

KENNETH C. BALDWIN

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Also admitted in Massachusetts
and New York

May 17, 2022

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
880 Post Road East, Westport, 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 Connecticut State Police tower and associated equipment on the ground near the base of the structure. The tower and Cellco’s use of the tower were approved by the Siting Council (“Council”) in March of 1990 (Docket No 123). A copy of the Council’s Docket No. 123 Decision and Order is included in Attachment 1.

Cellco now intends to modify its facility by removing five (5) existing antennas and installing three (3) new Samsung MT6407-77A antennas and four (4) new MX06FRO640 antennas on its existing antenna mounts. Cellco also intends to install six (6) remote radio heads (“RRHs”) behind its antennas. A set of project plans showing Cellco’s proposed facility modifications and new antennas and RRH specifications 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 Westport’s Chief Elected Official and Land Use Officer.

Melanie A. Bachman, Esq.
May 17, 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. The replacement antennas will be installed on Cellco's existing antenna mounts.
2. The proposed modifications will not involve any change to ground-mounted equipment and, therefore, will not require the extension of the site boundary.
3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
4. The installation of Cellco's new antennas will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. A cumulative General Power Density table for Cellco's modified facility is included in Attachment 3. The modified facility will be capable of providing Cellco's 5G wireless service.
5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
6. According to the attached Structural Analysis ("SA") and Mount Analysis ("MA"), the existing tower, tower foundation and antenna mounts, with certain modifications, can support Cellco's proposed modifications. Copies of the SA and MA are included in Attachment 4.

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

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

Melanie A. Bachman, Esq.
May 17, 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:

Jennifer Tooker, Westport First Selectwoman
Mary Young, Planning and Zoning Director
Connecticut State Police, Property Owner
Alex Tyurin, Verizon Wireless

ATTACHMENT 1

An application of the Department : Docket 123
of Public Safety, Division of :
State Police, for a Certificate of : Connecticut
Environmental Compatibility and Public : Siting
Need for the construction, operation, : Council
and maintenance of a telecommunications :
tower and associated equipment in the :
Town of Westport, Connecticut. : March 29, 1990

DECISION AND ORDER

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council finds that the effects associated with the construction, operation, and maintenance of a telecommunications tower, building, and associated equipment at the proposed Westport, Connecticut, site including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not significant either alone or cumulatively with other effects, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application, and therefore directs that a Certificate of Environmental Compatibility and Public Need, as provided by Section 16-50k of the General Statutes of Connecticut (CGS), be issued to Department of Public Safety, Division of State Police, for the construction, operation, and maintenance of a telecommunications tower, associated equipment, and building at the proposed Troop "G" site in Westport, Connecticut.

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

1. The self-supporting lattice tower shall be no taller than necessary to provide the proposed communications and in no event shall the Westport, Troop "G", tower exceed 180 feet above ground level, with antennas and all appurtenances.
2. The facility shall be constructed in accordance with the State of Connecticut Basic Building Code.
3. The Certificate Holder shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of State Agencies. The D&M plan shall include detailed plans for the site's preparation including the tower and building foundation, site access, and erosion and sedimentation controls.
4. The Certificate Holder shall comply with any future radio frequency (RF) standards, promulgated by State or federal regulatory agencies. Upon the establishment of any new governmental RF standards, the facilities granted in this Decision and Order shall be brought into compliance with such standards.

5. The Certificate Holder shall provide the Council a recalculated report of power density if and when circumstances in operation cause a change in power density above the levels originally calculated and provided in the application.
6. The Certificate Holder shall permit public or private entities to share space on the proposed tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.
7. If the facility does not initially provide, or permanently ceases to provide telecommunications service following completion of construction, this Decision and Order shall be void, and the tower and all associated equipment shall be dismantled and removed or reapplication for any new use shall be made to the Council before any such new use is made.
8. Unless otherwise approved by the Council, this Decision and Order shall be void if all construction authorized herein is not completed within three years of the effective date of this Decision and Order.

Pursuant to Section 16-50p, we hereby direct that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed below. A notice of issuance shall be published in the Bridgeport Post, The Hour, and the Advocate.

By this Decision and Order, the Council disposes of the legal rights, duties, and privileges of each party named or admitted to the proceeding in accordance with section 16-50j-17 of the Regulations of State Agencies.

The parties or intervenors to this proceeding are:

| <u>Party</u> | <u>Its Representatives</u> |
|---|--|
| Department of Public Safety Division of State Police | Captain Ronald P. Milkulka Commanding Officer Connecticut State Police Police Support Services 294 Colony Street Building No. 5 Meriden, Connecticut 06450 |
| | L.D. McCallum and Robert F. Vachelli Assistant Attorneys General MacKenzie Hall 110 Sherman Street Hartford, Connecticut 06105 |

Party

Metro Mobile CTS, of
Fairfield County, Inc.
50 Rockland Road
South Norwalk, Connecticut 06854

Its Representative

Henry H. Sprague, Esq.
Robinson & Cole
One Commercial Plaza
Hartford, Connecticut 06105

Party

Metro Mobile CTS, of
110 East 59th Street
New York, New York 10022

Its Representative

Henry H. Sprague, Esq.
Robinson & Cole
One Commercial Plaza
Hartford, Connecticut 06105

Party

Town of Westport
110 Myrtle Avenue
Westport, Connecticut 06880

Its Representative

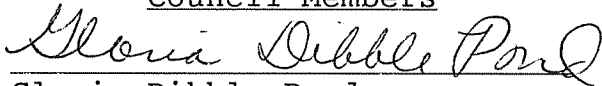



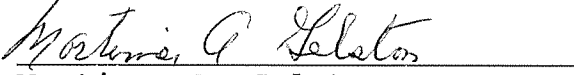
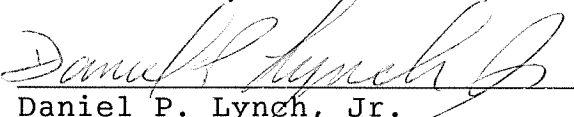
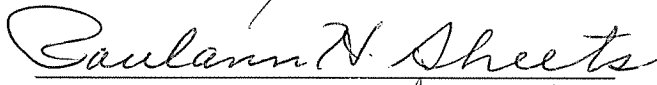
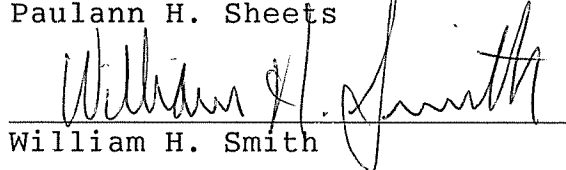
Paul L. Brozdowski
Office of Town Attorney
110 Myrtle Avenue
Westport, Connecticut 06880

4052E

CERTIFICATION

The undersigned members of the Connecticut Siting Council hereby certify that they have heard this case in Docket No. 123 - An application of the Department of Public Safety, Division of State Police for a Certificate of Environmental Compatibility and Public Need for the construction, operation, and maintenance of a telecommunications tower and associated equipment in the Town of Westport, Connecticut or read the record thereof, and that we voted as follows:

Dated at New Britain, Connecticut the 26th day of March, 1990.

| <u>Council Members</u> | <u>Vote Cast</u> |
|---|------------------|
|  Gloria Dibble Pond Chairperson | Yes |
|  Commissioner Peter Boucher Designee: Mark Marcus | Abstain |
|  Commissioner Leslie Carothers Designee: Brian Emerick | Yes |
|  Harry E. Covey | Yes |
|  Mortimer A. Gelston | Yes |
|  Daniel P. Lynch, Jr. | Yes |
|  Paulann H. Sheets | Abstain |
|  William H. Smith | Yes |
| Colin C. Tait | Absent |

ATTACHMENT 2

verizon

WESTPORT_CT

880 POST ROAD EAST UNIT 1
WESTPORT, CT 06880
CT STATE POLICE SELF-SUPPORT TOWER

LOCATION CODE (PSLC): 469153
FUZE ID: 16242132
EQUIPMENT UPGRADE PROJECT
RFDS DATE: 12/03/21

GENERAL NOTES

1. VERIFY COAX CONFIGURATION, ANTENNA CONFIGURATION, AND ANTENNA HEIGHT WITH LATEST RF DATA SHEET PRIOR TO INSTALLATION.
2. THE CONTRACTOR SHALL SCHEDULE AND SEQUENCE ALL REQUIRED WORK WITH THE OWNER'S REPRESENTATIVE AND CONSTRUCTION MANAGER.
3. REPAIR ANY DAMAGE DURING CONSTRUCTION TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE CONSTRUCTION MANAGER.
4. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES FOR THE WORK.
5. ANTENNAS TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS, GLOBAL STRUCTURAL ANALYSIS, AND LOCAL ANTENNA MOUNT ANALYSIS INCLUDING ANTENNA MOUNT MODIFICATIONS AND STRUCTURAL AUGMENTS AS APPLICABLE.
6. REPLACE AND/OR REUSE (E) MOUNTING HARDWARE, INSPECT FOR DAMAGE, AND REPLACE AS NECESSARY TO THE SATISFACTION OF THE ENGINEER.
7. EQUIPMENT LOCATIONS AND CONDITIONS TO BE FIELD VERIFIED PRIOR TO COMMENCEMENT OF CONSTRUCTION. ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES OR BE RESPONSIBLE FOR THE SAME.
8. NORTH SHOWN IS APPROXIMATE. NOT ALL (E) OR (P) IMPROVEMENTS REQUIRED MAY BE SHOWN FOR CLARITY.
9. ANTENNA ELEVATIONS SHALL BE PER ZONING OR AS APPROVALS DICTATE.
10. THESE CONSTRUCTION DRAWINGS ARE CONTINGENT UPON A PASSING GLOBAL STRUCTURAL ANALYSIS INCLUDING THE INSTALLATION OF ANY REQUIRED MODIFICATIONS AND INSPECTION REPORTS AS A RESULT THEREIN.

STRUCTURAL NOTES

GLOBAL TOWER STRUCTURAL ANALYSIS REPORT:

PENDING: A GLOBAL TOWER STRUCTURAL ANALYSIS SHALL BE COMPLETED BY OTHERS PRIOR TO CONSTRUCTION TO CONFIRM CAPACITY.

LOCAL ANTENNA MOUNT ANALYSIS REPORT:

MOUNT MODIFICATIONS REQUIRED - PER PASSING REPORT & MODIFICATION DRAWINGS BY MASER CONSULTING DATED 11/16/21.

- REMOVE AND REPLACE TIE BACK WITH ADAPTER FOR PIPE CONNECTION (ALPHA SECTOR ONLY)
- RELOCATE ANTENNA PIPE AND REMOVE AND REPLACE ANTENNA PIPE MOUNTING BRACKETS IN POSITION 3, TYP. PER SECTOR (3 TOTAL)

CONTRACTOR MOUNT POST MODIFICATION INSPECTION (PMI) REPORT REQUIREMENTS

PMI ONLINE ACCESS: <https://pmi.vzwsmart.com>

SMART TOOL VENDOR PROJECT NUMBER: 10115278

VZW LOCATION CODE (PSLC): 469153

*** PMI AND REQUIREMENTS ALSO EMBEDDED IN ANTENNA MOUNT ANALYSIS REPORT BY MASER CONSULTING DATED 11/16/21.

MOUNT MODIFICATIONS REQUIRED (Y/N): YES

VZW APPROVED SMART KIT VENDORS

REFER TO MOUNT MODIFICATION DRAWINGS PAGE FOR VZW SMART KIT APPROVED VENDORS

PROJECT SUMMARY

SCOPE OF WORK: EXISTING TELECOMMUNICATIONS FACILITY EQUIPMENT ALTERATION

SITE NAME: WESTPORT_CT

LOCATION CODE (PSLC): 469153

FUZE PROJECT ID: 16242132

SITE ADDRESS: 880 POST ROAD EAST UNIT 1 WESTPORT, CT 06880

LATITUDE: 41.137475 N (RFDS)

LONGITUDE: -73.334364 W (RFDS)

FACILITY: CT STATE POLICE SELF-SUPPORT TOWER

APPLICANT, LESSEE/LICENSEE, PROJECT OWNER: CELCO PARTNERSHIP dba VERIZON WIRELESS 118 FLANDERS ROAD THIRD FLOOR WESTBOROUGH, MA 01581

SITE ENGINEER: PROTERRA DESIGN GROUP, LLC 4 BAY ROAD BUILDING A, SUITE 200 HADLEY, MA 01035

SHEET INDEX

| SHT. NO. | DESCRIPTION | REV. NO. |
|----------|---------------------------------------|----------|
| T-1 | TITLE SHEET | 1 |
| A-1 | COMPOUND PLAN & ELEVATION | 1 |
| A-2 | EXISTING AND PROPOSED ANTENNA PLAN | 1 |
| D-1 | DETAIL | 1 |
| X-1 | ANTENNA LAYOUT RENDERINGS (BY OTHERS) | 1 |
| | | |
| | | |

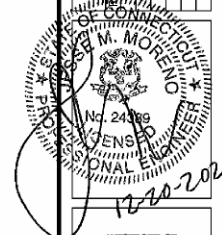
LOCATION MAP



PREPARED BY:
ProTerra
DESIGN GROUP, LLC
4 Bay Road, Bldg A
Suite 200
Hadley, MA 01035
Ph: (413)320-4918

REVISIONS

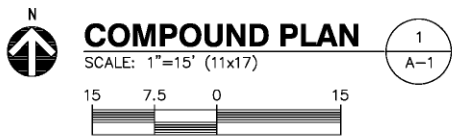
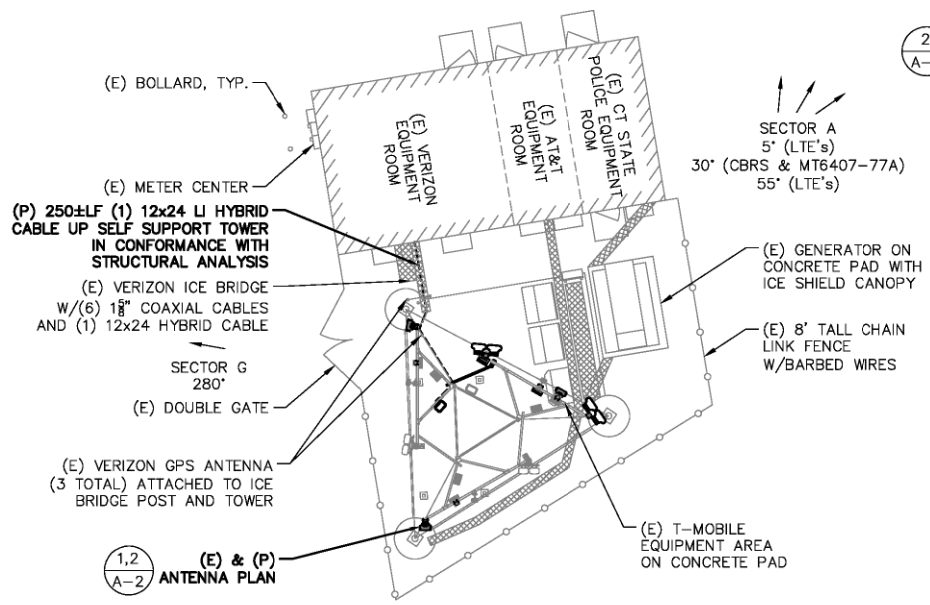
| BY | CHK APP'D | DATE | DESCRIPTION |
|----|-----------|----------|-------------------------|
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| | | 12/20/21 | PER RFDS DATED 12/03/21 |
| | | | |
| | | | |



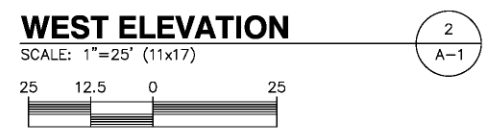
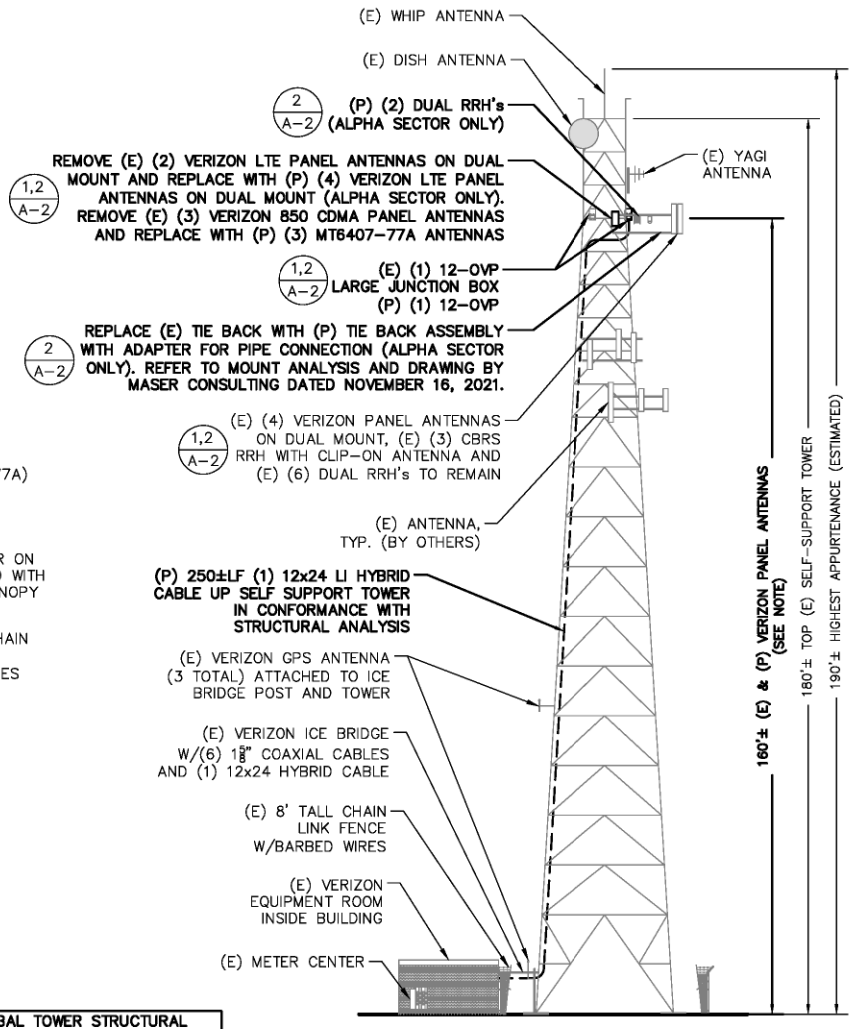
WESTPORT CT
880 POST ROAD EAST UNIT 1
WESTPORT, CT 06880
FUZE PROJECT ID: 16242132

T-1

NOTE: AGL ELEVATIONS SHOWN HEREON FOR GENERAL REFERENCE ONLY, REFER TO LOCAL ANTENNA MOUNT ANALYSIS BY MASER CONSULTING AND SHEET X-1 FOR REQUIRED EQUIPMENT MOUNTING CONFIGURATION INCLUDING VERTICAL AND HORIZONTAL MOUNTING LOCATIONS LISTED IN TABLES. COORDINATE EQUIPMENT LOCATIONS AND ANY CONFLICTS WITH MASER CONSULTING.



A GLOBAL TOWER STRUCTURAL ANALYSIS SHALL BE COMPLETED BY OTHERS PRIOR TO CONSTRUCTION TO CONFIRM CAPACITY.



