 1.6W Normal Wind	26.07	0.00	0.0			1.2D + 1.6W Normal Wind	43.90	0.00	/8 A325-X	4
17	140	1.2D + 1.6W Normal Wind	9.72	0.00	0.0			1.2D + 1.6W Normal Wind	26.07	0.00		
18	152	1.2D + 1.0Di + 1.0Wi 60° Wind	0.25	0.00	0.0			1.2D + 1.6W Normal Wind	9.72	0.00	/8 A325-X	4

HORIZONTAL MEMBERS

Sect	Top Elev	Member	Force (kips)	Load Case	Len (ft)	Bracing %	Fy (ksi)	Mem		Shear Bear			
								Cap (kips)	Num Bolts	Num Holes	Cap (kips)	Cap (kips)	Use %
1	10							0.00	0	0			
2	20							0.00	0	0			
3	30							0.00	0	0			
4	40							0.00	0	0			
5	50							0.00	0	0			

Force/Stress Compression Summary

Structure: CT13065-A-SBA	Code: TIA-222-G	1/31/2022
Site Name: Guilford	Exposure: B	
Height: 152.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 0.85	Topography: 1	Struct Class: II



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HORIZONTAL MEMBERS

Sect	Top Elev	Member	Force (kips)	Load Case	Len (ft)	Bracing %			KL/R	Fy (ksi)	Mem Cap (kips)	Num Bolts	Num Holes	Shear Cap (kips)	Bear Cap (kips)	Use %	Controls
						X	Y	Z									
6	60									0.00	0	0					
7	66.7									0.00	0	0					
8	73.4									0.00	0	0					
9	80									0.00	0	0					
10	86.7									0.00	0	0					
11	93.2									0.00	0	0					
12	100									0.00	0	0					
13	106.									0.00	0	0					
14	113.									0.00	0	0					
15	120									0.00	0	0					
16	130									0.00	0	0					
17	140									0.00	0	0					
18	152	SAE - 2x2x0.125	-0.66	0.9D + 1.6W Normal Wind	6.52	100	100	100	196.58	36.00	2.81	10	10	972.00	696.0	24	Member Z

DIAGONAL MEMBERS

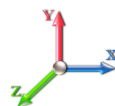
Sect	Top Elev	Member	Force (kips)	Load Case	Len (ft)	Bracing %			KL/R	Fy (ksi)	Mem Cap (kips)	Num Bolts	Num Holes	Shear Cap (kips)	Bear Cap (kips)	Use %	Controls
						X	Y	Z									
1	10	SAE - 3.5X3.5X0.25	-7.73	1.2D + 1.6W 90° Wind	22.61	49	49	49	191.59	50.00	10.40	1	1	15.19	11.6	74	Member Z
2	20	SAE - 3.5X3.5X0.25	-7.47	0.9D + 1.6W 90° Wind	21.59	49	49	49	182.93	50.00	11.41	1	1	15.19	11.6	65	Member Z
3	30	SAE - 3X3X0.375	-7.27	0.9D + 1.6W 90° Wind	20.81	49	49	49	208.49	36.00	10.97	1	1	15.19	26.1	66	Member Z
4	40	SAE - 3X3X0.375	-7.67	1.2D + 1.6W 90° Wind	19.79	49	49	49	198.27	36.00	12.13	1	1	15.19	26.1	63	Member Z
5	50	SAE - 3X3X0.25	-7.08	1.2D + 1.6W 90° Wind	18.89	49	49	49	187.63	36.00	9.24	1	1	15.19	17.4	77	Member Z
6	60	SAE - 3X3X0.25	-7.29	1.2D + 1.6W 90° Wind	18.06	49	49	49	179.41	36.00	10.11	1	1	15.19	14.7	72	Member Z
7	66.7	SAE - 2.5X2.5X0.25	-6.18	1.2D + 1.6W 90° Wind	15.83	49	49	49	189.62	36.00	7.48	1	1	9.72	13.9	83	Member Z
8	73.4	SAE - 2.5X2.5X0.25	-6.00	1.2D + 1.6W 90° Wind	15.21	49	49	49	182.11	36.00	8.11	1	1	9.72	13.9	74	Member Z
9	80	SAE - 2.5X2.5X0.1875	-5.79	1.2D + 1.6W 90° Wind	14.54	49	49	49	172.67	36.00	6.83	1	1	9.72	6.20	93	Bolt Bear
10	86.7	SAE - 2X2X0.375	-5.53	1.2D + 1.6W 90° Wind	13.86	49	49	49	209.54	36.00	7.00	1	1	9.72	20.8	79	Member Z
11	93.2	SAE - 2X2X0.375	-5.31	1.2D + 1.6W 90° Wind	13.28	49	49	49	200.74	36.00	7.62	1	1	9.72	20.8	70	Member Z
12	100	SAE - 2X2X0.375	-5.78	1.2D + 1.6W 90° Wind	12.71	49	49	49	192.07	36.00	8.33	1	1	9.72	20.8	69	Member Z
13	106.	MOD - 2L2x2x1/8_Speci	5.29	1.2D + 1.6W 90° Wind	12.10	49	49	49	117.93	36.00	15.28	1	1	9.72		54	Bolt Shear
14	113.	MOD - 2L2x2x1/8_Speci	5.12	1.2D + 1.6W 90° Wind	11.56	49	49	49	113.99	36.00	16.03	1	1	9.72		53	Bolt Shear
15	120	MOD - 2L2x2x1/8_Speci	5.48	1.2D + 1.6W 90° Wind	11.03	49	49	49	110.13	36.00	16.78	1	1	9.72		56	Bolt Shear
16	130	SAE - 1.75X1.75X0.25	-4.71	1.2D + 1.6W 90° Wind	9.62	50	50	50	169.25	36.00	6.39	1	1	9.72	13.9	74	Member Z
17	140	SAE - 1.75X1.75X0.125	-3.73	1.2D + 1.6W 90° Wind	8.39	50	50	50	145.10	36.00	4.51	1	1	9.72	4.13	90	Bolt Bear
18	152	SAE - 1.5X1.5X0.125	-2.32	1.2D + 1.6W 90° Wind	7.63	50	50	50	154.74	36.00	3.40	1	1	9.72	4.13	68	Member Z

Force/Stress Tension Summary

Structure: CT13065-A-SBA
Site Name: Guilford
Height: 152.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Topography: 1

Code: TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

1/31/2022

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LEG MEMBERS

Sect	Top Elev	Member	Force (kips)	Load Case	Fy (ksi)	Mem Cap (kips)	Leg Use %	Controls
1	10	MOD - 5"PST+6"PX1/2P	181.31	0.9D + 1.6W 60° Wind	50	382.59	47.4	Member
2	20	MOD - 5"PST+6"PX1/2P	176.60	0.9D + 1.6W 60° Wind	50	382.59	46.2	Member
3	30	MOD - 4"PX+5"PX1/2P	159.46	0.9D + 1.6W 60° Wind	50	335.85	47.5	Member
4	40	PX - 4" DIA PIPE	147.49	0.9D + 1.6W 60° Wind	50	198.45	74.3	Member
5	50	PX - 4" DIA PIPE	142.64	0.9D + 1.6W 60° Wind	50	198.45	71.9	Member
6	60	PX - 4" DIA PIPE	123.40	0.9D + 1.6W 60° Wind	50	198.45	62.2	Member
7	66.7	MOD - 3"PX+4"PX1/2P	113.07	0.9D + 1.6W 60° Wind	50	234.80	48.2	Member
8	73.4	PX - 3" DIA PIPE	104.37	0.9D + 1.6W 60° Wind	50	135.90	76.8	Member
9	80	PX - 3" DIA PIPE	95.83	0.9D + 1.6W 60° Wind	50	135.90	70.5	Member
10	86.75	MOD - 2.5"PX+3"PX1/2P	92.08	0.9D + 1.6W 60° Wind	50	169.27	54.4	Member
11	93.25	MOD - 2.5"PX+3.5"PX1/2P	78.76	0.9D + 1.6W 60° Wind	50	184.12	42.8	Member
12	100	PX - 2-1/2" DIA PIPE	69.35	0.9D + 1.6W 60° Wind	50	101.25	68.5	Member
13	106.75	PX - 2-1/2" DIA PIPE	65.25	0.9D + 1.6W 60° Wind	50	101.25	64.4	Member
14	113.25	PX - 2-1/2" DIA PIPE	50.43	0.9D + 1.6W 60° Wind	50	101.25	49.8	Member
15	120	PX - 2-1/2" DIA PIPE	39.81	0.9D + 1.6W 60° Wind	50	101.25	39.3	Member
16	130	PST - 2-1/2" DIA PIPE	35.23	0.9D + 1.6W 60° Wind	50	76.68	46.0	Member
17	140	PST - 2-1/2" DIA PIPE	16.53	0.9D + 1.6W 60° Wind	50	76.68	21.6	Member
18	152	PST - 2" DIA PIPE	6.69	0.9D + 1.6W 60° Wind	50	48.15	13.9	Member

Splices

Sect	Top Elev	Top Splice					Bottom Splice						
		Load Case	Force (kips)	Cap (kips)	Use %	Bolt Type	Num Bolts	Load Case	Force (kips)	Cap (kips)	Use %	Bolt Type	Num Bolts
1	10	0.9D + 1.6W 60° Wind	175.19	0.00	0.0		0.9D + 1.6W 60° Wind	187.7	0.00				
2	20	0.9D + 1.6W 60° Wind	164.33	0.00	0.0		0.9D + 1.6W 60° Wind	175.1	0.00				
3	30	0.9D + 1.6W 60° Wind	152.82	0.00	0.0		0.9D + 1.6W 60° Wind	164.3	212.04	77.5	1	A325-X	4
4	40	0.9D + 1.6W 60° Wind	142.37	0.00	0.0		0.9D + 1.6W 60° Wind	152.8	0.00				
5	50	0.9D + 1.6W 60° Wind	129.38	0.00	0.0		0.9D + 1.6W 60° Wind	142.3	166.24	85.6	7/8	A325	4
6	60	0.9D + 1.6W 60° Wind	117.77	0.00	0.0		0.9D + 1.6W 60° Wind	129.3	0.00				
7	66.7	0.9D + 1.6W 60° Wind	108.02	0.00	0.0		0.9D + 1.6W 60° Wind	117.7	166.24	70.8	7/8	A325-X	4
8	73.4	0.9D + 1.6W 60° Wind	99.58	0.00	0.0		0.9D + 1.6W 60° Wind	108.0	0.00				
9	80	0.9D + 1.6W 60° Wind	90.89	0.00	0.0		0.9D + 1.6W 60° Wind	99.58	0.00				
10	86.75	0.9D + 1.6W 60° Wind	82.55	0.00	0.0		0.9D + 1.6W 60° Wind	90.89	120.40	75.5	3/4	A325-X	4
11	93.25	0.9D + 1.6W 60° Wind	73.79	0.00	0.0		0.9D + 1.6W 60° Wind	82.55	0.00				
12	100	0.9D + 1.6W 60° Wind	65.12	0.00	0.0		0.9D + 1.6W 60° Wind	73.79	0.00				
13	106.75	0.9D + 1.6W 60° Wind	54.75	0.00	0.0		0.9D + 1.6W 60° Wind	65.12	82.84	78.6	5/8	A325-X	4
14	113.25	0.9D + 1.6W 60° Wind	45.03	0.00	0.0		0.9D + 1.6W 60° Wind	54.75	0.00				
15	120	0.9D + 1.6W 60° Wind	35.14	0.00	0.0		0.9D + 1.6W 60° Wind	45.03	0.00				
16	130	0.9D + 1.6W 60° Wind	18.28	0.00	0.0		0.9D + 1.6W 60° Wind	35.14	82.84	42.4	5/8	A325-X	4
17	140	0.9D + 1.6W 60° Wind	6.79	0.00	0.0		0.9D + 1.6W 60° Wind	18.28	0.00				
18	152	0.9D + 1.6W 60° Wind	0.00	0.00	0.0		0.9D + 1.6W 60° Wind	6.79	82.84	8.2	5/8	A325-X	4

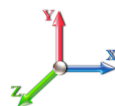
HORIZONTAL MEMBERS

Sect	Top Elev	Member	Force (kips)	Load Case	Fy (ksi)	Mem Cap (kips)	Num Bolts	Num Holes	Shear Cap (kips)	Bear Cap (kips)	B.S. Cap (kips)	Use %	Controls
1	10	-			50	0.00	0	0					
2	20	-			50	0.00	0	0					
3	30	-			36	0.00	0	0					
4	40	-			36	0.00	0	0					
5	50	-			36	0.00	0	0					
6	60	-			36	0.00	0	0					

Force/Stress Tension Summary

Structure: CT13065-A-SBA
Site Name: Guilford
Height: 152.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Code: TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II
Topography: 1

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HORIZONTAL MEMBERS

Sect	Top Elev	Member	Force (kips)	Load Case	Fy (ksi)	Mem Cap (kips)	Num Bolts	Num Holes	Shear Cap (kips)	Bear Cap (kips)	B.S. Cap (kips)	Use %	Controls
7	66.7	-			36	0.00	0	0					
8	73.4	-			36	0.00	0	0					
9	80	-			36	0.00	0	0					
10	86.75	-			36	0.00	0	0					
11	93.25	-			36	0.00	0	0					
12	100	-			36	0.00	0	0					
13	106.75	-			36	0.00	0	0					
14	113.25	-			36	0.00	0	0					
15	120	-			36	0.00	0	0					
16	130	-			36	0.00	0	0					
17	140	-			36	0.00	0	0					
18	152	SAE - 2x2x0.125	0.74	1.2D + 1.6W 60° Wind	36	-318.96	100	100	972.00	696.00	287.78	0.2	Member

DIAGONAL MEMBERS

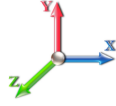
Sect	Top Elev	Member	Force (kips)	Load Case	Fy (ksi)	Mem Cap (kips)	Num Bolts	Num Holes	Shear Cap (kips)	Bear Cap (kips)	B.S. Cap (kips)	Use %	Controls
1	10	SAE - 3.5X3.5X0.25	7.47	0.9D + 1.6W 90° Wind	50	54.94	1	1	15.19	11.69	23.91	63.9	Bolt Bear
2	20	SAE - 3.5X3.5X0.25	7.38	0.9D + 1.6W 90° Wind	50	54.94	1	1	15.19	11.69	23.91	63.2	Bolt Bear
3	30	SAE - 3X3X0.375	7.24	0.9D + 1.6W 90° Wind	36	59.66	1	1	15.19	26.10	23.39	47.7	Bolt Shear
4	40	SAE - 3X3X0.375	7.23	0.9D + 1.6W 90° Wind	36	59.66	1	1	15.19	26.10	23.39	47.6	Bolt Shear
5	50	SAE - 3X3X0.25	7.06	1.2D + 1.6W 90° Wind	36	40.86	1	1	15.19	17.40	15.59	46.5	Bolt Shear
6	60	SAE - 3X3X0.25	6.94	0.9D + 1.6W 90° Wind	36	40.86	1	1	15.19	14.79	14.58	47.6	Blck Shear
7	66.7	SAE - 2.5X2.5X0.25	6.26	1.2D + 1.6W 90° Wind	36	33.73	1	1	9.72	13.92	14.91	64.4	Bolt Shear
8	73.4	SAE - 2.5X2.5X0.25	5.74	1.2D + 1.6W 90° Wind	36	33.73	1	1	9.72	13.92	14.91	59.0	Bolt Shear
9	80	SAE - 2.5X2.5X0.1875	5.77	1.2D + 1.6W 90° Wind	36	25.60	1	1	9.72	6.20	9.79	93.1	Bolt Bear
10	86.75	SAE - 2X2X0.375	5.43	1.2D + 1.6W 90° Wind	36	36.72	1	1	9.72	20.88	18.29	55.9	Bolt Shear
11	93.25	SAE - 2X2X0.375	5.32	1.2D + 1.6W 90° Wind	36	36.72	1	1	9.72	20.88	18.29	54.7	Bolt Shear
12	100	SAE - 2X2X0.375	5.54	1.2D + 1.6W 90° Wind	36	36.72	1	1	9.72	20.88	18.29	57.0	Bolt Shear
13	106.75	MOD - 2L2x2x1/8_Special	5.29	1.2D + 1.6W 90° Wind	36	31.78	1	1	9.72			54.4	Bolt Shear
14	113.25	MOD - 2L2x2x1/8_Special	5.10	1.2D + 1.6W 90° Wind	36	31.78	1	1	9.72			52.5	Bolt Shear
15	120	MOD - 2L2x2x1/8_Special	5.29	1.2D + 1.6W 90° Wind	36	31.78	1	1	9.72			54.5	Bolt Shear
16	130	SAE - 1.75X1.75X0.25	4.83	1.2D + 1.6W 90° Wind	36	21.33	1	1	9.72	13.92	10.83	49.7	Bolt Shear
17	140	SAE - 1.75X1.75X0.125	3.61	0.9D + 1.6W 90° Wind	36	11.15	1	1	9.72	4.13	3.81	94.8	Blck Shear
18	152	SAE - 1.5X1.5X0.125	2.27	0.9D + 1.6W 90° Wind	36	9.20	1	1	9.72	4.13	3.81	59.7	Blck Shear

Support Forces Summary

Structure: CT13065-A-SBA
Site Name: Guilford
Height: 152.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Topography: 1

Code: TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

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Load Case	Node	FX (kips)	FY (kips)	FZ (kips)	(-) = Uplift (+) = Down
<hr/>					
1.2D + 1.6W Normal Wind	1	0.02	216.60	-23.50	
	1a	7.88	-89.22	-7.72	
	1b	-7.90	-89.26	-7.70	
<hr/>					
1.2D + 1.6W 60° Wind	1	-2.57	110.88	-11.53	
	1a	-11.28	110.90	3.53	
	1b	-18.13	-183.66	-10.45	
<hr/>					
1.2D + 1.6W 90° Wind	1	-3.01	12.70	-0.69	
	1a	-17.84	184.40	8.54	
	1b	-16.57	-158.98	-7.84	
<hr/>					
0.9D + 1.6W Normal Wind	1	0.02	213.15	-23.30	
	1a	8.05	-92.27	-7.82	
	1b	-8.07	-92.30	-7.80	
<hr/>					
0.9D + 1.6W 60° Wind	1	-2.57	107.58	-11.33	
	1a	-11.11	107.58	3.42	
	1b	-18.30	-186.56	-10.55	
<hr/>					
0.9D + 1.6W 90° Wind	1	-3.01	9.52	-0.49	
	1a	-17.67	180.99	8.44	
	1b	-16.75	-161.92	-7.94	
<hr/>					
1.2D + 1.0Di + 1.0Wi Normal Wind	1	0.00	84.56	-6.63	
	1a	1.59	4.83	-1.71	
	1b	-1.59	4.76	-1.71	
<hr/>					
1.2D + 1.0Di + 1.0Wi 60° Wind	1	-0.66	57.49	-3.60	
	1a	-3.45	57.51	1.22	
	1b	-4.36	-20.85	-2.52	
<hr/>					
1.2D + 1.0Di + 1.0Wi 90° Wind	1	-0.77	31.38	-0.72	
	1a	-5.16	76.83	2.53	
	1b	-3.92	-14.06	-1.82	
<hr/>					
1.0D + 1.0W Normal Wind	1	0.00	55.52	-5.69	
	1a	1.30	-11.86	-1.46	
	1b	-1.30	-11.89	-1.45	
<hr/>					
1.0D + 1.0W 60° Wind	1	-0.56	32.22	-3.05	
	1a	-2.93	32.25	1.03	
	1b	-3.57	-32.70	-2.06	
<hr/>					
1.0D + 1.0W 90° Wind	1	-0.67	10.58	-0.66	
	1a	-4.38	48.47	2.14	
	1b	-3.23	-27.28	-1.48	
<hr/>					

Max Reactions

Leg	Overturning
Max Uplift: -186.56 (kips)	Moment: 3669.48 (ft-kips)
Max Down: 216.60 (kips)	Total Down: 38.13 (kips)
Max Shear: 23.50 (kips)	Total Shear: 38.91 (kips)

Analysis Summary

Structure: CT13065-A-SBA	Code: TIA-222-G	1/31/2022
Site Name: Guilford	Exposure: B	
Height: 152.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 0.85	Topography: 1	Struct Class: II
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Max Reactions

	Leg	Overturning
Max Uplift:	-186.56 (kips)	Moment: 3669.48 (ft-kips)
Max Down:	216.60 (kips)	Total Down: 38.13 (kips)
Max Shear:	23.50 (kips)	Total Shear: 38.91 (kips)

Anchor Bolts

Bolt Size (in.): 1.00	Number Bolts: 4
Yield Strength (Ksi): 92.00	Tensile Strength (Ksi): 120.00
Detail Type: B	

Interaction Ratio: 0.95

Max Usages

Max Leg: 97.0% (1.2D + 1.6W Normal Wind - Sect 8)
 Max Diag: 94.8% (0.9D + 1.6W 90° Wind - Sect 17)
 Max Horiz: 23.7% (0.9D + 1.6W Normal Wind - Sect 18)

Max Deflection, Twist and Sway

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)
0.9D + 1.6W 101 mph Wind at 60° From Face	80.25	0.3103	0.0519	0.5579
	130.00	0.9109	0.1350	0.9259
	139.75	1.0665	0.1608	1.1560
	148.08	1.2025	0.1606	0.9489
0.9D + 1.6W 101 mph Wind at 90° From Face	80.25	0.3132	0.0326	0.5998
	130.00	0.9177	-0.1576	0.9208
	139.75	1.0747	-0.1876	1.1340
	148.08	1.2112	-0.1900	0.9408
0.9D + 1.6W 101 mph Wind at Normal To Face	80.25	0.3207	0.0463	0.5733
	130.00	0.9371	0.1207	0.9494
	139.75	1.0965	0.1432	1.1876
	148.08	1.2358	0.1439	1.0147
1.0D + 1.0W 60 mph Wind at 60° From Face	80.25	0.0685	0.0072	0.1230
	130.00	0.2010	0.0168	0.2050
	139.75	0.2353	-0.0209	0.2568
	148.08	0.2654	0.0198	0.2084
1.0D + 1.0W 60 mph Wind at 90° From Face	80.25	0.0692	0.0053	0.1318
	130.00	0.2027	-0.0258	0.2039
	139.75	0.2374	-0.0315	0.2519
	148.08	0.2675	-0.0312	0.2096
1.0D + 1.0W 60 mph Wind at Normal To Face	80.25	0.0708	0.0069	0.1270
	130.00	0.2068	0.0164	0.2088
	139.75	0.2420	0.0205	0.2603
	148.08	0.2727	0.0195	0.2220

1.2D + 1.0Di + 1.0Wi 50 mph Wind at 60° From Face	80.25	0.0819	0.0110	0.1483
	130.00	0.2417	0.0277	0.2438
	139.75	0.2819	0.0334	0.3022
	148.08	0.3172	0.0328	0.2478

1.2D + 1.0Di + 1.0Wi 50 mph Wind at 90° From Face	80.25	0.0817	0.0076	0.1585
	130.00	0.2424	-0.0409	0.2413
	139.75	0.2828	-0.0489	0.2949
	148.08	0.3181	-0.0498	0.2489

1.2D + 1.0Di + 1.0Wi 50 mph Wind at Normal From Face	80.25	0.0847	0.0107	0.1511
	130.00	0.2447	0.0276	0.2432
	139.75	0.2858	0.0333	0.2980
	148.08	0.3214	0.0329	0.2741

1.2D + 1.6W 101 mph Wind at 60° From Face	80.25	0.3109	0.0523	0.5590
	130.00	0.9129	0.1360	0.9286
	139.75	1.0688	0.1621	1.1598
	148.08	1.2053	0.1618	0.9511

1.2D + 1.6W 101 mph Wind at 90° From Face	80.25	0.3138	0.0328	0.6009
	130.00	0.9198	-0.1588	0.9232
	139.75	1.0772	-0.1889	1.1368
	148.08	1.2139	-0.1913	0.9440

1.2D + 1.6W 101 mph Wind at Normal To Face	80.25	0.3213	0.0465	0.5745
	130.00	0.9391	0.1216	0.9518
	139.75	1.0989	0.1442	1.1905
	148.08	1.2385	0.1449	1.0165



Self Supporting Tower Footing Design

Date
1/31/2022

Customer Name:	SBA Communications Corp	EIA/TIA Standard:	TIA-222-G
Site Name:		Structure Height (Ft.):	152
Site Number:	CT13065-A-SBA	Engineer Name:	J. Tibbetts
Engr. Number:	123167	Engineer Login ID:	

Foundation Info Obtained from:

Mapping Operation
Self Supporting Tower
Analysis

Structure Type:

Analysis or Design?

Base Reactions (Factored):

Axial Load (Kips):	216.6	Shear Force (Kips):	23.5
Uplift Force (Kips):	186.6	Moment (Kips-ft):	

Allowable overstress %: 5.0%

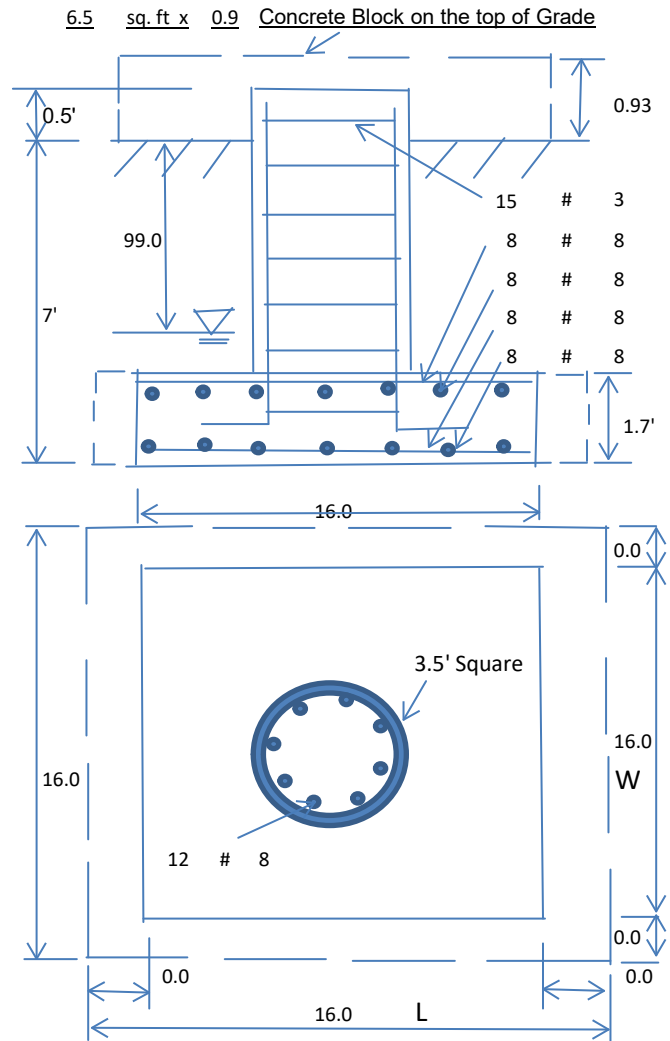
Foundation Geometries:

Pad Base w/ toe or in Rock-Yes/No ?	No	Mods required -Yes/No ?:	Yes
Diameter of Pier (ft.):	Square 3.500	Depth of Base BG (ft.):	7.0
Pier Height A. G. (ft.):	0.50	Thickness of Pad (ft):	1.70
Length of Pad (ft.):	16	Width of Pad (ft.):	16
Add Concrete Width & Length (ft.)	6.5	Add Concrete Thick. (ft)	0.926
Final Length of pad (ft)	16.0	Final width of pad (ft):	16.0

Consider ties in concrete shear strength?: Yes

Material Properties and Reabr Info:

Concrete Strength (psi):	3000	Steel Elastic Modulus:	29000	ksi
Vertical bar yield (ksi)	60	Tie steel yield (ksi):	36	
Vertical Rebar Size #:	8	Tie / Stirrup Size #:	3	
Qty. of Vertical Rebars:	12	Tie Spacing (in):	6.0	
Pad Rebar Yield (Ksi):	60	Pad Steel Rebar Size (#):	8	
Concrete Cover (in.):	3	Unit Weight of Concrete:	150.0	pcf
Rebar at the bottom of the concrete pad:				
Qty. of Rebar in Pad (L):	8	Qty. of Rebar in Pad (W):	8	
Rebar at the top of the concrete pad:				
Qty. of Rebar in Pad (L):	8	Qty. of Rebar in Pad (W):	8	



Soil Design Parameters:

Soil Unit Weight (pcf):	120.0	Soil Buoyant Weight:	55.0	Pcf
Water Table B.G.S. (ft):	99.0	Unit Weight of Water:	62.4	pcf
Ultimate Bearing Pressure (psf):	10000	Ultimate Skin Friction:	0	Psf
		Angle from Top of Pad:	30	
		Angle from Bottm of Pad:	25	

Foundation Analysis and Design:

Uplift Strength Reduction Factor A:	0.75
Compression Strength Reduction Factor:	0.75

Total Dry Soil Volume (cu. Ft.):	1860.47	Total Dry Soil Weight (Kips):	223.26
Total Buoyant Soil Volume (cu. Ft.):	0.00	Total Buoyant Soil Weight (Kips):	0.00
Total Effective Soil Weight (Kips):	223.26	Weight from the Concrete Block at Top (K):	4.95
Total Dry Concrete Volume (cu. Ft.):	539.25	Total Dry Concrete Weight (Kips):	80.89
Total Buoyant Concrete Volume (cu. Ft.):	0.00	Total Buoyant Concrete Weight (Kips):	0.00
Total Effective Concrete Weight (Kips):	80.89	Total Vertical Load on Base (Kips):	520.75

Check Soil Capacities:

Calculated Maxium Net Soil Pressure under the base (psf):	1161.91	<	Allowable Factored Soil Bearing (psf):	7500	0.15	OK!
Calculated Foundation Allowable Axail Capacity (Kips):	1920.0	>	Design Factored Axial Load (Kips):	236	0.12	OK!
Calculated Foundation Uplift Capacity (Kips):	263.49	>	Design Factored Uplift Load (Kips):	187	0.71	OK!