118 FLANBERS ROAD
THIRD FLOOR
WESTBOROUGH, MA 01581

4 Bay Road, Bldg A
Suite 200
Hudson, MA 01035
Ph: (413)320-4918

PREPARED BY:

| NO. | DATE | DESCRIPTION | BY (CHK APP'D) |
|-----|----------|-------------------------|----------------|
| 1 | 11/30/21 | PER REFS DATED 10/05/21 | BDJ/JWG/JAM |
| 2 | 12/20/21 | PER REFS DATED 12/03/21 | BDJ/JWG/JAM |

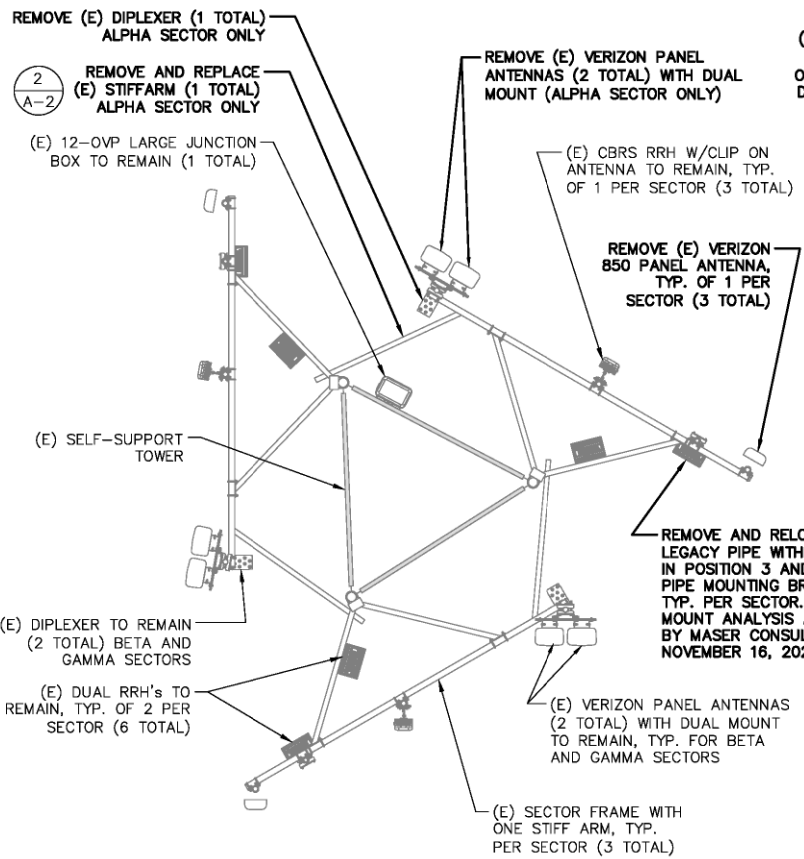
12-20-2021

WESTPORT, CT
880 POST ROAD EAST UNIT 1
WESTPORT, CT 06880
FLZE PROJECT ID: 16842132

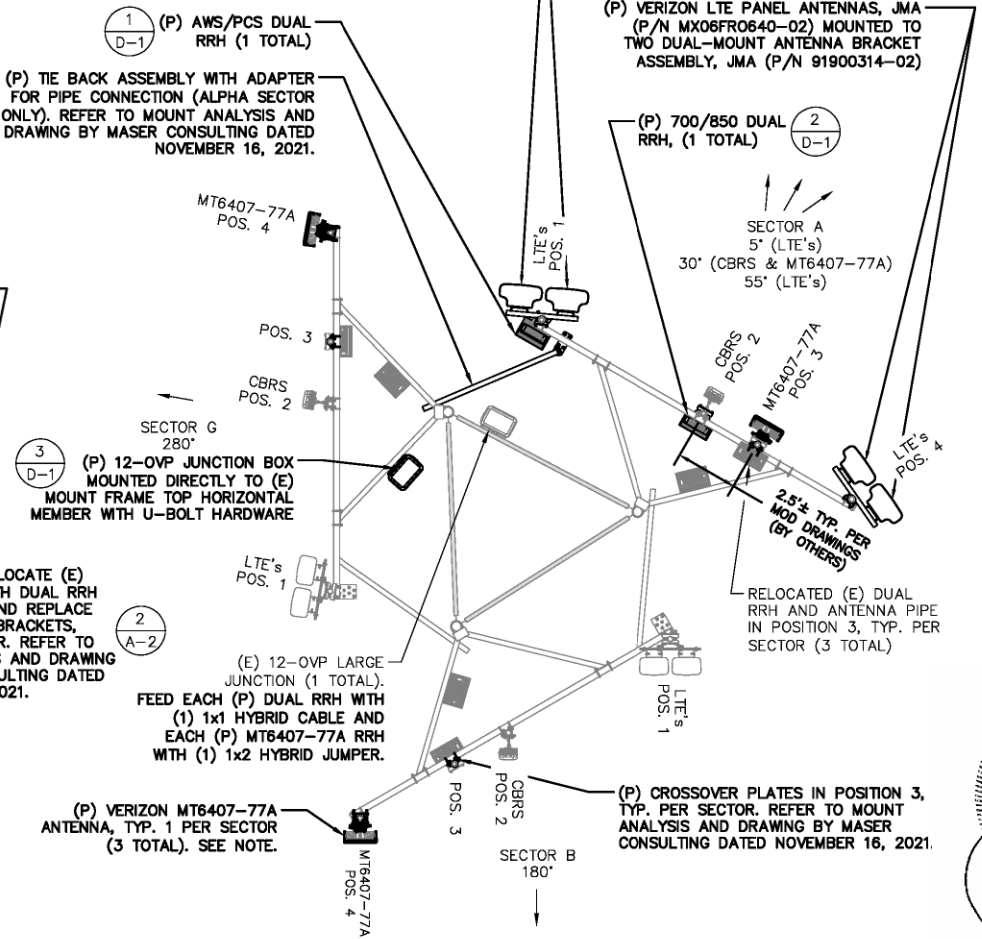
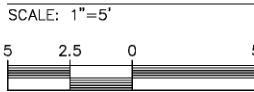
A-1

MOUNT MODIFICATION REQUIRED PER PASSING MOUNT ANALYSIS BY MASER CONSULTING DATED NOVEMBER 16, 2021. INSTALL ALL EQUIPMENT PER MOUNT ANALYSIS AS SHOWN ON SHEET X-1 (BY OTHERS).

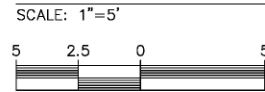
NOTE: AT TIME OF PUBLICATION, THE DESIGN OF THE VERIZON MT6407-77A ANTENNA WAS NOT FINALIZED. BASED UPON DIRECTIVE BY VERIZON WIRELESS, FOR DESIGN PURPOSES THE PROPOSED EQUIPMENT HAS BEEN CONSIDERED TO BE A MAXIMUM SIZE NOT TO EXCEED 35.1"±H x 16.1"±W x 5.6"±D AND WEIGH APPROXIMATELY 87.1±LBS. IF ANY OF THESE PARAMETERS ARE EXCEEDED BY THE EQUIPMENT THE ENGINEER(S) SHALL BE NOTIFIED TO REVISE THE DRAWINGS, STRUCTURAL ANALYSIS, AND MOUNT ANALYSIS.



(E) ANTENNA PLAN



(P) ANTENNA PLAN



PREPARED BY: ProTerra DESIGN GROUP, LLC
4 Bay Road, Bldg A
Suffield, MA 01035
Ph: (413)320-4918

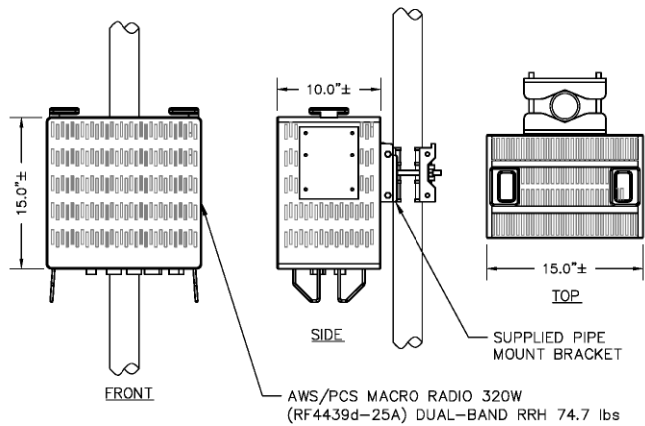
REVISIONS

| NO. | DATE | DESCRIPTION | BY | CHK APP'D |
|-----|----------|-------------------------|-----|-----------|
| 1 | 11/30/21 | PER REFS DATED 10/05/21 | TBD | JWG / JAM |
| 2 | 12/20/21 | PER REFS DATED 12/03/21 | TBD | JWG / JAM |

Professional Engineer Seal: No. 24388, State of Connecticut, License No. 24388, dated 12-20-2021.

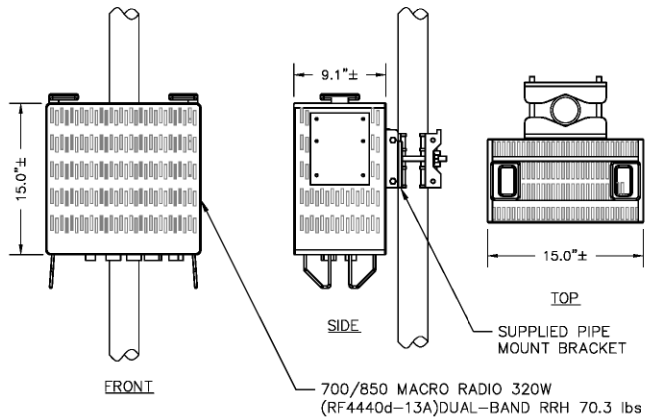
WESTPORT, CT
880 POST ROAD EAST UNIT 1
WESTPORT, CT 06880
FLUZ PROJECT ID: 16842132

A-2



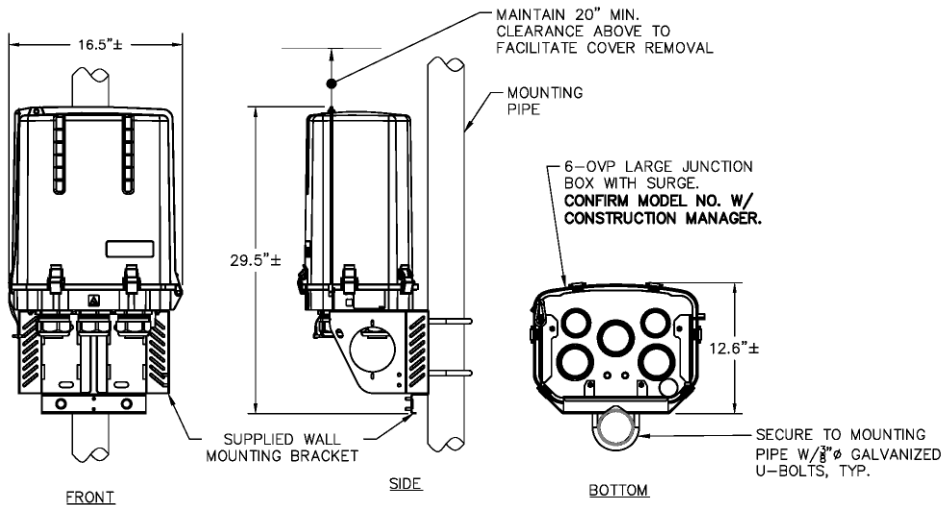
(P) AWS/PCS RRH MOUNTING DETAIL

SCALE: NONE



(P) 700/850 RRH MOUNTING DETAIL

SCALE: NONE



(P) LARGE JUNCTION BOX MOUNTING DETAIL

SCALE: NONE



INSTALLATION NOTES:

1. INSTALL ALL EQUIPMENT, MOUNTING BRACKETS, AND HARDWARE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
2. GROUND DISTRIBUTION BOXES, MOUNTING PIPES, AND RRHs IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
3. INSTALL EQUIPMENT AND MOUNTING BRACKETS TO PRESERVE CLIMBING ACCESS ON TOWER.
4. EQUIPMENT TO BE INSTALLED AT VERIZON RAD. CENTER IN ACCORDANCE WITH GLOBAL TOWER STRUCTURAL ANALYSIS AND MOUNT ANALYSIS (BY OTHERS).



118 FLANERS ROAD
THIRD FLOOR
WESTBOROUGH, MA 01581

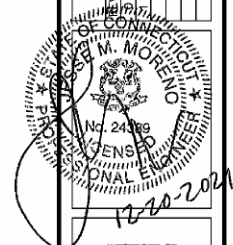


4 Bay Road, Bldg A
Suite 200
Hedley, MA 01035
Ph: (413)320-4918

PREPARED BY:

| BY | CHK APP'D | DATE | DESCRIPTION |
|----|-----------|----------|-------------------------|
| | TBD | 10/05/21 | PER REDS DATED 10/05/21 |
| | TBD | 11/30/21 | PER REDS DATED 12/03/21 |
| | TBD | 12/20/21 | PER REDS DATED 12/20/21 |

REVISIONS

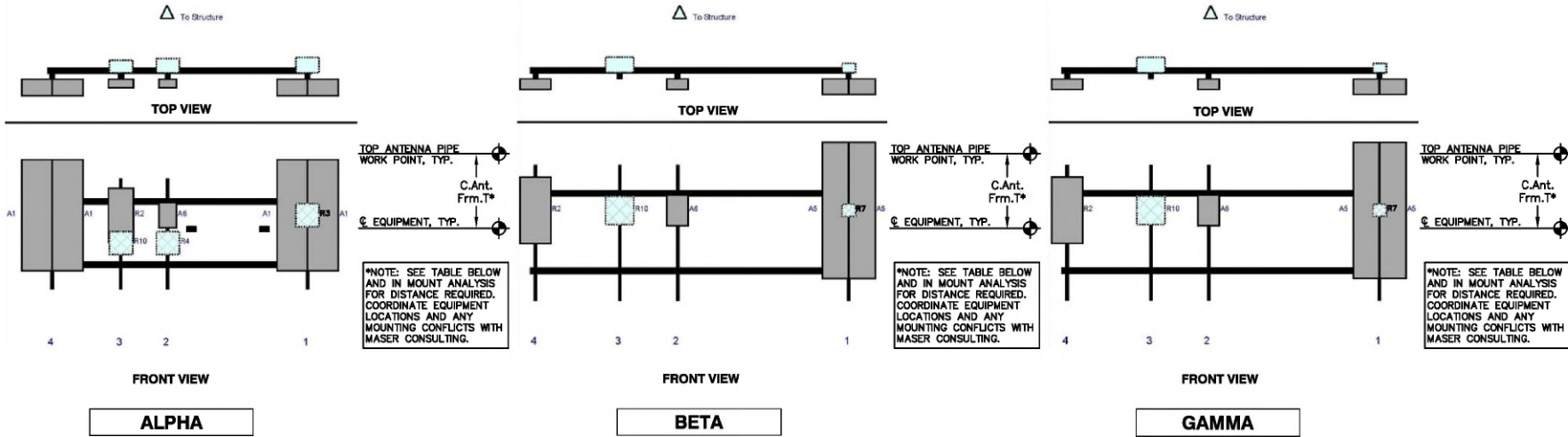


WESTPORT, CT
880 POST ROAD EAST UNIT 1
WESTPORT, CT 06880
FLZE PROJECT ID: 16842132

D-1

ANTENNA LAYOUT SCHEMATIC RENDERINGS SHOWN HEREON PROVIDED BY OTHERS

REFER TO ANTENNA MOUNT ANALYSIS REPORT BY MASER CONSULTING DATED 11/16/21 AND MODIFICATION DRAWINGS DATED 11/16/21 FOR ADDITIONAL DETAIL



ALPHA

| Ref# | Model | Height (in) | Width (in) | H Dist Fm L | Pipe # | Pipe Pos V | Ant Pos | C. Ant Frm T | Ant H Off | Status | Validation |
|------|-------------------------------|-------------|------------|-------------|--------|------------|---------|--------------|-----------|----------|------------|
| A1 | MX09FRO640-02 | 72 | 19.8 | 169 | 1 | a | Front | 24 | -10 | Added | |
| A1 | MX09FRO640-02 | 72 | 19.8 | 169 | 1 | b | Front | 24 | 10 | Added | |
| R3 | RF4439d-25A | 15 | 15 | 169 | 1 | a | Behind | 24 | 0 | Added | |
| A6 | CBRS RRH + Clip-on Ant | 16.2 | 11.4 | 78 | 2 | a | Front | 24 | 0 | Retained | 10/19/2021 |
| R4 | RF4440d-13A | 15 | 15 | 78 | 2 | a | Behind | 42 | 0 | Added | |
| R2 | MT8407-77A | 35.1 | 16.1 | 47.5 | 3 | a | Front | 24 | 0 | Added | |
| R10 | B5/B13 RRH-BR04C (RFV01U-D2A) | 15 | 15 | 47.5 | 3 | a | Behind | 42 | 0 | Retained | 10/19/2021 |
| A1 | MX09FRO640-02 | 72 | 19.8 | 3 | 4 | a | Front | 24 | -10 | Added | |
| A1 | MX09FRO640-02 | 72 | 19.8 | 3 | 4 | b | Front | 24 | 10 | Added | |

BETA

| Ref# | Model | Height (in) | Width (in) | H Dist Fm L | Pipe # | Pipe Pos V | Ant Pos | C. Ant Frm T | Ant H Off | Status | Validation |
|------|-------------------------------|-------------|------------|-------------|--------|------------|---------|--------------|-----------|----------|------------|
| A5 | JAHH-65B-R3B | 72 | 13.8 | 169 | 1 | a | Front | 24 | -7 | Retained | 10/19/2021 |
| A5 | JAHH-65B-R3B | 72 | 13.8 | 169 | 1 | b | Front | 24 | 7 | Retained | 10/19/2021 |
| R7 | CBCT8T-DS-43 | 6.4 | 6.9 | 169 | 1 | a | Behind | 24 | 0 | Retained | 10/19/2021 |
| A6 | CBRS RRH + Clip-on Ant | 16.2 | 11.4 | 78 | 2 | a | Front | 24 | 0 | Retained | 10/19/2021 |
| R10 | B5/B13 RRH-BR04C (RFV01U-D2A) | 15 | 15 | 47.5 | 3 | a | Behind | 24 | 0 | Retained | 10/19/2021 |
| R2 | MT8407-77A | 35.1 | 16.1 | 3 | 4 | a | Front | 24 | 0 | Added | |

GAMMA

| Ref# | Model | Height (in) | Width (in) | H Dist Fm L | Pipe # | Pipe Pos V | Ant Pos | C. Ant Frm T | Ant H Off | Status | Validation |
|------|-------------------------------|-------------|------------|-------------|--------|------------|---------|--------------|-----------|----------|------------|
| A5 | JAHH-65B-R3B | 72 | 13.8 | 169 | 1 | a | Front | 24 | -7 | Retained | 10/19/2021 |
| A5 | JAHH-65B-R3B | 72 | 13.8 | 169 | 1 | b | Front | 24 | 7 | Retained | 10/19/2021 |
| R7 | CBCT8T-DS-43 | 6.4 | 6.9 | 169 | 1 | a | Behind | 24 | 0 | Retained | 10/19/2021 |
| A6 | CBRS RRH + Clip-on Ant | 16.2 | 11.4 | 78 | 2 | a | Front | 24 | 0 | Retained | 10/19/2021 |
| R10 | B5/B13 RRH-BR04C (RFV01U-D2A) | 15 | 15 | 47.5 | 3 | a | Behind | 24 | 0 | Retained | 10/19/2021 |
| R2 | MT8407-77A | 35.1 | 16.1 | 3 | 4 | a | Front | 24 | 0 | Added | |

CONTRACTOR MOUNT POST MODIFICATION INSPECTION (PMI) REPORT REQUIREMENTS

PMI ONLINE ACCESS: <https://pml.vzwsmart.com>

SMART TOOL VENDOR PROJECT NUMBER: 10115278

VzW LOCATION CODE (PSLC): 469153

*** PMI AND REQUIREMENTS ALSO EMBEDDED IN ANTENNA MOUNT ANALYSIS REPORT BY MASER CONSULTING DATED 11/16/21.

MOUNT MODIFICATIONS REQUIRED (Y/N): **YES**

VZW APPROVED SMART KIT VENDORS

REFER TO MOUNT MODIFICATION DRAWINGS PAGE FOR VZW SMART KIT APPROVED VENDORS



PRO Terra DESIGN GROUP, LLC
 4 Bay Road, Bldg A
 Suite 200
 Westborough, MA 01581
 Phone: (413)320-4918

REVISIONS

| REV | DATE | DESCRIPTION | BY | CHK | APP'D |
|-----|----------|-------------------------|-----|-----|-------|
| 0 | 11/30/21 | PER REFS DATED 10/05/21 | TBD | JWG | JAM |
| 1 | 12/20/21 | PER REFS DATED 12/03/21 | TBD | JWG | JAM |

RENDERINGS BY:
 MASER CONSULTING
 MT LAUREL OFFICE
 2000 MIDLANTIC DRIVE - SUITE 100
 MOUNT LAUREL, NJ 08054
 Phone: 866-797-0412

WESTPORT CT
 880 POST ROAD EAST UNIT 1
 WESTPORT, CT 06880
 FLZE PROJECT ID: 1682132

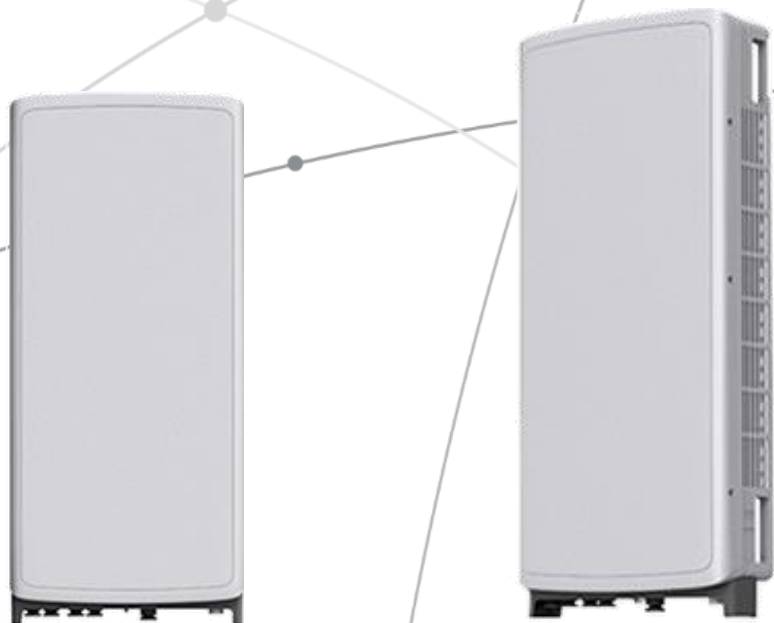
X-1

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



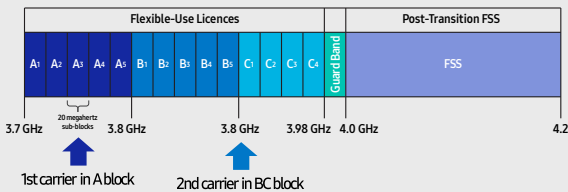
Points of Differentiation

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

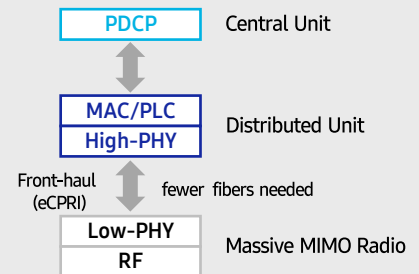
C-Band spectrum supported by Massive MIMO Radio



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.