Check the capacities of Reinforcing Concrete:

Strength reduction factor (Flexure and axial tension):	0.90	Strength reduction factor (Shear):	0.75
Strength reduction factor (Axial compression):	0.65	Wind Load Factor on Concrete Design:	1.00

Load/
Capacity
Ratio

(1) Concrete Pier:

Vertical Steel Rebar Area (sq. in./each):	0.79	Tie / Stirrup Area (sq. in./each):	0.11		
Calculated Moment Capacity (Mn,Kips-Ft):	577.3	> Design Factored Moment (Mu, Kips-Ft)	136.3	0.24	OK!
Calculated Shear Capacity (Kips):	142.9	> Design Factored Shear (Kips):	23.5	0.16	OK!
Calculated Tension Capacity (Tn, Kips):	511.9	> Design Factored Tension (Tu Kips):	186.6	0.36	OK!
Calculated Compression Capacity (Pn, Kips):	2326.5	> Design Factored Axial Load (Pu Kips):	216.6	0.09	OK!
Moment & Axial Strength Combination:	0.24	OK! Check Tie Spacing (Design/Required):		0.5	OK!
Pier Reinforcement Ratio:	0.005				

(2).Concrete Pad:

One-Way Design Shear Capacity (L-Dir. Kips);	266.6	> One-Way Factored Shear (L-Dir Kips):	68.5	0.26	OK!
One-Way Design Shear Capacity (W-Dir. Kips):	266.6	> One-Way Factored Shear (W-Dir Kips)	68.5	0.26	OK!
Two-Way Design Shear Capacity (Kips):	560.9	> Two-Way Factored Shear (Kips):	196.0	0.35	OK!
Lower Steel Pad Reinforcement Ratio (L-Direct.):	0.0019	Lower Steel Pad Reinf. Ratio (W-Direc	0.0019		OK!
Lower Steel Pad Moment Capacity (L-Direction. Kips-ft):	469.6	> Moment at Bottom (L-Direct. K-Ft):	269.4	0.57	OK!
Lower Steel Pad Moment Capacity (W-Dir. Kips-ft):	469.6	> Moment at Bottom (W-Dir. Kips-Ft):	269.4	0.57	OK!
Upper Steel Pad Reinforcement Ratio (L-Direct.):	0.0019	Upper Steel Reinf. Ratio (W-Direct.):	0.0019		OK!
Upper Steel Pad Moment Capacity (L-Direction. Kips-ft):	469.6	> Moment at the top (L-Dir Kips-Ft):	211.8	0.45	OK!
Upper Steel Pad Moment Capacity (W-Dir. Kips-ft):	469.6	> Moment at the top (W-Dir Kips-Ft):	211.8	0.45	OK!

Rebar Info Assumption per ACI when Foundation info was obtained from an mapping operation:

Concrete Strength (Psi):	3000	Vertical bar yield (ksi)	60	Pad Rebar Yield (Ksi):	60
Vertical Rebar Size #:	8	Vertical Rebar Area (sq. in./each):	0.8	Min. Qty. of Vertical Rebars:	12
Pad Steel Rebar Size (#):	8	Vertical Rebar Area (sq. in./each):	0.79		
Min. Qty. of Rebars in L-Direction:	12	Min. Qty. of Rebars in W-Direction:	12		



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Replacement Antenna Mount Analysis Report and PMI Requirements

Mount Analysis-R

SMART Tool Project #: 10092933
Maser Consulting Connecticut Project #: 2177792A

August 6, 2021

Site Information

Site ID: 467748-VZW / GUILFORD NORTH CT
Site Name: GUILFORD NORTH CT
Carrier Name: Verizon Wireless
Address: 331 Route 80
Guilford, Connecticut 06437
New Haven County
Latitude: 41.353164°
Longitude: -72.688256°

Structure Information

Tower Type: 150-Ft Self Support
Mount Type: 12.50-Ft Sector Frame

FUZE ID # 16092576

Analysis Results

Sector Frame: 40.0% 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 may also be Noted on A & E drawings*

Report Prepared By: Chuanjiao Hu



Digitally signed by Derek Hartzel
Date: 2021.08.06 15:55:15-0700

Executive Summary:

The objective of this report is to determine the capacity of the proposed antenna support mount at the subject facility for the final wireless telecommunications configuration, per the applicable codes and standards. The proposed mount was assumed to be installed properly to the existing tower per the manufacturer’s instructions. Maser Consulting Connecticut cannot verify that the proposed mount will fit properly and is not liable for any fit-up issues during installation.

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
<i>Radio Frequency Data Sheet (RFDS)</i>	<i>Verizon RFDS, Site ID: 674923, dated July 16, 2021</i>
<i>Previous Mount Analysis Report</i>	<i>Maser Consulting Connecticut, Project #: 21777792A, dated July 30, 2021</i>
<i>Mount Specification Drawing</i>	<i>Site Pro 1, Part #: VFA12-HD</i>

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H	
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust),	122 mph
	Ice Wind Speed (3-sec. Gust):	50 mph
	Design Ice Thickness:	1.00 in
	Risk Category:	II
	Exposure Category:	B
	Topographic Category:	1
	Topographic Feature Considered:	N/A
	Topographic Method:	N/A
	Ground Elevation Factor, K _e :	0.991
Seismic Parameters:	S _s :	0.208
	S ₁ :	0.054
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
			Andrew		Retained
			Andrew		
			Samsung		Added
			Commscope		
			Samsung	RF4439d-25A	
		3	Samsung	RF4440d-13A	
			Raycap		

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.

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.

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 Connecticut 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 Connecticut 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.
3. For mount analyses completed from other data sources (including new replacement mounts) and not specifically mapped by Maser Consulting Connecticut, 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 Connecticut 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:
- Channel, Solid Round, Angle, Plate ASTM A36 (Gr. 36)
 - HSS (Rectangular) ASTM 500 (Gr. B-46)
 - Pipe ASTM A53 (Gr. B-35)
 - Threaded Rod F1554 (Gr. 36)
 - Bolts ASTM A325

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

Analysis Results:

Component	Utilization %	Pass/Fail
Face Horizontal		Pass
Standoff Horizontal		Pass
Standoff Diagonal		Pass
Standoff Vertical		Pass
Standoff Plate		Pass
Tieback		Pass
Antenna Pipe		Pass
Dual Antenna Pipe		Pass
Mount Connection		Pass

Structure Rating – (Controlling Utilization of all Components)	40.0%
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Recommendation:

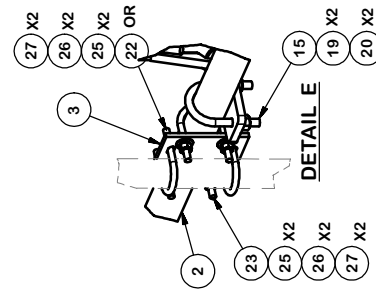
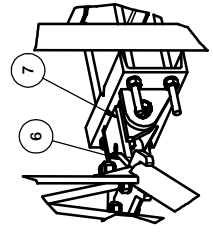
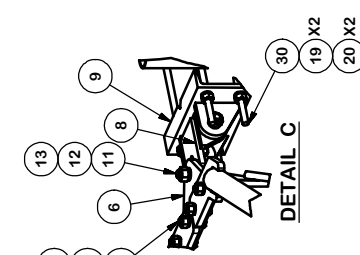
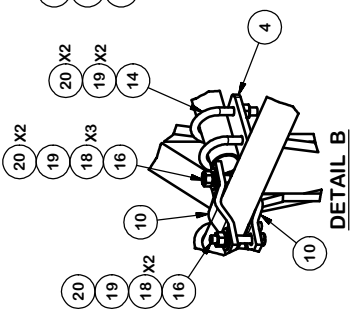
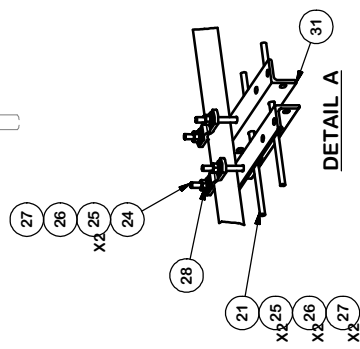
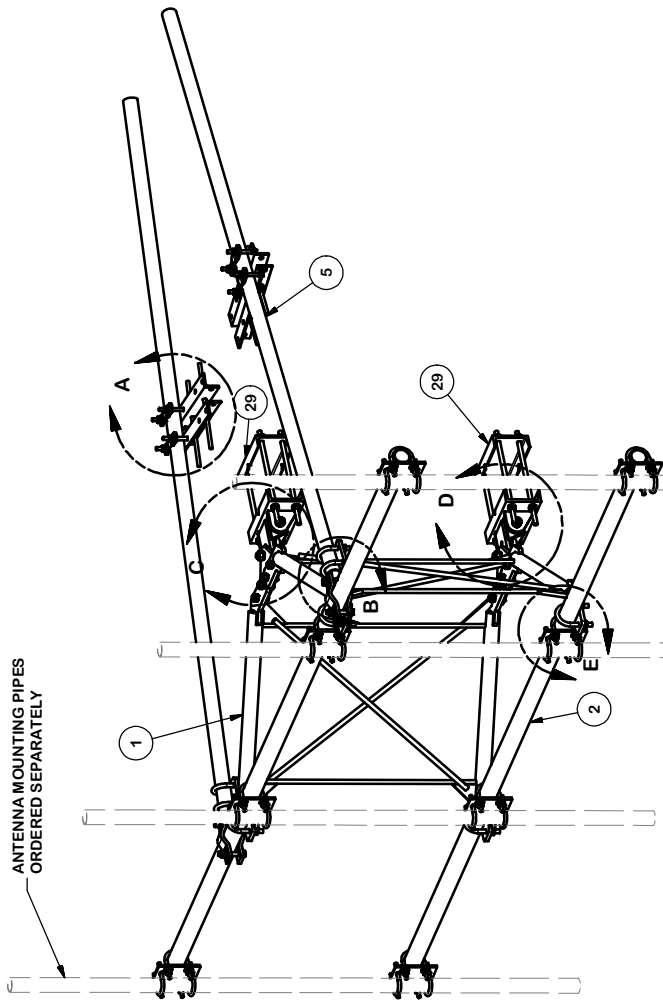
The proposed antenna mounts are **SUFFICIENT** for the final loading configuration and do not require modifications.

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:

- Mount Specifications
- Analysis Calculations
- Contractor Required Post Installation Inspection (PMI) Report Deliverables**
- Antenna Placement Diagrams

ANTENNA MOUNTING PIPES
ORDERED SEPARATELY



ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	2	X-VFAW	SUPPORT ARM		66.80	133.59
2	2	P30150	2-7/8" X 150" (2-1/2" SCH. 40) GALVANIZED PIPE	150 in	76.94	153.87
3	8	SCX2	CROSSOVER PLATE	7 in	4.80	38.37
4	2	X-SPTB	SLIDING PIPE TIE BACK PLATE	5 1/2 in	5.87	11.74
5	2	P2126	2-3/8" OD X 126" SCH 40 GALVANIZED PIPE	126 in	40.75	81.50
6	2	X-VFAPL3	VFA-HD PIVOT PLATE	24 in	9.69	19.38
7	1	X-LPB	LOWER PIVOT BRACKET		8.84	8.84
8	1	X-UPB	UPPER PIVOT BRACKET		8.84	8.84
9	2	X-HDPMW	HEAVY DUTY PIPE MOUNT WELDMENT		18.61	37.21
10	4	DCP	1/2" THICK, 5-3/4" CENTER TO CENTER CLAMP HALF	8 1/8 in	2.42	9.68
11	6	A34212	3/4" X 2-1/2" UNC HEX BOLT (A325)	2 1/2 in	0.48	2.87
12	6	G34LW	3/4" HDG LOCKWASHER		0.04	0.26
13	6	G34NUT	3/4" HDG HEAVY 2H HEX NUT		0.21	1.27
14	4	X-UB5258	5/8" X 2-5/8" X 4-1/2" X 2" U-BOLT (HDG.)		1.00	4.00
15	4	X-UB5300	5/8" X 3" X 5-1/4" X 2-1/2" U-BOLT (HDG.)		1.15	4.60
16	4	G5804	5/8" X 4" HDG HEX BOLT GR5		0.44	1.78
17	8	A582114	5/8" X 2-1/4" HDG A325 HEX BOLT	2 1/4 in	0.31	2.50
18	10	G58FW	5/8" HDG USS FLATWASHER	1 1/8 in	0.07	0.70
19	44	G58LW	5/8" HDG LOCKWASHER		0.03	1.15
20	46	G58NUT	5/8" HDG HEAVY 2H HEX NUT		0.13	5.98
21	4	G12R-15	1/2" X 15" THREADED ROD (HDG.)		0.40	1.60
22	16	X-UB1212	1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.)		0.26	4.11
23	32	X-UB1300	1/2" X 3" X 5" X 2" GALV U-BOLT		0.74	23.64
24	8	G12045	1/2" X 4.5" HDG HEX BOLT GR5 FULL THREAD	4 1/2 in	0.30	2.38
25	88	G12FW	1/2" HDG USS FLATWASHER	3/32 in	0.03	3.00
26	80	G12LW	1/2" HDG LOCKWASHER	1 1/8 in	0.01	1.11
27	80	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	5.73
28	4	X-100064	CLAMP (4" V-CLAMP) GALVANIZED		0.91	3.65
29	2	X-HDPMBP	HEAVY DUTY PIPE MOUNT BACKING PLATE	12 in	13.44	26.89
30	8	G58R-18	5/8" X 18" THREADED ROD (HDG.)	18 in	0.40	3.19
31	4	X-LLTB	ANGLE BRACKET FOR LLTB	16 1/2 in	7.06	28.25
					TOTAL WT. #	648.71

SITE PRO
A Valmont COMPANY

Locations:
New York, NY
Atlanta, GA
Los Angeles, CA
Plymouth, IN
Tomball, TX
Dallas, TX

Engineering
Support Team:
1-888-53-7446

PART NO. **VFA12-HD**
DWG. NO. **VFA12-HD**

DESCRIPTION
12'-6" HEAVY DUTY V-FRAME ASSEMBLY WITH TWO STIFF ARMS

DRAWN BY **CEK** 6/1/2015
ENG. APPROVAL

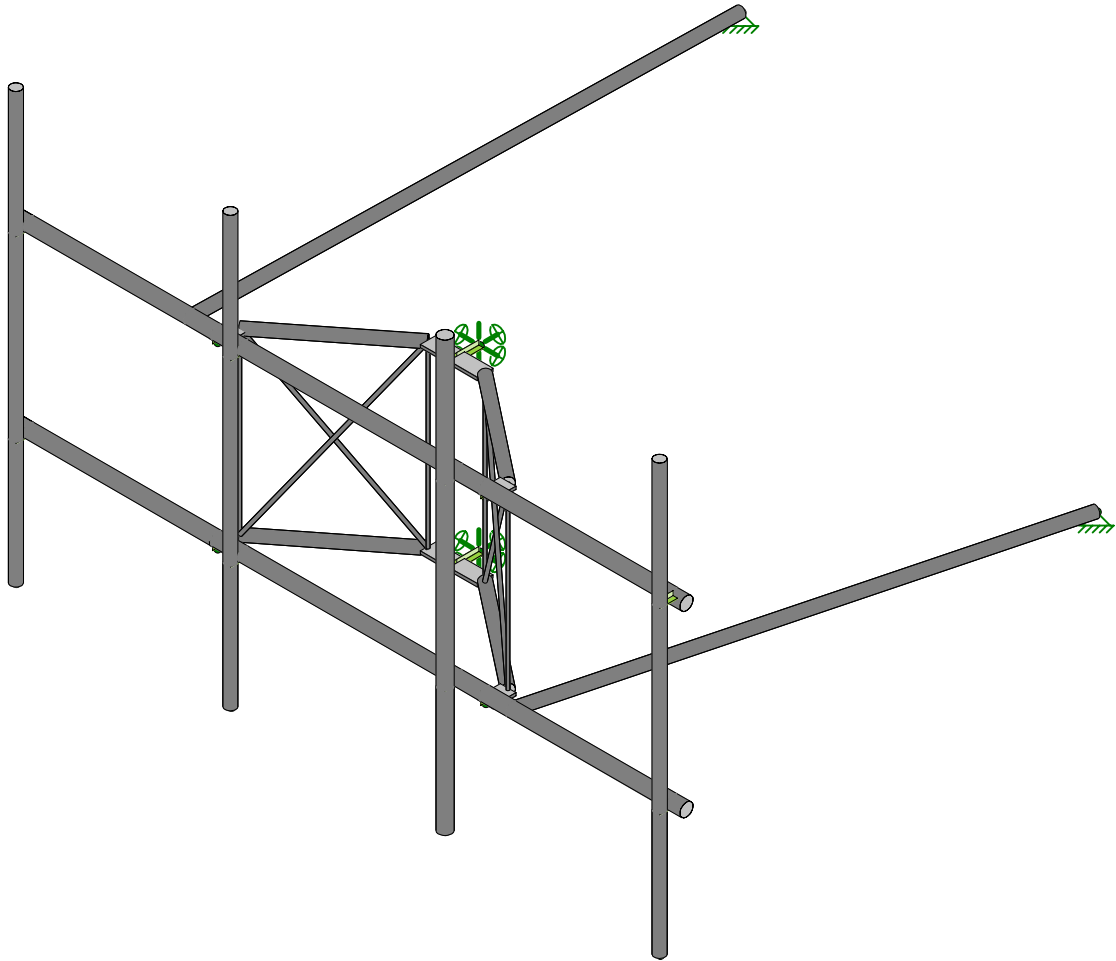
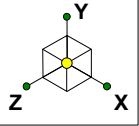
CHECKED BY **BMC** 2/2/2017
CUSTOMER

CPD NO. **81** SUB **02**

TOLERANCE NOTES
TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:
SAWED, SHEARED AND GAS CUT EDGES ($\pm 0.030"$)
DRILLED AND GAS CUT HOLES ($\pm 0.030"$) - NO CONING OF HOLES
LASER CUT EDGES AND HOLES ($\pm 0.010"$) - NO CONING OF HOLES
BENDS ARE $\pm 1/2$ DEGREE
ALL OTHER MACHINING ($\pm 0.030"$)
ALL OTHER ASSEMBLY ($\pm 0.060"$)

PROPRIETARY NOTE: THE INFORMATION CONTAINED IN THIS DRAWING IS PROPRIETARY INFORMATION OF VALMONT INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF VALMONT INDUSTRIES IS STRICTLY PROHIBITED.

REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE
A	CHANGED TIE-BACK FRONT CONNECTION	CEK	2/2/2017	
REVISION HISTORY				

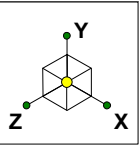


Envelope Only Solution

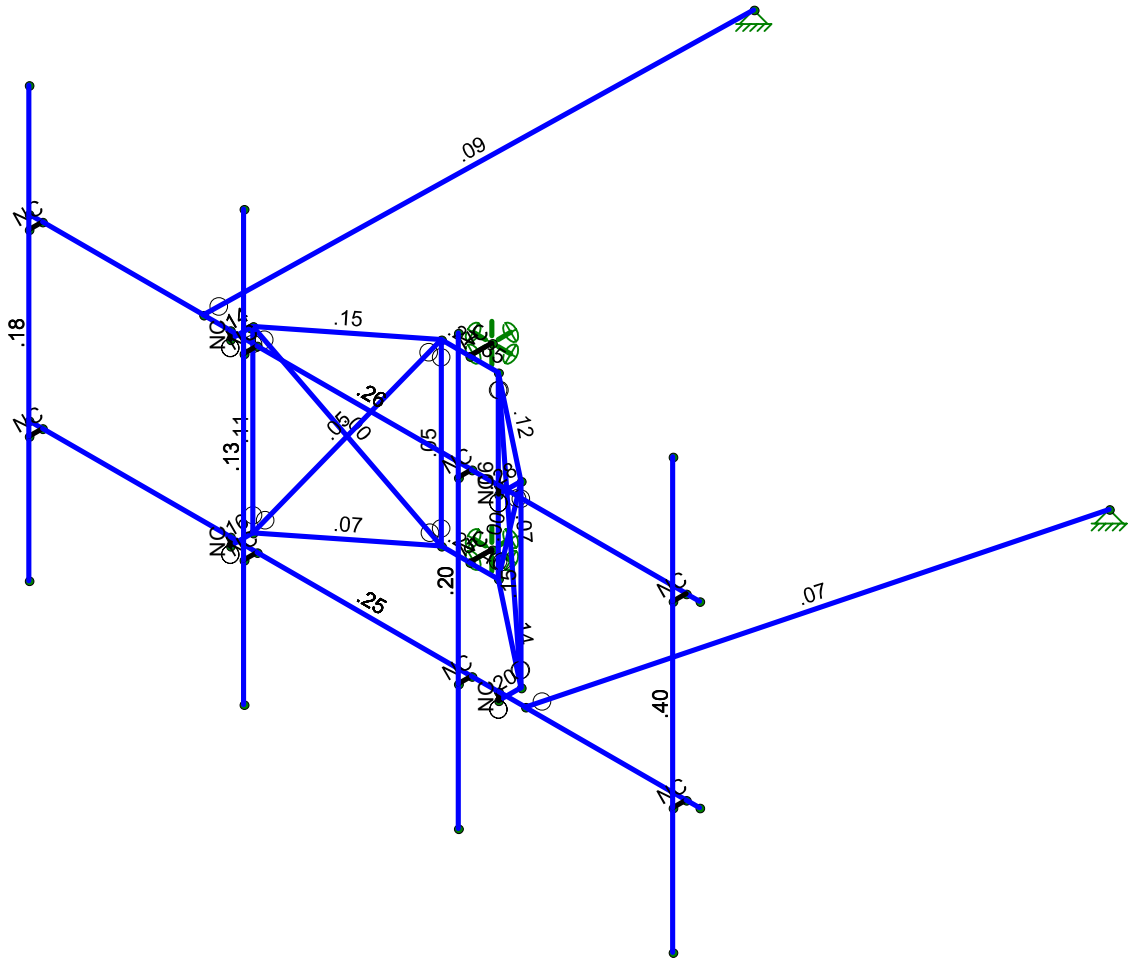
SK - 1

Aug 5, 2021 at 6:35 PM

467748-VZW_MT_LOT_B_H.r3d



Code Check (Env)	
Black	No Calc
Red	> 1.0
Magenta	.90-1.0
Green	.75-.90
Cyan	.50-.75
Blue	0-.50



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

		SK - 1
		Aug 5, 2021 at 6:39 PM
		467748-VZW_MT_LOT_B_H.r3d

Basic Load Cases

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

Basic Load Cases (Continued)

BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...	Surface(P...
57 Structure Wi (120 De...	None						56	
58 Structure Wi (150 De...	None						56	
59 Structure Wi (180 De...	None						56	
60 Structure Wi (210 De...	None						56	
61 Structure Wi (240 De...	None						56	
62 Structure Wi (270 De...	None						56	
63 Structure Wi (300 De...	None						56	
64 Structure Wi (330 De...	None						56	
65 Structure Wm (0 Deg)	None						56	
66 Structure Wm (30 De...	None						56	
67 Structure Wm (60 De...	None						56	
68 Structure Wm (90 De...	None						56	
69 Structure Wm (120 D...	None						56	
70 Structure Wm (150 D...	None						56	
71 Structure Wm (180 D...	None						56	
72 Structure Wm (210 D...	None						56	
73 Structure Wm (240 D...	None						56	
74 Structure Wm (270 D...	None						56	
75 Structure Wm (300 D...	None						56	
76 Structure Wm (330 D...	None						56	
77 Lm1	None					1		
78 Lm2	None					1		
79 Lv1	None					1		
80 Lv2	None					1		

Load Combinations

Description	So...	PDelta	S...	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..
1 1.2D+1.0Wo (0 ...	Yes	Y		1	1.2	39	1.2	3	1	41	1								
2 1.2D+1.0Wo (30...	Yes	Y		1	1.2	39	1.2	4	1	42	1								
3 1.2D+1.0Wo (60...	Yes	Y		1	1.2	39	1.2	5	1	43	1								
4 1.2D+1.0Wo (90...	Yes	Y		1	1.2	39	1.2	6	1	44	1								
5 1.2D+1.0Wo (12...	Yes	Y		1	1.2	39	1.2	7	1	45	1								
6 1.2D+1.0Wo (15...	Yes	Y		1	1.2	39	1.2	8	1	46	1								
7 1.2D+1.0Wo (18...	Yes	Y		1	1.2	39	1.2	9	1	47	1								
8 1.2D+1.0Wo (21...	Yes	Y		1	1.2	39	1.2	10	1	48	1								
9 1.2D+1.0Wo (24...	Yes	Y		1	1.2	39	1.2	11	1	49	1								
10 1.2D+1.0Wo (27...	Yes	Y		1	1.2	39	1.2	12	1	50	1								
11 1.2D+1.0Wo (30...	Yes	Y		1	1.2	39	1.2	13	1	51	1								
12 1.2D+1.0Wo (33...	Yes	Y		1	1.2	39	1.2	14	1	52	1								
13 1.2D + 1.0Di + 1...	Yes	Y		1	1.2	39	1.2	2	1	40	1	15	1	53	1				
14 1.2D + 1.0Di + 1...	Yes	Y		1	1.2	39	1.2	2	1	40	1	16	1	54	1				
15 1.2D + 1.0Di + 1...	Yes	Y		1	1.2	39	1.2	2	1	40	1	17	1	55	1				
16 1.2D + 1.0Di + 1...	Yes	Y		1	1.2	39	1.2	2	1	40	1	18	1	56	1				
17 1.2D + 1.0Di + 1...	Yes	Y		1	1.2	39	1.2	2	1	40	1	19	1	57	1				
18 1.2D + 1.0Di + 1...	Yes	Y		1	1.2	39	1.2	2	1	40	1	20	1	58	1				
19 1.2D + 1.0Di + 1...	Yes	Y		1	1.2	39	1.2	2	1	40	1	21	1	59	1				
20 1.2D + 1.0Di + 1...	Yes	Y		1	1.2	39	1.2	2	1	40	1	22	1	60	1				
21 1.2D + 1.0Di + 1...	Yes	Y		1	1.2	39	1.2	2	1	40	1	23	1	61	1				
22 1.2D + 1.0Di + 1...	Yes	Y		1	1.2	39	1.2	2	1	40	1	24	1	62	1				
23 1.2D + 1.0Di + 1...	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1				
24 1.2D + 1.0Di + 1...	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1				
25 1.2D + 1.5Lm1 +...	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1						
26 1.2D + 1.5Lm1 +...	Yes	Y		1	1.2	39	1.2	77	1.5	28	1	66	1						
27 1.2D + 1.5Lm1 +...	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1						
28 1.2D + 1.5Lm1 +...	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1						

Load Combinations (Continued)

Description	So...	PDelta	S...	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..
29	1.2D + 1.5Lm1 +...	Yes	Y	1	1.2	39	1.2	77	1.5	31	1	69	1	
30	1.2D + 1.5Lm1 +...	Yes	Y	1	1.2	39	1.2	77	1.5	32	1	70	1	
31	1.2D + 1.5Lm1 +...	Yes	Y	1	1.2	39	1.2	77	1.5	33	1	71	1	
32	1.2D + 1.5Lm1 +...	Yes	Y	1	1.2	39	1.2	77	1.5	34	1	72	1	
33	1.2D + 1.5Lm1 +...	Yes	Y	1	1.2	39	1.2	77	1.5	35	1	73	1	
34	1.2D + 1.5Lm1 +...	Yes	Y	1	1.2	39	1.2	77	1.5	36	1	74	1	
35	1.2D + 1.5Lm1 +...	Yes	Y	1	1.2	39	1.2	77	1.5	37	1	75	1	
36	1.2D + 1.5Lm1 +...	Yes	Y	1	1.2	39	1.2	77	1.5	38	1	76	1	
37	1.2D + 1.5Lm2 +...	Yes	Y	1	1.2	39	1.2	78	1.5	27	1	65	1	
38	1.2D + 1.5Lm2 +...	Yes	Y	1	1.2	39	1.2	78	1.5	28	1	66	1	
39	1.2D + 1.5Lm2 +...	Yes	Y	1	1.2	39	1.2	78	1.5	29	1	67	1	
40	1.2D + 1.5Lm2 +...	Yes	Y	1	1.2	39	1.2	78	1.5	30	1	68	1	
41	1.2D + 1.5Lm2 +...	Yes	Y	1	1.2	39	1.2	78	1.5	31	1	69	1	
42	1.2D + 1.5Lm2 +...	Yes	Y	1	1.2	39	1.2	78	1.5	32	1	70	1	
43	1.2D + 1.5Lm2 +...	Yes	Y	1	1.2	39	1.2	78	1.5	33	1	71	1	
44	1.2D + 1.5Lm2 +...	Yes	Y	1	1.2	39	1.2	78	1.5	34	1	72	1	
45	1.2D + 1.5Lm2 +...	Yes	Y	1	1.2	39	1.2	78	1.5	35	1	73	1	
46	1.2D + 1.5Lm2 +...	Yes	Y	1	1.2	39	1.2	78	1.5	36	1	74	1	
47	1.2D + 1.5Lm2 +...	Yes	Y	1	1.2	39	1.2	78	1.5	37	1	75	1	
48	1.2D + 1.5Lm2 +...	Yes	Y	1	1.2	39	1.2	78	1.5	38	1	76	1	
49	1.2D + 1.5Lv1	Yes	Y	1	1.2	39	1.2	79	1.5					
50	1.2D + 1.5Lv2	Yes	Y	1	1.2	39	1.2	80	1.5					
51	1.4D	Yes	Y	1	1.4	39	1.4							
52	Seismic Mass		Y	1	1	39	1							
53	1.2D + 1.0Ev + ...		Y	1	1.2	39	1.2	SX		SY	1	SZ	-1	
54	1.2D + 1.0Ev + ...		Y	1	1.2	39	1.2	SX	.5	SY	1	SZ	-.866	
55	1.2D + 1.0Ev + ...		Y	1	1.2	39	1.2	SX	.866	SY	1	SZ	-.5	
56	1.2D + 1.0Ev + ...		Y	1	1.2	39	1.2	SX	1	SY	1	SZ		
57	1.2D + 1.0Ev + ...		Y	1	1.2	39	1.2	SX	.866	SY	1	SZ	.5	
58	1.2D + 1.0Ev + ...		Y	1	1.2	39	1.2	SX	.5	SY	1	SZ	.866	
59	1.2D + 1.0Ev + ...		Y	1	1.2	39	1.2	SX		SY	1	SZ	1	
60	1.2D + 1.0Ev + ...		Y	1	1.2	39	1.2	SX	-.5	SY	1	SZ	.866	
61	1.2D + 1.0Ev + ...		Y	1	1.2	39	1.2	SX	-.866	SY	1	SZ	.5	
62	1.2D + 1.0Ev + ...		Y	1	1.2	39	1.2	SX	-1	SY	1	SZ		
63	1.2D + 1.0Ev + ...		Y	1	1.2	39	1.2	SX	-.866	SY	1	SZ	-.5	
64	1.2D + 1.0Ev + ...		Y	1	1.2	39	1.2	SX	-.5	SY	1	SZ	-.866	