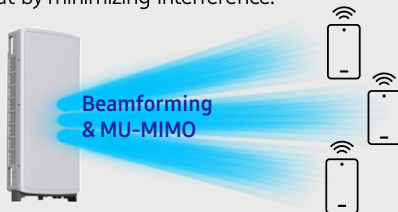


Enhanced Performance

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.

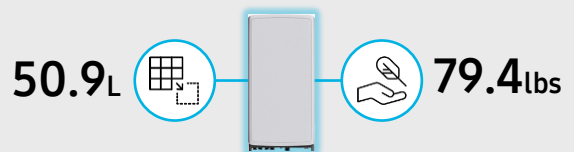
Furthermore, as C-Band massive MIMO Radio supports MU-MIMO (Multi-user MIMO), it enables to increase user throughput by minimizing interference.



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 |

The Samsung logo is positioned in the top right corner. The background features several thin, light gray curved lines that sweep across the page, creating a sense of motion and connectivity. There are also a few small, solid gray dots scattered across the page, some of which appear to be at the intersections of the lines.

SAMSUNG

About Samsung Electronics Co., Ltd.

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

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

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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

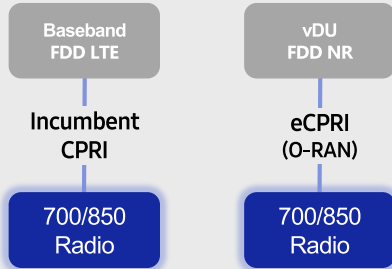


Youtube
www.youtube.com/samsung5g

Points of Differentiation

Continuous Migration

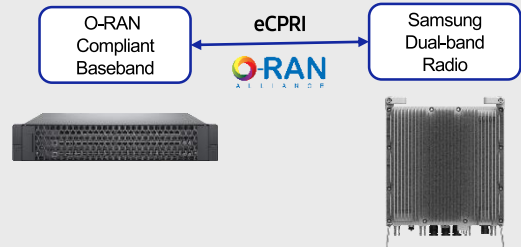
Samsung's 700/850MHz macro radio can support each incumbent CPRI interface as well as an advanced eCPRI interface. This feature provides installable options for both legacy LTE networks and added NR networks.



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.

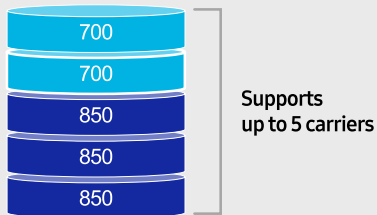
Samsung's state-of-the-art O-RAN technology will help accelerate the effort toward constructing a solid O-RAN ecosystem.



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.

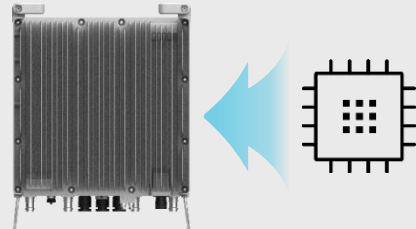
The new 700/850MHz dual-band radio can support up to 2 carriers in the B13 (700MHz) band and 3 carriers in the B5 (850MHz) band, respectively.



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 |

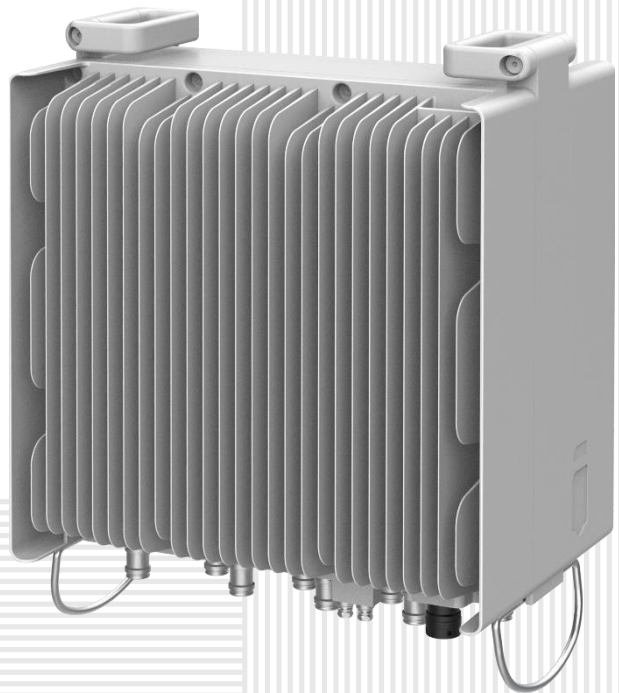
SAMSUNG

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

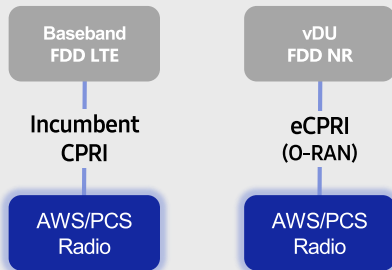


Youtube
www.youtube.com/samsung5g

Points of Differentiation

Continuous Migration

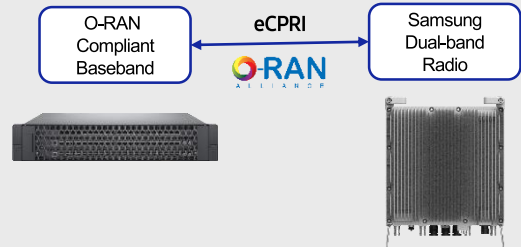
Samsung's AWS/PCS macro radio can support each incumbent CPRI interface as well as advanced eCPRI interfaces. This feature provides installable options for both legacy LTE networks and added NR networks.



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.

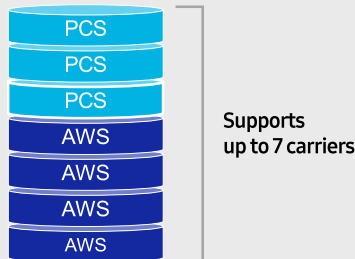
Samsung's state-of-the-art O-RAN technology will help accelerate the effort toward constructing a solid O-RAN ecosystem.



Optimum Spectrum Utilization

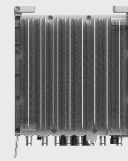
The number of required carriers varies according to site (region). Supporting many carriers is essential for using all frequencies that the operator has available.

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 |

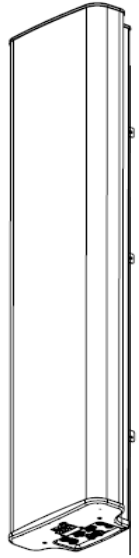
MX06FRO640-02

NWAV™ X-Pol Antenna | Hex-Port | 6 ft | 40°



X-Pol, Hex-Port 6 ft 40° Fast Roll-Off with Smart Bias-T (2) 698–894 MHz & (4) 1695–2180 MHz

- Fast Roll-Off (FRO™) Azimuth beam pattern improves Intra- and Inter-cell SINR
- Excellent Passive Intermodulation (PIM) performance reduces harmful interference
- Fully integrated (iRETs) with *independent* RET control for low and high bands for ease of network optimization
- SON-Ready array spacing supports beamforming capabilities
- Suitable for LTE/CDMA/PCS/UMTS/GSM air interface technologies
- Integrated Smart BIAS-Ts reduces leasing costs



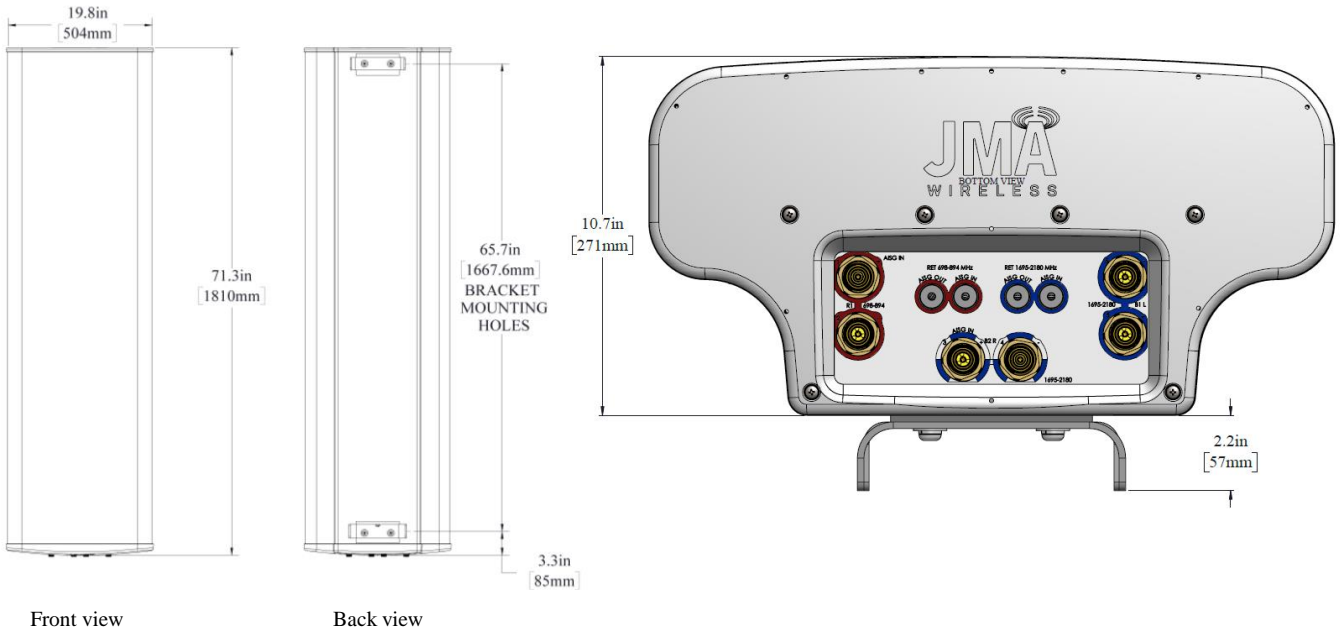
| Electrical specification (minimum/ maximum) | Ports 1,2 | | Ports 3,4,5,6 | | |
|--|------------|------------|---------------|------------|------------|
| | 698–798 | 824–894 | 1695–1880 | 1850–1990 | 1920–2180 |
| Frequency bands, MHz | 698–798 | 824–894 | 1695–1880 | 1850–1990 | 1920–2180 |
| Polarization | ± 45° | | ± 45° | | |
| Average gain over all tilts, dBi | 16.3 | 17.2 | 19.3 | 20.1 | 20.4 |
| Horizontal beamwidth (HBW), degrees ¹ | 42° | 37° | 40° | 39° | 37° |
| Front-to-back ratio, co-polar power @180° ± 30°, dB | >25.0 | >25.0 | >28.0 | >28.0 | >28.0 |
| X-Pol discrimination (CPR) at boresight, dB | >18.0 | >15.0 | >18 | >18 | >15 |
| Sector power ratio, percent | <4.5 | <3.5 | <3.7 | <3.8 | <3.6 |
| Vertical beamwidth, (VBW), degrees ¹ | 13.1° | 11.8° | 6.0° | 5.7° | 5.3° |
| Electrical downtilt (EDT) range, degrees | 2-14 | 2-14 | 0-9 | | |
| First upper side lobe (USLS) suppression, dB ¹ | ≤ -15.0 | ≤ -15.0 | ≤ -16.0 | ≤ -16.0 | ≤ -16.0 |
| Minimum cross polar isolation, port-to-port, dB | 25 | 25 | 25 | 25 | 25 |
| Maximum VSWR/ return loss, dB | 1.5/ -14.0 | 1.5/ -14.0 | 1.5/ -14.0 | 1.5/ -14.0 | 1.5/ -14.0 |
| Maximum passive Intermodulation (PIM), 2x 20W carrier, dBc | -153 | -153 | -153 | | |
| Maximum input power per any port, watts | 300 | | 250 | | |
| Total composite power all ports, watts | | | 1500 | | |

¹ Typical value over frequency and tilt

MX06FRO640-02

NWAV™ X-Pol Antenna | Hex-Port | 6 ft | 40°

| Mechanical specifications | |
|--|-----------------------------------|
| Dimensions height/ width/ depth, inches (mm) | 72/ 19.8/ 10.7 (1829/504/271) |
| Shipping dimensions length/ width/ height, inches (mm) | 84/ 26/ 15 (2134/ 660/ 381) |
| No. of RF input ports, connector type & location | 6 x 4.3-10 female, bottom |
| RF connector torque | 96 lbf-in (10.85 N-m or 8 lbf-ft) |
| Net antenna weight, lb (kg) | 70 (31.8) |
| Shipping weight, lb (kg) | 100 (45.4) |
| Antenna mounting and downtilt kit included with antenna | 91900318 |
| Net weight of the mounting and downtilt kit, lb (kg) | 18 (8.2) |
| Range of mechanical up/ down tilt | -2° to 14° |
| Rated wind survival speed, mph (km/h) | 150 (241) |
| Frontal, lateral & rear wind loading @ 150 km/h, lbf (N) | 263 (1170), 112 (498), 263 (1170) |
| Equivalent flat plate @100 mph and Cd=2, sq ft | 6.03 |



| Ordering information | |
|----------------------|---|
| Antenna model | Description |
| MX06FRO640-02 | 6F X- Pol HEX FRO 40° 2-14°/ 0-9° RET, 4.3-10 & SBT |
| Optional accessories | |
| 992100-CA030-SC | Optional AISG jumper cable, M/F, 3.0 meters |
| PCU-1000 | Primary control unit, USB |

MX06FRO640-02

NWAV™ X-Pol Antenna | Hex-Port | 6 ft | 40°

| Remote Electrical Tilt (RET 1000) information | |
|--|---|
| RET location | Integrated into antenna |
| RET interface connector type | 8-pin AISG connector per IEC 60130-9 |
| RET interface connector quantity | 2 pairs of AISG male/ female connectors |
| RET interface connector location | Bottom of the antenna |
| Total No. of internal RETs low bands | 1 |
| Total No. of internal RETs high bands | 1 |
| RET input operating voltage, vdc | 10–30 |
| RET max. power consumption, idle state, W | ≤ 2.0 |
| RET max. power consumption, normal operating conditions, W | ≤ 13.0 |
| RET communication protocol | AISG 2.0/ 3GPP |

RET & RF connector topology

Each RET device can be controlled either via the designated external AISG connector or RF port as shown below

| RET Device | Band | RF Port |
|------------|---------|---------|
| 1 | 698–894 | 1–2 |

| RET Device | Band | RF Port |
|------------|-----------|---------|
| 2 | 1695–2180 | 3–6 |

Array topology

3 sets of radiating arrays

R1: 698–894 MHz
B1: 1695–2180 MHz
B2: 1695–2180 MHz

| Band | RF Port |
|-----------|---------|
| 1695–2180 | 3–4 |
| 698–894 | 1–2 |
| 1695–2180 | 5–6 |

ATTACHMENT 3

| | General | Power | Density | | | | | |
|--------------------------------------|------------|--------------|------------|----------------|---------------------|----------------------|-----------------|---------------|
| Site Name: Westport | | | | | | | | |
| Tower Height: Verizon @ 160ft | | | | | | | | |
| CARRIER | # OF CHAN. | WATTS ERP | HEIGHT | FREQ. | CALC. POWER DENS | MAX. PERMISS.EXP. | FRACTION MPE | Total |
| *AT&T | 1 | 368 | 133 | 850 | 0.0082 | 0.5667 | 0.14% | |
| *AT&T | 1 | 1476 | 133 | 737 | 0.0329 | 0.4913 | 0.67% | |
| *AT&T | 1 | 4842 | 133 | 1900 | 0.1080 | 1.0000 | 1.08% | |
| *AT&T | 1 | 3837 | 133 | 2100 | 0.0856 | 1.0000 | 0.86% | |
| *AT&T | 1 | 1285 | 133 | 2300 | 0.0287 | 1.0000 | 0.29% | |
| *T-Mobile | 4 | 1167 | 125 | 1900 | 0.1185 | 1.0000 | 1.19% | |
| *T-Mobile | 1 | 865 | 125 | 700 | 0.0220 | 0.4667 | 0.47% | |
| *T-Mobile | 2 | 2334 | 125 | 2100 | 0.1185 | 1.0000 | 1.19% | |
| *State Police | 1 | 330 | 180 | 42.04 | 0.0039 | 0.2000 | 0.20% | |
| *State Police | 1 | 50.7 | 169 | 954.4 | 0.0007 | 0.6363 | 0.01% | |
| VZW 700 | 4 | 1122 | 160 | 751 | 0.0063 | 0.5007 | 1.26% | |
| VZW CDMA | 2 | 499 | 160 | 876.03 | 0.0014 | 0.5840 | 0.24% | |
| VZW Cellular | 4 | 871 | 160 | 874 | 0.0049 | 0.5827 | 0.84% | |
| VZW PCS | 4 | 1778 | 160 | 1980 | 0.0100 | 1.0000 | 1.00% | |
| VZW AWS | 4 | 2344 | 160 | 2120 | 0.0132 | 1.0000 | 1.32% | |
| VZW CBRS | 4 | 11 | 160 | 3625 | 0.0001 | 1.0000 | 0.01% | |
| VZW CBAND | 2 | 13335 | 160 | 3730.08 | 0.0375 | 1.0000 | 3.75% | |
| | | | | | | | | 14.50% |
| * Source: Siting Council | | | | | | | | |

ATTACHMENT 4

Structural Analysis Report

180' Existing Lattice Tower

Verizon Antenna Upgrade

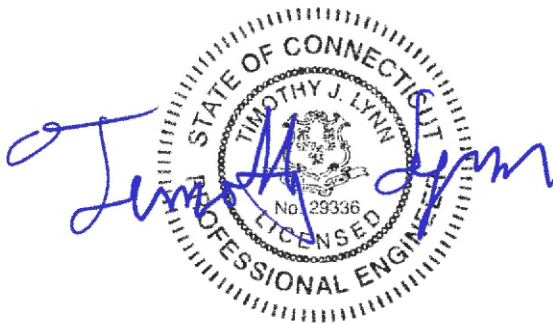
CSP Tower Ref: #32

*880 Post Road East
Westport, CT*

CEN TEK Project No. 22027.01

Date: April 5, 2022

Max Stress Ratio = 82%



Prepared for:
Verizon Wireless
20 Alexander Drive
Wallingford, CT 06492

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- INTRODUCTION
- ANTENNA AND APPURTENANCE SUMMARY
- PRIMARY ASSUMPTIONS USED IN THE ANALYSIS
- ANALYSIS
- TOWER LOADING
- TOWER CAPACITY
- FOUNDATION AND ANCHORS
- CONCLUSION

SECTION 2 – CONDITIONS & SOFTWARE

- STANDARD ENGINEERING CONDITIONS
- GENERAL DESCRIPTION OF STRUCTURAL ANALYSIS PROGRAM

SECTION 3 – CALCULATIONS

- tnxTower INPUT/OUTPUT SUMMARY
- tnxTower FEED LINE PLAN
- tnxTower FEED LINE DISTRIBUTION
- tnxTower DETAILED OUTPUT
- tnxTower INPUT/OUTPUT SUMMARY (REV.F FOR TWIST AND SWAY)
- tnxTower DETAILED OUTPUT (REV.F FOR TWIST AND SWAY)
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- FOUNDATION ANALYSIS

Introduction

The purpose of this report is to summarize the results of the non-linear, P-Δ structural analysis of the antenna upgrade by Verizon on the existing lattice tower located in Westport, Connecticut.

The host tower is a 180-ft, three legged, lattice tower originally designed and manufactured by Rohn Industries. File no. 26263DL dated February 1, 1991. The tower geometry, structure member sizes and foundation information were taken from a previous structural analysis report prepared by AECOM job no. VZ5-224 60620140 dated July 10, 2020. The tower has been previously reinforced. All previous reinforcements are assumed to be installed. See Primary Assumptions Section below for detailed reinforcement reference reports.

Antenna and appurtenance inventory was taken from the aforementioned structural analysis and information provided by Verizon.

The tower consists of nine (9) vertical sections consisting of steel pipe legs conforming to ASTM A572-50 and steel pipe lateral bracing. The vertical tower sections are connected by bolted flange plates with the diagonal and horizontal bracing to pipe legs consisting of bolted connections. The width of the tower face is 8.5-ft at the top and 27.7-ft at the bottom.