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	0	0	0	0	
2	N2	0	3.333333	0	0	
3	N3	6.25	0.145833	2.380208	0	
4	N4	-6.25	0.145833	2.380208	0	
5	N5	6.25	3.479167	2.380208	0	
6	N6	-6.25	3.479167	2.380208	0	
7	N7	-6	0.145833	2.380208	0	
8	N8	-6	3.479167	2.380208	0	
9	N9	-2	0.145833	2.380208	0	
10	N10	-2	3.479167	2.380208	0	
11	N11	2	0.145833	2.380208	0	
12	N12	2	3.479167	2.380208	0	
13	N13	6	0.145833	2.380208	0	
14	N14	6	3.479167	2.380208	0	
15	N15	-6	0.145833	2.630208	0	
16	N16	-6	3.479167	2.630208	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
17	N17	-2	0.145833	2.630208	0	
18	N18	-2	3.479167	2.630208	0	
19	N19	2	0.145833	2.630208	0	
20	N20	2	3.479167	2.630208	0	
21	N21	6	0.145833	2.630208	0	
22	N22	6	3.479167	2.630208	0	
23	N23	-2.5	0	2.380208	0	
24	N24	-2.5	3.333333	2.380208	0	
25	N25	2.5	0	2.380208	0	
26	N26	2.5	3.333333	2.380208	0	
27	N27	-2.5	0	1.958333	0	
28	N28	-2.5	3.333333	1.958333	0	
29	N29	2.5	0	1.958333	0	
30	N30	2.5	3.333333	1.958333	0	
31	N31	0.	0	0.416667	0	
32	N32	0.	3.333333	0.416667	0	
33	N33	-0.53125	0	0.416667	0	
34	N34	-0.53125	3.333333	0.416667	0	
35	N35	0.53125	0	0.416667	0	
36	N36	0.53125	3.333333	0.416667	0	
37	N37	-6	5.8125	2.630208	0	
38	N38	-2	5.8125	2.630208	0	
39	N39	2	5.8125	2.630208	0	
40	N40	6	5.8125	2.630208	0	
41	N41	-6	-2.1875	2.630208	0	
42	N42	-2	-2.1875	2.630208	0	
43	N43	2	-2.1875	2.630208	0	
44	N44	6	-2.1875	2.630208	0	
45	N45	-2.5	3.333333	2.005208	0	
46	N46	-2.5	0.145833	2.380208	0	
47	N47	-2.5	3.479167	2.380208	0	
48	N48	2.5	0.145833	2.380208	0	
49	N49	2.5	3.479167	2.380208	0	
50	N50	-3	3.479167	2.380208	0	
51	N51	3	0.145833	2.380208	0	
52	N52	-2.793164	3.479167	-7.674156	0	
53	N53	5.249432	0.145833	-6.25603	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Face Horizontal	PIPE 2.5	None	None	Q235	Typical	1.61	1.45	1.45	2.89
2	Standoff Horizontal	PIPE 2.0	None	None	Q235	Typical	1.02	.627	.627	1.25
3	Standoff Diagonal	SR 0.75	None	None	Q235	Typical	.442	.016	.016	.031
4	Standoff Vertical	SR 0.625	None	None	Q235	Typical	.307	.007	.007	.015
5	Standoff Plate	PL5/8X3.5	None	None	Q235	Typical	2.188	.071	2.233	.253
6	Tieback	PIPE 2.0	None	None	Q235	Typical	1.02	.627	.627	1.25
7	Antenna Pipe	PIPE 2.0	None	None	A53 Gr. B	Typical	1.02	.627	.627	1.25
8	Dual Antenna Pipe	PIPE 2.5	None	None	A53 Gr. B	Typical	1.61	1.45	1.45	2.89

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (/1E...Density[k/ft...	Yield[ksi]	Ry	Fu[ksi]	Rt	
1	A36 Gr.36	29000	11154	.3	.65	.49	36	1.5	58	1.2
2	A53 Gr. B	29000	11154	.3	.65	.49	35	1.5	60	1.2
3	A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	65	1.1

Hot Rolled Steel Properties (Continued)

	Label	E [ksi]	G [ksi]	Nu	Therm (/1E...	Density[k/ft...	Yield[ksi]	Ry	Fu[ksi]	Rt
4	A992	29000	11154	.3	.65	.49	50	1.1	65	1.1
5	A500 Gr. B 42	29000	11154	.3	.65	.49	42	1.4	58	1.3
6	A500 Gr. B 46	29000	11154	.3	.65	.49	46	1.4	58	1.3
7	Q235	29000	11154	.3	.65	.49	35	1.5	58	1.2

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N4	N3			Face Horizontal	None	None	Q235	Typical
2	M2	N6	N5			Face Horizontal	None	None	Q235	Typical
3	M3	N28	N34			Standoff Horiz...	None	None	Q235	Typical
4	M4	N27	N33			Standoff Horiz...	None	None	Q235	Typical
5	M5	N29	N35			Standoff Horiz...	None	None	Q235	Typical
6	M6	N30	N36			Standoff Horiz...	None	None	Q235	Typical
7	M7	N33	N28			Standoff Diago...	None	None	Q235	Typical
8	M8	N34	N27			Standoff Diago...	None	None	Q235	Typical
9	M9	N35	N30			Standoff Diago...	None	None	Q235	Typical
10	M10	N29	N36			Standoff Diago...	None	None	Q235	Typical
11	M11	N27	N28			Standoff Vertical	None	None	Q235	Typical
12	M12	N33	N34			Standoff Vertical	None	None	Q235	Typical
13	M13	N35	N36			Standoff Vertical	None	None	Q235	Typical
14	M14	N29	N30			Standoff Vertical	None	None	Q235	Typical
15	M15	N24	N28		90	Standoff Plate	None	None	Q235	Typical
16	M16	N23	N27		90	Standoff Plate	None	None	Q235	Typical
17	M17	N25	N29		90	Standoff Plate	None	None	Q235	Typical
18	M18	N26	N30		90	Standoff Plate	None	None	Q235	Typical
19	M19	N34	N32		90	Standoff Plate	None	None	Q235	Typical
20	M20	N36	N32		90	Standoff Plate	None	None	Q235	Typical
21	M21	N33	N31		90	Standoff Plate	None	None	Q235	Typical
22	M22	N35	N31		90	Standoff Plate	None	None	Q235	Typical
23	M23	N50	N52			Tieback	None	None	Q235	Typical
24	M24	N51	N53			Tieback	None	None	Q235	Typical
25	MP1A	N40	N44			Antenna Pipe	None	None	A53 Gr. B	Typical
26	MP2A	N39	N43			Dual Antenna ...	None	None	A53 Gr. B	Typical
27	MP3A	N38	N42			Antenna Pipe	None	None	A53 Gr. B	Typical
28	MP4A	N37	N41			Antenna Pipe	None	None	A53 Gr. B	Typical
29	M29	N7	N15			RIGID	None	None	RIGID	Typical
30	M30	N8	N16			RIGID	None	None	RIGID	Typical
31	M31	N10	N18			RIGID	None	None	RIGID	Typical
32	M32	N9	N17			RIGID	None	None	RIGID	Typical
33	M33	N12	N20			RIGID	None	None	RIGID	Typical
34	M34	N11	N19			RIGID	None	None	RIGID	Typical
35	M35	N14	N22			RIGID	None	None	RIGID	Typical
36	M36	N13	N21			RIGID	None	None	RIGID	Typical
37	M37	N31	N1			RIGID	None	None	RIGID	Typical
38	M38	N32	N2			RIGID	None	None	RIGID	Typical
39	M39	N24	N47			RIGID	None	None	RIGID	Typical
40	M40	N23	N46			RIGID	None	None	RIGID	Typical
41	M41	N26	N49			RIGID	None	None	RIGID	Typical
42	M42	N25	N48			RIGID	None	None	RIGID	Typical
43	M43	N32	N2			RIGID	None	None	RIGID	Typical
44	M44	N31	N1			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	M2						Yes	** NA **			None
3	M3						Yes	** NA **			None
4	M4						Yes	** NA **			None
5	M5						Yes	** NA **			None
6	M6						Yes	** NA **			None
7	M7	BenPIN	BenPIN				Euler Buc... Yes	** NA **			None
8	M8	BenPIN	BenPIN				Euler Buc... Yes	** NA **			None
9	M9	BenPIN	BenPIN				Euler Buc... Yes	** NA **			None
10	M10	BenPIN	BenPIN				Euler Buc... Yes	** NA **			None
11	M11	BenPIN	BenPIN				Yes	** NA **			None
12	M12	BenPIN	BenPIN				Yes	** NA **			None
13	M13	BenPIN	BenPIN				Yes	** NA **			None
14	M14	BenPIN	BenPIN				Yes	** NA **			None
15	M15						Yes	** NA **			None
16	M16						Yes	** NA **			None
17	M17						Yes	** NA **			None
18	M18						Yes	** NA **			None
19	M19						Yes	** NA **			None
20	M20						Yes	** NA **			None
21	M21						Yes	** NA **			None
22	M22						Yes	** NA **			None
23	M23	BenPIN					Yes	** NA **			None
24	M24	BenPIN					Yes	** NA **			None
25	MP1A						Yes	** NA **			None
26	MP2A						Yes	** NA **			None
27	MP3A						Yes	** NA **			None
28	MP4A						Yes	** NA **			None
29	M29						Yes	** NA **			None
30	M30						Yes	** NA **			None
31	M31						Yes	** NA **			None
32	M32						Yes	** NA **			None
33	M33						Yes	** NA **			None
34	M34						Yes	** NA **			None
35	M35						Yes	** NA **			None
36	M36						Yes	** NA **			None
37	M37						Yes	** NA **		Inactive	None
38	M38						Yes	** NA **		Inactive	None
39	M39			OOOXOO			Yes	** NA **			None
40	M40			OOOXOO			Yes	** NA **			None
41	M41			OOOXOO			Yes	** NA **			None
42	M42			OOOXOO			Yes	** NA **			None
43	M43						Yes	** NA **			None
44	M44						Yes	** NA **			None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP1A	Y	-43.55	3
2	MP1A	My	-.022	3
3	MP1A	Mz	0	3
4	MP1A	Y	-43.55	5
5	MP1A	My	-.022	5
6	MP1A	Mz	0	5
7	MP4A	Y	-22.95	.5



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Member Point Loads (BLC 1 : Antenna D) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
8	MP4A	My	-.011	.5
9	MP4A	Mz	0	.5
10	MP4A	Y	-22.95	7.5
11	MP4A	My	-.011	7.5
12	MP4A	Mz	0	7.5
13	MP2A	Y	-21.85	.5
14	MP2A	My	-.011	.5
15	MP2A	Mz	.013	.5
16	MP2A	Y	-21.85	7.5
17	MP2A	My	-.011	7.5
18	MP2A	Mz	.013	7.5
19	MP2A	Y	-21.85	.5
20	MP2A	My	-.011	.5
21	MP2A	Mz	-.013	.5
22	MP2A	Y	-21.85	7.5
23	MP2A	My	-.011	7.5
24	MP2A	Mz	-.013	7.5
25	MP2A	Y	-74.7	1
26	MP2A	My	.037	1
27	MP2A	Mz	0	1
28	MP3A	Y	-70.3	1
29	MP3A	My	.035	1
30	MP3A	Mz	0	1
31	M3	Y	-32	1.5
32	M3	My	0	1.5
33	M3	Mz	0	1.5

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1A	Y	-35.31	3
2	MP1A	My	-.018	3
3	MP1A	Mz	0	3
4	MP1A	Y	-35.31	5
5	MP1A	My	-.018	5
6	MP1A	Mz	0	5
7	MP4A	Y	-66.72	.5
8	MP4A	My	-.033	.5
9	MP4A	Mz	0	.5
10	MP4A	Y	-66.72	7.5
11	MP4A	My	-.033	7.5
12	MP4A	Mz	0	7.5
13	MP2A	Y	-60.082	.5
14	MP2A	My	-.03	.5
15	MP2A	Mz	.035	.5
16	MP2A	Y	-60.082	7.5
17	MP2A	My	-.03	7.5
18	MP2A	Mz	.035	7.5
19	MP2A	Y	-60.082	.5
20	MP2A	My	-.03	.5
21	MP2A	Mz	-.035	.5
22	MP2A	Y	-60.082	7.5
23	MP2A	My	-.03	7.5
24	MP2A	Mz	-.035	7.5
25	MP2A	Y	-44.512	1
26	MP2A	My	.022	1
27	MP2A	Mz	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
28	MP3A	Y	-42.388	1
29	MP3A	My	.021	1
30	MP3A	Mz	0	1
31	M3	Y	-87.177	1.5
32	M3	My	0	1.5
33	M3	Mz	0	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1A	X	0	3
2	MP1A	Z	-80.471	3
3	MP1A	Mx	0	3
4	MP1A	X	0	5
5	MP1A	Z	-80.471	5
6	MP1A	Mx	0	5
7	MP4A	X	0	.5
8	MP4A	Z	-158.032	.5
9	MP4A	Mx	0	.5
10	MP4A	X	0	7.5
11	MP4A	Z	-158.032	7.5
12	MP4A	Mx	0	7.5
13	MP2A	X	0	.5
14	MP2A	Z	-138.342	.5
15	MP2A	Mx	-.081	.5
16	MP2A	X	0	7.5
17	MP2A	Z	-138.342	7.5
18	MP2A	Mx	-.081	7.5
19	MP2A	X	0	.5
20	MP2A	Z	-138.342	.5
21	MP2A	Mx	.081	.5
22	MP2A	X	0	7.5
23	MP2A	Z	-138.342	7.5
24	MP2A	Mx	.081	7.5
25	MP2A	X	0	1
26	MP2A	Z	-64.034	1
27	MP2A	Mx	0	1
28	MP3A	X	0	1
29	MP3A	Z	-64.034	1
30	MP3A	Mx	0	1
31	M3	X	0	1.5
32	M3	Z	-130.787	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1A	X	34.115	3
2	MP1A	Z	-59.088	3
3	MP1A	Mx	-.017	3
4	MP1A	X	34.115	5
5	MP1A	Z	-59.088	5
6	MP1A	Mx	-.017	5
7	MP4A	X	72.403	.5
8	MP4A	Z	-125.405	.5
9	MP4A	Mx	-.036	.5
10	MP4A	X	72.403	7.5
11	MP4A	Z	-125.405	7.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
12	MP4A	Mx	-.036	7.5
13	MP2A	X	63.31	.5
14	MP2A	Z	-109.657	.5
15	MP2A	Mx	-.096	.5
16	MP2A	X	63.31	7.5
17	MP2A	Z	-109.657	7.5
18	MP2A	Mx	-.096	7.5
19	MP2A	X	63.31	.5
20	MP2A	Z	-109.657	.5
21	MP2A	Mx	.032	.5
22	MP2A	X	63.31	7.5
23	MP2A	Z	-109.657	7.5
24	MP2A	Mx	.032	7.5
25	MP2A	X	29.363	1
26	MP2A	Z	-50.859	1
27	MP2A	Mx	.015	1
28	MP3A	X	28.882	1
29	MP3A	Z	-50.025	1
30	MP3A	Mx	.014	1
31	M3	X	69.513	1.5
32	M3	Z	-120.401	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1A	X	37.885	3
2	MP1A	Z	-21.873	3
3	MP1A	Mx	-.019	3
4	MP1A	X	37.885	5
5	MP1A	Z	-21.873	5
6	MP1A	Mx	-.019	5
7	MP4A	X	102.498	.5
8	MP4A	Z	-59.177	.5
9	MP4A	Mx	-.051	.5
10	MP4A	X	102.498	7.5
11	MP4A	Z	-59.177	7.5
12	MP4A	Mx	-.051	7.5
13	MP2A	X	89.355	.5
14	MP2A	Z	-51.589	.5
15	MP2A	Mx	-.075	.5
16	MP2A	X	89.355	7.5
17	MP2A	Z	-51.589	7.5
18	MP2A	Mx	-.075	7.5
19	MP2A	X	89.355	.5
20	MP2A	Z	-51.589	.5
21	MP2A	Mx	-.015	.5
22	MP2A	X	89.355	7.5
23	MP2A	Z	-51.589	7.5
24	MP2A	Mx	-.015	7.5
25	MP2A	X	41.666	1
26	MP2A	Z	-24.056	1
27	MP2A	Mx	.021	1
28	MP3A	X	39.164	1
29	MP3A	Z	-22.611	1
30	MP3A	Mx	.02	1
31	M3	X	113.265	1.5



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
32	M3	Z	-65.393	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	31.504	3
2	MP1A	Z	0	3
3	MP1A	Mx	-.016	3
4	MP1A	X	31.504	5
5	MP1A	Z	0	5
6	MP1A	Mx	-.016	5
7	MP4A	X	105.129	.5
8	MP4A	Z	0	.5
9	MP4A	Mx	-.053	.5
10	MP4A	X	105.129	7.5
11	MP4A	Z	0	7.5
12	MP4A	Mx	-.053	7.5
13	MP2A	X	91.457	.5
14	MP2A	Z	0	.5
15	MP2A	Mx	-.046	.5
16	MP2A	X	91.457	7.5
17	MP2A	Z	0	7.5
18	MP2A	Mx	-.046	7.5
19	MP2A	X	91.457	.5
20	MP2A	Z	0	.5
21	MP2A	Mx	-.046	.5
22	MP2A	X	91.457	7.5
23	MP2A	Z	0	7.5
24	MP2A	Mx	-.046	7.5
25	MP2A	X	42.804	1
26	MP2A	Z	0	1
27	MP2A	Mx	.021	1
28	MP3A	X	38.951	1
29	MP3A	Z	0	1
30	MP3A	Mx	.019	1
31	M3	X	114.307	1.5
32	M3	Z	0	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	37.885	3
2	MP1A	Z	21.873	3
3	MP1A	Mx	-.019	3
4	MP1A	X	37.885	5
5	MP1A	Z	21.873	5
6	MP1A	Mx	-.019	5
7	MP4A	X	102.498	.5
8	MP4A	Z	59.177	.5
9	MP4A	Mx	-.051	.5
10	MP4A	X	102.498	7.5
11	MP4A	Z	59.177	7.5
12	MP4A	Mx	-.051	7.5
13	MP2A	X	89.355	.5
14	MP2A	Z	51.589	.5
15	MP2A	Mx	-.015	.5



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
16	MP2A	X	89.355	7.5
17	MP2A	Z	51.589	7.5
18	MP2A	Mx	-.015	7.5
19	MP2A	X	89.355	.5
20	MP2A	Z	51.589	.5
21	MP2A	Mx	-.075	.5
22	MP2A	X	89.355	7.5
23	MP2A	Z	51.589	7.5
24	MP2A	Mx	-.075	7.5
25	MP2A	X	41.666	1
26	MP2A	Z	24.056	1
27	MP2A	Mx	.021	1
28	MP3A	X	39.164	1
29	MP3A	Z	22.611	1
30	MP3A	Mx	.02	1
31	M3	X	91.857	1.5
32	M3	Z	53.034	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	34.115	3
2	MP1A	Z	59.088	3
3	MP1A	Mx	-.017	3
4	MP1A	X	34.115	5
5	MP1A	Z	59.088	5
6	MP1A	Mx	-.017	5
7	MP4A	X	72.403	.5
8	MP4A	Z	125.405	.5
9	MP4A	Mx	-.036	.5
10	MP4A	X	72.403	7.5
11	MP4A	Z	125.405	7.5
12	MP4A	Mx	-.036	7.5
13	MP2A	X	63.31	.5
14	MP2A	Z	109.657	.5
15	MP2A	Mx	.032	.5
16	MP2A	X	63.31	7.5
17	MP2A	Z	109.657	7.5
18	MP2A	Mx	.032	7.5
19	MP2A	X	63.31	.5
20	MP2A	Z	109.657	.5
21	MP2A	Mx	-.096	.5
22	MP2A	X	63.31	7.5
23	MP2A	Z	109.657	7.5
24	MP2A	Mx	-.096	7.5
25	MP2A	X	29.363	1
26	MP2A	Z	50.859	1
27	MP2A	Mx	.015	1
28	MP3A	X	28.882	1
29	MP3A	Z	50.025	1
30	MP3A	Mx	.014	1
31	M3	X	57.154	1.5
32	M3	Z	98.993	1.5
33	M3	Mx	0	1.5



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
1	MP1A	X	0	3
2	MP1A	Z	80.471	3
3	MP1A	Mx	0	3
4	MP1A	X	0	5
5	MP1A	Z	80.471	5
6	MP1A	Mx	0	5
7	MP4A	X	0	.5
8	MP4A	Z	158.032	.5
9	MP4A	Mx	0	.5
10	MP4A	X	0	7.5
11	MP4A	Z	158.032	7.5
12	MP4A	Mx	0	7.5
13	MP2A	X	0	.5
14	MP2A	Z	138.342	.5
15	MP2A	Mx	.081	.5
16	MP2A	X	0	7.5
17	MP2A	Z	138.342	7.5
18	MP2A	Mx	.081	7.5
19	MP2A	X	0	.5
20	MP2A	Z	138.342	.5
21	MP2A	Mx	-.081	.5
22	MP2A	X	0	7.5
23	MP2A	Z	138.342	7.5
24	MP2A	Mx	-.081	7.5
25	MP2A	X	0	1
26	MP2A	Z	64.034	1
27	MP2A	Mx	0	1
28	MP3A	X	0	1
29	MP3A	Z	64.034	1
30	MP3A	Mx	0	1
31	M3	X	0	1.5
32	M3	Z	130.787	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
1	MP1A	X	-34.115	3
2	MP1A	Z	59.088	3
3	MP1A	Mx	.017	3
4	MP1A	X	-34.115	5
5	MP1A	Z	59.088	5
6	MP1A	Mx	.017	5
7	MP4A	X	-72.403	.5
8	MP4A	Z	125.405	.5
9	MP4A	Mx	.036	.5
10	MP4A	X	-72.403	7.5
11	MP4A	Z	125.405	7.5
12	MP4A	Mx	.036	7.5
13	MP2A	X	-63.31	.5
14	MP2A	Z	109.657	.5
15	MP2A	Mx	.096	.5
16	MP2A	X	-63.31	7.5
17	MP2A	Z	109.657	7.5
18	MP2A	Mx	.096	7.5
19	MP2A	X	-63.31	.5
20	MP2A	Z	109.657	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
21	MP2A	Mx	-.032	.5
22	MP2A	X	-63.31	7.5
23	MP2A	Z	109.657	7.5
24	MP2A	Mx	-.032	7.5
25	MP2A	X	-29.363	1
26	MP2A	Z	50.859	1
27	MP2A	Mx	-.015	1
28	MP3A	X	-28.882	1
29	MP3A	Z	50.025	1
30	MP3A	Mx	-.014	1
31	M3	X	-69.513	1.5
32	M3	Z	120.401	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP1A	X	-37.885	3
2	MP1A	Z	21.873	3
3	MP1A	Mx	.019	3
4	MP1A	X	-37.885	5
5	MP1A	Z	21.873	5
6	MP1A	Mx	.019	5
7	MP4A	X	-102.498	.5
8	MP4A	Z	59.177	.5
9	MP4A	Mx	.051	.5
10	MP4A	X	-102.498	7.5
11	MP4A	Z	59.177	7.5
12	MP4A	Mx	.051	7.5
13	MP2A	X	-89.355	.5
14	MP2A	Z	51.589	.5
15	MP2A	Mx	.075	.5
16	MP2A	X	-89.355	7.5
17	MP2A	Z	51.589	7.5
18	MP2A	Mx	.075	7.5
19	MP2A	X	-89.355	.5
20	MP2A	Z	51.589	.5
21	MP2A	Mx	.015	.5
22	MP2A	X	-89.355	7.5
23	MP2A	Z	51.589	7.5
24	MP2A	Mx	.015	7.5
25	MP2A	X	-41.666	1
26	MP2A	Z	24.056	1
27	MP2A	Mx	-.021	1
28	MP3A	X	-39.164	1
29	MP3A	Z	22.611	1
30	MP3A	Mx	-.02	1
31	M3	X	-113.265	1.5
32	M3	Z	65.393	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP1A	X	-31.504	3
2	MP1A	Z	0	3
3	MP1A	Mx	.016	3
4	MP1A	X	-31.504	5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
5	MP1A	Z	0	5
6	MP1A	Mx	.016	5
7	MP4A	X	-105.129	.5
8	MP4A	Z	0	.5
9	MP4A	Mx	.053	.5
10	MP4A	X	-105.129	7.5
11	MP4A	Z	0	7.5
12	MP4A	Mx	.053	7.5
13	MP2A	X	-91.457	.5
14	MP2A	Z	0	.5
15	MP2A	Mx	.046	.5
16	MP2A	X	-91.457	7.5
17	MP2A	Z	0	7.5
18	MP2A	Mx	.046	7.5
19	MP2A	X	-91.457	.5
20	MP2A	Z	0	.5
21	MP2A	Mx	.046	.5
22	MP2A	X	-91.457	7.5
23	MP2A	Z	0	7.5
24	MP2A	Mx	.046	7.5
25	MP2A	X	-42.804	1
26	MP2A	Z	0	1
27	MP2A	Mx	-.021	1
28	MP3A	X	-38.951	1
29	MP3A	Z	0	1
30	MP3A	Mx	-.019	1
31	M3	X	-114.307	1.5
32	M3	Z	0	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP1A	X	-37.885	3
2	MP1A	Z	-21.873	3
3	MP1A	Mx	.019	3
4	MP1A	X	-37.885	5
5	MP1A	Z	-21.873	5
6	MP1A	Mx	.019	5
7	MP4A	X	-102.498	.5
8	MP4A	Z	-59.177	.5
9	MP4A	Mx	.051	.5
10	MP4A	X	-102.498	7.5
11	MP4A	Z	-59.177	7.5
12	MP4A	Mx	.051	7.5
13	MP2A	X	-89.355	.5
14	MP2A	Z	-51.589	.5
15	MP2A	Mx	.015	.5
16	MP2A	X	-89.355	7.5
17	MP2A	Z	-51.589	7.5
18	MP2A	Mx	.015	7.5
19	MP2A	X	-89.355	.5
20	MP2A	Z	-51.589	.5
21	MP2A	Mx	.075	.5
22	MP2A	X	-89.355	7.5
23	MP2A	Z	-51.589	7.5
24	MP2A	Mx	.075	7.5



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP2A	X	-41.666	1
26	MP2A	Z	-24.056	1
27	MP2A	Mx	-.021	1
28	MP3A	X	-39.164	1
29	MP3A	Z	-22.611	1
30	MP3A	Mx	-.02	1
31	M3	X	-91.857	1.5
32	M3	Z	-53.034	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-34.115	3
2	MP1A	Z	-59.088	3
3	MP1A	Mx	.017	3
4	MP1A	X	-34.115	5
5	MP1A	Z	-59.088	5
6	MP1A	Mx	.017	5
7	MP4A	X	-72.403	.5
8	MP4A	Z	-125.405	.5
9	MP4A	Mx	.036	.5
10	MP4A	X	-72.403	7.5
11	MP4A	Z	-125.405	7.5
12	MP4A	Mx	.036	7.5
13	MP2A	X	-63.31	.5
14	MP2A	Z	-109.657	.5
15	MP2A	Mx	-.032	.5
16	MP2A	X	-63.31	7.5
17	MP2A	Z	-109.657	7.5
18	MP2A	Mx	-.032	7.5
19	MP2A	X	-63.31	.5
20	MP2A	Z	-109.657	.5
21	MP2A	Mx	.096	.5
22	MP2A	X	-63.31	7.5
23	MP2A	Z	-109.657	7.5
24	MP2A	Mx	.096	7.5
25	MP2A	X	-29.363	1
26	MP2A	Z	-50.859	1
27	MP2A	Mx	-.015	1
28	MP3A	X	-28.882	1
29	MP3A	Z	-50.025	1
30	MP3A	Mx	-.014	1
31	M3	X	-57.154	1.5
32	M3	Z	-98.993	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	3
2	MP1A	Z	-15.256	3
3	MP1A	Mx	0	3
4	MP1A	X	0	5
5	MP1A	Z	-15.256	5
6	MP1A	Mx	0	5
7	MP4A	X	0	.5
8	MP4A	Z	-29.188	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
9	MP4A	Mx	0	.5
10	MP4A	X	0	7.5
11	MP4A	Z	-29.188	7.5
12	MP4A	Mx	0	7.5
13	MP2A	X	0	.5
14	MP2A	Z	-25.613	.5
15	MP2A	Mx	-.015	.5
16	MP2A	X	0	7.5
17	MP2A	Z	-25.613	7.5
18	MP2A	Mx	-.015	7.5
19	MP2A	X	0	.5
20	MP2A	Z	-25.613	.5
21	MP2A	Mx	.015	.5
22	MP2A	X	0	7.5
23	MP2A	Z	-25.613	7.5
24	MP2A	Mx	.015	7.5
25	MP2A	X	0	1
26	MP2A	Z	-12.852	1
27	MP2A	Mx	0	1
28	MP3A	X	0	1
29	MP3A	Z	-12.852	1
30	MP3A	Mx	0	1
31	M3	X	0	1.5
32	M3	Z	-24.981	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP1A	X	6.533	3
2	MP1A	Z	-11.315	3
3	MP1A	Mx	-.003	3
4	MP1A	X	6.533	5
5	MP1A	Z	-11.315	5
6	MP1A	Mx	-.003	5
7	MP4A	X	13.465	.5
8	MP4A	Z	-23.322	.5
9	MP4A	Mx	-.007	.5
10	MP4A	X	13.465	7.5
11	MP4A	Z	-23.322	7.5
12	MP4A	Mx	-.007	7.5
13	MP2A	X	11.812	.5
14	MP2A	Z	-20.459	.5
15	MP2A	Mx	-.018	.5
16	MP2A	X	11.812	7.5
17	MP2A	Z	-20.459	7.5
18	MP2A	Mx	-.018	7.5
19	MP2A	X	11.812	.5
20	MP2A	Z	-20.459	.5
21	MP2A	Mx	.006	.5
22	MP2A	X	11.812	7.5
23	MP2A	Z	-20.459	7.5
24	MP2A	Mx	.006	7.5
25	MP2A	X	5.937	1
26	MP2A	Z	-10.283	1
27	MP2A	Mx	.003	1
28	MP3A	X	5.849	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
29	MP3A	Z	-10.13	1
30	MP3A	Mx	.003	1
31	M3	X	13.211	1.5
32	M3	Z	-22.883	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1A	X	7.521	3
2	MP1A	Z	-4.342	3
3	MP1A	Mx	-.004	3
4	MP1A	X	7.521	5
5	MP1A	Z	-4.342	5
6	MP1A	Mx	-.004	5
7	MP4A	X	19.411	.5
8	MP4A	Z	-11.207	.5
9	MP4A	Mx	-.01	.5
10	MP4A	X	19.411	7.5
11	MP4A	Z	-11.207	7.5
12	MP4A	Mx	-.01	7.5
13	MP2A	X	17.014	.5
14	MP2A	Z	-9.823	.5
15	MP2A	Mx	-.014	.5
16	MP2A	X	17.014	7.5
17	MP2A	Z	-9.823	7.5
18	MP2A	Mx	-.014	7.5
19	MP2A	X	17.014	.5
20	MP2A	Z	-9.823	.5
21	MP2A	Mx	-.003	.5
22	MP2A	X	17.014	7.5
23	MP2A	Z	-9.823	7.5
24	MP2A	Mx	-.003	7.5
25	MP2A	X	8.587	1
26	MP2A	Z	-4.958	1
27	MP2A	Mx	.004	1
28	MP3A	X	8.13	1
29	MP3A	Z	-4.694	1
30	MP3A	Mx	.004	1
31	M3	X	21.635	1.5
32	M3	Z	-12.491	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1A	X	6.494	3
2	MP1A	Z	0	3
3	MP1A	Mx	-.003	3
4	MP1A	X	6.494	5
5	MP1A	Z	0	5
6	MP1A	Mx	-.003	5
7	MP4A	X	20.156	.5
8	MP4A	Z	0	.5
9	MP4A	Mx	-.01	.5
10	MP4A	X	20.156	7.5
11	MP4A	Z	0	7.5
12	MP4A	Mx	-.01	7.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
13	MP2A	X	17.657	.5
14	MP2A	Z	0	.5
15	MP2A	Mx	-.009	.5
16	MP2A	X	17.657	7.5
17	MP2A	Z	0	7.5
18	MP2A	Mx	-.009	7.5
19	MP2A	X	17.657	.5
20	MP2A	Z	0	.5
21	MP2A	Mx	-.009	.5
22	MP2A	X	17.657	7.5
23	MP2A	Z	0	7.5
24	MP2A	Mx	-.009	7.5
25	MP2A	X	8.937	1
26	MP2A	Z	0	1
27	MP2A	Mx	.004	1
28	MP3A	X	8.232	1
29	MP3A	Z	0	1
30	MP3A	Mx	.004	1
31	M3	X	22.099	1.5
32	M3	Z	0	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP1A	X	7.521	3
2	MP1A	Z	4.342	3
3	MP1A	Mx	-.004	3
4	MP1A	X	7.521	5
5	MP1A	Z	4.342	5
6	MP1A	Mx	-.004	5
7	MP4A	X	19.411	.5
8	MP4A	Z	11.207	.5
9	MP4A	Mx	-.01	.5
10	MP4A	X	19.411	7.5
11	MP4A	Z	11.207	7.5
12	MP4A	Mx	-.01	7.5
13	MP2A	X	17.014	.5
14	MP2A	Z	9.823	.5
15	MP2A	Mx	-.003	.5
16	MP2A	X	17.014	7.5
17	MP2A	Z	9.823	7.5
18	MP2A	Mx	-.003	7.5
19	MP2A	X	17.014	.5
20	MP2A	Z	9.823	.5
21	MP2A	Mx	-.014	.5
22	MP2A	X	17.014	7.5
23	MP2A	Z	9.823	7.5
24	MP2A	Mx	-.014	7.5
25	MP2A	X	8.587	1
26	MP2A	Z	4.958	1
27	MP2A	Mx	.004	1
28	MP3A	X	8.13	1
29	MP3A	Z	4.694	1
30	MP3A	Mx	.004	1
31	M3	X	17.891	1.5
32	M3	Z	10.329	1.5



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	6.533	3
2	MP1A	Z	11.315	3
3	MP1A	Mx	-.003	3
4	MP1A	X	6.533	5
5	MP1A	Z	11.315	5
6	MP1A	Mx	-.003	5
7	MP4A	X	13.465	.5
8	MP4A	Z	23.322	.5
9	MP4A	Mx	-.007	.5
10	MP4A	X	13.465	7.5
11	MP4A	Z	23.322	7.5
12	MP4A	Mx	-.007	7.5
13	MP2A	X	11.812	.5
14	MP2A	Z	20.459	.5
15	MP2A	Mx	.006	.5
16	MP2A	X	11.812	7.5
17	MP2A	Z	20.459	7.5
18	MP2A	Mx	.006	7.5
19	MP2A	X	11.812	.5
20	MP2A	Z	20.459	.5
21	MP2A	Mx	-.018	.5
22	MP2A	X	11.812	7.5
23	MP2A	Z	20.459	7.5
24	MP2A	Mx	-.018	7.5
25	MP2A	X	5.937	1
26	MP2A	Z	10.283	1
27	MP2A	Mx	.003	1
28	MP3A	X	5.849	1
29	MP3A	Z	10.13	1
30	MP3A	Mx	.003	1
31	M3	X	11.05	1.5
32	M3	Z	19.139	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	3
2	MP1A	Z	15.256	3
3	MP1A	Mx	0	3
4	MP1A	X	0	5
5	MP1A	Z	15.256	5
6	MP1A	Mx	0	5
7	MP4A	X	0	.5
8	MP4A	Z	29.188	.5
9	MP4A	Mx	0	.5
10	MP4A	X	0	7.5
11	MP4A	Z	29.188	7.5
12	MP4A	Mx	0	7.5
13	MP2A	X	0	.5
14	MP2A	Z	25.613	.5
15	MP2A	Mx	.015	.5
16	MP2A	X	0	7.5



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP2A	Z	25.613	7.5
18	MP2A	Mx	.015	7.5
19	MP2A	X	0	.5
20	MP2A	Z	25.613	.5
21	MP2A	Mx	-.015	.5
22	MP2A	X	0	7.5
23	MP2A	Z	25.613	7.5
24	MP2A	Mx	-.015	7.5
25	MP2A	X	0	1
26	MP2A	Z	12.852	1
27	MP2A	Mx	0	1
28	MP3A	X	0	1
29	MP3A	Z	12.852	1
30	MP3A	Mx	0	1
31	M3	X	0	1.5
32	M3	Z	24.981	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-6.533	3
2	MP1A	Z	11.315	3
3	MP1A	Mx	.003	3
4	MP1A	X	-6.533	5
5	MP1A	Z	11.315	5
6	MP1A	Mx	.003	5
7	MP4A	X	-13.465	.5
8	MP4A	Z	23.322	.5
9	MP4A	Mx	.007	.5
10	MP4A	X	-13.465	7.5
11	MP4A	Z	23.322	7.5
12	MP4A	Mx	.007	7.5
13	MP2A	X	-11.812	.5
14	MP2A	Z	20.459	.5
15	MP2A	Mx	.018	.5
16	MP2A	X	-11.812	7.5
17	MP2A	Z	20.459	7.5
18	MP2A	Mx	.018	7.5
19	MP2A	X	-11.812	.5
20	MP2A	Z	20.459	.5
21	MP2A	Mx	-.006	.5
22	MP2A	X	-11.812	7.5
23	MP2A	Z	20.459	7.5
24	MP2A	Mx	-.006	7.5
25	MP2A	X	-5.937	1
26	MP2A	Z	10.283	1
27	MP2A	Mx	-.003	1
28	MP3A	X	-5.849	1
29	MP3A	Z	10.13	1
30	MP3A	Mx	-.003	1
31	M3	X	-13.211	1.5
32	M3	Z	22.883	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
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Member Point Loads (BLC 23 : Antenna Wi (240 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
1	MP1A	X	-7.521	3
2	MP1A	Z	4.342	3
3	MP1A	Mx	.004	3
4	MP1A	X	-7.521	5
5	MP1A	Z	4.342	5
6	MP1A	Mx	.004	5
7	MP4A	X	-19.411	.5
8	MP4A	Z	11.207	.5
9	MP4A	Mx	.01	.5
10	MP4A	X	-19.411	7.5
11	MP4A	Z	11.207	7.5
12	MP4A	Mx	.01	7.5
13	MP2A	X	-17.014	.5
14	MP2A	Z	9.823	.5
15	MP2A	Mx	.014	.5
16	MP2A	X	-17.014	7.5
17	MP2A	Z	9.823	7.5
18	MP2A	Mx	.014	7.5
19	MP2A	X	-17.014	.5
20	MP2A	Z	9.823	.5
21	MP2A	Mx	.003	.5
22	MP2A	X	-17.014	7.5
23	MP2A	Z	9.823	7.5
24	MP2A	Mx	.003	7.5
25	MP2A	X	-8.587	1
26	MP2A	Z	4.958	1
27	MP2A	Mx	-.004	1
28	MP3A	X	-8.13	1
29	MP3A	Z	4.694	1
30	MP3A	Mx	-.004	1
31	M3	X	-21.635	1.5
32	M3	Z	12.491	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
1	MP1A	X	-6.494	3
2	MP1A	Z	0	3
3	MP1A	Mx	.003	3
4	MP1A	X	-6.494	5
5	MP1A	Z	0	5
6	MP1A	Mx	.003	5
7	MP4A	X	-20.156	.5
8	MP4A	Z	0	.5
9	MP4A	Mx	.01	.5
10	MP4A	X	-20.156	7.5
11	MP4A	Z	0	7.5
12	MP4A	Mx	.01	7.5
13	MP2A	X	-17.657	.5
14	MP2A	Z	0	.5
15	MP2A	Mx	.009	.5
16	MP2A	X	-17.657	7.5
17	MP2A	Z	0	7.5
18	MP2A	Mx	.009	7.5
19	MP2A	X	-17.657	.5
20	MP2A	Z	0	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
21	MP2A	Mx	.009	.5
22	MP2A	X	-17.657	7.5
23	MP2A	Z	0	7.5
24	MP2A	Mx	.009	7.5
25	MP2A	X	-8.937	1
26	MP2A	Z	0	1
27	MP2A	Mx	-.004	1
28	MP3A	X	-8.232	1
29	MP3A	Z	0	1
30	MP3A	Mx	-.004	1
31	M3	X	-22.099	1.5
32	M3	Z	0	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP1A	X	-7.521	3
2	MP1A	Z	-4.342	3
3	MP1A	Mx	.004	3
4	MP1A	X	-7.521	5
5	MP1A	Z	-4.342	5
6	MP1A	Mx	.004	5
7	MP4A	X	-19.411	.5
8	MP4A	Z	-11.207	.5
9	MP4A	Mx	.01	.5
10	MP4A	X	-19.411	7.5
11	MP4A	Z	-11.207	7.5
12	MP4A	Mx	.01	7.5
13	MP2A	X	-17.014	.5
14	MP2A	Z	-9.823	.5
15	MP2A	Mx	.003	.5
16	MP2A	X	-17.014	7.5
17	MP2A	Z	-9.823	7.5
18	MP2A	Mx	.003	7.5
19	MP2A	X	-17.014	.5
20	MP2A	Z	-9.823	.5
21	MP2A	Mx	.014	.5
22	MP2A	X	-17.014	7.5
23	MP2A	Z	-9.823	7.5
24	MP2A	Mx	.014	7.5
25	MP2A	X	-8.587	1
26	MP2A	Z	-4.958	1
27	MP2A	Mx	-.004	1
28	MP3A	X	-8.13	1
29	MP3A	Z	-4.694	1
30	MP3A	Mx	-.004	1
31	M3	X	-17.891	1.5
32	M3	Z	-10.329	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP1A	X	-6.533	3
2	MP1A	Z	-11.315	3
3	MP1A	Mx	.003	3
4	MP1A	X	-6.533	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
5	MP1A	Z	-11.315	5
6	MP1A	Mx	.003	5
7	MP4A	X	-13.465	.5
8	MP4A	Z	-23.322	.5
9	MP4A	Mx	.007	.5
10	MP4A	X	-13.465	7.5
11	MP4A	Z	-23.322	7.5
12	MP4A	Mx	.007	7.5
13	MP2A	X	-11.812	.5
14	MP2A	Z	-20.459	.5
15	MP2A	Mx	-.006	.5
16	MP2A	X	-11.812	7.5
17	MP2A	Z	-20.459	7.5
18	MP2A	Mx	-.006	7.5
19	MP2A	X	-11.812	.5
20	MP2A	Z	-20.459	.5
21	MP2A	Mx	.018	.5
22	MP2A	X	-11.812	7.5
23	MP2A	Z	-20.459	7.5
24	MP2A	Mx	.018	7.5
25	MP2A	X	-5.937	1
26	MP2A	Z	-10.283	1
27	MP2A	Mx	-.003	1
28	MP3A	X	-5.849	1
29	MP3A	Z	-10.13	1
30	MP3A	Mx	-.003	1
31	M3	X	-11.05	1.5
32	M3	Z	-19.139	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
1	MP1A	X	0	3
2	MP1A	Z	-4.866	3
3	MP1A	Mx	0	3
4	MP1A	X	0	5
5	MP1A	Z	-4.866	5
6	MP1A	Mx	0	5
7	MP4A	X	0	.5
8	MP4A	Z	-9.556	.5
9	MP4A	Mx	0	.5
10	MP4A	X	0	7.5
11	MP4A	Z	-9.556	7.5
12	MP4A	Mx	0	7.5
13	MP2A	X	0	.5
14	MP2A	Z	-8.365	.5
15	MP2A	Mx	-.005	.5
16	MP2A	X	0	7.5
17	MP2A	Z	-8.365	7.5
18	MP2A	Mx	-.005	7.5
19	MP2A	X	0	.5
20	MP2A	Z	-8.365	.5
21	MP2A	Mx	.005	.5
22	MP2A	X	0	7.5
23	MP2A	Z	-8.365	7.5
24	MP2A	Mx	.005	7.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
25	MP2A	X	0	1
26	MP2A	Z	-3.872	1
27	MP2A	Mx	0	1
28	MP3A	X	0	1
29	MP3A	Z	-3.872	1
30	MP3A	Mx	0	1
31	M3	X	0	1.5
32	M3	Z	-7.908	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
1	MP1A	X	2.063	3
2	MP1A	Z	-3.573	3
3	MP1A	Mx	-.001	3
4	MP1A	X	2.063	5
5	MP1A	Z	-3.573	5
6	MP1A	Mx	-.001	5
7	MP4A	X	4.378	.5
8	MP4A	Z	-7.583	.5
9	MP4A	Mx	-.002	.5
10	MP4A	X	4.378	7.5
11	MP4A	Z	-7.583	7.5
12	MP4A	Mx	-.002	7.5
13	MP2A	X	3.828	.5
14	MP2A	Z	-6.631	.5
15	MP2A	Mx	-.006	.5
16	MP2A	X	3.828	7.5
17	MP2A	Z	-6.631	7.5
18	MP2A	Mx	-.006	7.5
19	MP2A	X	3.828	.5
20	MP2A	Z	-6.631	.5
21	MP2A	Mx	.002	.5
22	MP2A	X	3.828	7.5
23	MP2A	Z	-6.631	7.5
24	MP2A	Mx	.002	7.5
25	MP2A	X	1.776	1
26	MP2A	Z	-3.075	1
27	MP2A	Mx	.000888	1
28	MP3A	X	1.746	1
29	MP3A	Z	-3.025	1
30	MP3A	Mx	.000873	1
31	M3	X	4.203	1.5
32	M3	Z	-7.28	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
1	MP1A	X	2.291	3
2	MP1A	Z	-1.323	3
3	MP1A	Mx	-.001	3
4	MP1A	X	2.291	5
5	MP1A	Z	-1.323	5
6	MP1A	Mx	-.001	5
7	MP4A	X	6.198	.5
8	MP4A	Z	-3.578	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
9	MP4A	Mx	-.003	.5
10	MP4A	X	6.198	7.5
11	MP4A	Z	-3.578	7.5
12	MP4A	Mx	-.003	7.5
13	MP2A	X	5.403	.5
14	MP2A	Z	-3.119	.5
15	MP2A	Mx	-.005	.5
16	MP2A	X	5.403	7.5
17	MP2A	Z	-3.119	7.5
18	MP2A	Mx	-.005	7.5
19	MP2A	X	5.403	.5
20	MP2A	Z	-3.119	.5
21	MP2A	Mx	-.000882	.5
22	MP2A	X	5.403	7.5
23	MP2A	Z	-3.119	7.5
24	MP2A	Mx	-.000882	7.5
25	MP2A	X	2.519	1
26	MP2A	Z	-1.455	1
27	MP2A	Mx	.001	1
28	MP3A	X	2.368	1
29	MP3A	Z	-1.367	1
30	MP3A	Mx	.001	1
31	M3	X	6.849	1.5
32	M3	Z	-3.954	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP1A	X	1.905	3
2	MP1A	Z	0	3
3	MP1A	Mx	-.000952	3
4	MP1A	X	1.905	5
5	MP1A	Z	0	5
6	MP1A	Mx	-.000952	5
7	MP4A	X	6.357	.5
8	MP4A	Z	0	.5
9	MP4A	Mx	-.003	.5
10	MP4A	X	6.357	7.5
11	MP4A	Z	0	7.5
12	MP4A	Mx	-.003	7.5
13	MP2A	X	5.53	.5
14	MP2A	Z	0	.5
15	MP2A	Mx	-.003	.5
16	MP2A	X	5.53	7.5
17	MP2A	Z	0	7.5
18	MP2A	Mx	-.003	7.5
19	MP2A	X	5.53	.5
20	MP2A	Z	0	.5
21	MP2A	Mx	-.003	.5
22	MP2A	X	5.53	7.5
23	MP2A	Z	0	7.5
24	MP2A	Mx	-.003	7.5
25	MP2A	X	2.588	1
26	MP2A	Z	0	1
27	MP2A	Mx	.001	1
28	MP3A	X	2.355	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
29	MP3A	Z	0	1
30	MP3A	Mx	.001	1
31	M3	X	6.912	1.5
32	M3	Z	0	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP1A	X	2.291	3
2	MP1A	Z	1.323	3
3	MP1A	Mx	-.001	3
4	MP1A	X	2.291	5
5	MP1A	Z	1.323	5
6	MP1A	Mx	-.001	5
7	MP4A	X	6.198	.5
8	MP4A	Z	3.578	.5
9	MP4A	Mx	-.003	.5
10	MP4A	X	6.198	7.5
11	MP4A	Z	3.578	7.5
12	MP4A	Mx	-.003	7.5
13	MP2A	X	5.403	.5
14	MP2A	Z	3.119	.5
15	MP2A	Mx	-.000882	.5
16	MP2A	X	5.403	7.5
17	MP2A	Z	3.119	7.5
18	MP2A	Mx	-.000882	7.5
19	MP2A	X	5.403	.5
20	MP2A	Z	3.119	.5
21	MP2A	Mx	-.005	.5
22	MP2A	X	5.403	7.5
23	MP2A	Z	3.119	7.5
24	MP2A	Mx	-.005	7.5
25	MP2A	X	2.519	1
26	MP2A	Z	1.455	1
27	MP2A	Mx	.001	1
28	MP3A	X	2.368	1
29	MP3A	Z	1.367	1
30	MP3A	Mx	.001	1
31	M3	X	5.554	1.5
32	M3	Z	3.207	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP1A	X	2.063	3
2	MP1A	Z	3.573	3
3	MP1A	Mx	-.001	3
4	MP1A	X	2.063	5
5	MP1A	Z	3.573	5
6	MP1A	Mx	-.001	5
7	MP4A	X	4.378	.5
8	MP4A	Z	7.583	.5
9	MP4A	Mx	-.002	.5
10	MP4A	X	4.378	7.5
11	MP4A	Z	7.583	7.5
12	MP4A	Mx	-.002	7.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
13	MP2A	X	3.828	.5
14	MP2A	Z	6.631	.5
15	MP2A	Mx	.002	.5
16	MP2A	X	3.828	7.5
17	MP2A	Z	6.631	7.5
18	MP2A	Mx	.002	7.5
19	MP2A	X	3.828	.5
20	MP2A	Z	6.631	.5
21	MP2A	Mx	-.006	.5
22	MP2A	X	3.828	7.5
23	MP2A	Z	6.631	7.5
24	MP2A	Mx	-.006	7.5
25	MP2A	X	1.776	1
26	MP2A	Z	3.075	1
27	MP2A	Mx	.000888	1
28	MP3A	X	1.746	1
29	MP3A	Z	3.025	1
30	MP3A	Mx	.000873	1
31	M3	X	3.456	1.5
32	M3	Z	5.986	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP1A	X	0	3
2	MP1A	Z	4.866	3
3	MP1A	Mx	0	3
4	MP1A	X	0	5
5	MP1A	Z	4.866	5
6	MP1A	Mx	0	5
7	MP4A	X	0	.5
8	MP4A	Z	9.556	.5
9	MP4A	Mx	0	.5
10	MP4A	X	0	7.5
11	MP4A	Z	9.556	7.5
12	MP4A	Mx	0	7.5
13	MP2A	X	0	.5
14	MP2A	Z	8.365	.5
15	MP2A	Mx	.005	.5
16	MP2A	X	0	7.5
17	MP2A	Z	8.365	7.5
18	MP2A	Mx	.005	7.5
19	MP2A	X	0	.5
20	MP2A	Z	8.365	.5
21	MP2A	Mx	-.005	.5
22	MP2A	X	0	7.5
23	MP2A	Z	8.365	7.5
24	MP2A	Mx	-.005	7.5
25	MP2A	X	0	1
26	MP2A	Z	3.872	1
27	MP2A	Mx	0	1
28	MP3A	X	0	1
29	MP3A	Z	3.872	1
30	MP3A	Mx	0	1
31	M3	X	0	1.5
32	M3	Z	7.908	1.5



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-2.063	3
2	MP1A	Z	3.573	3
3	MP1A	Mx	.001	3
4	MP1A	X	-2.063	5
5	MP1A	Z	3.573	5
6	MP1A	Mx	.001	5
7	MP4A	X	-4.378	.5
8	MP4A	Z	7.583	.5
9	MP4A	Mx	.002	.5
10	MP4A	X	-4.378	7.5
11	MP4A	Z	7.583	7.5
12	MP4A	Mx	.002	7.5
13	MP2A	X	-3.828	.5
14	MP2A	Z	6.631	.5
15	MP2A	Mx	.006	.5
16	MP2A	X	-3.828	7.5
17	MP2A	Z	6.631	7.5
18	MP2A	Mx	.006	7.5
19	MP2A	X	-3.828	.5
20	MP2A	Z	6.631	.5
21	MP2A	Mx	-.002	.5
22	MP2A	X	-3.828	7.5
23	MP2A	Z	6.631	7.5
24	MP2A	Mx	-.002	7.5
25	MP2A	X	-1.776	1
26	MP2A	Z	3.075	1
27	MP2A	Mx	-.000888	1
28	MP3A	X	-1.746	1
29	MP3A	Z	3.025	1
30	MP3A	Mx	-.000873	1
31	M3	X	-4.203	1.5
32	M3	Z	7.28	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-2.291	3
2	MP1A	Z	1.323	3
3	MP1A	Mx	.001	3
4	MP1A	X	-2.291	5
5	MP1A	Z	1.323	5
6	MP1A	Mx	.001	5
7	MP4A	X	-6.198	.5
8	MP4A	Z	3.578	.5
9	MP4A	Mx	.003	.5
10	MP4A	X	-6.198	7.5
11	MP4A	Z	3.578	7.5
12	MP4A	Mx	.003	7.5
13	MP2A	X	-5.403	.5
14	MP2A	Z	3.119	.5
15	MP2A	Mx	.005	.5
16	MP2A	X	-5.403	7.5



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP2A	Z	3.119	7.5
18	MP2A	Mx	.005	7.5
19	MP2A	X	-5.403	.5
20	MP2A	Z	3.119	.5
21	MP2A	Mx	.000882	.5
22	MP2A	X	-5.403	7.5
23	MP2A	Z	3.119	7.5
24	MP2A	Mx	.000882	7.5
25	MP2A	X	-2.519	1
26	MP2A	Z	1.455	1
27	MP2A	Mx	-.001	1
28	MP3A	X	-2.368	1
29	MP3A	Z	1.367	1
30	MP3A	Mx	-.001	1
31	M3	X	-6.849	1.5
32	M3	Z	3.954	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-1.905	3
2	MP1A	Z	0	3
3	MP1A	Mx	.000952	3
4	MP1A	X	-1.905	5
5	MP1A	Z	0	5
6	MP1A	Mx	.000952	5
7	MP4A	X	-6.357	.5
8	MP4A	Z	0	.5
9	MP4A	Mx	.003	.5
10	MP4A	X	-6.357	7.5
11	MP4A	Z	0	7.5
12	MP4A	Mx	.003	7.5
13	MP2A	X	-5.53	.5
14	MP2A	Z	0	.5
15	MP2A	Mx	.003	.5
16	MP2A	X	-5.53	7.5
17	MP2A	Z	0	7.5
18	MP2A	Mx	.003	7.5
19	MP2A	X	-5.53	.5
20	MP2A	Z	0	.5
21	MP2A	Mx	.003	.5
22	MP2A	X	-5.53	7.5
23	MP2A	Z	0	7.5
24	MP2A	Mx	.003	7.5
25	MP2A	X	-2.588	1
26	MP2A	Z	0	1
27	MP2A	Mx	-.001	1
28	MP3A	X	-2.355	1
29	MP3A	Z	0	1
30	MP3A	Mx	-.001	1
31	M3	X	-6.912	1.5
32	M3	Z	0	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
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Member Point Loads (BLC 37 : Antenna Wm (300 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-2.291	3
2	MP1A	Z	-1.323	3
3	MP1A	Mx	.001	3
4	MP1A	X	-2.291	5
5	MP1A	Z	-1.323	5
6	MP1A	Mx	.001	5
7	MP4A	X	-6.198	.5
8	MP4A	Z	-3.578	.5
9	MP4A	Mx	.003	.5
10	MP4A	X	-6.198	7.5
11	MP4A	Z	-3.578	7.5
12	MP4A	Mx	.003	7.5
13	MP2A	X	-5.403	.5
14	MP2A	Z	-3.119	.5
15	MP2A	Mx	.000882	.5
16	MP2A	X	-5.403	7.5
17	MP2A	Z	-3.119	7.5
18	MP2A	Mx	.000882	7.5
19	MP2A	X	-5.403	.5
20	MP2A	Z	-3.119	.5
21	MP2A	Mx	.005	.5
22	MP2A	X	-5.403	7.5
23	MP2A	Z	-3.119	7.5
24	MP2A	Mx	.005	7.5
25	MP2A	X	-2.519	1
26	MP2A	Z	-1.455	1
27	MP2A	Mx	-.001	1
28	MP3A	X	-2.368	1
29	MP3A	Z	-1.367	1
30	MP3A	Mx	-.001	1
31	M3	X	-5.554	1.5
32	M3	Z	-3.207	1.5
33	M3	Mx	0	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-2.063	3
2	MP1A	Z	-3.573	3
3	MP1A	Mx	.001	3
4	MP1A	X	-2.063	5
5	MP1A	Z	-3.573	5
6	MP1A	Mx	.001	5
7	MP4A	X	-4.378	.5
8	MP4A	Z	-7.583	.5
9	MP4A	Mx	.002	.5
10	MP4A	X	-4.378	7.5
11	MP4A	Z	-7.583	7.5
12	MP4A	Mx	.002	7.5
13	MP2A	X	-3.828	.5
14	MP2A	Z	-6.631	.5
15	MP2A	Mx	-.002	.5
16	MP2A	X	-3.828	7.5
17	MP2A	Z	-6.631	7.5
18	MP2A	Mx	-.002	7.5
19	MP2A	X	-3.828	.5
20	MP2A	Z	-6.631	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
21	MP2A	Mx	.006	.5
22	MP2A	X	-3.828	7.5
23	MP2A	Z	-6.631	7.5
24	MP2A	Mx	.006	7.5
25	MP2A	X	-1.776	1
26	MP2A	Z	-3.075	1
27	MP2A	Mx	-.000888	1
28	MP3A	X	-1.746	1
29	MP3A	Z	-3.025	1
30	MP3A	Mx	-.000873	1
31	M3	X	-3.456	1.5
32	M3	Z	-5.986	1.5
33	M3	Mx	0	1.5

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
1	M33	Y	-500	0

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
1	M35	Y	-500	%2

Member Point Loads (BLC 79 : Lv1)

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

Member Point Loads (BLC 80 : Lv2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
1	M1	Y	-250	%100

Member Distributed Loads (BLC 40 : Structure Di)

	Member Label	Direction	Start Magnitude[lb/f...]	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
1	M1	Y	-5.625	-5.625	0	%100
2	M2	Y	-5.625	-5.625	0	%100
3	M3	Y	-4.925	-4.925	0	%100
4	M4	Y	-4.925	-4.925	0	%100
5	M5	Y	-4.925	-4.925	0	%100
6	M6	Y	-4.925	-4.925	0	%100
7	M7	Y	-2.652	-2.652	0	%100
8	M8	Y	-2.652	-2.652	0	%100
9	M9	Y	-2.652	-2.652	0	%100
10	M10	Y	-2.652	-2.652	0	%100
11	M11	Y	-2.477	-2.477	0	%100
12	M12	Y	-2.477	-2.477	0	%100
13	M13	Y	-2.477	-2.477	0	%100
14	M14	Y	-2.477	-2.477	0	%100
15	M15	Y	-6.576	-6.576	0	%100
16	M16	Y	-6.576	-6.576	0	%100
17	M17	Y	-6.576	-6.576	0	%100
18	M18	Y	-6.576	-6.576	0	%100
19	M19	Y	-6.576	-6.576	0	%100
20	M20	Y	-6.576	-6.576	0	%100
21	M21	Y	-6.576	-6.576	0	%100



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Member Distributed Loads (BLC 40 : Structure Di) (Continued)

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
22	M22	Y	-6.576	-6.576	0	%100
23	M23	Y	-4.925	-4.925	0	%100
24	M24	Y	-4.925	-4.925	0	%100
25	MP1A	Y	-4.925	-4.925	0	%100
26	MP2A	Y	-5.625	-5.625	0	%100
27	MP3A	Y	-4.925	-4.925	0	%100
28	MP4A	Y	-4.925	-4.925	0	%100