Antenna and Appurtenance Summary

The existing and proposed loads considered in the analysis consist of the following:

| Antenna Type | Carrier | Mount | Antenna Centerline Elevation | Cable |
|--|--------------------------------|----------------------------|-------------------------------------|------------------------------|
| (1) Telewave ANT490Y10-WR Yagi | D&K-51 CSP-1 (existing) | Leg Mounted | 187' | (1) LDF5-50A |
| (1) Telewave ANT490Y10-WR Yagi | CSP-22 (existing) | Leg Mounted | 181' | (1) LDF5-50A |
| (1) Celwave PA6-65 Dish | D&K-52 CSP-42 (existing) | Pipe Mounted to tower Leg | 177' | (1) EW-63 |
| (3) RFI BPA7496-180-14 Panel Antennas (1) Bird TTA unit | CSP-47,80-82 (existing) | (1) USF12-396 Sector Frame | 170' | (3) AVA7-50A (1) LDF4-50A |
| (1) 3-ft Yagi | CSP (existing) | Pipe Mounted to tower Leg | 169' | (1) LDF5-50A |
| (2) BXA-70063-4CF (1) BXA-70080-4CF (2) JAHH-65B-R3B (1) CBC78T-DS-43 | VZW (existing to remove) | See Below Mount | 160' | NA |

CEN TEK Engineering, Inc.
Structural Analysis - 180-ft Lattice Tower #32 Westport
Antenna Upgrade – Verizon
Westport, CT
April 5, 2022

| Antenna Type | Carrier | Mount | Antenna Centerline Elevation | Cable |
|---|-------------------------------|------------------------------|-------------------------------------|--|
| (4) MX06FRO640-02 (3) MT6407-77A (1) 4439d-25A RRH (1) 4440d-13A RRH (1) OVP Unit | VZW (Proposed) | See Below Mount | 160' | (1) 12x24 Hybrid Cable |
| (4) JAHH-65B-R3B (3) XXDWMM-12.5-65-8T (3) B2/B66A RRHs (3) B5/B13 RRHs (3) RT4401-48A RRHs (2) CBC78T-DS-43 (1) OVP Units | VZW (existing to remain) | (3) 15-ft Gate Booms | 160' | (6) 1 5/8" Coax Cables (1) 12x24 Hybrid Cable |
| (3) 800-10798 (3) P65-16-XLH-RR (3) HPA-65R-BUU-H6 (3) RRUS-11 RRH Units (9) RRUS-32 RRH Units (3) DBS0061F1V51-2 (3) DC6-48-60-18-8F | AT&T (existing) | (3) 15-ft T-Frames | 133' | (12) 1 1/4" Coax Cables (2) Fiber Cables (4) DC Cables |
| (3) Ericsson AIR32 (3) Ericsson AIR21 (3) RFS APXVAARR24_43 (3) 4449 RRHS (3) TMAs | T-Mobile (existing) | (3) 12-ft T-Frames | 125' | (6) 1 5/8" Coax Cables (3) 6x12 Hybrid Cables |
| (1) Telewave ANT150D Dipole | CSP (existing) | Pipe Mounted to tower Leg | 113' | (1) LDF4-50A |
| (1) GPS Antenna | D&K-1 CSP-43 (existing) | Leg Mounted | 61' | (1) LDF4-50A |

Primary Assumptions Used in the Analysis

- The tower structure's theoretical capacity not including any assessment of the condition of the tower.
- The tower carries the horizontal and vertical loads due to the weight of antennas, ice load and wind.
- Tower is properly installed and maintained.
- Tower is in plumb condition.
- Tower loading for antennas and mounts as listed in this report.
- All bolts are appropriately tightened providing the necessary connection continuity.
- All welds are fabricated with ER-70S-6 electrodes.
- All members are assumed to be as specified in the original tower design documents.
- All members are “hot dipped” galvanized in accordance with ASTM A123 and ASTM A153 Standards.
- All member protective coatings are in good condition.
- All tower members were properly designed, detailed, fabricated, installed and have been properly maintained since erection.
- Any deviation from the analyzed antenna loading will require a new analysis for verification of structural adequacy.
- All coax cables should be routed as specified in section 3 of this report.
- **All previous reinforcements per the below listed structural analysis and modification reports are assumed to be installed.**
 - **Structural report prepared by AECOM Corp for AT&T project no. SMK-004 / 60581632 dated 7/13/18.**
 - **Structural report prepared by AECOM Corp for Verizon project no. VZ5-224 / 60620140 dated 7/10/20.**

A n a l y s i s

The existing tower was analyzed using a comprehensive computer program entitled tnxTower. The program analyzes the tower, considering the worst case loading condition. The tower is considered as loaded by concentric forces along the tower, and the model assumes that the tower members are subjected to bending, axial, and shear forces.

The existing tower was analyzed for the controlling basic wind speed with no ice and the applicable wind and ice combination to determine stresses in members as per guidelines of TIA-222-H entitled “Structural Standard for Antenna Support Structures, Antennas and Small Wind Turbine Support Structures”, the American Institute of Steel Construction (AISC) and the Manual of Steel Construction; Load and Resistance Factor Design (LRFD).

The controlling wind speed is determined by evaluating the local available wind speed data as provided in Appendix N of the CSBC¹ and the wind speed data available in the TIA-222-H Standard.

T o w e r L o a d i n g

Tower loading was determined by the basic wind speed as applied to projected surface areas with modification factors per TIA-222-H, gravity loads of the tower structure and its components, and the application of 1.0” radial ice on the tower structure and its components.

| | | |
|-------------|--|---|
| Load Cases: | <u>Load Case 1</u> ; 130 mph (Risk Cat III) wind speed w/ no ice plus gravity load – used in calculation of tower stresses and rotation. | <i>[Appendix N of the 2018 CT Building Code]</i> |
| | <u>Load Case 2</u> ; 50 mph wind speed w/ 1.00” radial ice plus gravity load – used in calculation of tower stresses. | <i>[Annex B of TIA-222-H]</i> |
| | <u>Load Case 3</u> ; 90 mph wind speed w/ 0.5” radial ice plus gravity load – used in calculation of tower twist and sway. | <i>[TIA-222-F used for calculation of tower twist and sway per the requirements of the CSP]</i> |

¹ The 2015 International Building Code as amended by the 2018 Connecticut State Building Code (CSBC).

Tower Capacity

- Calculated stresses **were found to be within allowable limits.**

| Tower Section | Elevation | Stress Ratio (percentage of capacity) | Result |
|------------------|---------------|--|-------------|
| Leg (T12) | 20.0' - 30.0' | 61.5% | PASS |
| Diagonal (T12) | 20.0' - 30.0' | 81.6% | PASS |
| Horizontal (T11) | 30.0' - 40.0' | 74.8% | PASS |

- The tower combined deflection **was found to be within allowable limits.**

| Deflection Criteria | Proposed (degrees) | Allowable (degrees) | Result |
|---------------------|-----------------------|------------------------|-------------|
| Sway (Tilt) | 0.3783 | n/a | n/a |
| Twist | 0.3184 | n/a | n/a |
| Combined | 0.6967 | 0.75 | PASS |

TIA-222-F standard used for calculation of tower twist and sway per the requirements of the CSP.

Foundation and Anchors

The existing foundation consists of three (3) 4.5-ft diameter x 27-ft long reinforced concrete caissons. The base of the tower is connected to the foundation by means of (10) 1.00"Ø anchor bolts per leg embedded into the concrete foundation structure.

- The tower reactions developed from the governing Load Case were used in the verification of the foundation and anchor bolts:

| Load Effect | Proposed Tower Reactions |
|-----------------|-----------------------------|
| Leg Shear | 50 kips |
| Leg Compression | 348 kips |
| Leg Tension | 306 kips |
| Base Moment | 7,843 ft-kips |
| Base Shear | 86 kips |

- The anchor bolts **were found** to be within allowable limits.

| Tower Section | Component | Stress Ratio (percentage of capacity) | Result |
|---------------|--------------------------------------|--|-------------|
| Anchor Bolts | Combined Compression and Shear | 47.2% | PASS |

- The foundation was found to be within allowable limits.

| Foundation | Design Limit | (percentage of capacity) | Result |
|------------------------------------|-----------------|-----------------------------|-------------|
| (3) Reinforced Concrete Caisson | Uplift | 34% | PASS |
| | Bearing | 46% | PASS |

Conclusion

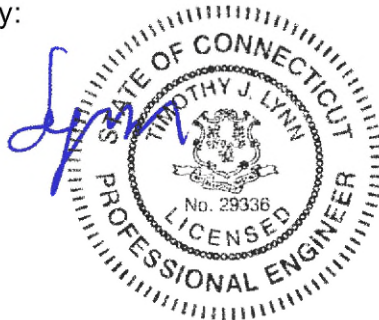
This analysis shows that the subject tower **is adequate** to support the proposed antenna configuration.

The analysis is based, in part, on the information provided to this office by Verizon and the CSP. If the existing conditions are different than the information in this report, Centek Engineering, Inc. must be contacted for resolution of any potential issues.

Please feel free to call with any questions or comments.

Respectfully Submitted by:

Timothy J. Lynn, PE
 Structural Engineer



Standard Conditions for Furnishing of Professional Engineering Services on Existing Structures

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

- Information supplied by the client regarding the structure itself, its foundations, the soil conditions, the antenna and feed line loading on the structure and its components, or other relevant information.
- Information from the field and/or drawings in the possession of Centek Engineering, Inc. or generated by field inspections or measurements of the structure.
- It is the responsibility of the client to ensure that the information provided to Centek Engineering, Inc. and used in the performance of our engineering services is correct and complete. In the absence of information to the contrary, we assume that all structures were constructed in accordance with the drawings and specifications and are in an un-corroded condition and have not deteriorated. It is therefore assumed that its capacity has not significantly changed from the “as new” condition.
- All services will be performed to the codes specified by the client, and we do not imply to meet any other codes or requirements unless explicitly agreed in writing. If wind and ice loads or other relevant parameters are to be different from the minimum values recommended by the codes, the client shall specify the exact requirement. In the absence of information to the contrary, all work will be performed in accordance with the latest revision of ANSI/ASCE10 & ANSI/EIA-222
- All services performed, results obtained, and recommendations made are in accordance with generally accepted engineering principles and practices. Centek Engineering, Inc. is not responsible for the conclusions, opinions and recommendations made by others based on the information we supply.

GENERAL DESCRIPTION OF STRUCTURAL ANALYSIS PROGRAM

tnxTower, is an integrated structural analysis and design software package for Designed specifically for the telecommunications industry, tnxTower, formerly RISA Tower, automates much of the tower analysis and design required by the TIA/EIA 222 Standard.

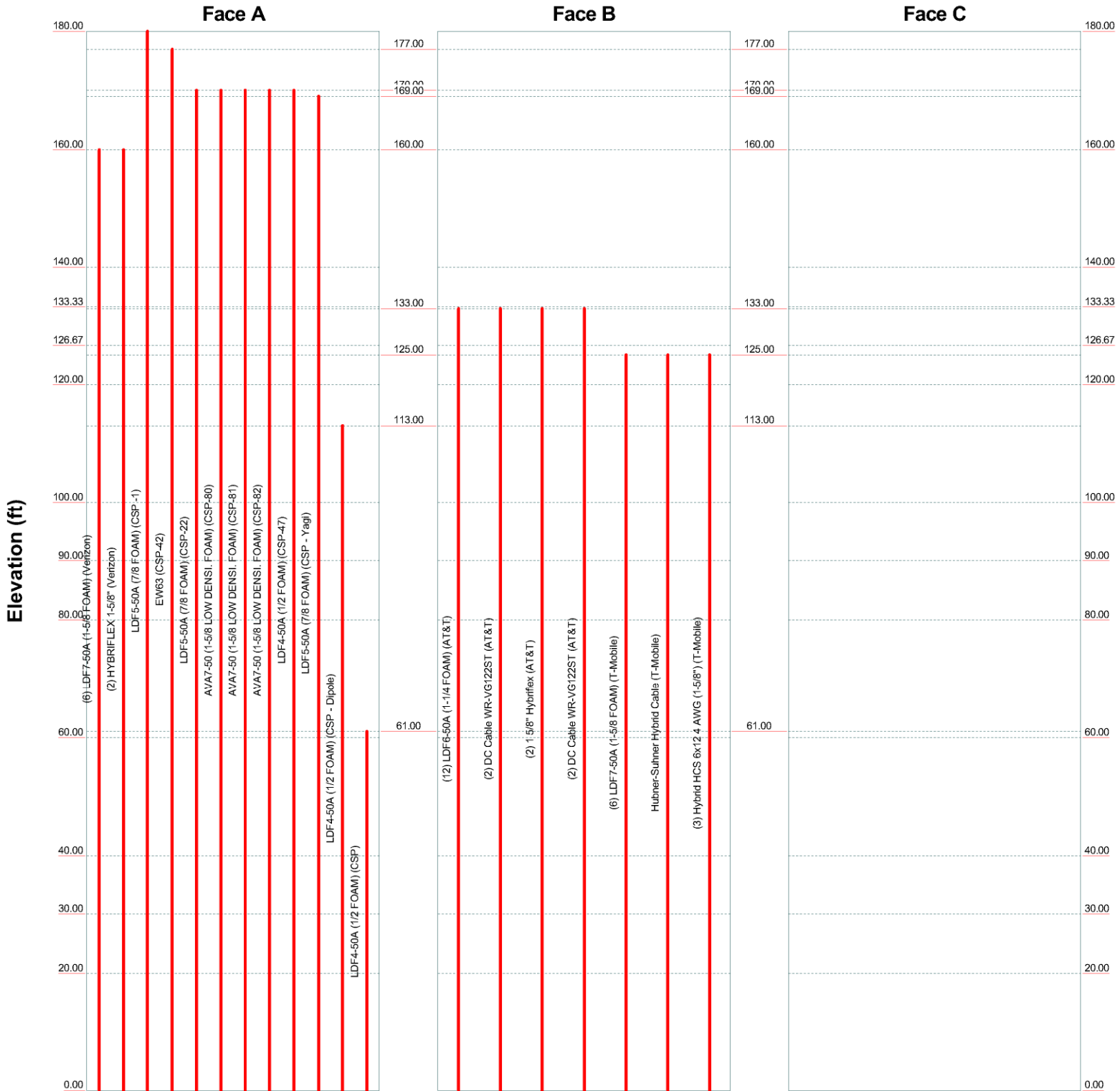
tnxTower Features:

- tnxTower can analyze and design 3- and 4-sided guyed towers, 3- and 4-sided self-supporting towers and either round or tapered ground mounted poles with or without guys.
- The program analyzes towers using the TIA-222-G (2005) standard or any of the previous TIA/EIA standards back to RS-222 (1959). Steel design is checked using the AISC ASD 9th Edition or the AISC LRFD specifications.
- Linear and non-linear (P-delta) analyses can be used in determining displacements and forces in the structure. Wind pressures and forces are automatically calculated.
- Extensive graphics plots include material take-off, shear-moment, leg compression, displacement, twist, feed line, guy anchor and stress plots.
- tnxTower contains unique features such as True Cable behavior, hog rod take-up, foundation stiffness and much more.

Feed Line Distribution Chart

0' - 180'

— Round
 — Flat
 — App In Face
 — App Out Face
 — Truss Leg



| | | |
|---|----------------|-------------|
| Centek Engineering Inc. | | |
| 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | | |
| Job: 22027.01 - Westport | | |
| Project: 180-ft Lattice Tower (CSP #32) | | |
| Client: Verizon | Drawn by: TJL | App'd: |
| Code: TIA-222-H | Date: 04/05/22 | Scale: NTS |
| Path: | | Dwg No. E-7 |

| | | |
|--|--|----------------------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job 22027.01 - Westport | Page 1 of 71 |
| | Project 180-ft Lattice Tower (CSP #32) | Date 08:43:42 04/05/22 |
| | Client Verizon | Designed by TJL |

Tower Input Data

The main tower is a 3x free standing tower with an overall height of 180.00 ft above the ground line.

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

The face width of the tower is 8.54 ft at the top and 27.68 ft at the base.

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

The following design criteria apply:

Tower base elevation above sea level: 0.00 ft.

Basic wind speed of 130 mph.

Risk Category IV.

Exposure Category C.

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

Topographic Category: 1.

Crest Height: 0.00 ft.

Nominal ice thickness of 1.0000 in.

Ice thickness is considered to increase with height.

Ice density of 56 pcf.

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

Deflections calculated using a wind speed of 60 mph.

P-Delta for analysis does not apply for this case - TIA-222-H Section 3.5.

Pressures are calculated at each section.

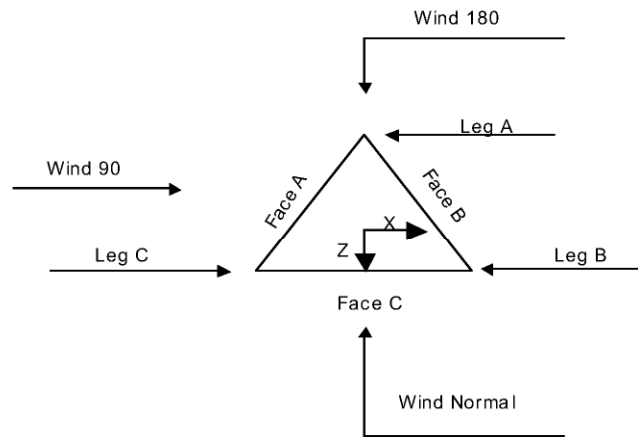
Stress ratio used in tower member design is 1.

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

Options

| | | |
|--|---|--|
| Consider Moments - Legs Consider Moments - Horizontals Consider Moments - Diagonals Use Moment Magnification <input checked="" type="checkbox"/> Use Code Stress Ratios <input checked="" type="checkbox"/> Use Code Safety Factors - Guys Escalate Ice Always Use Max Kz Use Special Wind Profile <input checked="" type="checkbox"/> Include Bolts In Member Capacity <input checked="" type="checkbox"/> Leg Bolts Are At Top Of Section <input checked="" type="checkbox"/> Secondary Horizontal Braces Leg Use Diamond Inner Bracing (4 Sided) <input checked="" type="checkbox"/> SR Members Have Cut Ends SR Members Are Concentric | Distribute Leg Loads As Uniform Assume Legs Pinned Assume Rigid Index Plate <input checked="" type="checkbox"/> Use Clear Spans For Wind Area <input checked="" type="checkbox"/> Use Clear Spans For KL/r Retension Guys To Initial Tension <input checked="" type="checkbox"/> Bypass Mast Stability Checks <input checked="" type="checkbox"/> Use Azimuth Dish Coefficients <input checked="" type="checkbox"/> Project Wind Area of Appurt. Autocalc Torque Arm Areas Add IBC .6D+W Combination <input checked="" type="checkbox"/> Sort Capacity Reports By Component Triangulate Diamond Inner Bracing Treat Feed Line Bundles As Cylinder Ignore KL/ry For 60 Deg. Angle Legs | Use ASCE 10 X-Brace Ly Rules <input checked="" type="checkbox"/> Calculate Redundant Bracing Forces Ignore Redundant Members in FEA <input checked="" type="checkbox"/> SR Leg Bolts Resist Compression <input checked="" type="checkbox"/> All Leg Panels Have Same Allowable Offset Girt At Foundation <input checked="" type="checkbox"/> Consider Feed Line Torque <input checked="" type="checkbox"/> Include Angle Block Shear Check Use TIA-222-H Bracing Resist. Exemption Use TIA-222-H Tension Splice Exemption <div style="background-color: #e0e0e0; text-align: center; padding: 2px;">Poles</div> <input checked="" type="checkbox"/> Include Shear-Torsion Interaction Always Use Sub-Critical Flow Use Top Mounted Sockets Pole Without Linear Attachments Pole With Shroud Or No Appurtenances Outside and Inside Corner Radii Are Known |
|--|---|--|

| | | |
|--|--|----------------------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job 22027.01 - Westport | Page 2 of 71 |
| | Project 180-ft Lattice Tower (CSP #32) | Date 08:43:42 04/05/22 |
| | Client Verizon | Designed by TJJ |



Triangular Tower

Tower Section Geometry

| Tower Section | Tower Elevation | Assembly Database | Description | Section Width | Number of Sections | Section Length |
|---------------|-----------------|-------------------|-------------|---------------|--------------------|----------------|
| | <i>ft</i> | | | <i>ft</i> | | <i>ft</i> |
| T1 | 180.00-160.00 | | | 8.54 | 1 | 20.00 |
| T2 | 160.00-140.00 | | | 8.63 | 1 | 20.00 |
| T3 | 140.00-133.33 | | | 10.71 | 1 | 6.67 |
| T4 | 133.33-126.67 | | | 11.40 | 1 | 6.67 |
| T5 | 126.67-120.00 | | | 12.10 | 1 | 6.67 |
| T6 | 120.00-100.00 | | | 12.79 | 1 | 20.00 |
| T7 | 100.00-90.00 | | | 15.04 | 1 | 10.00 |
| T8 | 90.00-80.00 | | | 16.36 | 1 | 10.00 |
| T9 | 80.00-60.00 | | | 17.68 | 1 | 20.00 |
| T10 | 60.00-40.00 | | | 20.18 | 1 | 20.00 |
| T11 | 40.00-30.00 | | | 22.68 | 1 | 10.00 |
| T12 | 30.00-20.00 | | | 23.93 | 1 | 10.00 |
| T13 | 20.00-0.00 | | | 25.18 | 1 | 20.00 |