Member Distributed Loads (BLC 41 : Structure Wo (0 Deg))

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	-9.845	-9.845	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-9.845	-9.845	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	-3.887	-3.887	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	-3.887	-3.887	0	%100
9	M5	X	0	0	0	%100
10	M5	Z	-3.887	-3.887	0	%100
11	M6	X	0	0	0	%100
12	M6	Z	-3.887	-3.887	0	%100
13	M7	X	0	0	0	%100
14	M7	Z	-2.217	-2.217	0	%100
15	M8	X	0	0	0	%100
16	M8	Z	-2.217	-2.217	0	%100
17	M9	X	0	0	0	%100
18	M9	Z	-2.217	-2.217	0	%100
19	M10	X	0	0	0	%100
20	M10	Z	-2.217	-2.217	0	%100
21	M11	X	0	0	0	%100
22	M11	Z	-2.14	-2.14	0	%100
23	M12	X	0	0	0	%100
24	M12	Z	-2.14	-2.14	0	%100
25	M13	X	0	0	0	%100
26	M13	Z	-2.14	-2.14	0	%100
27	M14	X	0	0	0	%100
28	M14	Z	-2.14	-2.14	0	%100
29	M15	X	0	0	0	%100
30	M15	Z	0	0	0	%100
31	M16	X	0	0	0	%100
32	M16	Z	0	0	0	%100
33	M17	X	0	0	0	%100
34	M17	Z	0	0	0	%100
35	M18	X	0	0	0	%100
36	M18	Z	0	0	0	%100
37	M19	X	0	0	0	%100
38	M19	Z	-2.14	-2.14	0	%100
39	M20	X	0	0	0	%100
40	M20	Z	-2.14	-2.14	0	%100
41	M21	X	0	0	0	%100
42	M21	Z	-2.14	-2.14	0	%100
43	M22	X	0	0	0	%100
44	M22	Z	-2.14	-2.14	0	%100
45	M23	X	0	0	0	%100
46	M23	Z	-.003	-.003	0	%100



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Member Distributed Loads (BLC 41 : Structure Wo (0 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft.%]	End Location[ft.%]
47	M24	X	0	0	0	%100
48	M24	Z	-517	-517	0	%100
49	MP1A	X	0	0	0	%100
50	MP1A	Z	-8.133	-8.133	0	%100
51	MP2A	X	0	0	0	%100
52	MP2A	Z	-9.845	-9.845	0	%100
53	MP3A	X	0	0	0	%100
54	MP3A	Z	-8.133	-8.133	0	%100
55	MP4A	X	0	0	0	%100
56	MP4A	Z	-8.133	-8.133	0	%100

Member Distributed Loads (BLC 42 : Structure Wo (30 Deg))

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft.%]	End Location[ft.%]
1	M1	X	3.692	3.692	0	%100
2	M1	Z	-6.394	-6.394	0	%100
3	M2	X	3.692	3.692	0	%100
4	M2	Z	-6.394	-6.394	0	%100
5	M3	X	.438	.438	0	%100
6	M3	Z	-.758	-.758	0	%100
7	M4	X	.438	.438	0	%100
8	M4	Z	-.758	-.758	0	%100
9	M5	X	3.074	3.074	0	%100
10	M5	Z	-5.323	-5.323	0	%100
11	M6	X	3.074	3.074	0	%100
12	M6	Z	-5.323	-5.323	0	%100
13	M7	X	.886	.886	0	%100
14	M7	Z	-1.535	-1.535	0	%100
15	M8	X	.886	.886	0	%100
16	M8	Z	-1.535	-1.535	0	%100
17	M9	X	1.275	1.275	0	%100
18	M9	Z	-2.208	-2.208	0	%100
19	M10	X	1.275	1.275	0	%100
20	M10	Z	-2.208	-2.208	0	%100
21	M11	X	1.07	1.07	0	%100
22	M11	Z	-1.853	-1.853	0	%100
23	M12	X	1.07	1.07	0	%100
24	M12	Z	-1.853	-1.853	0	%100
25	M13	X	1.07	1.07	0	%100
26	M13	Z	-1.853	-1.853	0	%100
27	M14	X	1.07	1.07	0	%100
28	M14	Z	-1.853	-1.853	0	%100
29	M15	X	.268	.268	0	%100
30	M15	Z	-.463	-.463	0	%100
31	M16	X	.268	.268	0	%100
32	M16	Z	-.463	-.463	0	%100
33	M17	X	.268	.268	0	%100
34	M17	Z	-.463	-.463	0	%100
35	M18	X	.268	.268	0	%100
36	M18	Z	-.463	-.463	0	%100
37	M19	X	.803	.803	0	%100
38	M19	Z	-1.39	-1.39	0	%100
39	M20	X	.803	.803	0	%100
40	M20	Z	-1.39	-1.39	0	%100
41	M21	X	.803	.803	0	%100
42	M21	Z	-1.39	-1.39	0	%100
43	M22	X	.803	.803	0	%100



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Member Distributed Loads (BLC 42 : Structure Wo (30 Deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
44	M22	Z	-1.39	-1.39	0 %100
45	M23	X	.945	.945	0 %100
46	M23	Z	-1.637	-1.637	0 %100
47	M24	X	.287	.287	0 %100
48	M24	Z	-.497	-.497	0 %100
49	MP1A	X	4.066	4.066	0 %100
50	MP1A	Z	-7.043	-7.043	0 %100
51	MP2A	X	4.922	4.922	0 %100
52	MP2A	Z	-8.526	-8.526	0 %100
53	MP3A	X	4.066	4.066	0 %100
54	MP3A	Z	-7.043	-7.043	0 %100
55	MP4A	X	4.066	4.066	0 %100
56	MP4A	Z	-7.043	-7.043	0 %100

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

Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	2.131	2.131	0 %100
2	M1	Z	-1.231	-1.231	0 %100
3	M2	X	2.131	2.131	0 %100
4	M2	Z	-1.231	-1.231	0 %100
5	M3	X	.107	.107	0 %100
6	M3	Z	-.062	-.062	0 %100
7	M4	X	.107	.107	0 %100
8	M4	Z	-.062	-.062	0 %100
9	M5	X	4.672	4.672	0 %100
10	M5	Z	-2.698	-2.698	0 %100
11	M6	X	4.672	4.672	0 %100
12	M6	Z	-2.698	-2.698	0 %100
13	M7	X	1.439	1.439	0 %100
14	M7	Z	-.831	-.831	0 %100
15	M8	X	1.439	1.439	0 %100
16	M8	Z	-.831	-.831	0 %100
17	M9	X	2.112	2.112	0 %100
18	M9	Z	-1.22	-1.22	0 %100
19	M10	X	2.112	2.112	0 %100
20	M10	Z	-1.22	-1.22	0 %100
21	M11	X	1.853	1.853	0 %100
22	M11	Z	-1.07	-1.07	0 %100
23	M12	X	1.853	1.853	0 %100
24	M12	Z	-1.07	-1.07	0 %100
25	M13	X	1.853	1.853	0 %100
26	M13	Z	-1.07	-1.07	0 %100
27	M14	X	1.853	1.853	0 %100
28	M14	Z	-1.07	-1.07	0 %100
29	M15	X	1.39	1.39	0 %100
30	M15	Z	-.803	-.803	0 %100
31	M16	X	1.39	1.39	0 %100
32	M16	Z	-.803	-.803	0 %100
33	M17	X	1.39	1.39	0 %100
34	M17	Z	-.803	-.803	0 %100
35	M18	X	1.39	1.39	0 %100
36	M18	Z	-.803	-.803	0 %100
37	M19	X	.463	.463	0 %100
38	M19	Z	-.268	-.268	0 %100
39	M20	X	.463	.463	0 %100
40	M20	Z	-.268	-.268	0 %100



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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
41	M21	X	.463	.463	0	%100
42	M21	Z	-.268	-.268	0	%100
43	M22	X	.463	.463	0	%100
44	M22	Z	-.268	-.268	0	%100
45	M23	X	5.155	5.155	0	%100
46	M23	Z	-2.976	-2.976	0	%100
47	M24	X	3.571	3.571	0	%100
48	M24	Z	-2.062	-2.062	0	%100
49	MP1A	X	7.043	7.043	0	%100
50	MP1A	Z	-4.066	-4.066	0	%100
51	MP2A	X	8.526	8.526	0	%100
52	MP2A	Z	-4.922	-4.922	0	%100
53	MP3A	X	7.043	7.043	0	%100
54	MP3A	Z	-4.066	-4.066	0	%100
55	MP4A	X	7.043	7.043	0	%100
56	MP4A	Z	-4.066	-4.066	0	%100

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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	2.383	2.383	0	%100
6	M3	Z	0	0	0	%100
7	M4	X	2.383	2.383	0	%100
8	M4	Z	0	0	0	%100
9	M5	X	2.383	2.383	0	%100
10	M5	Z	0	0	0	%100
11	M6	X	2.383	2.383	0	%100
12	M6	Z	0	0	0	%100
13	M7	X	1.995	1.995	0	%100
14	M7	Z	0	0	0	%100
15	M8	X	1.995	1.995	0	%100
16	M8	Z	0	0	0	%100
17	M9	X	1.995	1.995	0	%100
18	M9	Z	0	0	0	%100
19	M10	X	1.995	1.995	0	%100
20	M10	Z	0	0	0	%100
21	M11	X	2.14	2.14	0	%100
22	M11	Z	0	0	0	%100
23	M12	X	2.14	2.14	0	%100
24	M12	Z	0	0	0	%100
25	M13	X	2.14	2.14	0	%100
26	M13	Z	0	0	0	%100
27	M14	X	2.14	2.14	0	%100
28	M14	Z	0	0	0	%100
29	M15	X	2.14	2.14	0	%100
30	M15	Z	0	0	0	%100
31	M16	X	2.14	2.14	0	%100
32	M16	Z	0	0	0	%100
33	M17	X	2.14	2.14	0	%100
34	M17	Z	0	0	0	%100
35	M18	X	2.14	2.14	0	%100
36	M18	Z	0	0	0	%100
37	M19	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
38	M19	Z	0	0	0	%100
39	M20	X	0	0	0	%100
40	M20	Z	0	0	0	%100
41	M21	X	0	0	0	%100
42	M21	Z	0	0	0	%100
43	M22	X	0	0	0	%100
44	M22	Z	0	0	0	%100
45	M23	X	8.129	8.129	0	%100
46	M23	Z	0	0	0	%100
47	M24	X	7.616	7.616	0	%100
48	M24	Z	0	0	0	%100
49	MP1A	X	8.133	8.133	0	%100
50	MP1A	Z	0	0	0	%100
51	MP2A	X	9.845	9.845	0	%100
52	MP2A	Z	0	0	0	%100
53	MP3A	X	8.133	8.133	0	%100
54	MP3A	Z	0	0	0	%100
55	MP4A	X	8.133	8.133	0	%100
56	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 45 : Structure Wo (120 Deg))

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	2.131	2.131	0	%100
2	M1	Z	1.231	1.231	0	%100
3	M2	X	2.131	2.131	0	%100
4	M2	Z	1.231	1.231	0	%100
5	M3	X	4.672	4.672	0	%100
6	M3	Z	2.698	2.698	0	%100
7	M4	X	4.672	4.672	0	%100
8	M4	Z	2.698	2.698	0	%100
9	M5	X	.107	.107	0	%100
10	M5	Z	.062	.062	0	%100
11	M6	X	.107	.107	0	%100
12	M6	Z	.062	.062	0	%100
13	M7	X	2.112	2.112	0	%100
14	M7	Z	1.22	1.22	0	%100
15	M8	X	2.112	2.112	0	%100
16	M8	Z	1.22	1.22	0	%100
17	M9	X	1.439	1.439	0	%100
18	M9	Z	.831	.831	0	%100
19	M10	X	1.439	1.439	0	%100
20	M10	Z	.831	.831	0	%100
21	M11	X	1.853	1.853	0	%100
22	M11	Z	1.07	1.07	0	%100
23	M12	X	1.853	1.853	0	%100
24	M12	Z	1.07	1.07	0	%100
25	M13	X	1.853	1.853	0	%100
26	M13	Z	1.07	1.07	0	%100
27	M14	X	1.853	1.853	0	%100
28	M14	Z	1.07	1.07	0	%100
29	M15	X	1.39	1.39	0	%100
30	M15	Z	.803	.803	0	%100
31	M16	X	1.39	1.39	0	%100
32	M16	Z	.803	.803	0	%100
33	M17	X	1.39	1.39	0	%100
34	M17	Z	.803	.803	0	%100



Company :
 Designer :
 Job Number :
 Model Name :

Aug 5, 2021
 6:40 PM
 Checked By: _____

Member Distributed Loads (BLC 45 : Structure Wo (120 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
35	M18	X	1.39	1.39	0	%100
36	M18	Z	.803	.803	0	%100
37	M19	X	.463	.463	0	%100
38	M19	Z	.268	.268	0	%100
39	M20	X	.463	.463	0	%100
40	M20	Z	.268	.268	0	%100
41	M21	X	.463	.463	0	%100
42	M21	Z	.268	.268	0	%100
43	M22	X	.463	.463	0	%100
44	M22	Z	.268	.268	0	%100
45	M23	X	5.406	5.406	0	%100
46	M23	Z	3.121	3.121	0	%100
47	M24	X	6.546	6.546	0	%100
48	M24	Z	3.78	3.78	0	%100
49	MP1A	X	7.043	7.043	0	%100
50	MP1A	Z	4.066	4.066	0	%100
51	MP2A	X	8.526	8.526	0	%100
52	MP2A	Z	4.922	4.922	0	%100
53	MP3A	X	7.043	7.043	0	%100
54	MP3A	Z	4.066	4.066	0	%100
55	MP4A	X	7.043	7.043	0	%100
56	MP4A	Z	4.066	4.066	0	%100

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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	3.692	3.692	0	%100
2	M1	Z	6.394	6.394	0	%100
3	M2	X	3.692	3.692	0	%100
4	M2	Z	6.394	6.394	0	%100
5	M3	X	3.074	3.074	0	%100
6	M3	Z	5.323	5.323	0	%100
7	M4	X	3.074	3.074	0	%100
8	M4	Z	5.323	5.323	0	%100
9	M5	X	.438	.438	0	%100
10	M5	Z	.758	.758	0	%100
11	M6	X	.438	.438	0	%100
12	M6	Z	.758	.758	0	%100
13	M7	X	1.275	1.275	0	%100
14	M7	Z	2.208	2.208	0	%100
15	M8	X	1.275	1.275	0	%100
16	M8	Z	2.208	2.208	0	%100
17	M9	X	.886	.886	0	%100
18	M9	Z	1.535	1.535	0	%100
19	M10	X	.886	.886	0	%100
20	M10	Z	1.535	1.535	0	%100
21	M11	X	1.07	1.07	0	%100
22	M11	Z	1.853	1.853	0	%100
23	M12	X	1.07	1.07	0	%100
24	M12	Z	1.853	1.853	0	%100
25	M13	X	1.07	1.07	0	%100
26	M13	Z	1.853	1.853	0	%100
27	M14	X	1.07	1.07	0	%100
28	M14	Z	1.853	1.853	0	%100
29	M15	X	.268	.268	0	%100
30	M15	Z	.463	.463	0	%100
31	M16	X	.268	.268	0	%100

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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
32	M16	Z	.463	.463	0	%100
33	M17	X	.268	.268	0	%100
34	M17	Z	.463	.463	0	%100
35	M18	X	.268	.268	0	%100
36	M18	Z	.463	.463	0	%100
37	M19	X	.803	.803	0	%100
38	M19	Z	1.39	1.39	0	%100
39	M20	X	.803	.803	0	%100
40	M20	Z	1.39	1.39	0	%100
41	M21	X	.803	.803	0	%100
42	M21	Z	1.39	1.39	0	%100
43	M22	X	.803	.803	0	%100
44	M22	Z	1.39	1.39	0	%100
45	M23	X	1.09	1.09	0	%100
46	M23	Z	1.888	1.888	0	%100
47	M24	X	2.005	2.005	0	%100
48	M24	Z	3.472	3.472	0	%100
49	MP1A	X	4.066	4.066	0	%100
50	MP1A	Z	7.043	7.043	0	%100
51	MP2A	X	4.922	4.922	0	%100
52	MP2A	Z	8.526	8.526	0	%100
53	MP3A	X	4.066	4.066	0	%100
54	MP3A	Z	7.043	7.043	0	%100
55	MP4A	X	4.066	4.066	0	%100
56	MP4A	Z	7.043	7.043	0	%100

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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	9.845	9.845	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	9.845	9.845	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	3.887	3.887	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	3.887	3.887	0	%100
9	M5	X	0	0	0	%100
10	M5	Z	3.887	3.887	0	%100
11	M6	X	0	0	0	%100
12	M6	Z	3.887	3.887	0	%100
13	M7	X	0	0	0	%100
14	M7	Z	2.217	2.217	0	%100
15	M8	X	0	0	0	%100
16	M8	Z	2.217	2.217	0	%100
17	M9	X	0	0	0	%100
18	M9	Z	2.217	2.217	0	%100
19	M10	X	0	0	0	%100
20	M10	Z	2.217	2.217	0	%100
21	M11	X	0	0	0	%100
22	M11	Z	2.14	2.14	0	%100
23	M12	X	0	0	0	%100
24	M12	Z	2.14	2.14	0	%100
25	M13	X	0	0	0	%100
26	M13	Z	2.14	2.14	0	%100
27	M14	X	0	0	0	%100
28	M14	Z	2.14	2.14	0	%100

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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
29	M15	X	0	0	0	%100
30	M15	Z	0	0	0	%100
31	M16	X	0	0	0	%100
32	M16	Z	0	0	0	%100
33	M17	X	0	0	0	%100
34	M17	Z	0	0	0	%100
35	M18	X	0	0	0	%100
36	M18	Z	0	0	0	%100
37	M19	X	0	0	0	%100
38	M19	Z	2.14	2.14	0	%100
39	M20	X	0	0	0	%100
40	M20	Z	2.14	2.14	0	%100
41	M21	X	0	0	0	%100
42	M21	Z	2.14	2.14	0	%100
43	M22	X	0	0	0	%100
44	M22	Z	2.14	2.14	0	%100
45	M23	X	0	0	0	%100
46	M23	Z	.003	.003	0	%100
47	M24	X	0	0	0	%100
48	M24	Z	.517	.517	0	%100
49	MP1A	X	0	0	0	%100
50	MP1A	Z	8.133	8.133	0	%100
51	MP2A	X	0	0	0	%100
52	MP2A	Z	9.845	9.845	0	%100
53	MP3A	X	0	0	0	%100
54	MP3A	Z	8.133	8.133	0	%100
55	MP4A	X	0	0	0	%100
56	MP4A	Z	8.133	8.133	0	%100

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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-3.692	-3.692	0	%100
2	M1	Z	6.394	6.394	0	%100
3	M2	X	-3.692	-3.692	0	%100
4	M2	Z	6.394	6.394	0	%100
5	M3	X	-.438	-.438	0	%100
6	M3	Z	.758	.758	0	%100
7	M4	X	-.438	-.438	0	%100
8	M4	Z	.758	.758	0	%100
9	M5	X	-3.074	-3.074	0	%100
10	M5	Z	5.323	5.323	0	%100
11	M6	X	-3.074	-3.074	0	%100
12	M6	Z	5.323	5.323	0	%100
13	M7	X	-.886	-.886	0	%100
14	M7	Z	1.535	1.535	0	%100
15	M8	X	-.886	-.886	0	%100
16	M8	Z	1.535	1.535	0	%100
17	M9	X	-1.275	-1.275	0	%100
18	M9	Z	2.208	2.208	0	%100
19	M10	X	-1.275	-1.275	0	%100
20	M10	Z	2.208	2.208	0	%100
21	M11	X	-1.07	-1.07	0	%100
22	M11	Z	1.853	1.853	0	%100
23	M12	X	-1.07	-1.07	0	%100
24	M12	Z	1.853	1.853	0	%100
25	M13	X	-1.07	-1.07	0	%100

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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
26	M13	Z	1.853	1.853	0	%100
27	M14	X	-1.07	-1.07	0	%100
28	M14	Z	1.853	1.853	0	%100
29	M15	X	-.268	-.268	0	%100
30	M15	Z	.463	.463	0	%100
31	M16	X	-.268	-.268	0	%100
32	M16	Z	.463	.463	0	%100
33	M17	X	-.268	-.268	0	%100
34	M17	Z	.463	.463	0	%100
35	M18	X	-.268	-.268	0	%100
36	M18	Z	.463	.463	0	%100
37	M19	X	-.803	-.803	0	%100
38	M19	Z	1.39	1.39	0	%100
39	M20	X	-.803	-.803	0	%100
40	M20	Z	1.39	1.39	0	%100
41	M21	X	-.803	-.803	0	%100
42	M21	Z	1.39	1.39	0	%100
43	M22	X	-.803	-.803	0	%100
44	M22	Z	1.39	1.39	0	%100
45	M23	X	-.945	-.945	0	%100
46	M23	Z	1.637	1.637	0	%100
47	M24	X	-.287	-.287	0	%100
48	M24	Z	.497	.497	0	%100
49	MP1A	X	-4.066	-4.066	0	%100
50	MP1A	Z	7.043	7.043	0	%100
51	MP2A	X	-4.922	-4.922	0	%100
52	MP2A	Z	8.526	8.526	0	%100
53	MP3A	X	-4.066	-4.066	0	%100
54	MP3A	Z	7.043	7.043	0	%100
55	MP4A	X	-4.066	-4.066	0	%100
56	MP4A	Z	7.043	7.043	0	%100

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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-2.131	-2.131	0	%100
2	M1	Z	1.231	1.231	0	%100
3	M2	X	-2.131	-2.131	0	%100
4	M2	Z	1.231	1.231	0	%100
5	M3	X	-.107	-.107	0	%100
6	M3	Z	.062	.062	0	%100
7	M4	X	-.107	-.107	0	%100
8	M4	Z	.062	.062	0	%100
9	M5	X	-4.672	-4.672	0	%100
10	M5	Z	2.698	2.698	0	%100
11	M6	X	-4.672	-4.672	0	%100
12	M6	Z	2.698	2.698	0	%100
13	M7	X	-1.439	-1.439	0	%100
14	M7	Z	.831	.831	0	%100
15	M8	X	-1.439	-1.439	0	%100
16	M8	Z	.831	.831	0	%100
17	M9	X	-2.112	-2.112	0	%100
18	M9	Z	1.22	1.22	0	%100
19	M10	X	-2.112	-2.112	0	%100
20	M10	Z	1.22	1.22	0	%100
21	M11	X	-1.853	-1.853	0	%100
22	M11	Z	1.07	1.07	0	%100

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

Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
23	M12	X	-1.853	-1.853	0 %100
24	M12	Z	1.07	1.07	0 %100
25	M13	X	-1.853	-1.853	0 %100
26	M13	Z	1.07	1.07	0 %100
27	M14	X	-1.853	-1.853	0 %100
28	M14	Z	1.07	1.07	0 %100
29	M15	X	-1.39	-1.39	0 %100
30	M15	Z	.803	.803	0 %100
31	M16	X	-1.39	-1.39	0 %100
32	M16	Z	.803	.803	0 %100
33	M17	X	-1.39	-1.39	0 %100
34	M17	Z	.803	.803	0 %100
35	M18	X	-1.39	-1.39	0 %100
36	M18	Z	.803	.803	0 %100
37	M19	X	-.463	-.463	0 %100
38	M19	Z	.268	.268	0 %100
39	M20	X	-.463	-.463	0 %100
40	M20	Z	.268	.268	0 %100
41	M21	X	-.463	-.463	0 %100
42	M21	Z	.268	.268	0 %100
43	M22	X	-.463	-.463	0 %100
44	M22	Z	.268	.268	0 %100
45	M23	X	-5.155	-5.155	0 %100
46	M23	Z	2.976	2.976	0 %100
47	M24	X	-3.571	-3.571	0 %100
48	M24	Z	2.062	2.062	0 %100
49	MP1A	X	-7.043	-7.043	0 %100
50	MP1A	Z	4.066	4.066	0 %100
51	MP2A	X	-8.526	-8.526	0 %100
52	MP2A	Z	4.922	4.922	0 %100
53	MP3A	X	-7.043	-7.043	0 %100
54	MP3A	Z	4.066	4.066	0 %100
55	MP4A	X	-7.043	-7.043	0 %100
56	MP4A	Z	4.066	4.066	0 %100

Member Distributed Loads (BLC 50 : Structure Wo (270 Deg))

Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0 %100
2	M1	Z	0	0	0 %100
3	M2	X	0	0	0 %100
4	M2	Z	0	0	0 %100
5	M3	X	-2.383	-2.383	0 %100
6	M3	Z	0	0	0 %100
7	M4	X	-2.383	-2.383	0 %100
8	M4	Z	0	0	0 %100
9	M5	X	-2.383	-2.383	0 %100
10	M5	Z	0	0	0 %100
11	M6	X	-2.383	-2.383	0 %100
12	M6	Z	0	0	0 %100
13	M7	X	-1.995	-1.995	0 %100
14	M7	Z	0	0	0 %100
15	M8	X	-1.995	-1.995	0 %100
16	M8	Z	0	0	0 %100
17	M9	X	-1.995	-1.995	0 %100
18	M9	Z	0	0	0 %100
19	M10	X	-1.995	-1.995	0 %100

Member Distributed Loads (BLC 50 : Structure Wo (270 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
20	M10	Z	0	0	0	%100
21	M11	X	-2.14	-2.14	0	%100
22	M11	Z	0	0	0	%100
23	M12	X	-2.14	-2.14	0	%100
24	M12	Z	0	0	0	%100
25	M13	X	-2.14	-2.14	0	%100
26	M13	Z	0	0	0	%100
27	M14	X	-2.14	-2.14	0	%100
28	M14	Z	0	0	0	%100
29	M15	X	-2.14	-2.14	0	%100
30	M15	Z	0	0	0	%100
31	M16	X	-2.14	-2.14	0	%100
32	M16	Z	0	0	0	%100
33	M17	X	-2.14	-2.14	0	%100
34	M17	Z	0	0	0	%100
35	M18	X	-2.14	-2.14	0	%100
36	M18	Z	0	0	0	%100
37	M19	X	0	0	0	%100
38	M19	Z	0	0	0	%100
39	M20	X	0	0	0	%100
40	M20	Z	0	0	0	%100
41	M21	X	0	0	0	%100
42	M21	Z	0	0	0	%100
43	M22	X	0	0	0	%100
44	M22	Z	0	0	0	%100
45	M23	X	-8.129	-8.129	0	%100
46	M23	Z	0	0	0	%100
47	M24	X	-7.616	-7.616	0	%100
48	M24	Z	0	0	0	%100
49	MP1A	X	-8.133	-8.133	0	%100
50	MP1A	Z	0	0	0	%100
51	MP2A	X	-9.845	-9.845	0	%100
52	MP2A	Z	0	0	0	%100
53	MP3A	X	-8.133	-8.133	0	%100
54	MP3A	Z	0	0	0	%100
55	MP4A	X	-8.133	-8.133	0	%100
56	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 51 : Structure Wo (300 Deg))

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-2.131	-2.131	0	%100
2	M1	Z	-1.231	-1.231	0	%100
3	M2	X	-2.131	-2.131	0	%100
4	M2	Z	-1.231	-1.231	0	%100
5	M3	X	-4.672	-4.672	0	%100
6	M3	Z	-2.698	-2.698	0	%100
7	M4	X	-4.672	-4.672	0	%100
8	M4	Z	-2.698	-2.698	0	%100
9	M5	X	-.107	-.107	0	%100
10	M5	Z	-.062	-.062	0	%100
11	M6	X	-.107	-.107	0	%100
12	M6	Z	-.062	-.062	0	%100
13	M7	X	-2.112	-2.112	0	%100
14	M7	Z	-1.22	-1.22	0	%100
15	M8	X	-2.112	-2.112	0	%100
16	M8	Z	-1.22	-1.22	0	%100

Member Distributed Loads (BLC 51 : Structure Wo (300 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft.%]	End Location[ft.%]
17	M9	X	-1.439	-1.439	0	%100
18	M9	Z	-0.831	-0.831	0	%100
19	M10	X	-1.439	-1.439	0	%100
20	M10	Z	-0.831	-0.831	0	%100
21	M11	X	-1.853	-1.853	0	%100
22	M11	Z	-1.07	-1.07	0	%100
23	M12	X	-1.853	-1.853	0	%100
24	M12	Z	-1.07	-1.07	0	%100
25	M13	X	-1.853	-1.853	0	%100
26	M13	Z	-1.07	-1.07	0	%100
27	M14	X	-1.853	-1.853	0	%100
28	M14	Z	-1.07	-1.07	0	%100
29	M15	X	-1.39	-1.39	0	%100
30	M15	Z	-0.803	-0.803	0	%100
31	M16	X	-1.39	-1.39	0	%100
32	M16	Z	-0.803	-0.803	0	%100
33	M17	X	-1.39	-1.39	0	%100
34	M17	Z	-0.803	-0.803	0	%100
35	M18	X	-1.39	-1.39	0	%100
36	M18	Z	-0.803	-0.803	0	%100
37	M19	X	-0.463	-0.463	0	%100
38	M19	Z	-0.268	-0.268	0	%100
39	M20	X	-0.463	-0.463	0	%100
40	M20	Z	-0.268	-0.268	0	%100
41	M21	X	-0.463	-0.463	0	%100
42	M21	Z	-0.268	-0.268	0	%100
43	M22	X	-0.463	-0.463	0	%100
44	M22	Z	-0.268	-0.268	0	%100
45	M23	X	-5.406	-5.406	0	%100
46	M23	Z	-3.121	-3.121	0	%100
47	M24	X	-6.546	-6.546	0	%100
48	M24	Z	-3.78	-3.78	0	%100
49	MP1A	X	-7.043	-7.043	0	%100
50	MP1A	Z	-4.066	-4.066	0	%100
51	MP2A	X	-8.526	-8.526	0	%100
52	MP2A	Z	-4.922	-4.922	0	%100
53	MP3A	X	-7.043	-7.043	0	%100
54	MP3A	Z	-4.066	-4.066	0	%100
55	MP4A	X	-7.043	-7.043	0	%100
56	MP4A	Z	-4.066	-4.066	0	%100

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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft.%]	End Location[ft.%]
1	M1	X	-3.692	-3.692	0	%100
2	M1	Z	-6.394	-6.394	0	%100
3	M2	X	-3.692	-3.692	0	%100
4	M2	Z	-6.394	-6.394	0	%100
5	M3	X	-3.074	-3.074	0	%100
6	M3	Z	-5.323	-5.323	0	%100
7	M4	X	-3.074	-3.074	0	%100
8	M4	Z	-5.323	-5.323	0	%100
9	M5	X	-0.438	-0.438	0	%100
10	M5	Z	-0.758	-0.758	0	%100
11	M6	X	-0.438	-0.438	0	%100
12	M6	Z	-0.758	-0.758	0	%100
13	M7	X	-1.275	-1.275	0	%100

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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
14	M7	Z	-2.208	-2.208	0	%100
15	M8	X	-1.275	-1.275	0	%100
16	M8	Z	-2.208	-2.208	0	%100
17	M9	X	-.886	-.886	0	%100
18	M9	Z	-1.535	-1.535	0	%100
19	M10	X	-.886	-.886	0	%100
20	M10	Z	-1.535	-1.535	0	%100
21	M11	X	-1.07	-1.07	0	%100
22	M11	Z	-1.853	-1.853	0	%100
23	M12	X	-1.07	-1.07	0	%100
24	M12	Z	-1.853	-1.853	0	%100
25	M13	X	-1.07	-1.07	0	%100
26	M13	Z	-1.853	-1.853	0	%100
27	M14	X	-1.07	-1.07	0	%100
28	M14	Z	-1.853	-1.853	0	%100
29	M15	X	-.268	-.268	0	%100
30	M15	Z	-.463	-.463	0	%100
31	M16	X	-.268	-.268	0	%100
32	M16	Z	-.463	-.463	0	%100
33	M17	X	-.268	-.268	0	%100
34	M17	Z	-.463	-.463	0	%100
35	M18	X	-.268	-.268	0	%100
36	M18	Z	-.463	-.463	0	%100
37	M19	X	-.803	-.803	0	%100
38	M19	Z	-1.39	-1.39	0	%100
39	M20	X	-.803	-.803	0	%100
40	M20	Z	-1.39	-1.39	0	%100
41	M21	X	-.803	-.803	0	%100
42	M21	Z	-1.39	-1.39	0	%100
43	M22	X	-.803	-.803	0	%100
44	M22	Z	-1.39	-1.39	0	%100
45	M23	X	-1.09	-1.09	0	%100
46	M23	Z	-1.888	-1.888	0	%100
47	M24	X	-2.005	-2.005	0	%100
48	M24	Z	-3.472	-3.472	0	%100
49	MP1A	X	-4.066	-4.066	0	%100
50	MP1A	Z	-7.043	-7.043	0	%100
51	MP2A	X	-4.922	-4.922	0	%100
52	MP2A	Z	-8.526	-8.526	0	%100
53	MP3A	X	-4.066	-4.066	0	%100
54	MP3A	Z	-7.043	-7.043	0	%100
55	MP4A	X	-4.066	-4.066	0	%100
56	MP4A	Z	-7.043	-7.043	0	%100

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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	-2.971	-2.971	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-2.971	-2.971	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	-1.29	-1.29	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	-1.29	-1.29	0	%100
9	M5	X	0	0	0	%100
10	M5	Z	-1.29	-1.29	0	%100

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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
11	M6	X	0	0	0	%100
12	M6	Z	-1.29	-1.29	0	%100
13	M7	X	0	0	0	%100
14	M7	Z	-1.443	-1.443	0	%100
15	M8	X	0	0	0	%100
16	M8	Z	-1.443	-1.443	0	%100
17	M9	X	0	0	0	%100
18	M9	Z	-1.443	-1.443	0	%100
19	M10	X	0	0	0	%100
20	M10	Z	-1.443	-1.443	0	%100
21	M11	X	0	0	0	%100
22	M11	Z	-1.493	-1.493	0	%100
23	M12	X	0	0	0	%100
24	M12	Z	-1.493	-1.493	0	%100
25	M13	X	0	0	0	%100
26	M13	Z	-1.493	-1.493	0	%100
27	M14	X	0	0	0	%100
28	M14	Z	-1.493	-1.493	0	%100
29	M15	X	0	0	0	%100
30	M15	Z	0	0	0	%100
31	M16	X	0	0	0	%100
32	M16	Z	0	0	0	%100
33	M17	X	0	0	0	%100
34	M17	Z	0	0	0	%100
35	M18	X	0	0	0	%100
36	M18	Z	0	0	0	%100
37	M19	X	0	0	0	%100
38	M19	Z	-1.135	-1.135	0	%100
39	M20	X	0	0	0	%100
40	M20	Z	-1.135	-1.135	0	%100
41	M21	X	0	0	0	%100
42	M21	Z	-1.135	-1.135	0	%100
43	M22	X	0	0	0	%100
44	M22	Z	-1.135	-1.135	0	%100
45	M23	X	0	0	0	%100
46	M23	Z	-.001	-.001	0	%100
47	M24	X	0	0	0	%100
48	M24	Z	-.17	-.17	0	%100
49	MP1A	X	0	0	0	%100
50	MP1A	Z	-2.683	-2.683	0	%100
51	MP2A	X	0	0	0	%100
52	MP2A	Z	-2.971	-2.971	0	%100
53	MP3A	X	0	0	0	%100
54	MP3A	Z	-2.683	-2.683	0	%100
55	MP4A	X	0	0	0	%100
56	MP4A	Z	-2.683	-2.683	0	%100

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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
1	M1	X	1.114	1.114	0	%100
2	M1	Z	-1.93	-1.93	0	%100
3	M2	X	1.114	1.114	0	%100
4	M2	Z	-1.93	-1.93	0	%100
5	M3	X	.145	.145	0	%100
6	M3	Z	-.251	-.251	0	%100
7	M4	X	.145	.145	0	%100

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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
8	M4	Z	-.251	-.251	0	%100
9	M5	X	1.02	1.02	0	%100
10	M5	Z	-1.766	-1.766	0	%100
11	M6	X	1.02	1.02	0	%100
12	M6	Z	-1.766	-1.766	0	%100
13	M7	X	.577	.577	0	%100
14	M7	Z	-.999	-.999	0	%100
15	M8	X	.577	.577	0	%100
16	M8	Z	-.999	-.999	0	%100
17	M9	X	.83	.83	0	%100
18	M9	Z	-1.437	-1.437	0	%100
19	M10	X	.83	.83	0	%100
20	M10	Z	-1.437	-1.437	0	%100
21	M11	X	.746	.746	0	%100
22	M11	Z	-1.293	-1.293	0	%100
23	M12	X	.746	.746	0	%100
24	M12	Z	-1.293	-1.293	0	%100
25	M13	X	.746	.746	0	%100
26	M13	Z	-1.293	-1.293	0	%100
27	M14	X	.746	.746	0	%100
28	M14	Z	-1.293	-1.293	0	%100
29	M15	X	.141	.141	0	%100
30	M15	Z	-.244	-.244	0	%100
31	M16	X	.141	.141	0	%100
32	M16	Z	-.244	-.244	0	%100
33	M17	X	.141	.141	0	%100
34	M17	Z	-.244	-.244	0	%100
35	M18	X	.141	.141	0	%100
36	M18	Z	-.244	-.244	0	%100
37	M19	X	.426	.426	0	%100
38	M19	Z	-.737	-.737	0	%100
39	M20	X	.426	.426	0	%100
40	M20	Z	-.737	-.737	0	%100
41	M21	X	.426	.426	0	%100
42	M21	Z	-.737	-.737	0	%100
43	M22	X	.426	.426	0	%100
44	M22	Z	-.737	-.737	0	%100
45	M23	X	.312	.312	0	%100
46	M23	Z	-.54	-.54	0	%100
47	M24	X	.095	.095	0	%100
48	M24	Z	-.164	-.164	0	%100
49	MP1A	X	1.342	1.342	0	%100
50	MP1A	Z	-2.324	-2.324	0	%100
51	MP2A	X	1.485	1.485	0	%100
52	MP2A	Z	-2.573	-2.573	0	%100
53	MP3A	X	1.342	1.342	0	%100
54	MP3A	Z	-2.324	-2.324	0	%100
55	MP4A	X	1.342	1.342	0	%100
56	MP4A	Z	-2.324	-2.324	0	%100

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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
1	M1	X	.643	.643	0	%100
2	M1	Z	-.371	-.371	0	%100
3	M2	X	.643	.643	0	%100
4	M2	Z	-.371	-.371	0	%100

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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
5	M3	X	.035	.035	0	%100
6	M3	Z	-.02	-.02	0	%100
7	M4	X	.035	.035	0	%100
8	M4	Z	-.02	-.02	0	%100
9	M5	X	1.55	1.55	0	%100
10	M5	Z	-.895	-.895	0	%100
11	M6	X	1.55	1.55	0	%100
12	M6	Z	-.895	-.895	0	%100
13	M7	X	.937	.937	0	%100
14	M7	Z	-.541	-.541	0	%100
15	M8	X	.937	.937	0	%100
16	M8	Z	-.541	-.541	0	%100
17	M9	X	1.375	1.375	0	%100
18	M9	Z	-.794	-.794	0	%100
19	M10	X	1.375	1.375	0	%100
20	M10	Z	-.794	-.794	0	%100
21	M11	X	1.293	1.293	0	%100
22	M11	Z	-.746	-.746	0	%100
23	M12	X	1.293	1.293	0	%100
24	M12	Z	-.746	-.746	0	%100
25	M13	X	1.293	1.293	0	%100
26	M13	Z	-.746	-.746	0	%100
27	M14	X	1.293	1.293	0	%100
28	M14	Z	-.746	-.746	0	%100
29	M15	X	.733	.733	0	%100
30	M15	Z	-.423	-.423	0	%100
31	M16	X	.733	.733	0	%100
32	M16	Z	-.423	-.423	0	%100
33	M17	X	.733	.733	0	%100
34	M17	Z	-.423	-.423	0	%100
35	M18	X	.733	.733	0	%100
36	M18	Z	-.423	-.423	0	%100
37	M19	X	.246	.246	0	%100
38	M19	Z	-.142	-.142	0	%100
39	M20	X	.246	.246	0	%100
40	M20	Z	-.142	-.142	0	%100
41	M21	X	.246	.246	0	%100
42	M21	Z	-.142	-.142	0	%100
43	M22	X	.246	.246	0	%100
44	M22	Z	-.142	-.142	0	%100
45	M23	X	1.701	1.701	0	%100
46	M23	Z	-.982	-.982	0	%100
47	M24	X	1.178	1.178	0	%100
48	M24	Z	-.68	-.68	0	%100
49	MP1A	X	2.324	2.324	0	%100
50	MP1A	Z	-1.342	-1.342	0	%100
51	MP2A	X	2.573	2.573	0	%100
52	MP2A	Z	-1.485	-1.485	0	%100
53	MP3A	X	2.324	2.324	0	%100
54	MP3A	Z	-1.342	-1.342	0	%100
55	MP4A	X	2.324	2.324	0	%100
56	MP4A	Z	-1.342	-1.342	0	%100

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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft,%]	End Location[ft,%]
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M3	X	.791	.791	0	%100
6	M3	Z	0	0	0	%100
7	M4	X	.791	.791	0	%100
8	M4	Z	0	0	0	%100
9	M5	X	.791	.791	0	%100
10	M5	Z	0	0	0	%100
11	M6	X	.791	.791	0	%100
12	M6	Z	0	0	0	%100
13	M7	X	1.298	1.298	0	%100
14	M7	Z	0	0	0	%100
15	M8	X	1.298	1.298	0	%100
16	M8	Z	0	0	0	%100
17	M9	X	1.298	1.298	0	%100
18	M9	Z	0	0	0	%100
19	M10	X	1.298	1.298	0	%100
20	M10	Z	0	0	0	%100
21	M11	X	1.493	1.493	0	%100
22	M11	Z	0	0	0	%100
23	M12	X	1.493	1.493	0	%100
24	M12	Z	0	0	0	%100
25	M13	X	1.493	1.493	0	%100
26	M13	Z	0	0	0	%100
27	M14	X	1.493	1.493	0	%100
28	M14	Z	0	0	0	%100
29	M15	X	1.128	1.128	0	%100
30	M15	Z	0	0	0	%100
31	M16	X	1.128	1.128	0	%100
32	M16	Z	0	0	0	%100
33	M17	X	1.128	1.128	0	%100
34	M17	Z	0	0	0	%100
35	M18	X	1.128	1.128	0	%100
36	M18	Z	0	0	0	%100
37	M19	X	0	0	0	%100
38	M19	Z	0	0	0	%100
39	M20	X	0	0	0	%100
40	M20	Z	0	0	0	%100
41	M21	X	0	0	0	%100
42	M21	Z	0	0	0	%100
43	M22	X	0	0	0	%100
44	M22	Z	0	0	0	%100
45	M23	X	2.682	2.682	0	%100
46	M23	Z	0	0	0	%100
47	M24	X	2.513	2.513	0	%100
48	M24	Z	0	0	0	%100
49	MP1A	X	2.683	2.683	0	%100
50	MP1A	Z	0	0	0	%100
51	MP2A	X	2.971	2.971	0	%100
52	MP2A	Z	0	0	0	%100
53	MP3A	X	2.683	2.683	0	%100
54	MP3A	Z	0	0	0	%100
55	MP4A	X	2.683	2.683	0	%100
56	MP4A	Z	0	0	0	%100



Company :
 Designer :
 Job Number :
 Model Name :

Aug 5, 2021
 6:40 PM
 Checked By: _____

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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
1	M1	X	.643	.643	0	%100
2	M1	Z	.371	.371	0	%100
3	M2	X	.643	.643	0	%100
4	M2	Z	.371	.371	0	%100
5	M3	X	1.55	1.55	0	%100
6	M3	Z	.895	.895	0	%100
7	M4	X	1.55	1.55	0	%100
8	M4	Z	.895	.895	0	%100
9	M5	X	.035	.035	0	%100
10	M5	Z	.02	.02	0	%100
11	M6	X	.035	.035	0	%100
12	M6	Z	.02	.02	0	%100
13	M7	X	1.375	1.375	0	%100
14	M7	Z	.794	.794	0	%100
15	M8	X	1.375	1.375	0	%100
16	M8	Z	.794	.794	0	%100
17	M9	X	.937	.937	0	%100
18	M9	Z	.541	.541	0	%100
19	M10	X	.937	.937	0	%100
20	M10	Z	.541	.541	0	%100
21	M11	X	1.293	1.293	0	%100
22	M11	Z	.746	.746	0	%100
23	M12	X	1.293	1.293	0	%100
24	M12	Z	.746	.746	0	%100
25	M13	X	1.293	1.293	0	%100
26	M13	Z	.746	.746	0	%100
27	M14	X	1.293	1.293	0	%100
28	M14	Z	.746	.746	0	%100
29	M15	X	.733	.733	0	%100
30	M15	Z	.423	.423	0	%100
31	M16	X	.733	.733	0	%100
32	M16	Z	.423	.423	0	%100
33	M17	X	.733	.733	0	%100
34	M17	Z	.423	.423	0	%100
35	M18	X	.733	.733	0	%100
36	M18	Z	.423	.423	0	%100
37	M19	X	.246	.246	0	%100
38	M19	Z	.142	.142	0	%100
39	M20	X	.246	.246	0	%100
40	M20	Z	.142	.142	0	%100
41	M21	X	.246	.246	0	%100
42	M21	Z	.142	.142	0	%100
43	M22	X	.246	.246	0	%100
44	M22	Z	.142	.142	0	%100
45	M23	X	1.784	1.784	0	%100
46	M23	Z	1.03	1.03	0	%100
47	M24	X	2.16	2.16	0	%100
48	M24	Z	1.247	1.247	0	%100
49	MP1A	X	2.324	2.324	0	%100
50	MP1A	Z	1.342	1.342	0	%100
51	MP2A	X	2.573	2.573	0	%100
52	MP2A	Z	1.485	1.485	0	%100
53	MP3A	X	2.324	2.324	0	%100
54	MP3A	Z	1.342	1.342	0	%100
55	MP4A	X	2.324	2.324	0	%100
56	MP4A	Z	1.342	1.342	0	%100



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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
1	M1	X	1.114	1.114	0	%100
2	M1	Z	1.93	1.93	0	%100
3	M2	X	1.114	1.114	0	%100
4	M2	Z	1.93	1.93	0	%100
5	M3	X	1.02	1.02	0	%100
6	M3	Z	1.766	1.766	0	%100
7	M4	X	1.02	1.02	0	%100
8	M4	Z	1.766	1.766	0	%100
9	M5	X	.145	.145	0	%100
10	M5	Z	.251	.251	0	%100
11	M6	X	.145	.145	0	%100
12	M6	Z	.251	.251	0	%100
13	M7	X	.83	.83	0	%100
14	M7	Z	1.437	1.437	0	%100
15	M8	X	.83	.83	0	%100
16	M8	Z	1.437	1.437	0	%100
17	M9	X	.577	.577	0	%100
18	M9	Z	.999	.999	0	%100
19	M10	X	.577	.577	0	%100
20	M10	Z	.999	.999	0	%100
21	M11	X	.746	.746	0	%100
22	M11	Z	1.293	1.293	0	%100
23	M12	X	.746	.746	0	%100
24	M12	Z	1.293	1.293	0	%100
25	M13	X	.746	.746	0	%100
26	M13	Z	1.293	1.293	0	%100
27	M14	X	.746	.746	0	%100
28	M14	Z	1.293	1.293	0	%100
29	M15	X	.141	.141	0	%100
30	M15	Z	.244	.244	0	%100
31	M16	X	.141	.141	0	%100
32	M16	Z	.244	.244	0	%100
33	M17	X	.141	.141	0	%100
34	M17	Z	.244	.244	0	%100
35	M18	X	.141	.141	0	%100
36	M18	Z	.244	.244	0	%100
37	M19	X	.426	.426	0	%100
38	M19	Z	.737	.737	0	%100
39	M20	X	.426	.426	0	%100
40	M20	Z	.737	.737	0	%100
41	M21	X	.426	.426	0	%100
42	M21	Z	.737	.737	0	%100
43	M22	X	.426	.426	0	%100
44	M22	Z	.737	.737	0	%100
45	M23	X	.36	.36	0	%100
46	M23	Z	.623	.623	0	%100
47	M24	X	.661	.661	0	%100
48	M24	Z	1.146	1.146	0	%100
49	MP1A	X	1.342	1.342	0	%100
50	MP1A	Z	2.324	2.324	0	%100
51	MP2A	X	1.485	1.485	0	%100
52	MP2A	Z	2.573	2.573	0	%100
53	MP3A	X	1.342	1.342	0	%100
54	MP3A	Z	2.324	2.324	0	%100
55	MP4A	X	1.342	1.342	0	%100
56	MP4A	Z	2.324	2.324	0	%100



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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	2.971	2.971	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	2.971	2.971	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	1.29	1.29	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	1.29	1.29	0	%100
9	M5	X	0	0	0	%100
10	M5	Z	1.29	1.29	0	%100
11	M6	X	0	0	0	%100
12	M6	Z	1.29	1.29	0	%100
13	M7	X	0	0	0	%100
14	M7	Z	1.443	1.443	0	%100
15	M8	X	0	0	0	%100
16	M8	Z	1.443	1.443	0	%100
17	M9	X	0	0	0	%100
18	M9	Z	1.443	1.443	0	%100
19	M10	X	0	0	0	%100
20	M10	Z	1.443	1.443	0	%100
21	M11	X	0	0	0	%100
22	M11	Z	1.493	1.493	0	%100
23	M12	X	0	0	0	%100
24	M12	Z	1.493	1.493	0	%100
25	M13	X	0	0	0	%100
26	M13	Z	1.493	1.493	0	%100
27	M14	X	0	0	0	%100
28	M14	Z	1.493	1.493	0	%100
29	M15	X	0	0	0	%100
30	M15	Z	0	0	0	%100
31	M16	X	0	0	0	%100
32	M16	Z	0	0	0	%100
33	M17	X	0	0	0	%100
34	M17	Z	0	0	0	%100
35	M18	X	0	0	0	%100
36	M18	Z	0	0	0	%100
37	M19	X	0	0	0	%100
38	M19	Z	1.135	1.135	0	%100
39	M20	X	0	0	0	%100
40	M20	Z	1.135	1.135	0	%100
41	M21	X	0	0	0	%100
42	M21	Z	1.135	1.135	0	%100
43	M22	X	0	0	0	%100
44	M22	Z	1.135	1.135	0	%100
45	M23	X	0	0	0	%100
46	M23	Z	.001	.001	0	%100
47	M24	X	0	0	0	%100
48	M24	Z	.17	.17	0	%100
49	MP1A	X	0	0	0	%100
50	MP1A	Z	2.683	2.683	0	%100
51	MP2A	X	0	0	0	%100
52	MP2A	Z	2.971	2.971	0	%100
53	MP3A	X	0	0	0	%100
54	MP3A	Z	2.683	2.683	0	%100
55	MP4A	X	0	0	0	%100
56	MP4A	Z	2.683	2.683	0	%100



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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-1.114	-1.114	0	%100
2	M1	Z	1.93	1.93	0	%100
3	M2	X	-1.114	-1.114	0	%100
4	M2	Z	1.93	1.93	0	%100
5	M3	X	-.145	-.145	0	%100
6	M3	Z	.251	.251	0	%100
7	M4	X	-.145	-.145	0	%100
8	M4	Z	.251	.251	0	%100
9	M5	X	-1.02	-1.02	0	%100
10	M5	Z	1.766	1.766	0	%100
11	M6	X	-1.02	-1.02	0	%100
12	M6	Z	1.766	1.766	0	%100
13	M7	X	-.577	-.577	0	%100
14	M7	Z	.999	.999	0	%100
15	M8	X	-.577	-.577	0	%100
16	M8	Z	.999	.999	0	%100
17	M9	X	-.83	-.83	0	%100
18	M9	Z	1.437	1.437	0	%100
19	M10	X	-.83	-.83	0	%100
20	M10	Z	1.437	1.437	0	%100
21	M11	X	-.746	-.746	0	%100
22	M11	Z	1.293	1.293	0	%100
23	M12	X	-.746	-.746	0	%100
24	M12	Z	1.293	1.293	0	%100
25	M13	X	-.746	-.746	0	%100
26	M13	Z	1.293	1.293	0	%100
27	M14	X	-.746	-.746	0	%100
28	M14	Z	1.293	1.293	0	%100
29	M15	X	-.141	-.141	0	%100
30	M15	Z	.244	.244	0	%100
31	M16	X	-.141	-.141	0	%100
32	M16	Z	.244	.244	0	%100
33	M17	X	-.141	-.141	0	%100
34	M17	Z	.244	.244	0	%100
35	M18	X	-.141	-.141	0	%100
36	M18	Z	.244	.244	0	%100
37	M19	X	-.426	-.426	0	%100
38	M19	Z	.737	.737	0	%100
39	M20	X	-.426	-.426	0	%100
40	M20	Z	.737	.737	0	%100
41	M21	X	-.426	-.426	0	%100
42	M21	Z	.737	.737	0	%100
43	M22	X	-.426	-.426	0	%100
44	M22	Z	.737	.737	0	%100
45	M23	X	-.312	-.312	0	%100
46	M23	Z	.54	.54	0	%100
47	M24	X	-.095	-.095	0	%100
48	M24	Z	.164	.164	0	%100
49	MP1A	X	-1.342	-1.342	0	%100
50	MP1A	Z	2.324	2.324	0	%100
51	MP2A	X	-1.485	-1.485	0	%100
52	MP2A	Z	2.573	2.573	0	%100
53	MP3A	X	-1.342	-1.342	0	%100
54	MP3A	Z	2.324	2.324	0	%100
55	MP4A	X	-1.342	-1.342	0	%100
56	MP4A	Z	2.324	2.324	0	%100



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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-.643	-.643	0	%100
2	M1	Z	.371	.371	0	%100
3	M2	X	-.643	-.643	0	%100
4	M2	Z	.371	.371	0	%100
5	M3	X	-.035	-.035	0	%100
6	M3	Z	.02	.02	0	%100
7	M4	X	-.035	-.035	0	%100
8	M4	Z	.02	.02	0	%100
9	M5	X	-1.55	-1.55	0	%100
10	M5	Z	.895	.895	0	%100
11	M6	X	-1.55	-1.55	0	%100
12	M6	Z	.895	.895	0	%100
13	M7	X	-.937	-.937	0	%100
14	M7	Z	.541	.541	0	%100
15	M8	X	-.937	-.937	0	%100
16	M8	Z	.541	.541	0	%100
17	M9	X	-1.375	-1.375	0	%100
18	M9	Z	.794	.794	0	%100
19	M10	X	-1.375	-1.375	0	%100
20	M10	Z	.794	.794	0	%100
21	M11	X	-1.293	-1.293	0	%100
22	M11	Z	.746	.746	0	%100
23	M12	X	-1.293	-1.293	0	%100
24	M12	Z	.746	.746	0	%100
25	M13	X	-1.293	-1.293	0	%100
26	M13	Z	.746	.746	0	%100
27	M14	X	-1.293	-1.293	0	%100
28	M14	Z	.746	.746	0	%100
29	M15	X	-.733	-.733	0	%100
30	M15	Z	.423	.423	0	%100
31	M16	X	-.733	-.733	0	%100
32	M16	Z	.423	.423	0	%100
33	M17	X	-.733	-.733	0	%100
34	M17	Z	.423	.423	0	%100
35	M18	X	-.733	-.733	0	%100
36	M18	Z	.423	.423	0	%100
37	M19	X	-.246	-.246	0	%100
38	M19	Z	.142	.142	0	%100
39	M20	X	-.246	-.246	0	%100
40	M20	Z	.142	.142	0	%100
41	M21	X	-.246	-.246	0	%100
42	M21	Z	.142	.142	0	%100
43	M22	X	-.246	-.246	0	%100
44	M22	Z	.142	.142	0	%100
45	M23	X	-1.701	-1.701	0	%100
46	M23	Z	.982	.982	0	%100
47	M24	X	-1.178	-1.178	0	%100
48	M24	Z	.68	.68	0	%100
49	MP1A	X	-2.324	-2.324	0	%100
50	MP1A	Z	1.342	1.342	0	%100
51	MP2A	X	-2.573	-2.573	0	%100
52	MP2A	Z	1.485	1.485	0	%100
53	MP3A	X	-2.324	-2.324	0	%100
54	MP3A	Z	1.342	1.342	0	%100
55	MP4A	X	-2.324	-2.324	0	%100
56	MP4A	Z	1.342	1.342	0	%100



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

Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	%100
2	M1	Z	0	0	%100
3	M2	X	0	0	%100
4	M2	Z	0	0	%100
5	M3	X	-791	-791	%100
6	M3	Z	0	0	%100
7	M4	X	-791	-791	%100
8	M4	Z	0	0	%100
9	M5	X	-791	-791	%100
10	M5	Z	0	0	%100
11	M6	X	-791	-791	%100
12	M6	Z	0	0	%100
13	M7	X	-1.298	-1.298	%100
14	M7	Z	0	0	%100
15	M8	X	-1.298	-1.298	%100
16	M8	Z	0	0	%100
17	M9	X	-1.298	-1.298	%100
18	M9	Z	0	0	%100
19	M10	X	-1.298	-1.298	%100
20	M10	Z	0	0	%100
21	M11	X	-1.493	-1.493	%100
22	M11	Z	0	0	%100
23	M12	X	-1.493	-1.493	%100
24	M12	Z	0	0	%100
25	M13	X	-1.493	-1.493	%100
26	M13	Z	0	0	%100
27	M14	X	-1.493	-1.493	%100
28	M14	Z	0	0	%100
29	M15	X	-1.128	-1.128	%100
30	M15	Z	0	0	%100
31	M16	X	-1.128	-1.128	%100
32	M16	Z	0	0	%100
33	M17	X	-1.128	-1.128	%100
34	M17	Z	0	0	%100
35	M18	X	-1.128	-1.128	%100
36	M18	Z	0	0	%100
37	M19	X	0	0	%100
38	M19	Z	0	0	%100
39	M20	X	0	0	%100
40	M20	Z	0	0	%100
41	M21	X	0	0	%100
42	M21	Z	0	0	%100
43	M22	X	0	0	%100
44	M22	Z	0	0	%100
45	M23	X	-2.682	-2.682	%100
46	M23	Z	0	0	%100
47	M24	X	-2.513	-2.513	%100
48	M24	Z	0	0	%100
49	MP1A	X	-2.683	-2.683	%100
50	MP1A	Z	0	0	%100
51	MP2A	X	-2.971	-2.971	%100
52	MP2A	Z	0	0	%100
53	MP3A	X	-2.683	-2.683	%100
54	MP3A	Z	0	0	%100
55	MP4A	X	-2.683	-2.683	%100
56	MP4A	Z	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-643	-643	0	%100
2	M1	Z	-371	-371	0	%100
3	M2	X	-643	-643	0	%100
4	M2	Z	-371	-371	0	%100
5	M3	X	-1.55	-1.55	0	%100
6	M3	Z	-895	-895	0	%100
7	M4	X	-1.55	-1.55	0	%100
8	M4	Z	-895	-895	0	%100
9	M5	X	-.035	-.035	0	%100
10	M5	Z	-.02	-.02	0	%100
11	M6	X	-.035	-.035	0	%100
12	M6	Z	-.02	-.02	0	%100
13	M7	X	-1.375	-1.375	0	%100
14	M7	Z	-.794	-.794	0	%100
15	M8	X	-1.375	-1.375	0	%100
16	M8	Z	-.794	-.794	0	%100
17	M9	X	-.937	-.937	0	%100
18	M9	Z	-.541	-.541	0	%100
19	M10	X	-.937	-.937	0	%100
20	M10	Z	-.541	-.541	0	%100
21	M11	X	-1.293	-1.293	0	%100
22	M11	Z	-.746	-.746	0	%100
23	M12	X	-1.293	-1.293	0	%100
24	M12	Z	-.746	-.746	0	%100
25	M13	X	-1.293	-1.293	0	%100
26	M13	Z	-.746	-.746	0	%100
27	M14	X	-1.293	-1.293	0	%100
28	M14	Z	-.746	-.746	0	%100
29	M15	X	-.733	-.733	0	%100
30	M15	Z	-.423	-.423	0	%100
31	M16	X	-.733	-.733	0	%100
32	M16	Z	-.423	-.423	0	%100
33	M17	X	-.733	-.733	0	%100
34	M17	Z	-.423	-.423	0	%100
35	M18	X	-.733	-.733	0	%100
36	M18	Z	-.423	-.423	0	%100
37	M19	X	-.246	-.246	0	%100
38	M19	Z	-.142	-.142	0	%100
39	M20	X	-.246	-.246	0	%100
40	M20	Z	-.142	-.142	0	%100
41	M21	X	-.246	-.246	0	%100
42	M21	Z	-.142	-.142	0	%100
43	M22	X	-.246	-.246	0	%100
44	M22	Z	-.142	-.142	0	%100
45	M23	X	-1.784	-1.784	0	%100
46	M23	Z	-1.03	-1.03	0	%100
47	M24	X	-2.16	-2.16	0	%100
48	M24	Z	-1.247	-1.247	0	%100
49	MP1A	X	-2.324	-2.324	0	%100
50	MP1A	Z	-1.342	-1.342	0	%100
51	MP2A	X	-2.573	-2.573	0	%100
52	MP2A	Z	-1.485	-1.485	0	%100
53	MP3A	X	-2.324	-2.324	0	%100
54	MP3A	Z	-1.342	-1.342	0	%100
55	MP4A	X	-2.324	-2.324	0	%100
56	MP4A	Z	-1.342	-1.342	0	%100