Tower Section Geometry (cont'd)

| Tower Section | Tower Elevation | Diagonal Spacing | Bracing Type | Has K Brace End Panels | Has Horizontals | Top Girt Offset | Bottom Girt Offset |
|---------------|-----------------|------------------|--------------|------------------------|-----------------|-----------------|--------------------|
| | <i>ft</i> | <i>ft</i> | | | | <i>in</i> | <i>in</i> |
| T1 | 180.00-160.00 | 6.67 | K Brace Down | No | Yes | 0.0000 | 0.0000 |
| T2 | 160.00-140.00 | 6.67 | K Brace Down | No | Yes | 0.0000 | 0.0000 |

| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 3 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Tower Section | Tower Elevation <i>ft</i> | Diagonal Spacing <i>ft</i> | Bracing Type | Has K Brace End Panels | Has Horizontals | Top Girt Offset <i>in</i> | Bottom Girt Offset <i>in</i> |
|---------------|------------------------------|-------------------------------|--------------|------------------------|-----------------|------------------------------|---------------------------------|
| T3 | 140.00-133.33 | 6.67 | K Brace Down | No | Yes | 0.0000 | 0.0000 |
| T4 | 133.33-126.67 | 6.67 | K Brace Down | No | Yes | 0.0000 | 0.0000 |
| T5 | 126.67-120.00 | 6.67 | K Brace Down | No | Yes | 0.0000 | 0.0000 |
| T6 | 120.00-100.00 | 10.00 | K Brace Down | No | Yes | 0.0000 | 0.0000 |
| T7 | 100.00-90.00 | 10.00 | K Brace Down | No | Yes | 0.0000 | 0.0000 |
| T8 | 90.00-80.00 | 10.00 | K Brace Down | No | Yes | 0.0000 | 0.0000 |
| T9 | 80.00-60.00 | 10.00 | K Brace Down | No | Yes | 0.0000 | 0.0000 |
| T10 | 60.00-40.00 | 10.00 | K Brace Down | No | Yes | 0.0000 | 0.0000 |
| T11 | 40.00-30.00 | 10.00 | K Brace Down | No | Yes | 0.0000 | 0.0000 |
| T12 | 30.00-20.00 | 10.00 | K Brace Down | No | Yes | 0.0000 | 0.0000 |
| T13 | 20.00-0.00 | 20.00 | K1 Down | No | Yes | 0.0000 | 0.0000 |

Tower Section Geometry (cont'd)

| Tower Elevation <i>ft</i> | Leg Type | Leg Size | Leg Grade | Diagonal Type | Diagonal Size | Diagonal Grade |
|------------------------------|-----------------|---|------------------|---------------|---------------|------------------|
| T1 180.00-160.00 | Pipe | ROHN 3 STD | A572-50 (50 ksi) | Pipe | ROHN 2 STD | A572-50 (50 ksi) |
| T2 160.00-140.00 | Pipe | ROHN 4 STD | A572-50 (50 ksi) | Pipe | ROHN 2 STD | A572-50 (50 ksi) |
| T3 140.00-133.33 | Pipe | ROHN 5 EH | A572-50 (50 ksi) | Pipe | ROHN 2 EH | A572-50 (50 ksi) |
| T4 133.33-126.67 | Pipe | ROHN 5 EH | A572-50 (50 ksi) | Pipe | ROHN 2 EH | A572-50 (50 ksi) |
| T5 126.67-120.00 | Pipe | ROHN 5 EH | A572-50 (50 ksi) | Pipe | ROHN 2 XXS | A572-50 (50 ksi) |
| T6 120.00-100.00 | Pipe | ROHN 6 EHS | A572-50 (50 ksi) | Pipe | Pipe 2.5 XXS | A572-50 (50 ksi) |
| T7 100.00-90.00 | Pipe | ROHN 6 EH | A572-50 (50 ksi) | Pipe | ROHN 3 STD | A572-50 (50 ksi) |
| T8 90.00-80.00 | Pipe | ROHN 6 EH | A572-50 (50 ksi) | Pipe | ROHN 3 STD | A572-50 (50 ksi) |
| T9 80.00-60.00 | Arbitrary Shape | 120deg_9.6250x0.375 BU on ROHN 8 EHS | A572-50 (50 ksi) | Pipe | ROHN 3 STD | A572-50 (50 ksi) |
| T10 60.00-40.00 | Arbitrary Shape | 1/3 9.6250x0.375 on ROHN 8 EHS Leg Pipe | A572-42 (42 ksi) | Pipe | ROHN 3 EH | A572-50 (50 ksi) |
| T11 40.00-30.00 | Arbitrary Shape | 1/3 9.6250x0.375 on ROHN 8 EHS Leg Pipe | A572-42 (42 ksi) | Pipe | ROHN 3 EH | A572-50 (50 ksi) |
| T12 30.00-20.00 | Arbitrary Shape | 1/3 9.6250x0.375 on ROHN 8 EHS Leg Pipe | A572-42 (42 ksi) | Pipe | ROHN 3 EH | A572-50 (50 ksi) |
| T13 20.00-0.00 | Arbitrary Shape | 1/3 9.6250x0.375 on ROHN 8 EH Leg Pipe | A572-42 (42 ksi) | Pipe | ROHN 3 EH | A572-50 (50 ksi) |

Tower Section Geometry (cont'd)

| Tower Elevation <i>ft</i> | Top Girt Type | Top Girt Size | Top Girt Grade | Bottom Girt Type | Bottom Girt Size | Bottom Girt Grade |
|------------------------------|---------------|---------------|------------------|------------------|------------------|-------------------|
| T4 133.33-126.67 | Pipe | ROHN 2 STD | A572-50 (50 ksi) | Solid Round | | A36 (36 ksi) |
| T5 126.67-120.00 | Pipe | ROHN 2 STD | A572-50 | Solid Round | | A36 |

| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 4 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Tower Elevation ft | Top Girt Type | Top Girt Size | Top Girt Grade | Bottom Girt Type | Bottom Girt Size | Bottom Girt Grade |
|-----------------------|---------------|---------------|---------------------|------------------|------------------|-----------------------------|
| T8 90.00-80.00 | Pipe | ROHN 2 STD | (50 ksi) A572-50 | Single Angle | | (36 ksi) A36 |
| T12 30.00-20.00 | Pipe | ROHN 2.5 EH | (50 ksi) A572-50 | Single Angle | | (36 ksi) A36 (36 ksi) |

Tower Section Geometry (cont'd)

| Tower Elevation ft | No. of Mid Girts | Mid Girt Type | Mid Girt Size | Mid Girt Grade | Horizontal Type | Horizontal Size | Horizontal Grade |
|-----------------------|------------------|---------------|---------------|-----------------|-----------------|-----------------|---------------------|
| T1 180.00-160.00 | None | Flat Bar | | A36 (36 ksi) | Pipe | ROHN 1.5 STD | A572-50 (50 ksi) |
| T2 160.00-140.00 | None | Flat Bar | | A36 (36 ksi) | Pipe | ROHN 1.5 STD | A572-50 (50 ksi) |
| T3 140.00-133.33 | None | Flat Bar | | A36 (36 ksi) | Pipe | ROHN 2 STD | A572-50 (50 ksi) |
| T4 133.33-126.67 | None | Flat Bar | | A36 (36 ksi) | Pipe | ROHN 2 STD | A572-50 (50 ksi) |
| T5 126.67-120.00 | None | Flat Bar | | A36 (36 ksi) | Pipe | ROHN 2 STD | A572-50 (50 ksi) |
| T6 120.00-100.00 | None | Single Angle | | A36 (36 ksi) | Pipe | ROHN 2 STD | A572-50 (50 ksi) |
| T7 100.00-90.00 | None | Flat Bar | | A36 (36 ksi) | Pipe | ROHN 2 STD | A572-50 (50 ksi) |
| T8 90.00-80.00 | None | Flat Bar | | A36 (36 ksi) | Pipe | ROHN 2 STD | A572-50 (50 ksi) |
| T9 80.00-60.00 | None | Flat Bar | | A36 (36 ksi) | Pipe | ROHN 2.5 STD | A572-50 (50 ksi) |
| T10 60.00-40.00 | None | Single Angle | | A36 (36 ksi) | Pipe | ROHN 2.5 STD | A572-50 (50 ksi) |
| T11 40.00-30.00 | None | Flat Bar | | A36 (36 ksi) | Pipe | ROHN 2.5 STD | A572-50 (50 ksi) |
| T12 30.00-20.00 | None | Flat Bar | | A36 (36 ksi) | Pipe | ROHN 2.5 STD | A572-50 (50 ksi) |
| T13 20.00-0.00 | None | Flat Bar | | A36 (36 ksi) | Pipe | P3.5x.226 | A572-50 (50 ksi) |

Tower Section Geometry (cont'd)

| Tower Elevation ft | Secondary Horizontal Type | Secondary Horizontal Size | Secondary Horizontal Grade | Inner Bracing Type | Inner Bracing Size | Inner Bracing Grade |
|-----------------------|---------------------------|---------------------------|----------------------------|--------------------|--------------------|---------------------|
| T1 180.00-160.00 | Solid Round | | A36 (36 ksi) | Single Angle | L2x2x1/8 | A36 (36 ksi) |
| T2 160.00-140.00 | Solid Round | | A36 (36 ksi) | Single Angle | L2x2x1/8 | A36 (36 ksi) |
| T3 140.00-133.33 | Solid Round | | A36 (36 ksi) | Single Angle | L2x2x1/8 | A36 (36 ksi) |

| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 5 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Tower Elevation | Secondary Horizontal Type | Secondary Horizontal Size | Secondary Horizontal Grade | Inner Bracing Type | Inner Bracing Size | Inner Bracing Grade |
|------------------|---------------------------|---------------------------|----------------------------|--------------------|--------------------|---------------------|
| <i>ft</i> | | | | | | |
| T4 133.33-126.67 | Solid Round | | A36 (36 ksi) | Single Angle | L2x2x1/8 | A36 (36 ksi) |
| T5 126.67-120.00 | Solid Round | | A36 (36 ksi) | Single Angle | L2x2x1/8 | A36 (36 ksi) |
| T6 120.00-100.00 | Single Angle | | A36 (36 ksi) | Single Angle | L2 1/2x2 1/2x3/16 | A36 (36 ksi) |
| T7 100.00-90.00 | Solid Round | | A36 (36 ksi) | Single Angle | L2 1/2x2 1/2x3/16 | A36 (36 ksi) |
| T8 90.00-80.00 | Solid Round | | A36 (36 ksi) | Single Angle | L2 1/2x2 1/2x3/16 | A36 (36 ksi) |
| T9 80.00-60.00 | Solid Round | | A36 (36 ksi) | Single Angle | L3x3x3/16 | A36 (36 ksi) |
| T10 60.00-40.00 | Single Angle | | A36 (36 ksi) | Single Angle | L3 1/2x3 1/2x1/4 | A572-50 (50 ksi) |
| T11 40.00-30.00 | Single Angle | | A572-50 (50 ksi) | Single Angle | L3 1/2x3 1/2x1/4 | A572-50 (50 ksi) |
| T12 30.00-20.00 | Single Angle | | A572-50 (50 ksi) | Single Angle | L3 1/2x3 1/2x1/4 | A572-50 (50 ksi) |
| T13 20.00-0.00 | Solid Round | | A36 (36 ksi) | Pipe | ROHN 2 STD | A572-50 (50 ksi) |

Tower Section Geometry (cont'd)

| Tower Elevation | Redundant Bracing Grade | Redundant Type | Redundant Size | K Factor |
|-------------------|-------------------------|---|----------------------|--|
| <i>ft</i> | | | | |
| T13 20.00-0.00 | A572-50 (50 ksi) | Horizontal (1) Diagonal (1) Hip (1) | Pipe Pipe Pipe | ROHN 1.5 STD ROHN 2 STD ROHN 2.5 STD |
| | | | | 1 1 1 |

Tower Section Geometry (cont'd)

| Tower Elevation | Gusset Area (per face) | Gusset Thickness | Gusset Grade | Adjust. Factor A_f | Adjust. Factor A_r | Weight Mult. | Double Angle Stitch Bolt Spacing Diagonals | Double Angle Stitch Bolt Spacing Horizontals | Double Angle Stitch Bolt Spacing Redundants |
|---------------------|------------------------|------------------|-----------------|----------------------|----------------------|--------------|--|--|---|
| <i>ft</i> | <i>ft²</i> | <i>in</i> | | | | | <i>in</i> | <i>in</i> | <i>in</i> |
| T1 180.00-160.00 | 0.00 | 0.0000 | A36 (36 ksi) | 1 | 1 | 1 | 36.0000 | 36.0000 | 36.0000 |
| T2 160.00-140.00 | 0.00 | 0.0000 | A36 (36 ksi) | 1 | 1 | 1 | 36.0000 | 36.0000 | 36.0000 |
| T3 140.00-133.33 | 0.00 | 0.0000 | A36 (36 ksi) | 1 | 1 | 1 | 36.0000 | 36.0000 | 36.0000 |
| T4 133.33-126.67 | 0.00 | 0.0000 | A36 (36 ksi) | 1 | 1 | 1 | 36.0000 | 36.0000 | 36.0000 |
| T5 126.67-120.00 | 0.00 | 0.0000 | A36 (36 ksi) | 1 | 1 | 1 | 36.0000 | 36.0000 | 36.0000 |
| T6 120.00-100.00 | 0.00 | 0.0000 | A36 (36 ksi) | 1 | 1 | 1 | 36.0000 | 36.0000 | 36.0000 |
| T7 100.00-90.00 | 0.00 | 0.0000 | A36 (36 ksi) | 1 | 1 | 1 | 36.0000 | 36.0000 | 36.0000 |

| | | |
|--|--|----------------------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job 22027.01 - Westport | Page 6 of 71 |
| | Project 180-ft Lattice Tower (CSP #32) | Date 08:43:42 04/05/22 |
| | Client Verizon | Designed by TJL |

| Tower Elevation | Gusset Area (per face) | Gusset Thickness | Gusset Grade | Adjust. Factor A_f | Adjust. Factor A_r | Weight Mult. | Double Angle Stitch Bolt Spacing Diagonals in | Double Angle Stitch Bolt Spacing Horizontals in | Double Angle Stitch Bolt Spacing Redundants in |
|-----------------|------------------------|------------------|--------------|----------------------|----------------------|--------------|---|---|--|
| ft | ft ² | in | | | | | | | |
| T8 90.00-80.00 | 0.00 | 0.0000 | A36 (36 ksi) | 1 | 1 | 1 | 36.0000 | 36.0000 | 36.0000 |
| T9 80.00-60.00 | 0.00 | 0.0000 | A36 (36 ksi) | 1 | 1 | 1 | 36.0000 | 36.0000 | 36.0000 |
| T10 60.00-40.00 | 0.00 | 0.0000 | A36 (36 ksi) | 1 | 1 | 1 | 36.0000 | 36.0000 | 36.0000 |
| T11 40.00-30.00 | 0.00 | 0.0000 | A36 (36 ksi) | 1 | 1 | 1 | 36.0000 | 36.0000 | 36.0000 |
| T12 30.00-20.00 | 0.00 | 0.0000 | A36 (36 ksi) | 1 | 1 | 1 | 36.0000 | 36.0000 | 36.0000 |
| T13 20.00-0.00 | 0.00 | 0.0000 | A36 (36 ksi) | 1 | 1 | 1 | 36.0000 | 36.0000 | 36.0000 |

Tower Section Geometry (cont'd)

| Tower Elevation | Calc K Single Angles | Calc K Solid Rounds | K Factors ¹ | | | | | | | |
|------------------|----------------------|---------------------|------------------------|---------------|---------------|--------------|-------|--------|-------------|-------------|
| | | | Legs | X Brace Diags | K Brace Diags | Single Diags | Girts | Horiz. | Sec. Horiz. | Inner Brace |
| | | | X | X | X | X | X | X | X | X |
| T1 180.00-160.00 | Yes | Yes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| T2 160.00-140.00 | Yes | Yes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| T3 140.00-133.33 | Yes | Yes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| T4 133.33-126.67 | Yes | Yes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| T5 126.67-120.00 | Yes | Yes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| T6 120.00-100.00 | Yes | Yes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| T7 100.00-90.00 | Yes | Yes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| T8 90.00-80.00 | Yes | Yes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| T9 80.00-60.00 | Yes | Yes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| T10 60.00-40.00 | Yes | Yes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| T11 40.00-30.00 | Yes | Yes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| T12 30.00-20.00 | Yes | Yes | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| T13 20.00-0.00 | Yes | Yes | 1 | 1 | 0.5 | 1 | 1 | 1 | 1 | 1 |
| | | | | | 0.5 | 1 | 1 | 1 | 1 | 1 |

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

Tower Section Geometry (cont'd)

| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 9 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Tower Elevation ft | Leg Connection Type | Leg | | Diagonal | | Top Girt | | Bottom Girt | | Mid Girt | | Long Horizontal | | Short Horizontal | |
|--------------------|---------------------|--------------|-----|--------------|-----|--------------|-----|--------------|-----|--------------|-----|-----------------|-----|------------------|-----|
| | | Bolt Size in | No. | Bolt Size in | No. | Bolt Size in | No. | Bolt Size in | No. | Bolt Size in | No. | Bolt Size in | No. | Bolt Size in | No. |
| T8 90.00-80.00 | Flange | 1.0000 | 0 | 0.6250 | 3 | 0.6250 | 2 | 0.6250 | 0 | 0.6250 | 0 | 0.6250 | 2 | 0.6250 | 0 |
| | | A325N | | A325N | | A325N | | A325N | | A325N | | A325N | | A325N | |
| T9 80.00-60.00 | Flange | 1.0000 | 8 | 0.6250 | 3 | 0.6250 | 2 | 0.6250 | 0 | 0.6250 | 0 | 0.6250 | 2 | 0.6250 | 0 |
| | | A325N | | A325N | | A325N | | A325N | | A325N | | A325N | | A325N | |
| T10 60.00-40.00 | Flange | 1.0000 | 8 | 0.6250 | 3 | 0.6250 | 2 | 0.6250 | 0 | 0.6250 | 0 | 0.6250 | 2 | 0.6250 | 0 |
| | | A325N | | A325N | | A325N | | A325N | | A325N | | A325N | | A325N | |
| T11 40.00-30.00 | Flange | 1.0000 | 8 | 0.6250 | 3 | 0.6250 | 2 | 0.6250 | 0 | 0.6250 | 0 | 0.6250 | 2 | 0.6250 | 0 |
| | | A325N | | A325N | | A325N | | A325N | | A325N | | A325N | | A325N | |
| T12 30.00-20.00 | Flange | 1.0000 | 0 | 0.6250 | 3 | 0.6250 | 2 | 0.6250 | 0 | 0.6250 | 0 | 0.6250 | 2 | 0.6250 | 0 |
| | | A325N | | A325N | | A325N | | A325N | | A325N | | A325N | | A325N | |
| T13 20.00-0.00 | Flange | 1.0000 | 8 | 0.6250 | 3 | 0.6250 | 2 | 0.6250 | 0 | 0.6250 | 0 | 0.7500 | 2 | 0.6250 | 0 |
| | | A325N | | A325X | | A325N | | A325N | | A325N | | A325N | | A325N | |