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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-1.114	-1.114	0	%100
2	M1	Z	-1.93	-1.93	0	%100
3	M2	X	-1.114	-1.114	0	%100
4	M2	Z	-1.93	-1.93	0	%100
5	M3	X	-1.02	-1.02	0	%100
6	M3	Z	-1.766	-1.766	0	%100
7	M4	X	-1.02	-1.02	0	%100
8	M4	Z	-1.766	-1.766	0	%100
9	M5	X	-.145	-.145	0	%100
10	M5	Z	-.251	-.251	0	%100
11	M6	X	-.145	-.145	0	%100
12	M6	Z	-.251	-.251	0	%100
13	M7	X	-.83	-.83	0	%100
14	M7	Z	-1.437	-1.437	0	%100
15	M8	X	-.83	-.83	0	%100
16	M8	Z	-1.437	-1.437	0	%100
17	M9	X	-.577	-.577	0	%100
18	M9	Z	-.999	-.999	0	%100
19	M10	X	-.577	-.577	0	%100
20	M10	Z	-.999	-.999	0	%100
21	M11	X	-.746	-.746	0	%100
22	M11	Z	-1.293	-1.293	0	%100
23	M12	X	-.746	-.746	0	%100
24	M12	Z	-1.293	-1.293	0	%100
25	M13	X	-.746	-.746	0	%100
26	M13	Z	-1.293	-1.293	0	%100
27	M14	X	-.746	-.746	0	%100
28	M14	Z	-1.293	-1.293	0	%100
29	M15	X	-.141	-.141	0	%100
30	M15	Z	-.244	-.244	0	%100
31	M16	X	-.141	-.141	0	%100
32	M16	Z	-.244	-.244	0	%100
33	M17	X	-.141	-.141	0	%100
34	M17	Z	-.244	-.244	0	%100
35	M18	X	-.141	-.141	0	%100
36	M18	Z	-.244	-.244	0	%100
37	M19	X	-.426	-.426	0	%100
38	M19	Z	-.737	-.737	0	%100
39	M20	X	-.426	-.426	0	%100
40	M20	Z	-.737	-.737	0	%100
41	M21	X	-.426	-.426	0	%100
42	M21	Z	-.737	-.737	0	%100
43	M22	X	-.426	-.426	0	%100
44	M22	Z	-.737	-.737	0	%100
45	M23	X	-.36	-.36	0	%100
46	M23	Z	-.623	-.623	0	%100
47	M24	X	-.661	-.661	0	%100
48	M24	Z	-1.146	-1.146	0	%100
49	MP1A	X	-1.342	-1.342	0	%100
50	MP1A	Z	-2.324	-2.324	0	%100
51	MP2A	X	-1.485	-1.485	0	%100
52	MP2A	Z	-2.573	-2.573	0	%100
53	MP3A	X	-1.342	-1.342	0	%100
54	MP3A	Z	-2.324	-2.324	0	%100
55	MP4A	X	-1.342	-1.342	0	%100
56	MP4A	Z	-2.324	-2.324	0	%100



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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	-.595	-.595	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-.595	-.595	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	-.235	-.235	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	-.235	-.235	0	%100
9	M5	X	0	0	0	%100
10	M5	Z	-.235	-.235	0	%100
11	M6	X	0	0	0	%100
12	M6	Z	-.235	-.235	0	%100
13	M7	X	0	0	0	%100
14	M7	Z	-.134	-.134	0	%100
15	M8	X	0	0	0	%100
16	M8	Z	-.134	-.134	0	%100
17	M9	X	0	0	0	%100
18	M9	Z	-.134	-.134	0	%100
19	M10	X	0	0	0	%100
20	M10	Z	-.134	-.134	0	%100
21	M11	X	0	0	0	%100
22	M11	Z	-.129	-.129	0	%100
23	M12	X	0	0	0	%100
24	M12	Z	-.129	-.129	0	%100
25	M13	X	0	0	0	%100
26	M13	Z	-.129	-.129	0	%100
27	M14	X	0	0	0	%100
28	M14	Z	-.129	-.129	0	%100
29	M15	X	0	0	0	%100
30	M15	Z	0	0	0	%100
31	M16	X	0	0	0	%100
32	M16	Z	0	0	0	%100
33	M17	X	0	0	0	%100
34	M17	Z	0	0	0	%100
35	M18	X	0	0	0	%100
36	M18	Z	0	0	0	%100
37	M19	X	0	0	0	%100
38	M19	Z	-.129	-.129	0	%100
39	M20	X	0	0	0	%100
40	M20	Z	-.129	-.129	0	%100
41	M21	X	0	0	0	%100
42	M21	Z	-.129	-.129	0	%100
43	M22	X	0	0	0	%100
44	M22	Z	-.129	-.129	0	%100
45	M23	X	0	0	0	%100
46	M23	Z	-.000208	-.000208	0	%100
47	M24	X	0	0	0	%100
48	M24	Z	-.031	-.031	0	%100
49	MP1A	X	0	0	0	%100
50	MP1A	Z	-.492	-.492	0	%100
51	MP2A	X	0	0	0	%100
52	MP2A	Z	-.595	-.595	0	%100
53	MP3A	X	0	0	0	%100
54	MP3A	Z	-.492	-.492	0	%100
55	MP4A	X	0	0	0	%100
56	MP4A	Z	-.492	-.492	0	%100



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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
1	M1	X	.223	.223	0	%100
2	M1	Z	-.387	-.387	0	%100
3	M2	X	.223	.223	0	%100
4	M2	Z	-.387	-.387	0	%100
5	M3	X	.026	.026	0	%100
6	M3	Z	-.046	-.046	0	%100
7	M4	X	.026	.026	0	%100
8	M4	Z	-.046	-.046	0	%100
9	M5	X	.186	.186	0	%100
10	M5	Z	-.322	-.322	0	%100
11	M6	X	.186	.186	0	%100
12	M6	Z	-.322	-.322	0	%100
13	M7	X	.054	.054	0	%100
14	M7	Z	-.093	-.093	0	%100
15	M8	X	.054	.054	0	%100
16	M8	Z	-.093	-.093	0	%100
17	M9	X	.077	.077	0	%100
18	M9	Z	-.134	-.134	0	%100
19	M10	X	.077	.077	0	%100
20	M10	Z	-.134	-.134	0	%100
21	M11	X	.065	.065	0	%100
22	M11	Z	-.112	-.112	0	%100
23	M12	X	.065	.065	0	%100
24	M12	Z	-.112	-.112	0	%100
25	M13	X	.065	.065	0	%100
26	M13	Z	-.112	-.112	0	%100
27	M14	X	.065	.065	0	%100
28	M14	Z	-.112	-.112	0	%100
29	M15	X	.016	.016	0	%100
30	M15	Z	-.028	-.028	0	%100
31	M16	X	.016	.016	0	%100
32	M16	Z	-.028	-.028	0	%100
33	M17	X	.016	.016	0	%100
34	M17	Z	-.028	-.028	0	%100
35	M18	X	.016	.016	0	%100
36	M18	Z	-.028	-.028	0	%100
37	M19	X	.049	.049	0	%100
38	M19	Z	-.084	-.084	0	%100
39	M20	X	.049	.049	0	%100
40	M20	Z	-.084	-.084	0	%100
41	M21	X	.049	.049	0	%100
42	M21	Z	-.084	-.084	0	%100
43	M22	X	.049	.049	0	%100
44	M22	Z	-.084	-.084	0	%100
45	M23	X	.057	.057	0	%100
46	M23	Z	-.099	-.099	0	%100
47	M24	X	.017	.017	0	%100
48	M24	Z	-.03	-.03	0	%100
49	MP1A	X	.246	.246	0	%100
50	MP1A	Z	-.426	-.426	0	%100
51	MP2A	X	.298	.298	0	%100
52	MP2A	Z	-.516	-.516	0	%100
53	MP3A	X	.246	.246	0	%100
54	MP3A	Z	-.426	-.426	0	%100
55	MP4A	X	.246	.246	0	%100
56	MP4A	Z	-.426	-.426	0	%100



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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
1	M1	X	.129	.129	0	%100
2	M1	Z	-.074	-.074	0	%100
3	M2	X	.129	.129	0	%100
4	M2	Z	-.074	-.074	0	%100
5	M3	X	.006	.006	0	%100
6	M3	Z	-.004	-.004	0	%100
7	M4	X	.006	.006	0	%100
8	M4	Z	-.004	-.004	0	%100
9	M5	X	.283	.283	0	%100
10	M5	Z	-.163	-.163	0	%100
11	M6	X	.283	.283	0	%100
12	M6	Z	-.163	-.163	0	%100
13	M7	X	.087	.087	0	%100
14	M7	Z	-.05	-.05	0	%100
15	M8	X	.087	.087	0	%100
16	M8	Z	-.05	-.05	0	%100
17	M9	X	.128	.128	0	%100
18	M9	Z	-.074	-.074	0	%100
19	M10	X	.128	.128	0	%100
20	M10	Z	-.074	-.074	0	%100
21	M11	X	.112	.112	0	%100
22	M11	Z	-.065	-.065	0	%100
23	M12	X	.112	.112	0	%100
24	M12	Z	-.065	-.065	0	%100
25	M13	X	.112	.112	0	%100
26	M13	Z	-.065	-.065	0	%100
27	M14	X	.112	.112	0	%100
28	M14	Z	-.065	-.065	0	%100
29	M15	X	.084	.084	0	%100
30	M15	Z	-.049	-.049	0	%100
31	M16	X	.084	.084	0	%100
32	M16	Z	-.049	-.049	0	%100
33	M17	X	.084	.084	0	%100
34	M17	Z	-.049	-.049	0	%100
35	M18	X	.084	.084	0	%100
36	M18	Z	-.049	-.049	0	%100
37	M19	X	.028	.028	0	%100
38	M19	Z	-.016	-.016	0	%100
39	M20	X	.028	.028	0	%100
40	M20	Z	-.016	-.016	0	%100
41	M21	X	.028	.028	0	%100
42	M21	Z	-.016	-.016	0	%100
43	M22	X	.028	.028	0	%100
44	M22	Z	-.016	-.016	0	%100
45	M23	X	.312	.312	0	%100
46	M23	Z	-.18	-.18	0	%100
47	M24	X	.216	.216	0	%100
48	M24	Z	-.125	-.125	0	%100
49	MP1A	X	.426	.426	0	%100
50	MP1A	Z	-.246	-.246	0	%100
51	MP2A	X	.516	.516	0	%100
52	MP2A	Z	-.298	-.298	0	%100
53	MP3A	X	.426	.426	0	%100
54	MP3A	Z	-.246	-.246	0	%100
55	MP4A	X	.426	.426	0	%100
56	MP4A	Z	-.246	-.246	0	%100

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

Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	%100
2	M1	Z	0	0	%100
3	M2	X	0	0	%100
4	M2	Z	0	0	%100
5	M3	X	.144	.144	%100
6	M3	Z	0	0	%100
7	M4	X	.144	.144	%100
8	M4	Z	0	0	%100
9	M5	X	.144	.144	%100
10	M5	Z	0	0	%100
11	M6	X	.144	.144	%100
12	M6	Z	0	0	%100
13	M7	X	.121	.121	%100
14	M7	Z	0	0	%100
15	M8	X	.121	.121	%100
16	M8	Z	0	0	%100
17	M9	X	.121	.121	%100
18	M9	Z	0	0	%100
19	M10	X	.121	.121	%100
20	M10	Z	0	0	%100
21	M11	X	.129	.129	%100
22	M11	Z	0	0	%100
23	M12	X	.129	.129	%100
24	M12	Z	0	0	%100
25	M13	X	.129	.129	%100
26	M13	Z	0	0	%100
27	M14	X	.129	.129	%100
28	M14	Z	0	0	%100
29	M15	X	.129	.129	%100
30	M15	Z	0	0	%100
31	M16	X	.129	.129	%100
32	M16	Z	0	0	%100
33	M17	X	.129	.129	%100
34	M17	Z	0	0	%100
35	M18	X	.129	.129	%100
36	M18	Z	0	0	%100
37	M19	X	0	0	%100
38	M19	Z	0	0	%100
39	M20	X	0	0	%100
40	M20	Z	0	0	%100
41	M21	X	0	0	%100
42	M21	Z	0	0	%100
43	M22	X	0	0	%100
44	M22	Z	0	0	%100
45	M23	X	.492	.492	%100
46	M23	Z	0	0	%100
47	M24	X	.461	.461	%100
48	M24	Z	0	0	%100
49	MP1A	X	.492	.492	%100
50	MP1A	Z	0	0	%100
51	MP2A	X	.595	.595	%100
52	MP2A	Z	0	0	%100
53	MP3A	X	.492	.492	%100
54	MP3A	Z	0	0	%100
55	MP4A	X	.492	.492	%100
56	MP4A	Z	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
1	M1	X	.129	.129	0	%100
2	M1	Z	.074	.074	0	%100
3	M2	X	.129	.129	0	%100
4	M2	Z	.074	.074	0	%100
5	M3	X	.283	.283	0	%100
6	M3	Z	.163	.163	0	%100
7	M4	X	.283	.283	0	%100
8	M4	Z	.163	.163	0	%100
9	M5	X	.006	.006	0	%100
10	M5	Z	.004	.004	0	%100
11	M6	X	.006	.006	0	%100
12	M6	Z	.004	.004	0	%100
13	M7	X	.128	.128	0	%100
14	M7	Z	.074	.074	0	%100
15	M8	X	.128	.128	0	%100
16	M8	Z	.074	.074	0	%100
17	M9	X	.087	.087	0	%100
18	M9	Z	.05	.05	0	%100
19	M10	X	.087	.087	0	%100
20	M10	Z	.05	.05	0	%100
21	M11	X	.112	.112	0	%100
22	M11	Z	.065	.065	0	%100
23	M12	X	.112	.112	0	%100
24	M12	Z	.065	.065	0	%100
25	M13	X	.112	.112	0	%100
26	M13	Z	.065	.065	0	%100
27	M14	X	.112	.112	0	%100
28	M14	Z	.065	.065	0	%100
29	M15	X	.084	.084	0	%100
30	M15	Z	.049	.049	0	%100
31	M16	X	.084	.084	0	%100
32	M16	Z	.049	.049	0	%100
33	M17	X	.084	.084	0	%100
34	M17	Z	.049	.049	0	%100
35	M18	X	.084	.084	0	%100
36	M18	Z	.049	.049	0	%100
37	M19	X	.028	.028	0	%100
38	M19	Z	.016	.016	0	%100
39	M20	X	.028	.028	0	%100
40	M20	Z	.016	.016	0	%100
41	M21	X	.028	.028	0	%100
42	M21	Z	.016	.016	0	%100
43	M22	X	.028	.028	0	%100
44	M22	Z	.016	.016	0	%100
45	M23	X	.327	.327	0	%100
46	M23	Z	.189	.189	0	%100
47	M24	X	.396	.396	0	%100
48	M24	Z	.229	.229	0	%100
49	MP1A	X	.426	.426	0	%100
50	MP1A	Z	.246	.246	0	%100
51	MP2A	X	.516	.516	0	%100
52	MP2A	Z	.298	.298	0	%100
53	MP3A	X	.426	.426	0	%100
54	MP3A	Z	.246	.246	0	%100
55	MP4A	X	.426	.426	0	%100
56	MP4A	Z	.246	.246	0	%100



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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
1	M1	X	.223	.223	0	%100
2	M1	Z	.387	.387	0	%100
3	M2	X	.223	.223	0	%100
4	M2	Z	.387	.387	0	%100
5	M3	X	.186	.186	0	%100
6	M3	Z	.322	.322	0	%100
7	M4	X	.186	.186	0	%100
8	M4	Z	.322	.322	0	%100
9	M5	X	.026	.026	0	%100
10	M5	Z	.046	.046	0	%100
11	M6	X	.026	.026	0	%100
12	M6	Z	.046	.046	0	%100
13	M7	X	.077	.077	0	%100
14	M7	Z	.134	.134	0	%100
15	M8	X	.077	.077	0	%100
16	M8	Z	.134	.134	0	%100
17	M9	X	.054	.054	0	%100
18	M9	Z	.093	.093	0	%100
19	M10	X	.054	.054	0	%100
20	M10	Z	.093	.093	0	%100
21	M11	X	.065	.065	0	%100
22	M11	Z	.112	.112	0	%100
23	M12	X	.065	.065	0	%100
24	M12	Z	.112	.112	0	%100
25	M13	X	.065	.065	0	%100
26	M13	Z	.112	.112	0	%100
27	M14	X	.065	.065	0	%100
28	M14	Z	.112	.112	0	%100
29	M15	X	.016	.016	0	%100
30	M15	Z	.028	.028	0	%100
31	M16	X	.016	.016	0	%100
32	M16	Z	.028	.028	0	%100
33	M17	X	.016	.016	0	%100
34	M17	Z	.028	.028	0	%100
35	M18	X	.016	.016	0	%100
36	M18	Z	.028	.028	0	%100
37	M19	X	.049	.049	0	%100
38	M19	Z	.084	.084	0	%100
39	M20	X	.049	.049	0	%100
40	M20	Z	.084	.084	0	%100
41	M21	X	.049	.049	0	%100
42	M21	Z	.084	.084	0	%100
43	M22	X	.049	.049	0	%100
44	M22	Z	.084	.084	0	%100
45	M23	X	.066	.066	0	%100
46	M23	Z	.114	.114	0	%100
47	M24	X	.121	.121	0	%100
48	M24	Z	.21	.21	0	%100
49	MP1A	X	.246	.246	0	%100
50	MP1A	Z	.426	.426	0	%100
51	MP2A	X	.298	.298	0	%100
52	MP2A	Z	.516	.516	0	%100
53	MP3A	X	.246	.246	0	%100
54	MP3A	Z	.426	.426	0	%100
55	MP4A	X	.246	.246	0	%100
56	MP4A	Z	.426	.426	0	%100



Company :
 Designer :
 Job Number :
 Model Name :

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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	.595	.595	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	.595	.595	0	%100
5	M3	X	0	0	0	%100
6	M3	Z	.235	.235	0	%100
7	M4	X	0	0	0	%100
8	M4	Z	.235	.235	0	%100
9	M5	X	0	0	0	%100
10	M5	Z	.235	.235	0	%100
11	M6	X	0	0	0	%100
12	M6	Z	.235	.235	0	%100
13	M7	X	0	0	0	%100
14	M7	Z	.134	.134	0	%100
15	M8	X	0	0	0	%100
16	M8	Z	.134	.134	0	%100
17	M9	X	0	0	0	%100
18	M9	Z	.134	.134	0	%100
19	M10	X	0	0	0	%100
20	M10	Z	.134	.134	0	%100
21	M11	X	0	0	0	%100
22	M11	Z	.129	.129	0	%100
23	M12	X	0	0	0	%100
24	M12	Z	.129	.129	0	%100
25	M13	X	0	0	0	%100
26	M13	Z	.129	.129	0	%100
27	M14	X	0	0	0	%100
28	M14	Z	.129	.129	0	%100
29	M15	X	0	0	0	%100
30	M15	Z	0	0	0	%100
31	M16	X	0	0	0	%100
32	M16	Z	0	0	0	%100
33	M17	X	0	0	0	%100
34	M17	Z	0	0	0	%100
35	M18	X	0	0	0	%100
36	M18	Z	0	0	0	%100
37	M19	X	0	0	0	%100
38	M19	Z	.129	.129	0	%100
39	M20	X	0	0	0	%100
40	M20	Z	.129	.129	0	%100
41	M21	X	0	0	0	%100
42	M21	Z	.129	.129	0	%100
43	M22	X	0	0	0	%100
44	M22	Z	.129	.129	0	%100
45	M23	X	0	0	0	%100
46	M23	Z	.000208	.000208	0	%100
47	M24	X	0	0	0	%100
48	M24	Z	.031	.031	0	%100
49	MP1A	X	0	0	0	%100
50	MP1A	Z	.492	.492	0	%100
51	MP2A	X	0	0	0	%100
52	MP2A	Z	.595	.595	0	%100
53	MP3A	X	0	0	0	%100
54	MP3A	Z	.492	.492	0	%100
55	MP4A	X	0	0	0	%100
56	MP4A	Z	.492	.492	0	%100



Company :
 Designer :
 Job Number :
 Model Name :

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

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-.223	-.223	0	%100
2	M1	Z	.387	.387	0	%100
3	M2	X	-.223	-.223	0	%100
4	M2	Z	.387	.387	0	%100
5	M3	X	-.026	-.026	0	%100
6	M3	Z	.046	.046	0	%100
7	M4	X	-.026	-.026	0	%100
8	M4	Z	.046	.046	0	%100
9	M5	X	-.186	-.186	0	%100
10	M5	Z	.322	.322	0	%100
11	M6	X	-.186	-.186	0	%100
12	M6	Z	.322	.322	0	%100
13	M7	X	-.054	-.054	0	%100
14	M7	Z	.093	.093	0	%100
15	M8	X	-.054	-.054	0	%100
16	M8	Z	.093	.093	0	%100
17	M9	X	-.077	-.077	0	%100
18	M9	Z	.134	.134	0	%100
19	M10	X	-.077	-.077	0	%100
20	M10	Z	.134	.134	0	%100
21	M11	X	-.065	-.065	0	%100
22	M11	Z	.112	.112	0	%100
23	M12	X	-.065	-.065	0	%100
24	M12	Z	.112	.112	0	%100
25	M13	X	-.065	-.065	0	%100
26	M13	Z	.112	.112	0	%100
27	M14	X	-.065	-.065	0	%100
28	M14	Z	.112	.112	0	%100
29	M15	X	-.016	-.016	0	%100
30	M15	Z	.028	.028	0	%100
31	M16	X	-.016	-.016	0	%100
32	M16	Z	.028	.028	0	%100
33	M17	X	-.016	-.016	0	%100
34	M17	Z	.028	.028	0	%100
35	M18	X	-.016	-.016	0	%100
36	M18	Z	.028	.028	0	%100
37	M19	X	-.049	-.049	0	%100
38	M19	Z	.084	.084	0	%100
39	M20	X	-.049	-.049	0	%100
40	M20	Z	.084	.084	0	%100
41	M21	X	-.049	-.049	0	%100
42	M21	Z	.084	.084	0	%100
43	M22	X	-.049	-.049	0	%100
44	M22	Z	.084	.084	0	%100
45	M23	X	-.057	-.057	0	%100
46	M23	Z	.099	.099	0	%100
47	M24	X	-.017	-.017	0	%100
48	M24	Z	.03	.03	0	%100
49	MP1A	X	-.246	-.246	0	%100
50	MP1A	Z	.426	.426	0	%100
51	MP2A	X	-.298	-.298	0	%100
52	MP2A	Z	.516	.516	0	%100
53	MP3A	X	-.246	-.246	0	%100
54	MP3A	Z	.426	.426	0	%100
55	MP4A	X	-.246	-.246	0	%100
56	MP4A	Z	.426	.426	0	%100



Company :
 Designer :
 Job Number :
 Model Name :

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Member Distributed Loads (BLC 73 : Structure Wm (240 Deg))

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-.129	-.129	0	%100
2	M1	Z	.074	.074	0	%100
3	M2	X	-.129	-.129	0	%100
4	M2	Z	.074	.074	0	%100
5	M3	X	-.006	-.006	0	%100
6	M3	Z	.004	.004	0	%100
7	M4	X	-.006	-.006	0	%100
8	M4	Z	.004	.004	0	%100
9	M5	X	-.283	-.283	0	%100
10	M5	Z	.163	.163	0	%100
11	M6	X	-.283	-.283	0	%100
12	M6	Z	.163	.163	0	%100
13	M7	X	-.087	-.087	0	%100
14	M7	Z	.05	.05	0	%100
15	M8	X	-.087	-.087	0	%100
16	M8	Z	.05	.05	0	%100
17	M9	X	-.128	-.128	0	%100
18	M9	Z	.074	.074	0	%100
19	M10	X	-.128	-.128	0	%100
20	M10	Z	.074	.074	0	%100
21	M11	X	-.112	-.112	0	%100
22	M11	Z	.065	.065	0	%100
23	M12	X	-.112	-.112	0	%100
24	M12	Z	.065	.065	0	%100
25	M13	X	-.112	-.112	0	%100
26	M13	Z	.065	.065	0	%100
27	M14	X	-.112	-.112	0	%100
28	M14	Z	.065	.065	0	%100
29	M15	X	-.084	-.084	0	%100
30	M15	Z	.049	.049	0	%100
31	M16	X	-.084	-.084	0	%100
32	M16	Z	.049	.049	0	%100
33	M17	X	-.084	-.084	0	%100
34	M17	Z	.049	.049	0	%100
35	M18	X	-.084	-.084	0	%100
36	M18	Z	.049	.049	0	%100
37	M19	X	-.028	-.028	0	%100
38	M19	Z	.016	.016	0	%100
39	M20	X	-.028	-.028	0	%100
40	M20	Z	.016	.016	0	%100
41	M21	X	-.028	-.028	0	%100
42	M21	Z	.016	.016	0	%100
43	M22	X	-.028	-.028	0	%100
44	M22	Z	.016	.016	0	%100
45	M23	X	-.312	-.312	0	%100
46	M23	Z	.18	.18	0	%100
47	M24	X	-.216	-.216	0	%100
48	M24	Z	.125	.125	0	%100
49	MP1A	X	-.426	-.426	0	%100
50	MP1A	Z	.246	.246	0	%100
51	MP2A	X	-.516	-.516	0	%100
52	MP2A	Z	.298	.298	0	%100
53	MP3A	X	-.426	-.426	0	%100
54	MP3A	Z	.246	.246	0	%100
55	MP4A	X	-.426	-.426	0	%100
56	MP4A	Z	.246	.246	0	%100



Company :
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 Job Number :
 Model Name :

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Member Distributed Loads (BLC 74 : Structure Wm (270 Deg))

Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	%100
2	M1	Z	0	0	%100
3	M2	X	0	0	%100
4	M2	Z	0	0	%100
5	M3	X	-144	-144	%100
6	M3	Z	0	0	%100
7	M4	X	-144	-144	%100
8	M4	Z	0	0	%100
9	M5	X	-144	-144	%100
10	M5	Z	0	0	%100
11	M6	X	-144	-144	%100
12	M6	Z	0	0	%100
13	M7	X	-121	-121	%100
14	M7	Z	0	0	%100
15	M8	X	-121	-121	%100
16	M8	Z	0	0	%100
17	M9	X	-121	-121	%100
18	M9	Z	0	0	%100
19	M10	X	-121	-121	%100
20	M10	Z	0	0	%100
21	M11	X	-129	-129	%100
22	M11	Z	0	0	%100
23	M12	X	-129	-129	%100
24	M12	Z	0	0	%100
25	M13	X	-129	-129	%100
26	M13	Z	0	0	%100
27	M14	X	-129	-129	%100
28	M14	Z	0	0	%100
29	M15	X	-129	-129	%100
30	M15	Z	0	0	%100
31	M16	X	-129	-129	%100
32	M16	Z	0	0	%100
33	M17	X	-129	-129	%100
34	M17	Z	0	0	%100
35	M18	X	-129	-129	%100
36	M18	Z	0	0	%100
37	M19	X	0	0	%100
38	M19	Z	0	0	%100
39	M20	X	0	0	%100
40	M20	Z	0	0	%100
41	M21	X	0	0	%100
42	M21	Z	0	0	%100
43	M22	X	0	0	%100
44	M22	Z	0	0	%100
45	M23	X	-492	-492	%100
46	M23	Z	0	0	%100
47	M24	X	-461	-461	%100
48	M24	Z	0	0	%100
49	MP1A	X	-492	-492	%100
50	MP1A	Z	0	0	%100
51	MP2A	X	-595	-595	%100
52	MP2A	Z	0	0	%100
53	MP3A	X	-492	-492	%100
54	MP3A	Z	0	0	%100
55	MP4A	X	-492	-492	%100
56	MP4A	Z	0	0	%100



Company :
 Designer :
 Job Number :
 Model Name :

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Member Distributed Loads (BLC 75 : Structure Wm (300 Deg))

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-129	-129	0	%100
2	M1	Z	-074	-074	0	%100
3	M2	X	-129	-129	0	%100
4	M2	Z	-074	-074	0	%100
5	M3	X	-283	-283	0	%100
6	M3	Z	-163	-163	0	%100
7	M4	X	-283	-283	0	%100
8	M4	Z	-163	-163	0	%100
9	M5	X	-006	-006	0	%100
10	M5	Z	-004	-004	0	%100
11	M6	X	-006	-006	0	%100
12	M6	Z	-004	-004	0	%100
13	M7	X	-128	-128	0	%100
14	M7	Z	-074	-074	0	%100
15	M8	X	-128	-128	0	%100
16	M8	Z	-074	-074	0	%100
17	M9	X	-087	-087	0	%100
18	M9	Z	-05	-05	0	%100
19	M10	X	-087	-087	0	%100
20	M10	Z	-05	-05	0	%100
21	M11	X	-112	-112	0	%100
22	M11	Z	-065	-065	0	%100
23	M12	X	-112	-112	0	%100
24	M12	Z	-065	-065	0	%100
25	M13	X	-112	-112	0	%100
26	M13	Z	-065	-065	0	%100
27	M14	X	-112	-112	0	%100
28	M14	Z	-065	-065	0	%100
29	M15	X	-084	-084	0	%100
30	M15	Z	-049	-049	0	%100
31	M16	X	-084	-084	0	%100
32	M16	Z	-049	-049	0	%100
33	M17	X	-084	-084	0	%100
34	M17	Z	-049	-049	0	%100
35	M18	X	-084	-084	0	%100
36	M18	Z	-049	-049	0	%100
37	M19	X	-028	-028	0	%100
38	M19	Z	-016	-016	0	%100
39	M20	X	-028	-028	0	%100
40	M20	Z	-016	-016	0	%100
41	M21	X	-028	-028	0	%100
42	M21	Z	-016	-016	0	%100
43	M22	X	-028	-028	0	%100
44	M22	Z	-016	-016	0	%100
45	M23	X	-327	-327	0	%100
46	M23	Z	-189	-189	0	%100
47	M24	X	-396	-396	0	%100
48	M24	Z	-229	-229	0	%100
49	MP1A	X	-426	-426	0	%100
50	MP1A	Z	-246	-246	0	%100
51	MP2A	X	-516	-516	0	%100
52	MP2A	Z	-298	-298	0	%100
53	MP3A	X	-426	-426	0	%100
54	MP3A	Z	-246	-246	0	%100
55	MP4A	X	-426	-426	0	%100
56	MP4A	Z	-246	-246	0	%100



Company :
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Member Distributed Loads (BLC 76 : Structure Wm (330 Deg))

	Member Label	Direction	Start Magnitude[lb/f...	End Magnitude[lb/ft,F,ksf]	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-0.223	-0.223	0	%100
2	M1	Z	-0.387	-0.387	0	%100
3	M2	X	-0.223	-0.223	0	%100
4	M2	Z	-0.387	-0.387	0	%100
5	M3	X	-0.186	-0.186	0	%100
6	M3	Z	-0.322	-0.322	0	%100
7	M4	X	-0.186	-0.186	0	%100
8	M4	Z	-0.322	-0.322	0	%100
9	M5	X	-0.026	-0.026	0	%100
10	M5	Z	-0.046	-0.046	0	%100
11	M6	X	-0.026	-0.026	0	%100
12	M6	Z	-0.046	-0.046	0	%100
13	M7	X	-0.077	-0.077	0	%100
14	M7	Z	-0.134	-0.134	0	%100
15	M8	X	-0.077	-0.077	0	%100
16	M8	Z	-0.134	-0.134	0	%100
17	M9	X	-0.054	-0.054	0	%100
18	M9	Z	-0.093	-0.093	0	%100
19	M10	X	-0.054	-0.054	0	%100
20	M10	Z	-0.093	-0.093	0	%100
21	M11	X	-0.065	-0.065	0	%100
22	M11	Z	-0.112	-0.112	0	%100
23	M12	X	-0.065	-0.065	0	%100
24	M12	Z	-0.112	-0.112	0	%100
25	M13	X	-0.065	-0.065	0	%100
26	M13	Z	-0.112	-0.112	0	%100
27	M14	X	-0.065	-0.065	0	%100
28	M14	Z	-0.112	-0.112	0	%100
29	M15	X	-0.016	-0.016	0	%100
30	M15	Z	-0.028	-0.028	0	%100
31	M16	X	-0.016	-0.016	0	%100
32	M16	Z	-0.028	-0.028	0	%100
33	M17	X	-0.016	-0.016	0	%100
34	M17	Z	-0.028	-0.028	0	%100
35	M18	X	-0.016	-0.016	0	%100
36	M18	Z	-0.028	-0.028	0	%100
37	M19	X	-0.049	-0.049	0	%100
38	M19	Z	-0.084	-0.084	0	%100
39	M20	X	-0.049	-0.049	0	%100
40	M20	Z	-0.084	-0.084	0	%100
41	M21	X	-0.049	-0.049	0	%100
42	M21	Z	-0.084	-0.084	0	%100
43	M22	X	-0.049	-0.049	0	%100
44	M22	Z	-0.084	-0.084	0	%100
45	M23	X	-0.066	-0.066	0	%100
46	M23	Z	-0.114	-0.114	0	%100
47	M24	X	-0.121	-0.121	0	%100
48	M24	Z	-0.21	-0.21	0	%100
49	MP1A	X	-0.246	-0.246	0	%100
50	MP1A	Z	-0.426	-0.426	0	%100
51	MP2A	X	-0.298	-0.298	0	%100
52	MP2A	Z	-0.516	-0.516	0	%100
53	MP3A	X	-0.246	-0.246	0	%100
54	MP3A	Z	-0.426	-0.426	0	%100
55	MP4A	X	-0.246	-0.246	0	%100
56	MP4A	Z	-0.426	-0.426	0	%100

Member Area Loads

Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
No Data to Print ...						