Feed Line/Linear Appurtenances - Entered As Round Or Flat

| Description | Face or Leg | Allow Shield | Exclude From Torque Calculation | Component Type | Placement ft | Face Offset in | Lateral Offset (Frac FW) | # | # Per Row | Clear Spacing in | Width or Diameter in | Perimeter in | Weight plf |
|---|-------------|--------------|---------------------------------|----------------|---------------|----------------|--------------------------|----|-----------|------------------|----------------------|--------------|------------|
| * LDF6-50A (1-1/4 FOAM) (AT&T) | B | No | No | Ar (CaAa) | 133.00 - 0.00 | 0.0000 | 0.46 | 12 | 6 | 1.5500 | 1.5500 | | 0.66 |
| DC Cable WR-VG122S | B | No | No | Ar (CaAa) | 133.00 - 0.00 | 0.0000 | 0.43 | 2 | 2 | 0.4000 | 0.4000 | | 0.25 |
| T (AT&T) | | | | | | | | | | | | | |
| 1 5/8" Hybriflex (AT&T) | B | No | No | Ar (CaAa) | 133.00 - 0.00 | 0.0000 | 0.41 | 2 | 1 | 1.6250 | 1.6250 | | 1.13 |
| DC Cable WR-VG122S | B | No | No | Ar (CaAa) | 133.00 - 0.00 | 0.0000 | 0.42 | 2 | 2 | 0.4000 | 0.4000 | | 0.25 |
| T (AT&T) | | | | | | | | | | | | | |
| * LDF7-50A (1-5/8 FOAM) (T-Mobile) | B | No | No | Ar (CaAa) | 125.00 - 0.00 | 0.0000 | -0.41 | 6 | 3 | 1.9800 | 1.9800 | | 0.82 |
| Hubner-Suhner Hybrid Cable (T-Mobile) | B | No | No | Ar (CaAa) | 125.00 - 0.00 | 0.0000 | -0.385 | 1 | 1 | 0.7087 | 0.7087 | | 0.48 |
| Hybrid HCS 6x12 4 AWG (1-5/8") (T-Mobile) | B | No | No | Ar (CaAa) | 125.00 - 0.00 | 0.0000 | -0.365 | 3 | 3 | 1.9900 | 1.9900 | | 1.90 |
| * LDF7-50A (1-5/8 FOAM) (Verizon) | A | No | No | Ar (CaAa) | 160.00 - 0.00 | 0.0000 | -0.42 | 6 | 6 | 1.9800 | 1.9800 | | 0.82 |
| HYBRIFLEX 1-5/8" (Verizon) | A | No | No | Ar (CaAa) | 160.00 - 0.00 | 0.0000 | -0.48 | 2 | 2 | 1.9800 | 1.9800 | | 1.90 |
| * LDF5-50A | A | No | No | Ar (CaAa) | 180.00 - 0.00 | 0.0000 | 0.48 | 1 | 1 | 1.0900 | 1.0900 | | 0.33 |

| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 10 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Description | Face or Leg | Allow Shield | Exclude From Torque Calculation | Component Type | Placement ft | Face Offset in | Lateral Offset (Frac FW) | # | # Per Row | Clear Spacing in | Width or Diameter in | Perimeter in | Weight plf |
|--|-------------------|-----------------|--|-------------------|------------------|----------------------|--------------------------------|---|-----------------|------------------------|----------------------------|-----------------|---------------|
| (7/8 FOAM) (CSP -1) EW63 | A | No | No | Af (CaAa) | 177.00 - 0.00 | 0.0000 | 0.44 | 1 | 1 | 1.5742 | 1.5742 | | 0.51 |
| (CSP-42) LDF5-50A | A | No | No | Ar (CaAa) | 170.00 - 0.00 | 0.0000 | 0.42 | 1 | 1 | 1.0900 | 1.0900 | | 0.33 |
| (7/8 FOAM) (CSP-22) AVA7-50 | A | No | No | Ar (CaAa) | 170.00 - 0.00 | 0.0000 | 0.4 | 1 | 1 | 1.9800 | 1.9800 | | 0.72 |
| (1-5/8 LOW DENS. FOAM) (CSP-80) AVA7-50 | A | No | No | Ar (CaAa) | 170.00 - 0.00 | 0.0000 | 0.38 | 1 | 1 | 1.9800 | 1.9800 | | 0.72 |
| (1-5/8 LOW DENS. FOAM) (CSP-81) AVA7-50 | A | No | No | Ar (CaAa) | 170.00 - 0.00 | 0.0000 | 0.36 | 1 | 1 | 1.9800 | 1.9800 | | 0.72 |
| (1-5/8 LOW DENS. FOAM) (CSP-82) LDF4-50A | A | No | No | Ar (CaAa) | 170.00 - 0.00 | 0.0000 | 0.34 | 1 | 1 | 0.6300 | 0.6300 | | 0.15 |
| (1/2 FOAM) (CSP-47) LDF5-50A | A | No | No | Ar (CaAa) | 169.00 - 0.00 | 0.0000 | 0.32 | 1 | 1 | 1.0900 | 1.0900 | | 0.33 |
| (7/8 FOAM) (CSP - Yagi) LDF4-50A | A | No | No | Ar (CaAa) | 113.00 - 0.00 | 0.0000 | 0.3 | 1 | 1 | 0.6300 | 0.6300 | | 0.15 |
| (1/2 FOAM) (CSP - Dipole) LDF4-50A | A | No | No | Ar (CaAa) | 61.00 -0.00 | 0.0000 | 0.28 | 1 | 1 | 0.6300 | 0.6300 | | 0.15 |
| (1/2 FOAM) (CSP) | | | | | | | | | | | | | |

Feed Line/Linear Appurtenances Section Areas

| Tower Section | Tower Elevation ft | Face | A_R ft ² | A_F ft ² | C_{AA} In Face ft ² | C_{AA} Out Face ft ² | Weight lb |
|------------------|--------------------------|------|--------------------------|--------------------------|--|---|--------------|
| T1 | 180.00-160.00 | A | 0.000 | 0.000 | 15.281 | 0.000 | 44.64 |
| | | B | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| | | C | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| T2 | 160.00-140.00 | A | 0.000 | 0.000 | 56.607 | 0.000 | 250.60 |
| | | B | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| | | C | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| T3 | 140.00-133.33 | A | 0.000 | 0.000 | 18.869 | 0.000 | 83.53 |
| | | B | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| | | C | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| T4 | 133.33-126.67 | A | 0.000 | 0.000 | 18.869 | 0.000 | 83.53 |
| | | B | 0.000 | 0.000 | 14.852 | 0.000 | 70.81 |
| | | C | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| T5 | 126.67-120.00 | A | 0.000 | 0.000 | 18.869 | 0.000 | 83.53 |
| | | B | 0.000 | 0.000 | 24.913 | 0.000 | 130.04 |
| | | C | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| T6 | 120.00-100.00 | A | 0.000 | 0.000 | 57.426 | 0.000 | 252.55 |

| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 11 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Tower Section | Tower Elevation ft | Face | A_R ft ² | A_F ft ² | C_{AA} In Face ft ² | C_{AA} Out Face ft ² | Weight lb |
|---------------|-----------------------|------|--------------------------|--------------------------|--|---|--------------|
| T7 | 100.00-90.00 | B | 0.000 | 0.000 | 84.017 | 0.000 | 445.62 |
| | | C | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| | | A | 0.000 | 0.000 | 28.934 | 0.000 | 126.80 |
| T8 | 90.00-80.00 | B | 0.000 | 0.000 | 42.009 | 0.000 | 222.81 |
| | | C | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| | | A | 0.000 | 0.000 | 28.934 | 0.000 | 126.80 |
| T9 | 80.00-60.00 | B | 0.000 | 0.000 | 42.009 | 0.000 | 222.81 |
| | | C | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| | | A | 0.000 | 0.000 | 57.930 | 0.000 | 253.75 |
| T10 | 60.00-40.00 | B | 0.000 | 0.000 | 84.017 | 0.000 | 445.62 |
| | | C | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| | | A | 0.000 | 0.000 | 59.127 | 0.000 | 256.60 |
| T11 | 40.00-30.00 | B | 0.000 | 0.000 | 42.009 | 0.000 | 222.81 |
| | | C | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| | | A | 0.000 | 0.000 | 29.564 | 0.000 | 128.30 |
| T12 | 30.00-20.00 | B | 0.000 | 0.000 | 42.009 | 0.000 | 222.81 |
| | | C | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| | | A | 0.000 | 0.000 | 29.564 | 0.000 | 128.30 |
| T13 | 20.00-0.00 | B | 0.000 | 0.000 | 84.017 | 0.000 | 445.62 |
| | | C | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| | | A | 0.000 | 0.000 | 59.127 | 0.000 | 256.60 |

Feed Line/Linear Appurtenances Section Areas - With Ice

| Tower Section | Tower Elevation ft | Face or Leg | Ice Thickness in | A_R ft ² | A_F ft ² | C_{AA} In Face ft ² | C_{AA} Out Face ft ² | Weight lb |
|---------------|-----------------------|-------------|---------------------|--------------------------|--------------------------|--|---|--------------|
| T1 | 180.00-160.00 | A | 1.473 | 0.000 | 0.000 | 43.556 | 0.000 | 552.25 |
| | | B | | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| | | C | | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| T2 | 160.00-140.00 | A | 1.454 | 0.000 | 0.000 | 159.660 | 0.000 | 2085.47 |
| | | B | | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| | | C | | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| T3 | 140.00-133.33 | A | 1.441 | 0.000 | 0.000 | 53.019 | 0.000 | 688.56 |
| | | B | | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| | | C | | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| T4 | 133.33-126.67 | A | 1.434 | 0.000 | 0.000 | 52.912 | 0.000 | 685.06 |
| | | B | | 0.000 | 0.000 | 32.201 | 0.000 | 494.30 |
| | | C | | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| T5 | 126.67-120.00 | A | 1.426 | 0.000 | 0.000 | 52.800 | 0.000 | 681.39 |
| | | B | | 0.000 | 0.000 | 53.843 | 0.000 | 857.37 |
| | | C | | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| T6 | 120.00-100.00 | A | 1.410 | 0.000 | 0.000 | 162.161 | 0.000 | 2068.23 |
| | | B | | 0.000 | 0.000 | 180.819 | 0.000 | 2888.00 |
| | | C | | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| T7 | 100.00-90.00 | A | 1.389 | 0.000 | 0.000 | 81.789 | 0.000 | 1031.26 |
| | | B | | 0.000 | 0.000 | 89.951 | 0.000 | 1429.42 |
| | | C | | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| T8 | 90.00-80.00 | A | 1.374 | 0.000 | 0.000 | 81.415 | 0.000 | 1019.60 |
| | | B | | 0.000 | 0.000 | 89.607 | 0.000 | 1418.55 |
| | | C | | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| T9 | 80.00-60.00 | A | 1.348 | 0.000 | 0.000 | 161.878 | 0.000 | 2002.79 |
| | | B | | 0.000 | 0.000 | 178.034 | 0.000 | 2799.96 |
| | | C | | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| T10 | 60.00-40.00 | A | 1.303 | 0.000 | 0.000 | 165.850 | 0.000 | 1997.61 |
| | | B | | 0.000 | 0.000 | 176.043 | 0.000 | 2737.88 |

| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
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| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Tower Section | Tower Elevation ft | Face or Leg | Ice Thickness in | A_R ft ² | A_F ft ² | C_{AA} In Face ft ² | C_{AA} Out Face ft ² | Weight lb |
|---------------|-----------------------|-------------|---------------------|--------------------------|--------------------------|--|---|--------------|
| T11 | 40.00-30.00 | C | | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| | | A | 1.257 | 0.000 | 0.000 | 81.724 | 0.000 | 963.64 |
| | | B | | 0.000 | 0.000 | 87.003 | 0.000 | 1337.56 |
| T12 | 30.00-20.00 | C | | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| | | A | 1.216 | 0.000 | 0.000 | 80.630 | 0.000 | 932.13 |
| | | B | | 0.000 | 0.000 | 86.075 | 0.000 | 1309.33 |
| T13 | 20.00-0.00 | C | | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |
| | | A | 1.109 | 0.000 | 0.000 | 155.667 | 0.000 | 1707.74 |
| | | B | | 0.000 | 0.000 | 167.410 | 0.000 | 2477.23 |
| | | C | | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 |

Feed Line Center of Pressure

| Section | Elevation ft | CP_x in | CP_z in | CP_x Ice in | CP_z Ice in |
|---------|-----------------|--------------|--------------|---------------------|---------------------|
| T1 | 180.00-160.00 | -1.5005 | -14.6984 | -2.0239 | -19.4249 |
| T2 | 160.00-140.00 | -19.2261 | -5.8802 | -22.3942 | -7.1105 |
| T3 | 140.00-133.33 | -20.7297 | -6.3241 | -24.4956 | -7.6882 |
| T4 | 133.33-126.67 | 5.0615 | 5.2607 | 0.3084 | 3.2469 |
| T5 | 126.67-120.00 | 6.8351 | -6.2402 | 2.5624 | -7.2776 |
| T6 | 120.00-100.00 | 7.5790 | -10.6727 | 2.9485 | -11.8964 |
| T7 | 100.00-90.00 | 8.1699 | -11.7515 | 3.0676 | -13.3490 |
| T8 | 90.00-80.00 | 8.7168 | -12.5594 | 3.2373 | -14.2388 |
| T9 | 80.00-60.00 | 7.3076 | -11.1201 | 3.1106 | -14.4471 |
| T10 | 60.00-40.00 | 7.8832 | -12.6641 | 2.9414 | -16.8345 |
| T11 | 40.00-30.00 | 8.4101 | -13.5269 | 3.0367 | -17.7861 |
| T12 | 30.00-20.00 | 8.7569 | -14.0941 | 3.0649 | -18.3173 |
| T13 | 20.00-0.00 | 9.4368 | -15.2108 | 3.0171 | -19.0153 |

Shielding Factor Ka

| Tower Section | Feed Line Record No. | Description | Feed Line Segment Elev. | K_a No Ice | K_a Ice |
|---------------|----------------------|--------------------------------|-------------------------|-----------------|--------------|
| T1 | 17 | LDF5-50A (7/8 FOAM) | 160.00 - 180.00 | 1.0000 | 1.0000 |
| T1 | 19 | EW63 | 160.00 - 177.00 | 1.0000 | 1.0000 |
| T1 | 20 | LDF5-50A (7/8 FOAM) | 160.00 - 170.00 | 1.0000 | 1.0000 |
| T1 | 21 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 160.00 - 170.00 | 1.0000 | 1.0000 |
| T1 | 22 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 160.00 - 170.00 | 1.0000 | 1.0000 |
| T1 | 23 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 160.00 - 170.00 | 1.0000 | 1.0000 |
| T1 | 24 | LDF4-50A (1/2 FOAM) | 160.00 - 170.00 | 1.0000 | 1.0000 |
| T1 | 25 | LDF5-50A (7/8 FOAM) | 160.00 - 169.00 | 1.0000 | 1.0000 |
| T2 | 14 | LDF7-50A (1-5/8 FOAM) | 140.00 - | 1.0000 | 1.0000 |

| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 13 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Tower Section | Feed Line Record No. | Description | Feed Line Segment Elev. | K_a No Ice | K_a Ice |
|---------------|----------------------|--------------------------------|-------------------------|--------------|-----------|
| | | | 160.00 | | |
| T2 | 15 | HYBRIFLEX 1-5/8" | 140.00 - | 1.0000 | 1.0000 |
| | | | 160.00 | | |
| T2 | 17 | LDF5-50A (7/8 FOAM) | 140.00 - | 1.0000 | 1.0000 |
| | | | 160.00 | | |
| T2 | 19 | EW63 | 140.00 - | 1.0000 | 1.0000 |
| | | | 160.00 | | |
| T2 | 20 | LDF5-50A (7/8 FOAM) | 140.00 - | 1.0000 | 1.0000 |
| | | | 160.00 | | |
| T2 | 21 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 140.00 - | 1.0000 | 1.0000 |
| | | | 160.00 | | |
| T2 | 22 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 140.00 - | 1.0000 | 1.0000 |
| | | | 160.00 | | |
| T2 | 23 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 140.00 - | 1.0000 | 1.0000 |
| | | | 160.00 | | |
| T2 | 24 | LDF4-50A (1/2 FOAM) | 140.00 - | 1.0000 | 1.0000 |
| | | | 160.00 | | |
| T2 | 25 | LDF5-50A (7/8 FOAM) | 140.00 - | 1.0000 | 1.0000 |
| | | | 160.00 | | |
| T3 | 14 | LDF7-50A (1-5/8 FOAM) | 133.33 - | 1.0000 | 1.0000 |
| | | | 140.00 | | |
| T3 | 15 | HYBRIFLEX 1-5/8" | 133.33 - | 1.0000 | 1.0000 |
| | | | 140.00 | | |
| T3 | 17 | LDF5-50A (7/8 FOAM) | 133.33 - | 1.0000 | 1.0000 |
| | | | 140.00 | | |
| T3 | 19 | EW63 | 133.33 - | 1.0000 | 1.0000 |
| | | | 140.00 | | |
| T3 | 20 | LDF5-50A (7/8 FOAM) | 133.33 - | 1.0000 | 1.0000 |
| | | | 140.00 | | |
| T3 | 21 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 133.33 - | 1.0000 | 1.0000 |
| | | | 140.00 | | |
| T3 | 22 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 133.33 - | 1.0000 | 1.0000 |
| | | | 140.00 | | |
| T3 | 23 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 133.33 - | 1.0000 | 1.0000 |
| | | | 140.00 | | |
| T3 | 24 | LDF4-50A (1/2 FOAM) | 133.33 - | 1.0000 | 1.0000 |
| | | | 140.00 | | |
| T3 | 25 | LDF5-50A (7/8 FOAM) | 133.33 - | 1.0000 | 1.0000 |
| | | | 140.00 | | |
| T4 | 2 | LDF6-50A (1-1/4 FOAM) | 126.67 - | 1.0000 | 1.0000 |
| | | | 133.00 | | |
| T4 | 3 | DC Cable WR-VG122ST | 126.67 - | 1.0000 | 1.0000 |
| | | | 133.00 | | |
| T4 | 4 | 1 5/8" Hybriflex | 126.67 - | 1.0000 | 1.0000 |
| | | | 133.00 | | |
| T4 | 6 | DC Cable WR-VG122ST | 126.67 - | 1.0000 | 1.0000 |
| | | | 133.00 | | |
| T4 | 14 | LDF7-50A (1-5/8 FOAM) | 126.67 - | 1.0000 | 1.0000 |
| | | | 133.33 | | |
| T4 | 15 | HYBRIFLEX 1-5/8" | 126.67 - | 1.0000 | 1.0000 |
| | | | 133.33 | | |
| T4 | 17 | LDF5-50A (7/8 FOAM) | 126.67 - | 1.0000 | 1.0000 |
| | | | 133.33 | | |
| T4 | 19 | EW63 | 126.67 - | 1.0000 | 1.0000 |
| | | | 133.33 | | |
| T4 | 20 | LDF5-50A (7/8 FOAM) | 126.67 - | 1.0000 | 1.0000 |
| | | | 133.33 | | |
| T4 | 21 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 126.67 - | 1.0000 | 1.0000 |
| | | | 133.33 | | |
| T4 | 22 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 126.67 - | 1.0000 | 1.0000 |
| | | | 133.33 | | |
| T4 | 23 | AVA7-50 (1-5/8 LOW | 126.67 - | 1.0000 | 1.0000 |

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| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job 22027.01 - Westport | Page 14 of 71 |
| | Project 180-ft Lattice Tower (CSP #32) | Date 08:43:42 04/05/22 |
| | Client Verizon | Designed by TJL |

| Tower Section | Feed Line Record No. | Description | Feed Line Segment Elev. | K_a No Ice | K_a Ice |
|---------------|----------------------|---------------------------------|-------------------------|--------------|-----------|
| | | DENSI. FOAM) | 133.33 | | |
| T4 | 24 | LDF4-50A (1/2 FOAM) | 126.67 - 133.33 | 1.0000 | 1.0000 |
| T4 | 25 | LDF5-50A (7/8 FOAM) | 126.67 - 133.33 | 1.0000 | 1.0000 |
| T5 | 2 | LDF6-50A (1-1/4 FOAM) | 120.00 - 126.67 | 1.0000 | 1.0000 |
| T5 | 3 | DC Cable WR-VG122ST | 120.00 - 126.67 | 1.0000 | 1.0000 |
| T5 | 4 | 1 5/8" Hybriflex | 120.00 - 126.67 | 1.0000 | 1.0000 |
| T5 | 6 | DC Cable WR-VG122ST | 120.00 - 126.67 | 1.0000 | 1.0000 |
| T5 | 10 | LDF7-50A (1-5/8 FOAM) | 120.00 - 125.00 | 1.0000 | 1.0000 |
| T5 | 11 | Hubner-Suhner Hybrid Cable | 120.00 - 125.00 | 1.0000 | 1.0000 |
| T5 | 12 | Hybrid HCS 6x12 4 AWG (1-5/8") | 120.00 - 125.00 | 1.0000 | 1.0000 |
| T5 | 14 | LDF7-50A (1-5/8 FOAM) | 120.00 - 126.67 | 1.0000 | 1.0000 |
| T5 | 15 | HYBRIFLEX 1-5/8" | 120.00 - 126.67 | 1.0000 | 1.0000 |
| T5 | 17 | LDF5-50A (7/8 FOAM) | 120.00 - 126.67 | 1.0000 | 1.0000 |
| T5 | 19 | EW63 | 120.00 - 126.67 | 1.0000 | 1.0000 |
| T5 | 20 | LDF5-50A (7/8 FOAM) | 120.00 - 126.67 | 1.0000 | 1.0000 |
| T5 | 21 | AVA7-50 (1-5/8 LOW DENSI. FOAM) | 120.00 - 126.67 | 1.0000 | 1.0000 |
| T5 | 22 | AVA7-50 (1-5/8 LOW DENSI. FOAM) | 120.00 - 126.67 | 1.0000 | 1.0000 |
| T5 | 23 | AVA7-50 (1-5/8 LOW DENSI. FOAM) | 120.00 - 126.67 | 1.0000 | 1.0000 |
| T5 | 24 | LDF4-50A (1/2 FOAM) | 120.00 - 126.67 | 1.0000 | 1.0000 |
| T5 | 25 | LDF5-50A (7/8 FOAM) | 120.00 - 126.67 | 1.0000 | 1.0000 |
| T6 | 2 | LDF6-50A (1-1/4 FOAM) | 100.00 - 120.00 | 1.0000 | 1.0000 |
| T6 | 3 | DC Cable WR-VG122ST | 100.00 - 120.00 | 1.0000 | 1.0000 |
| T6 | 4 | 1 5/8" Hybriflex | 100.00 - 120.00 | 1.0000 | 1.0000 |
| T6 | 6 | DC Cable WR-VG122ST | 100.00 - 120.00 | 1.0000 | 1.0000 |
| T6 | 10 | LDF7-50A (1-5/8 FOAM) | 100.00 - 120.00 | 1.0000 | 1.0000 |
| T6 | 11 | Hubner-Suhner Hybrid Cable | 100.00 - 120.00 | 1.0000 | 1.0000 |
| T6 | 12 | Hybrid HCS 6x12 4 AWG (1-5/8") | 100.00 - 120.00 | 1.0000 | 1.0000 |
| T6 | 14 | LDF7-50A (1-5/8 FOAM) | 100.00 - 120.00 | 1.0000 | 1.0000 |
| T6 | 15 | HYBRIFLEX 1-5/8" | 100.00 - 120.00 | 1.0000 | 1.0000 |
| T6 | 17 | LDF5-50A (7/8 FOAM) | 100.00 - 120.00 | 1.0000 | 1.0000 |
| T6 | 19 | EW63 | 100.00 - 120.00 | 1.0000 | 1.0000 |
| T6 | 20 | LDF5-50A (7/8 FOAM) | 100.00 - 120.00 | 1.0000 | 1.0000 |

| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 15 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Tower Section | Feed Line Record No. | Description | Feed Line Segment Elev. | K_a No Ice | K_a Ice |
|---------------|----------------------|--------------------------------|-------------------------|--------------|-----------|
| | | | 120.00 | | |
| T6 | 21 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 100.00 - 120.00 | 1.0000 | 1.0000 |
| T6 | 22 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 100.00 - 120.00 | 1.0000 | 1.0000 |
| T6 | 23 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 100.00 - 120.00 | 1.0000 | 1.0000 |
| T6 | 24 | LDF4-50A (1/2 FOAM) | 100.00 - 120.00 | 1.0000 | 1.0000 |
| T6 | 25 | LDF5-50A (7/8 FOAM) | 100.00 - 120.00 | 1.0000 | 1.0000 |
| T6 | 26 | LDF4-50A (1/2 FOAM) | 100.00 - 113.00 | 1.0000 | 1.0000 |
| T7 | 2 | LDF6-50A (1-1/4 FOAM) | 90.00 - 100.00 | 1.0000 | 1.0000 |
| T7 | 3 | DC Cable WR-VG122ST | 90.00 - 100.00 | 1.0000 | 1.0000 |
| T7 | 4 | 1 5/8" Hybriflex | 90.00 - 100.00 | 1.0000 | 1.0000 |
| T7 | 6 | DC Cable WR-VG122ST | 90.00 - 100.00 | 1.0000 | 1.0000 |
| T7 | 10 | LDF7-50A (1-5/8 FOAM) | 90.00 - 100.00 | 1.0000 | 1.0000 |
| T7 | 11 | Hubner-Suhner Hybrid Cable | 90.00 - 100.00 | 1.0000 | 1.0000 |
| T7 | 12 | Hybrid HCS 6x12 4 AWG (1-5/8") | 90.00 - 100.00 | 1.0000 | 1.0000 |
| T7 | 14 | LDF7-50A (1-5/8 FOAM) | 90.00 - 100.00 | 1.0000 | 1.0000 |
| T7 | 15 | HYBRIFLEX 1-5/8" | 90.00 - 100.00 | 1.0000 | 1.0000 |
| T7 | 17 | LDF5-50A (7/8 FOAM) | 90.00 - 100.00 | 1.0000 | 1.0000 |
| T7 | 19 | EW63 | 90.00 - 100.00 | 1.0000 | 1.0000 |
| T7 | 20 | LDF5-50A (7/8 FOAM) | 90.00 - 100.00 | 1.0000 | 1.0000 |
| T7 | 21 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 90.00 - 100.00 | 1.0000 | 1.0000 |
| T7 | 22 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 90.00 - 100.00 | 1.0000 | 1.0000 |
| T7 | 23 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 90.00 - 100.00 | 1.0000 | 1.0000 |
| T7 | 24 | LDF4-50A (1/2 FOAM) | 90.00 - 100.00 | 1.0000 | 1.0000 |
| T7 | 25 | LDF5-50A (7/8 FOAM) | 90.00 - 100.00 | 1.0000 | 1.0000 |
| T7 | 26 | LDF4-50A (1/2 FOAM) | 90.00 - 100.00 | 1.0000 | 1.0000 |
| T8 | 2 | LDF6-50A (1-1/4 FOAM) | 80.00 - 90.00 | 1.0000 | 1.0000 |
| T8 | 3 | DC Cable WR-VG122ST | 80.00 - 90.00 | 1.0000 | 1.0000 |
| T8 | 4 | 1 5/8" Hybriflex | 80.00 - 90.00 | 1.0000 | 1.0000 |
| T8 | 6 | DC Cable WR-VG122ST | 80.00 - 90.00 | 1.0000 | 1.0000 |
| T8 | 10 | LDF7-50A (1-5/8 FOAM) | 80.00 - 90.00 | 1.0000 | 1.0000 |
| T8 | 11 | Hubner-Suhner Hybrid Cable | 80.00 - 90.00 | 1.0000 | 1.0000 |
| T8 | 12 | Hybrid HCS 6x12 4 AWG (1-5/8") | 80.00 - 90.00 | 1.0000 | 1.0000 |
| T8 | 14 | LDF7-50A (1-5/8 FOAM) | 80.00 - 90.00 | 1.0000 | 1.0000 |
| T8 | 15 | HYBRIFLEX 1-5/8" | 80.00 - 90.00 | 1.0000 | 1.0000 |
| T8 | 17 | LDF5-50A (7/8 FOAM) | 80.00 - 90.00 | 1.0000 | 1.0000 |
| T8 | 19 | EW63 | 80.00 - 90.00 | 1.0000 | 1.0000 |
| T8 | 20 | LDF5-50A (7/8 FOAM) | 80.00 - 90.00 | 1.0000 | 1.0000 |
| T8 | 21 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 80.00 - 90.00 | 1.0000 | 1.0000 |
| T8 | 22 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 80.00 - 90.00 | 1.0000 | 1.0000 |
| T8 | 23 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 80.00 - 90.00 | 1.0000 | 1.0000 |
| T8 | 24 | LDF4-50A (1/2 FOAM) | 80.00 - 90.00 | 1.0000 | 1.0000 |
| T8 | 25 | LDF5-50A (7/8 FOAM) | 80.00 - 90.00 | 1.0000 | 1.0000 |
| T8 | 26 | LDF4-50A (1/2 FOAM) | 80.00 - 90.00 | 1.0000 | 1.0000 |
| T9 | 2 | LDF6-50A (1-1/4 FOAM) | 60.00 - 80.00 | 1.0000 | 1.0000 |
| T9 | 3 | DC Cable WR-VG122ST | 60.00 - 80.00 | 1.0000 | 1.0000 |
| T9 | 4 | 1 5/8" Hybriflex | 60.00 - 80.00 | 1.0000 | 1.0000 |
| T9 | 6 | DC Cable WR-VG122ST | 60.00 - 80.00 | 1.0000 | 1.0000 |
| T9 | 10 | LDF7-50A (1-5/8 FOAM) | 60.00 - 80.00 | 1.0000 | 1.0000 |

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| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job 22027.01 - Westport | Page 16 of 71 |
| | Project 180-ft Lattice Tower (CSP #32) | Date 08:43:42 04/05/22 |
| | Client Verizon | Designed by TJL |

| Tower Section | Feed Line Record No. | Description | Feed Line Segment Elev. | K _a No Ice | K _a Ice |
|---------------|----------------------|--------------------------------|-------------------------|-----------------------|--------------------|
| T9 | 11 | Hubner-Suhner Hybrid Cable | 60.00 - 80.00 | 1.0000 | 1.0000 |
| T9 | 12 | Hybrid HCS 6x12 4 AWG (1-5/8") | 60.00 - 80.00 | 1.0000 | 1.0000 |
| T9 | 14 | LDF7-50A (1-5/8 FOAM) | 60.00 - 80.00 | 1.0000 | 1.0000 |
| T9 | 15 | HYBRIFLEX 1-5/8" | 60.00 - 80.00 | 1.0000 | 1.0000 |
| T9 | 17 | LDF5-50A (7/8 FOAM) | 60.00 - 80.00 | 1.0000 | 1.0000 |
| T9 | 19 | EW63 | 60.00 - 80.00 | 1.0000 | 1.0000 |
| T9 | 20 | LDF5-50A (7/8 FOAM) | 60.00 - 80.00 | 1.0000 | 1.0000 |
| T9 | 21 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 60.00 - 80.00 | 1.0000 | 1.0000 |
| T9 | 22 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 60.00 - 80.00 | 1.0000 | 1.0000 |
| T9 | 23 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 60.00 - 80.00 | 1.0000 | 1.0000 |
| T9 | 24 | LDF4-50A (1/2 FOAM) | 60.00 - 80.00 | 1.0000 | 1.0000 |
| T9 | 25 | LDF5-50A (7/8 FOAM) | 60.00 - 80.00 | 1.0000 | 1.0000 |
| T9 | 26 | LDF4-50A (1/2 FOAM) | 60.00 - 80.00 | 1.0000 | 1.0000 |
| T9 | 27 | LDF4-50A (1/2 FOAM) | 60.00 - 61.00 | 1.0000 | 1.0000 |
| T10 | 2 | LDF6-50A (1-1/4 FOAM) | 40.00 - 60.00 | 1.0000 | 1.0000 |
| T10 | 3 | DC Cable WR-VG122ST | 40.00 - 60.00 | 1.0000 | 1.0000 |
| T10 | 4 | 1 5/8" Hybriflex | 40.00 - 60.00 | 1.0000 | 1.0000 |
| T10 | 6 | DC Cable WR-VG122ST | 40.00 - 60.00 | 1.0000 | 1.0000 |
| T10 | 10 | LDF7-50A (1-5/8 FOAM) | 40.00 - 60.00 | 1.0000 | 1.0000 |
| T10 | 11 | Hubner-Suhner Hybrid Cable | 40.00 - 60.00 | 1.0000 | 1.0000 |
| T10 | 12 | Hybrid HCS 6x12 4 AWG (1-5/8") | 40.00 - 60.00 | 1.0000 | 1.0000 |
| T10 | 14 | LDF7-50A (1-5/8 FOAM) | 40.00 - 60.00 | 1.0000 | 1.0000 |
| T10 | 15 | HYBRIFLEX 1-5/8" | 40.00 - 60.00 | 1.0000 | 1.0000 |
| T10 | 17 | LDF5-50A (7/8 FOAM) | 40.00 - 60.00 | 1.0000 | 1.0000 |
| T10 | 19 | EW63 | 40.00 - 60.00 | 1.0000 | 1.0000 |
| T10 | 20 | LDF5-50A (7/8 FOAM) | 40.00 - 60.00 | 1.0000 | 1.0000 |
| T10 | 21 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 40.00 - 60.00 | 1.0000 | 1.0000 |
| T10 | 22 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 40.00 - 60.00 | 1.0000 | 1.0000 |
| T10 | 23 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 40.00 - 60.00 | 1.0000 | 1.0000 |
| T10 | 24 | LDF4-50A (1/2 FOAM) | 40.00 - 60.00 | 1.0000 | 1.0000 |
| T10 | 25 | LDF5-50A (7/8 FOAM) | 40.00 - 60.00 | 1.0000 | 1.0000 |
| T10 | 26 | LDF4-50A (1/2 FOAM) | 40.00 - 60.00 | 1.0000 | 1.0000 |
| T10 | 27 | LDF4-50A (1/2 FOAM) | 40.00 - 60.00 | 1.0000 | 1.0000 |
| T11 | 2 | LDF6-50A (1-1/4 FOAM) | 30.00 - 40.00 | 1.0000 | 1.0000 |
| T11 | 3 | DC Cable WR-VG122ST | 30.00 - 40.00 | 1.0000 | 1.0000 |
| T11 | 4 | 1 5/8" Hybriflex | 30.00 - 40.00 | 1.0000 | 1.0000 |
| T11 | 6 | DC Cable WR-VG122ST | 30.00 - 40.00 | 1.0000 | 1.0000 |
| T11 | 10 | LDF7-50A (1-5/8 FOAM) | 30.00 - 40.00 | 1.0000 | 1.0000 |
| T11 | 11 | Hubner-Suhner Hybrid Cable | 30.00 - 40.00 | 1.0000 | 1.0000 |
| T11 | 12 | Hybrid HCS 6x12 4 AWG (1-5/8") | 30.00 - 40.00 | 1.0000 | 1.0000 |
| T11 | 14 | LDF7-50A (1-5/8 FOAM) | 30.00 - 40.00 | 1.0000 | 1.0000 |
| T11 | 15 | HYBRIFLEX 1-5/8" | 30.00 - 40.00 | 1.0000 | 1.0000 |
| T11 | 17 | LDF5-50A (7/8 FOAM) | 30.00 - 40.00 | 1.0000 | 1.0000 |
| T11 | 19 | EW63 | 30.00 - 40.00 | 1.0000 | 1.0000 |
| T11 | 20 | LDF5-50A (7/8 FOAM) | 30.00 - 40.00 | 1.0000 | 1.0000 |
| T11 | 21 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 30.00 - 40.00 | 1.0000 | 1.0000 |
| T11 | 22 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 30.00 - 40.00 | 1.0000 | 1.0000 |
| T11 | 23 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 30.00 - 40.00 | 1.0000 | 1.0000 |
| T11 | 24 | LDF4-50A (1/2 FOAM) | 30.00 - 40.00 | 1.0000 | 1.0000 |
| T11 | 25 | LDF5-50A (7/8 FOAM) | 30.00 - 40.00 | 1.0000 | 1.0000 |

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|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 17 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Tower Section | Feed Line Record No. | Description | Feed Line Segment Elev. | K_a No Ice | K_a Ice |
|---------------|----------------------|--------------------------------|-------------------------|--------------|-----------|
| T11 | 26 | LDF4-50A (1/2 FOAM) | 30.00 - 40.00 | 1.0000 | 1.0000 |
| T11 | 27 | LDF4-50A (1/2 FOAM) | 30.00 - 40.00 | 1.0000 | 1.0000 |
| T12 | 2 | LDF6-50A (1-1/4 FOAM) | 20.00 - 30.00 | 1.0000 | 1.0000 |
| T12 | 3 | DC Cable WR-VG122ST | 20.00 - 30.00 | 1.0000 | 1.0000 |
| T12 | 4 | 1 5/8" Hybriflex | 20.00 - 30.00 | 1.0000 | 1.0000 |
| T12 | 6 | DC Cable WR-VG122ST | 20.00 - 30.00 | 1.0000 | 1.0000 |
| T12 | 10 | LDF7-50A (1-5/8 FOAM) | 20.00 - 30.00 | 1.0000 | 1.0000 |
| T12 | 11 | Hubner-Suhner Hybrid Cable | 20.00 - 30.00 | 1.0000 | 1.0000 |
| T12 | 12 | Hybrid HCS 6x12 4 AWG (1-5/8") | 20.00 - 30.00 | 1.0000 | 1.0000 |
| T12 | 14 | LDF7-50A (1-5/8 FOAM) | 20.00 - 30.00 | 1.0000 | 1.0000 |
| T12 | 15 | HYBRIFLEX 1-5/8" | 20.00 - 30.00 | 1.0000 | 1.0000 |
| T12 | 17 | LDF5-50A (7/8 FOAM) | 20.00 - 30.00 | 1.0000 | 1.0000 |
| T12 | 19 | EW63 | 20.00 - 30.00 | 1.0000 | 1.0000 |
| T12 | 20 | LDF5-50A (7/8 FOAM) | 20.00 - 30.00 | 1.0000 | 1.0000 |
| T12 | 21 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 20.00 - 30.00 | 1.0000 | 1.0000 |
| T12 | 22 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 20.00 - 30.00 | 1.0000 | 1.0000 |
| T12 | 23 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 20.00 - 30.00 | 1.0000 | 1.0000 |
| T12 | 24 | LDF4-50A (1/2 FOAM) | 20.00 - 30.00 | 1.0000 | 1.0000 |
| T12 | 25 | LDF5-50A (7/8 FOAM) | 20.00 - 30.00 | 1.0000 | 1.0000 |
| T12 | 26 | LDF4-50A (1/2 FOAM) | 20.00 - 30.00 | 1.0000 | 1.0000 |
| T12 | 27 | LDF4-50A (1/2 FOAM) | 20.00 - 30.00 | 1.0000 | 1.0000 |
| T13 | 2 | LDF6-50A (1-1/4 FOAM) | 0.00 - 20.00 | 1.0000 | 1.0000 |
| T13 | 3 | DC Cable WR-VG122ST | 0.00 - 20.00 | 1.0000 | 1.0000 |
| T13 | 4 | 1 5/8" Hybriflex | 0.00 - 20.00 | 1.0000 | 1.0000 |
| T13 | 6 | DC Cable WR-VG122ST | 0.00 - 20.00 | 1.0000 | 1.0000 |
| T13 | 10 | LDF7-50A (1-5/8 FOAM) | 0.00 - 20.00 | 1.0000 | 1.0000 |
| T13 | 11 | Hubner-Suhner Hybrid Cable | 0.00 - 20.00 | 1.0000 | 1.0000 |
| T13 | 12 | Hybrid HCS 6x12 4 AWG (1-5/8") | 0.00 - 20.00 | 1.0000 | 1.0000 |
| T13 | 14 | LDF7-50A (1-5/8 FOAM) | 0.00 - 20.00 | 1.0000 | 1.0000 |
| T13 | 15 | HYBRIFLEX 1-5/8" | 0.00 - 20.00 | 1.0000 | 1.0000 |
| T13 | 17 | LDF5-50A (7/8 FOAM) | 0.00 - 20.00 | 1.0000 | 1.0000 |
| T13 | 19 | EW63 | 0.00 - 20.00 | 1.0000 | 1.0000 |
| T13 | 20 | LDF5-50A (7/8 FOAM) | 0.00 - 20.00 | 1.0000 | 1.0000 |
| T13 | 21 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 0.00 - 20.00 | 1.0000 | 1.0000 |
| T13 | 22 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 0.00 - 20.00 | 1.0000 | 1.0000 |
| T13 | 23 | AVA7-50 (1-5/8 LOW DENS. FOAM) | 0.00 - 20.00 | 1.0000 | 1.0000 |
| T13 | 24 | LDF4-50A (1/2 FOAM) | 0.00 - 20.00 | 1.0000 | 1.0000 |
| T13 | 25 | LDF5-50A (7/8 FOAM) | 0.00 - 20.00 | 1.0000 | 1.0000 |
| T13 | 26 | LDF4-50A (1/2 FOAM) | 0.00 - 20.00 | 1.0000 | 1.0000 |
| T13 | 27 | LDF4-50A (1/2 FOAM) | 0.00 - 20.00 | 1.0000 | 1.0000 |