Envelope Joint Reactions

Joint	X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC		
1	N1	max	1343.491	47	1081.321	20	1380.503	24	-.131	3	0	51	.21	38
2		min	-229.468	5	395.543	2	-60.495	6	-.465	21	0	1	-.044	8
3	N2	max	669.859	10	1031.471	14	354.794	2	-.114	8	0	51	.2	38
4		min	-1436.454	40	380.115	8	-1478.323	20	-.438	14	0	1	-.054	8
5	N52	max	30.149	10	45.747	18	760.045	12	0	51	0	51	0	51
6		min	-30.177	4	20.874	11	-770.389	6	0	1	0	1	0	1
7	N53	max	177.315	9	40.605	20	658.017	2	0	51	0	51	0	51
8		min	-175.573	3	18.486	2	-664.385	8	0	1	0	1	0	1
9	Totals:	max	1348.058	10	2162.636	20	1922.833	1						
10		min	-1348.058	4	995.328	2	-1922.831	7						

Envelope AISC 15th(360-16): LRFD Steel Code Checks

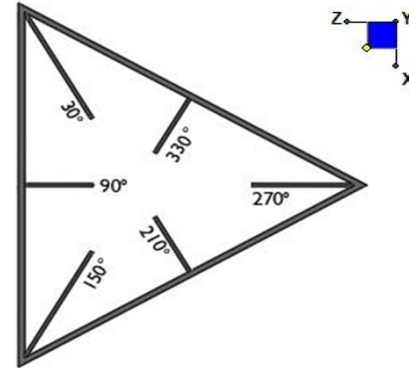
Member	Shape	Code Check	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	phi*Pnc ...	phi*Pnt [...]	phi*Mn ...	phi*Mn ...	Cb	Eqn	
1	M22	PL5/8X3.5	.400	.531	48	.089	0	y	9	67591.76	68906.25	.897	5.024	1...	H1-1b
2	MP1A	PIPE 2.0	.397	5.667	44	.054	5.083		39	14916.0...	32130	1.872	1.872	4...	H1-1b
3	M20	PL5/8X3.5	.351	.531	42	.059	.531	y	7	67591.76	68906.25	.897	5.024	1...	H1-1b
4	M18	PL5/8X3.5	.283	0	1	.120	0	y	7	66184.77	68906.25	.897	5.024	1...	H1-1b
5	M19	PL5/8X3.5	.270	.531	20	.079	.531	y	8	67591.76	68906.25	.897	5.024	1...	H1-1b
6	M2	PIPE 2.5	.255	8.724	48	.118	8.724		1	14558.7...	50715	3.596	3.596	2...	H1-1b
7	M21	PL5/8X3.5	.253	.531	21	.028	.531	y	12	67591.76	68906.25	.897	5.024	1...	H1-1b
8	M1	PIPE 2.5	.247	8.724	39	.110	8.724		7	14558.7...	50715	3.596	3.596	2...	H1-1b
9	M17	PL5/8X3.5	.204	0	44	.141	.422	y	11	66184.77	68906.25	.897	5.024	1...	H1-1b
10	MP2A	PIPE 2.5	.199	2.333	7	.052	2.333		8	30038.4...	50715	3.596	3.596	4...	H1-1b
11	MP4A	PIPE 2.0	.184	5.667	1	.045	2.333		9	14916.0...	32130	1.872	1.872	4...	H1-1b
12	M16	PL5/8X3.5	.159	0	7	.069	0	y	1	66184.77	68906.25	.897	5.024	1...	H1-1b
13	M3	PIPE 2.0	.150	0	9	.052	0		15	31128.25	32130	1.872	1.872	2...	H1-1b
14	M14	SR 0.625	.148	0	2	.014	0		37	2158.31	9664.079	.101	.101	1...	H1-1b*
15	M15	PL5/8X3.5	.140	0	2	.145	.422	y	9	66184.77	68906.25	.897	5.024	1...	H1-1b
16	M5	PIPE 2.0	.136	0	11	.082	0		45	31128.25	32130	1.872	1.872	1...	H1-1b
17	MP3A	PIPE 2.0	.131	2.333	7	.046	2.333		1	14916.0...	32130	1.872	1.872	4...	H1-1b
18	M6	PIPE 2.0	.123	0	7	.068	0		37	31128.25	32130	1.872	1.872	2...	H1-1b
19	M11	SR 0.625	.109	0	1	.011	0		38	2158.31	9664.079	.101	.101	1	H1-1b*
20	M23	PIPE 2.0	.088	5.028	10	.005	10.0...		22	9726.394	32130	1.872	1.872	1...	H1-1b
21	M10	SR 0.75	.072	4.167	41	.015	0		47	2863.936	13916.2...	.174	.174	1...	H1-1b*
22	M4	PIPE 2.0	.068	0	1	.049	0		21	31128.25	32130	1.872	1.872	1...	H1-1b
23	M24	PIPE 2.0	.065	4.462	4	.004	8.924		22	12350.6...	32130	1.872	1.872	1...	H1-1b
24	M13	SR 0.625	.061	0	7	.012	0		7	2158.31	9664.079	.101	.101	1	H1-1b*
25	M12	SR 0.625	.054	1.667	8	.009	0		1	2158.31	9664.079	.101	.101	1...	H1-1b
26	M8	SR 0.75	.045	0	20	.007	4.167		7	2863.936	13916.2...	.174	.174	1...	H1-1b*
27	M7	SR 0.75	.000	0	51	.009	4.167		8	2863.936	13916.2...	.174	.174	1...	H1-1a
28	M9	SR 0.75	.000	0	51	.016	0		2	2863.936	13916.2...	.174	.174	1...	H1-1a



I. Mount-to-Tower Connection Check

RISA Model Data

Nodes (labeled per RISA)	Orientation (per graphic of typical platform)
N1	90
N2	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):

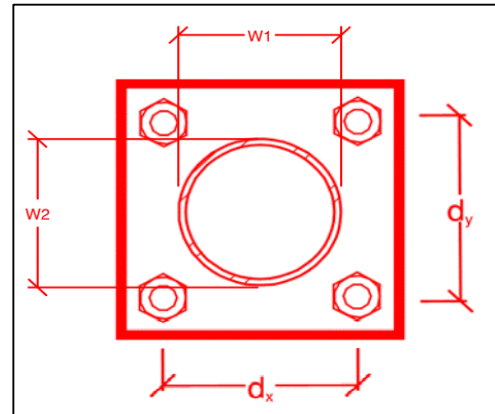
Tensile Strength / bolt (kips):

Shear Strength / bolt (kips):

Tensile Capacity Overall:

Shear Capacity Overall:

yes
4
9.5
3.5
A307
0.625
4.5
2.2
10.0
6.0
11.3%*
9.0%



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

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – **New Mount Passing MA**

Purpose – to provide Maser Consulting the proper documentation in order 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, this includes safety issues.

Base Requirements:

- Any special photos outside of the standard requirements will be indicated on the passing MA
- Verification that loading is as communicated in the Mount Analysis. NOTE If loading is different than what is conveyed in the modification drawing contact TES immediately.
- Verification that the New Mount Installed is as specified in the MA
- Each photo should be time and date stamped
- Photos should be high resolution and submitted in a Zip File and should be organized in the file structure as depicted in Schedule A attached.
- Contractor shall ensure that the safety climb wire rope is supported and 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.
- The photos in the file structure should be uploaded to <https://pmi.vzwsmart.com> as depicted on the drawings

Photo Requirements:

- **Base and “During Installation Photos”**
 - Base pictures include
 - Photo of Gate Signs showing the tower owner, site name, and number
 - Photo of carrier shelter showing the carrier site name and number if available
 - Photos of the galvanizing compound and/or paint used (if applicable), clearly showing the label and name
 - “During Installation Photos if provided - must be placed only in this folder
- **Photos taken at ground level**
 - Overall tower structure before and after installation of the modifications
 - Photos of the appropriate mount before and after installation of the new mount;
- **Photos taken at Mount Elevation**
 - Photos showing each individual sector before and also after installation of equipment. These photos should also certify that the placement and geometry of the equipment on the mount is as depicted on the sketch and table in the mount analysis
 - Photos showing the newly installed mount that is as specified in the Mount Analysis


















Special Instructions / Validation as required from the MA or any other information the contractor deems necessary to share that was identified:

Issue:

1. Contractor shall install 96" long P 2 Std pipes in position 1, 2, and 4 (3 per sector, 9 total). Top of pipe shall be 68" from bottom face horizontal. Connect to face horizontals with provided crossover plates. Contractor shall install 96" long P 2 1/2 Std pipes in position 3 (1 per sector, 3 total). Top of pipe shall be 68" from bottom face horizontal. Connect to face horizontals with crossover plate kit (VZWSMART – MSK1, 2 per sector, 6 total). Evenly space out all 4 mount pipes along the face horizontal. Refer to rendered image of the analysis (drawing SK-1).
2. Contractor shall install tiebacks to match the configuration shown in the rendered view of the mount analysis. Install one (1) tieback on the top horizontal no more than 6" from the stand-off connection point and one (1) tieback on the bottom horizontal on the opposite side of the mount as the top tieback, no more than 6" from the standoff connection point.
3. If present, 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:

Schedule A – Photo & Document File Structure

-  VzW Site Number / Name
 -  Base & “During Installation” Photos
 -  Pre-Installation Photos
 -  Alpha
 -  Beta
 -  Gamma
 -  Ground Level
 -  Tape Drop
 -  Post-Installation Photos
 -  Alpha
 -  Beta
 -  Gamma
 -  Ground Level
 -  Tape Drop
 -  Photos of climbing facility and safety climb – If Present
-  Certifications – Submission of this document including certifications
-  Specific Required Additional Photo

Sector: **A**
 Structure Type: Self Support
 Mount Elev: 128.00

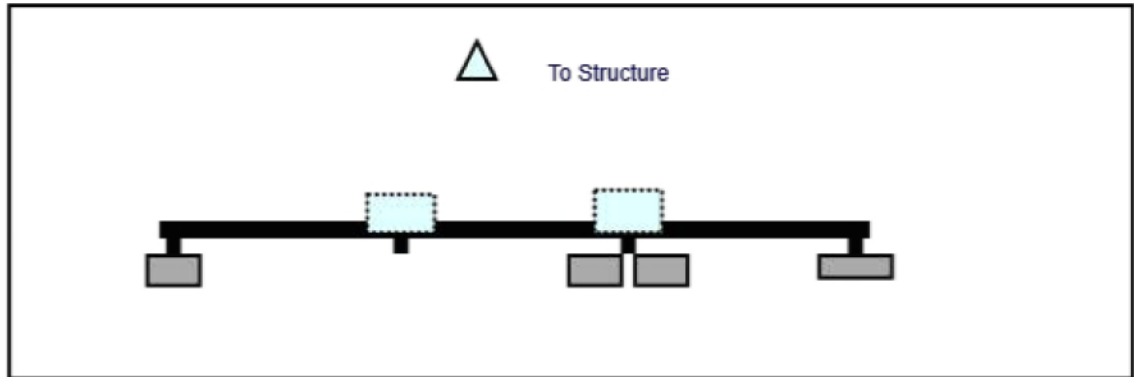
10092933

8/4/2021

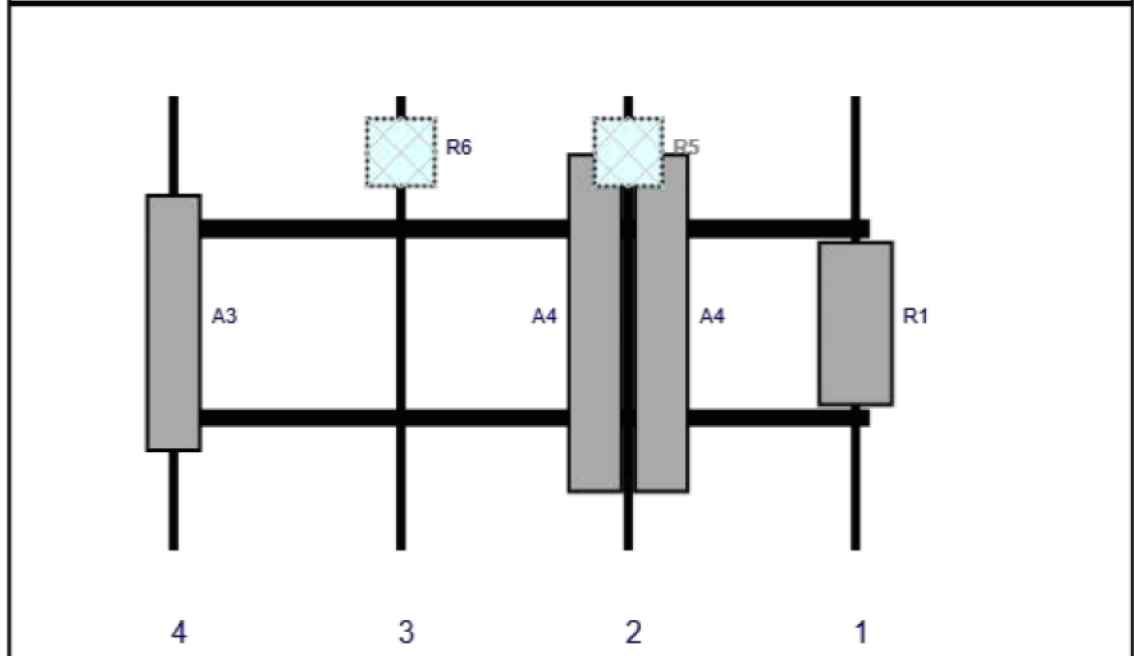
Page: 1



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
R1	MT6407-77A	35.1	16.1	147	1	a	Front	48	0	Added	
A4	NHH-65B-R2B	72	11.9	99	2	a	Front	48	7	Added	
A4	NHH-65B-R2B	72	11.9	99	2	b	Front	48	-7	Added	
R5	RF4439d-25A	15	15	99	2	a	Behind	12	0	Added	
R6	RF4440d-13A	15	15	51	3	a	Behind	12	0	Added	
A3	LNX-6513DS-A1M	54.7	11.9	3	4	a	Front	48	0	Retained	05/04/2021

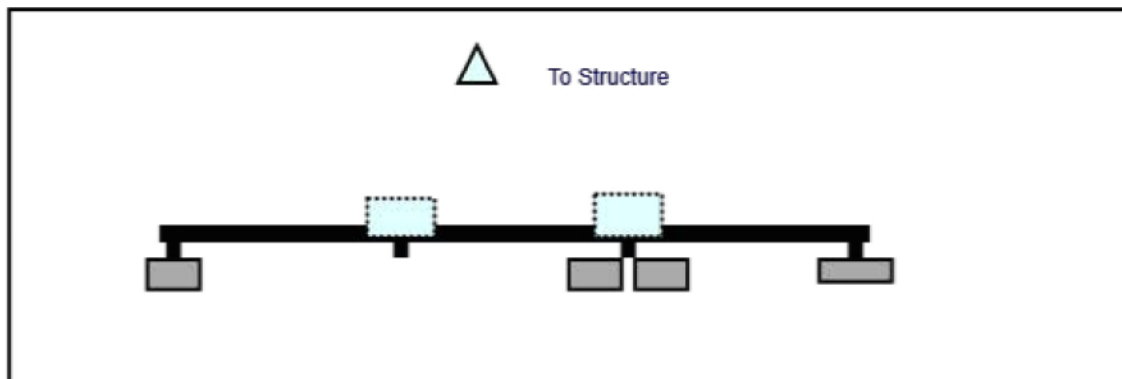
Sector: **B**
 Structure Type: Self Support
 Mount Elev: 128.00

8/4/2021

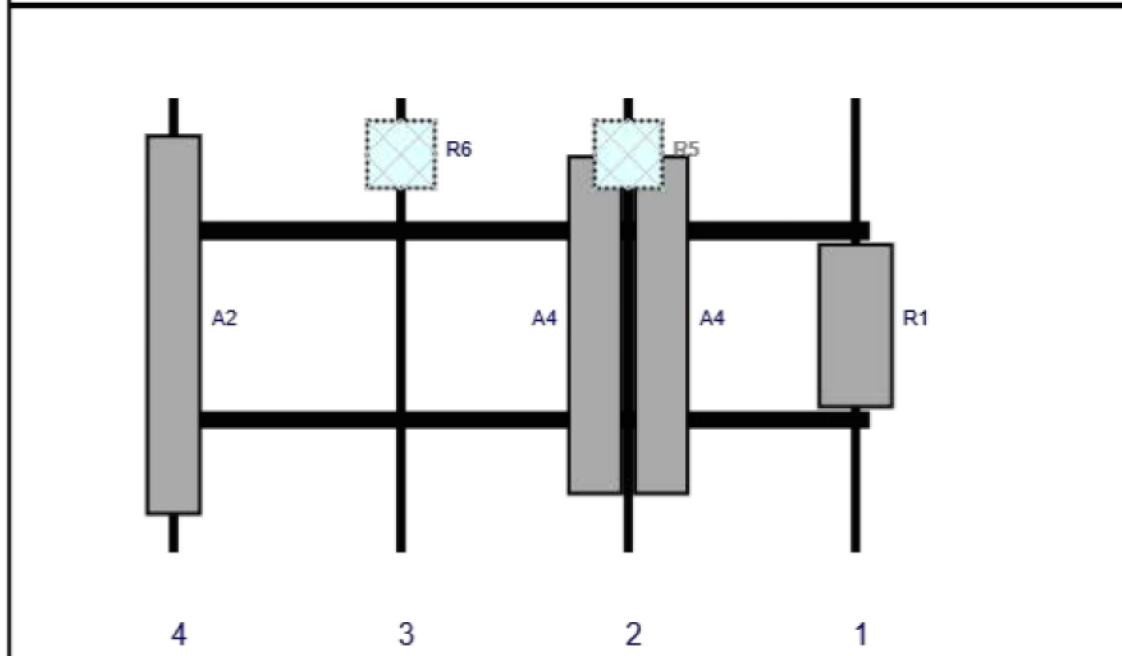
Page: 2



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
R1	MT6407-77A	35.1	16.1	147	1	a	Front	48	0	Added	
A4	NHH-65B-R2B	72	11.9	99	2	a	Front	48	7	Added	
A4	NHH-65B-R2B	72	11.9	99	2	b	Front	48	-7	Added	
R5	RF4439d-25A	15	15	99	2	a	Behind	12	0	Added	
R6	RF4440d-13A	15	15	51	3	a	Behind	12	0	Added	
A2	LNX-6514DS-A1M	80.6	11.9	3	4	a	Front	48	0	Retained	05/04/2021

Sector: C
 Structure Type: Self Support
 Mount Elev: 128.00

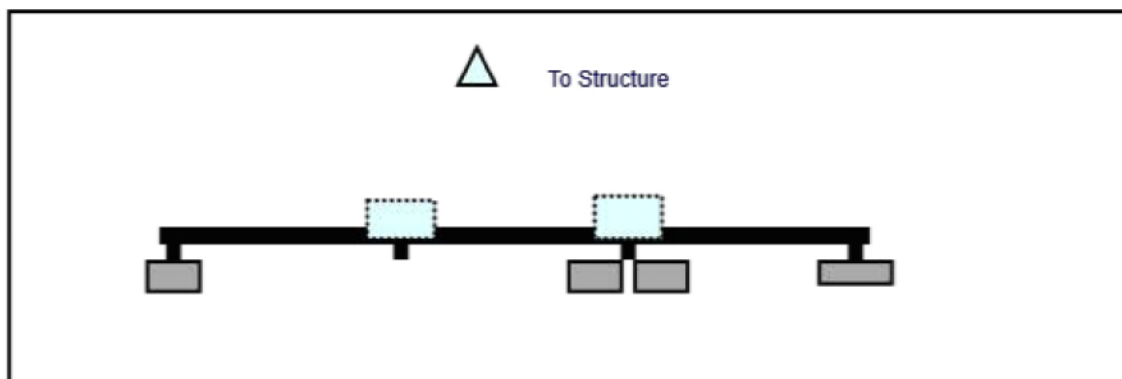
10092933

8/4/2021

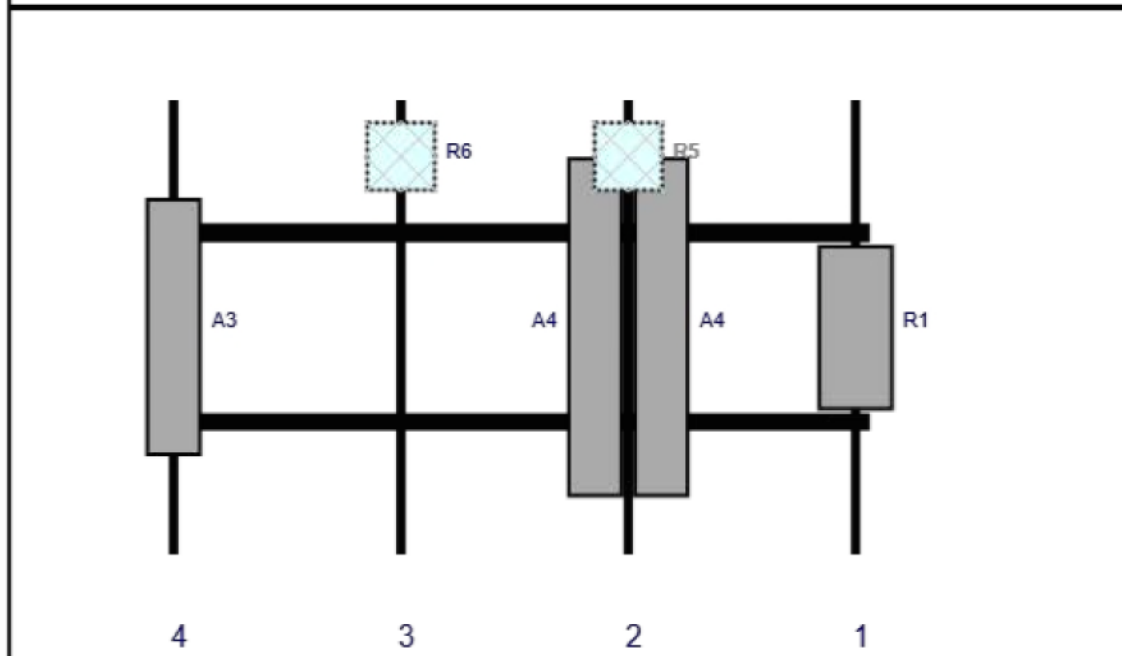
Page: 3



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
R1	MT6407-77A	35.1	16.1	147	1	a	Front	48	0	Added	
A4	NHH-65B-R2B	72	11.9	99	2	a	Front	48	7	Added	
A4	NHH-65B-R2B	72	11.9	99	2	b	Front	48	-7	Added	
R5	RF4439d-25A	15	15	99	2	a	Behind	12	0	Added	
R6	RF4440d-13A	15	15	51	3	a	Behind	12	0	Added	
A3	LNX-6513DS-A1M	54.7	11.9	3	4	a	Front	48	0	Retained	05/04/2021

Maser Consulting Connecticut

Subject

TIA-222-H Usage

Site Information

Site ID: 467748-VZW / GUILFORD NORTH CT

Site Name: GUILFORD NORTH CT

Carrier Name: Verizon Wireless

Address: 331 Route 80
Guilford, Connecticut 06437
New Haven County

Latitude: 41.353164°

Longitude: -72.688256°

Structure Information

Tower Type: 150-ft Self Support

Mount Type: 12.50-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 maps 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 methods, seismic analysis, 30-degree increment wind directions 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,



Derek Hartzell, PE
Technical Specialist

ATTACHMENT 5

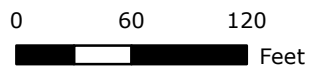
Town of Guilford, Connecticut - Assessment Parcel Map

Unique ID: 286

Address: 331 ROUTE 80



Approximate Scale: 1 inch = 100 feet



Map Produced:
August 2021

Disclaimer:
This map is for informational purposes only.
All information is subject to verification by any user.
The Town of Guilford and its mapping contractors
assume no legal responsibility
for the information contained herein.

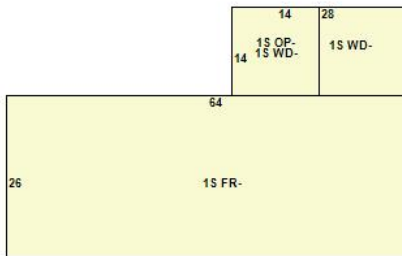


Property Information

Owner	BLOOMQUIST KATHLEEN
Address	331 ROUTE 80
Mailing Address	331 ROUTE 80 GUILFORD , CT 06437
Land Use	- SINGLE FAMILY
Land Class	Residential

Census Tract	1903
Neighborhood	N040
Zoning	R-8
Acreage	1.58
Utilities	
Lot Setting/ Desc	/

Photo



PARCEL VALUATIONS (Assessed value = 70% of Appraised Value)

	Appraised	Assessed
Buildings	140699	98490
Outbuildings	0	0
Improvements		
Extras		
Land	281500	197050
Total	422199	295540
Previous		

Construction Details

Year Built	1972
Stories	1
Building Style	1.0 RANCH
Building Use	Residential
Building Condition	GOOD
Total Rooms	5
Bedrooms	3
Full Bathrooms	1
Half Bathrooms	
Bath Style	
Kitchen Style	
Roof Style	GABLE
Roof Cover	ASPHALT

EXTERIOR WALLS:

Primary	ALUMINUM
Secondary	

INTERIOR WALLS:

Primary	DRYWALL
Secondary	

FLOORS:

Primary	CARPET
Secondary	

HEATING/AC:

Heating Type	HWBB
Heating Fuel	OIL
AC Type	CENTRAL

BUILDING AREA:

Effective Building Area	
Gross Building Area	0
Total Living Area	1664

SALES HISTORY:

Sale Date	6/1/2021
Sale Price	0
Book/ Page	0977/0256

ATTACHMENT 6



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 	TOTAL NO. of Pieces Received at Post Office™ 	Affix Stamp Here Postmark with Date of Receipt. 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.	Matthew Hoey III, First Selectman Town of Guilford 31 Park Street Guilford, CT 06437				
2.	Jaime Stein, Town Planner Town of Guilford 50 Boston Street Guilford, CT 06437				
3.	Kathleen Bloomquist 331 Route 80 Guilford, CT 06437				
4.					
5.					
6.					