Discrete Tower Loads

| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 18 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Description | Face or Leg | Offset Type | Offsets: | | Azimuth Adjustment | Placement | C _{AA} Front | C _{AA} Side | Weight | |
|--|-------------|-------------|-----------------------|------|--------------------|-----------|------------------------------|-------------------------|-------------------------|----------------------------|
| | | | Horz | Vert | | | | | | |
| | | | ft | ft | ° | ft | ft ² | ft ² | lb | |
| * | | | | | | | | | | |
| ROHN 6'x15' Boom Gate (1) (Verizon) | A | None | | | 0.0000 | 160.00 | No Ice 1/2" Ice 1" Ice | 17.75 21.10 24.50 | 17.75 21.10 24.50 | 600.00 75.00 890.00 |
| ROHN 6'x15' Boom Gate (1) (Verizon) | B | None | | | 0.0000 | 160.00 | No Ice 1/2" Ice 1" Ice | 17.75 21.10 24.50 | 17.75 21.10 24.50 | 600.00 75.00 890.00 |
| ROHN 6'x15' Boom Gate (1) (Verizon) | C | None | | | 0.0000 | 160.00 | No Ice 1/2" Ice 1" Ice | 17.75 21.10 24.50 | 17.75 21.10 24.50 | 600.00 75.00 890.00 |
| MX06FRO640-02 (Verizon - Proposed) | A | From Leg | 3.00 6.50 0.00 | | 0.0000 | 160.00 | No Ice 1/2" Ice 1" Ice | 12.38 12.88 13.38 | 7.43 7.88 8.33 | 70.00 151.39 239.61 |
| MX06FRO640-02 (Verizon - Proposed) | A | From Leg | 3.00 5.50 0.00 | | 0.0000 | 160.00 | No Ice 1/2" Ice 1" Ice | 12.38 12.88 13.38 | 7.43 7.88 8.33 | 70.00 151.39 239.61 |
| XXDWMM-12.5-65-8T-CBR S Panel (Verizon) | A | From Leg | 3.00 1.00 0.00 | | 0.0000 | 160.00 | No Ice 1/2" Ice 1" Ice | 4.80 5.07 5.35 | 2.40 2.60 2.81 | 20.00 59.31 102.70 |
| MT6407-77A (Verizon - Proposed) | A | From Leg | 3.00 -2.00 0.00 | | 0.0000 | 160.00 | No Ice 1/2" Ice 1" Ice | 4.71 5.00 5.29 | 1.84 2.06 2.29 | 0.09 29.40 62.58 |
| MX06FRO640-02 (Verizon - Proposed) | A | From Leg | 3.00 -6.50 0.00 | | 0.0000 | 160.00 | No Ice 1/2" Ice 1" Ice | 12.38 12.88 13.38 | 7.43 7.88 8.33 | 70.00 151.39 239.61 |
| MX06FRO640-02 (Verizon - Proposed) | A | From Leg | 3.00 -5.50 0.00 | | 0.0000 | 160.00 | No Ice 1/2" Ice 1" Ice | 12.38 12.88 13.38 | 7.43 7.88 8.33 | 70.00 151.39 239.61 |
| B2/B66A RRH (Verizon) | A | From Leg | 3.00 0.00 0.00 | | 0.0000 | 160.00 | No Ice 1/2" Ice 1" Ice | 2.54 2.75 2.97 | 1.61 1.79 1.98 | 60.00 80.12 103.35 |
| B5/B13 RRH (Verizon) | A | From Leg | 3.00 0.00 0.00 | | 0.0000 | 160.00 | No Ice 1/2" Ice 1" Ice | 1.87 2.03 2.21 | 1.02 1.15 1.29 | 70.00 86.42 105.50 |
| CBRS RRH-RT4401-48A (Verizon) | A | From Leg | 3.00 0.00 0.00 | | 0.0000 | 160.00 | No Ice 1/2" Ice 1" Ice | 0.86 0.98 1.10 | 0.42 0.51 0.61 | 20.00 26.90 35.60 |
| RF4439d-25A (B2/B66A RRH) (Verizon - Proposed) | A | From Leg | 3.00 0.00 0.00 | | 0.0000 | 160.00 | No Ice 1/2" Ice 1" Ice | 1.88 2.05 2.22 | 1.25 1.39 1.54 | 75.00 93.34 114.47 |
| RF4440d-13A (B5/B13 RRH) (Verizon - Proposed) | A | From Leg | 3.00 0.00 0.00 | | 0.0000 | 160.00 | No Ice 1/2" Ice 1" Ice | 1.88 2.05 2.22 | 1.13 1.26 1.41 | 75.00 92.34 112.40 |
| JAHH-65B-R3B Panel Antenna (Verizon) | B | From Leg | 3.00 6.50 0.00 | | 0.0000 | 160.00 | No Ice 1/2" Ice 1" Ice | 9.66 10.22 10.79 | 7.71 8.53 9.37 | 130.00 204.15 289.72 |
| JAHH-65B-R3B Panel Antenna (Verizon) | B | From Leg | 3.00 5.50 0.00 | | 0.0000 | 160.00 | No Ice 1/2" Ice 1" Ice | 9.66 10.22 10.79 | 7.71 8.53 9.37 | 130.00 204.15 289.72 |
| XXDWMM-12.5-65-8T-CBR S Panel (Verizon) | B | From Leg | 3.00 -1.00 0.00 | | 0.0000 | 160.00 | No Ice 1/2" Ice 1" Ice | 4.80 5.07 5.35 | 2.40 2.60 2.81 | 20.00 59.31 102.70 |
| MT6407-77A (Verizon - Proposed) | B | From Leg | 3.00 -6.00 0.00 | | 0.0000 | 160.00 | No Ice 1/2" Ice 1" Ice | 4.71 5.00 5.29 | 1.84 2.06 2.29 | 0.09 29.40 62.58 |
| CBC78T-DS-43-2X Diplexer (Verizon) | B | From Leg | 3.00 0.00 | | 0.0000 | 160.00 | No Ice 1/2" Ice | 0.37 0.45 | 0.51 0.60 | 22.00 28.34 |

| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 19 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Description | Face or Leg | Offset Type | Offsets: | | Azimuth Adjustment | Placement | C _{AA} Front | C _{AA} Side | Weight |
|---|-------------|-------------|----------|-------|--------------------|-----------|-----------------------|----------------------|--------|
| | | | Horz | Vert | | | | | |
| | | | ft | ft | ° | ft | ft ² | ft ² | lb |
| B2/B66A RRH (Verizon) | B | From Leg | 0.00 | 3.00 | 0.0000 | 160.00 | 1" Ice 0.53 | 0.70 | 36.37 |
| | | | 0.00 | 3.00 | | | No Ice 2.54 | 1.61 | 60.00 |
| | | | 0.00 | 0.00 | | | 1/2" Ice 2.75 | 1.79 | 80.12 |
| | | | 0.00 | 0.00 | | | 1" Ice 2.97 | 1.98 | 103.35 |
| B5/B13 RRH (Verizon) | B | From Leg | 3.00 | 0.00 | 0.0000 | 160.00 | No Ice 1.87 | 1.02 | 70.00 |
| | | | 0.00 | 0.00 | | | 1/2" Ice 2.03 | 1.15 | 86.42 |
| | | | 0.00 | 0.00 | | | 1" Ice 2.21 | 1.29 | 105.50 |
| CBRS RRH-RT4401-48A (Verizon) | B | From Leg | 3.00 | 0.00 | 0.0000 | 160.00 | No Ice 0.86 | 0.42 | 20.00 |
| | | | 0.00 | 0.00 | | | 1/2" Ice 0.98 | 0.51 | 26.90 |
| | | | 0.00 | 0.00 | | | 1" Ice 1.10 | 0.61 | 35.60 |
| JAHH-65B-R3B Panel Antenna (Verizon) | C | From Leg | 3.00 | 6.50 | 0.0000 | 160.00 | No Ice 9.66 | 7.71 | 130.00 |
| | | | 0.00 | 0.00 | | | 1/2" Ice 10.22 | 8.53 | 204.15 |
| | | | 0.00 | 0.00 | | | 1" Ice 10.79 | 9.37 | 289.72 |
| JAHH-65B-R3B Panel Antenna (Verizon) | C | From Leg | 3.00 | 5.50 | 0.0000 | 160.00 | No Ice 9.66 | 7.71 | 130.00 |
| | | | 0.00 | 0.00 | | | 1/2" Ice 10.22 | 8.53 | 204.15 |
| | | | 0.00 | 0.00 | | | 1" Ice 10.79 | 9.37 | 289.72 |
| XXDWMM-12.5-65-8T-CBR S Panel (Verizon) | C | From Leg | 3.00 | -1.00 | 0.0000 | 160.00 | No Ice 4.80 | 2.40 | 20.00 |
| | | | 0.00 | 0.00 | | | 1/2" Ice 5.07 | 2.60 | 59.31 |
| | | | 0.00 | 0.00 | | | 1" Ice 5.35 | 2.81 | 102.70 |
| MT6407-77A (Verizon - Proposed) | C | From Leg | 3.00 | -6.00 | 0.0000 | 160.00 | No Ice 4.71 | 1.84 | 0.09 |
| | | | 0.00 | 0.00 | | | 1/2" Ice 5.00 | 2.06 | 29.40 |
| | | | 0.00 | 0.00 | | | 1" Ice 5.29 | 2.29 | 62.58 |
| CBC78T-DS-43-2X Diplexer (Verizon) | C | From Leg | 3.00 | 0.00 | 0.0000 | 160.00 | No Ice 0.37 | 0.51 | 22.00 |
| | | | 0.00 | 0.00 | | | 1/2" Ice 0.45 | 0.60 | 28.34 |
| | | | 0.00 | 0.00 | | | 1" Ice 0.53 | 0.70 | 36.37 |
| B2/B66A RRH (Verizon) | C | From Leg | 3.00 | 0.00 | 0.0000 | 160.00 | No Ice 2.54 | 1.61 | 60.00 |
| | | | 0.00 | 0.00 | | | 1/2" Ice 2.75 | 1.79 | 80.12 |
| | | | 0.00 | 0.00 | | | 1" Ice 2.97 | 1.98 | 103.35 |
| B5/B13 RRH (Verizon) | C | From Leg | 3.00 | 0.00 | 0.0000 | 160.00 | No Ice 1.87 | 1.02 | 70.00 |
| | | | 0.00 | 0.00 | | | 1/2" Ice 2.03 | 1.15 | 86.42 |
| | | | 0.00 | 0.00 | | | 1" Ice 2.21 | 1.29 | 105.50 |
| CBRS RRH-RT4401-48A (Verizon) | C | From Leg | 3.00 | 0.00 | 0.0000 | 160.00 | No Ice 0.86 | 0.42 | 20.00 |
| | | | 0.00 | 0.00 | | | 1/2" Ice 0.98 | 0.51 | 26.90 |
| | | | 0.00 | 0.00 | | | 1" Ice 1.10 | 0.61 | 35.60 |
| DB-T1-6Z-8AB-0Z Distribution Box (Verizon) | A | From Leg | 3.00 | 0.00 | 0.0000 | 160.00 | No Ice 5.60 | 2.33 | 50.00 |
| | | | 0.00 | 0.00 | | | 1/2" Ice 5.92 | 2.56 | 81.13 |
| | | | 0.00 | 0.00 | | | 1" Ice 6.24 | 2.79 | 121.22 |
| DB-T1-6Z-8AB-0Z Distribution Box (Verizon - Proposed) | B | From Leg | 3.00 | 0.00 | 0.0000 | 160.00 | No Ice 5.60 | 2.33 | 50.00 |
| | | | 0.00 | 0.00 | | | 1/2" Ice 5.92 | 2.56 | 81.13 |
| | | | 0.00 | 0.00 | | | 1" Ice 6.24 | 2.79 | 121.22 |
| *** T-Mobile TWM-020 Updates 05/29/2019 | | | | | | | | | |
| LTF12=372 Sector Mount (1) (T-Mobile) | A | None | | | 0.0000 | 125.00 | No Ice 13.60 | 13.60 | 465.00 |
| | | | | | | | 1/2" Ice 18.40 | 18.40 | 600.00 |
| | | | | | | | 1" Ice 23.20 | 23.20 | 735.00 |
| LTF12=372 Sector Mount (1) (T-Mobile) | B | None | | | 0.0000 | 125.00 | No Ice 13.60 | 13.60 | 465.00 |
| | | | | | | | 1/2" Ice 18.40 | 18.40 | 600.00 |
| | | | | | | | 1" Ice 23.20 | 23.20 | 735.00 |
| LTF12=372 Sector Mount (1) (T-Mobile) | C | None | | | 0.0000 | 125.00 | No Ice 13.60 | 13.60 | 465.00 |
| | | | | | | | 1/2" Ice 18.40 | 18.40 | 600.00 |
| | | | | | | | 1" Ice 23.20 | 23.20 | 735.00 |
| Ericsson AIR32 B66A/B2A Panel Antenna (T-Mobile) | A | From Face | 3.00 | -4.00 | 0.0000 | 125.00 | No Ice 6.51 | 4.71 | 132.20 |
| | | | 0.00 | 0.00 | | | 1/2" Ice 6.89 | 5.07 | 178.02 |
| | | | 0.00 | 0.00 | | | 1" Ice 7.27 | 5.43 | 229.11 |
| Ericsson AIR32 B66A/B2A Panel Antenna (T-Mobile) | B | From Face | 3.00 | -4.00 | 0.0000 | 125.00 | No Ice 6.51 | 4.71 | 132.20 |
| | | | 0.00 | 0.00 | | | 1/2" Ice 6.89 | 5.07 | 178.02 |
| | | | 0.00 | 0.00 | | | 1" Ice 7.27 | 5.43 | 229.11 |

| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 20 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Description | Face or Leg | Offset Type | Offsets: | | Azimuth Adjustment | Placement | C _{AA} Front | C _{AA} Side | Weight |
|--|-------------|-------------|----------|--------|--------------------|-----------|-----------------------|----------------------|--------|
| | | | Horz | Vert | | | | | |
| | | | ft | ft | ° | ft | ft ² | ft ² | lb |
| Ericsson AIR32 B66A/B2A Panel Antenna (T-Mobile) | C | From Face | 3.00 | 0.0000 | 125.00 | No Ice | 6.51 | 4.71 | 132.20 |
| | | | -4.00 | | | 1/2" Ice | 6.89 | 5.07 | 178.02 |
| | | | 0.00 | | | 1" Ice | 7.27 | 5.43 | 229.11 |
| Generic Twin TMA unit (T-Mobile) | A | From Face | 3.00 | 0.0000 | 125.00 | No Ice | 0.37 | 0.96 | 25.00 |
| | | | 0.00 | | | 1/2" Ice | 0.46 | 1.09 | 32.19 |
| | | | 0.00 | | | 1" Ice | 0.55 | 1.22 | 41.21 |
| Generic Twin TMA unit (T-Mobile) | B | From Face | 3.00 | 0.0000 | 125.00 | No Ice | 0.37 | 0.96 | 25.00 |
| | | | 0.00 | | | 1/2" Ice | 0.46 | 1.09 | 32.19 |
| | | | 0.00 | | | 1" Ice | 0.55 | 1.22 | 41.21 |
| Generic Twin TMA unit (T-Mobile) | C | From Face | 3.00 | 0.0000 | 125.00 | No Ice | 0.37 | 0.96 | 25.00 |
| | | | 0.00 | | | 1/2" Ice | 0.46 | 1.09 | 32.19 |
| | | | 0.00 | | | 1" Ice | 0.55 | 1.22 | 41.21 |
| Ericsson AIR21 B2A B4P Panel (T-Mobile) | A | From Face | 3.00 | 0.0000 | 125.00 | No Ice | 6.51 | 4.71 | 105.80 |
| | | | 0.00 | | | 1/2" Ice | 6.89 | 5.07 | 151.62 |
| | | | 0.00 | | | 1" Ice | 7.27 | 5.43 | 202.71 |
| Ericsson AIR21 B2A B4P Panel (T-Mobile) | B | From Face | 3.00 | 0.0000 | 125.00 | No Ice | 6.51 | 4.71 | 105.80 |
| | | | 0.00 | | | 1/2" Ice | 6.89 | 5.07 | 151.62 |
| | | | 0.00 | | | 1" Ice | 7.27 | 5.43 | 202.71 |
| Ericsson AIR21 B2A B4P Panel (T-Mobile) | C | From Face | 3.00 | 0.0000 | 125.00 | No Ice | 6.51 | 4.71 | 105.80 |
| | | | 0.00 | | | 1/2" Ice | 6.89 | 5.07 | 151.62 |
| | | | 0.00 | | | 1" Ice | 7.27 | 5.43 | 202.71 |
| APXVARR24_43-C-NA20 Panel Antenna w/ 96" Pipe (T-Mobile) | A | From Face | 3.00 | 0.0000 | 125.00 | No Ice | 17.15 | 11.04 | 179.72 |
| | | | 4.00 | | | 1/2" Ice | 17.77 | 12.47 | 301.81 |
| | | | 0.00 | | | 1" Ice | 18.40 | 13.57 | 435.25 |
| APXVARR24_43-C-NA20 Panel Antenna w/ 96" Pipe (T-Mobile) | B | From Face | 3.00 | 0.0000 | 125.00 | No Ice | 17.15 | 11.04 | 179.72 |
| | | | 4.00 | | | 1/2" Ice | 17.77 | 12.47 | 301.81 |
| | | | 0.00 | | | 1" Ice | 18.40 | 13.57 | 435.25 |
| APXVARR24_43-C-NA20 Panel Antenna w/ 96" Pipe (T-Mobile) | C | From Face | 3.00 | 0.0000 | 125.00 | No Ice | 17.15 | 11.04 | 179.72 |
| | | | 4.00 | | | 1/2" Ice | 17.77 | 12.47 | 301.81 |
| | | | 0.00 | | | 1" Ice | 18.40 | 13.57 | 435.25 |
| Ericsson 4449 B71 + B12 Radio Unit (T-Mobile) | A | From Face | 3.00 | 0.0000 | 125.00 | No Ice | 1.66 | 1.16 | 80.00 |
| | | | 0.00 | | | 1/2" Ice | 1.82 | 1.29 | 96.16 |
| | | | 0.00 | | | 1" Ice | 1.98 | 1.44 | 114.94 |
| Ericsson 4449 B71 + B12 Radio Unit (T-Mobile) | B | From Face | 3.00 | 0.0000 | 125.00 | No Ice | 1.66 | 1.16 | 80.00 |
| | | | 0.00 | | | 1/2" Ice | 1.82 | 1.29 | 96.16 |
| | | | 0.00 | | | 1" Ice | 1.98 | 1.44 | 114.94 |
| Ericsson 4449 B71 + B12 Radio Unit (T-Mobile) | C | From Face | 3.00 | 0.0000 | 125.00 | No Ice | 1.66 | 1.16 | 80.00 |
| | | | 0.00 | | | 1/2" Ice | 1.82 | 1.29 | 96.16 |
| | | | 0.00 | | | 1" Ice | 1.98 | 1.44 | 114.94 |
| *** T-Mobile TWM-020 Updates 05/29/2019 | | | | | | | | | |
| *** AT&T Antennas from SMK-004 MODification Analysis | | | | | | | | | |
| 800-10798 Kathrein Panel (AT&T) | A | From Face | 3.00 | 0.0000 | 133.00 | No Ice | 11.31 | 7.25 | 110.00 |
| | | | 6.00 | | | 1/2" Ice | 11.92 | 8.37 | 188.92 |
| | | | 0.00 | | | 1" Ice | 12.54 | 9.27 | 275.98 |
| RRUS-32 B66 (AT&T) | A | From Face | 3.00 | 0.0000 | 133.00 | No Ice | 3.20 | 1.85 | 60.00 |
| | | | 6.00 | | | 1/2" Ice | 3.46 | 2.08 | 81.11 |
| | | | 0.00 | | | 1" Ice | 3.73 | 2.31 | 105.42 |
| RRUS-32 (AT&T) | A | From Face | 3.00 | 0.0000 | 133.00 | No Ice | 3.31 | 2.42 | 77.00 |
| | | | -2.00 | | | 1/2" Ice | 3.56 | 2.64 | 104.93 |
| | | | 0.00 | | | 1" Ice | 3.81 | 2.86 | 136.47 |
| DBC0061F1V51-2 Combiner Units (AT&T) | A | From Face | 3.00 | 0.0000 | 133.00 | No Ice | 0.48 | 0.51 | 30.00 |
| | | | 6.00 | | | 1/2" Ice | 0.58 | 0.60 | 30.80 |
| | | | 0.00 | | | 1" Ice | 0.68 | 0.71 | 37.64 |
| 800-10798 Kathrein Panel | B | From Face | 3.00 | 0.0000 | 133.00 | No Ice | 11.31 | 7.25 | 110.00 |

| | | | | | | | | | | |
|--|----------------|--|--------------------------------|--|--|--|--|--------------------|--|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | | 22027.01 - Westport | | | | | Page | | 21 of 71 |
| | Project | | 180-ft Lattice Tower (CSP #32) | | | | | Date | | 08:43:42 04/05/22 |
| | Client | | Verizon | | | | | Designed by | | TJL |

| Description | Face or Leg | Offset Type | Offsets: | | Azimuth Adjustment | Placement | C _{AA} Front | C _{AA} Side | Weight | |
|--------------------------|-------------------|----------------|-----------------|--------|-----------------------|-----------|--------------------------|-------------------------|--------|--------|
| | | | Horz Lateral | Vert | | | | | | ft |
| (AT&T) | | | | 6.00 | | | | | | |
| | | | | 0.00 | | | 1/2" Ice | 11.92 | 8.37 | 188.92 |
| | | | | 0.00 | | | 1" Ice | 12.54 | 9.27 | 275.98 |
| RRUS-32 B66 | B | From Face | 3.00 | 0.0000 | 133.00 | No Ice | 3.20 | 1.85 | 60.00 | |
| (AT&T) | | | 6.00 | | | 1/2" Ice | 3.46 | 2.08 | 81.11 | |
| | | | 0.00 | | | 1" Ice | 3.73 | 2.31 | 105.42 | |
| RRUS-32 | B | From Face | 3.00 | 0.0000 | 133.00 | No Ice | 3.31 | 2.42 | 77.00 | |
| (AT&T) | | | -2.00 | | | 1/2" Ice | 3.56 | 2.64 | 104.93 | |
| | | | 0.00 | | | 1" Ice | 3.81 | 2.86 | 136.47 | |
| DBC0061F1V51-2 Combiner | B | From Face | 3.00 | 0.0000 | 133.00 | No Ice | 0.48 | 0.51 | 30.00 | |
| Units | | | 6.00 | | | 1/2" Ice | 0.58 | 0.60 | 30.80 | |
| (AT&T) | | | 0.00 | | | 1" Ice | 0.68 | 0.71 | 37.64 | |
| 800-10798 Kathrein Panel | C | From Face | 3.00 | 0.0000 | 133.00 | No Ice | 11.31 | 7.25 | 110.00 | |
| (AT&T) | | | 6.00 | | | 1/2" Ice | 11.92 | 8.37 | 188.92 | |
| | | | 0.00 | | | 1" Ice | 12.54 | 9.27 | 275.98 | |
| RRUS-32 B66 | C | From Face | 3.00 | 0.0000 | 133.00 | No Ice | 3.20 | 1.85 | 60.00 | |
| (AT&T) | | | -2.00 | | | 1/2" Ice | 3.46 | 2.08 | 81.11 | |
| | | | 0.00 | | | 1" Ice | 3.73 | 2.31 | 105.42 | |
| RRUS-32 | C | From Face | 3.00 | 0.0000 | 133.00 | No Ice | 3.31 | 2.42 | 77.00 | |
| (AT&T) | | | 6.00 | | | 1/2" Ice | 3.56 | 2.64 | 104.93 | |
| | | | 0.00 | | | 1" Ice | 3.81 | 2.86 | 136.47 | |
| DBC0061F1V51-2 Combiner | C | From Face | 3.00 | 0.0000 | 133.00 | No Ice | 0.48 | 0.51 | 30.00 | |
| Units | | | 6.00 | | | 1/2" Ice | 0.58 | 0.60 | 30.80 | |
| (AT&T) | | | 0.00 | | | 1" Ice | 0.68 | 0.71 | 37.64 | |
| DC6-48-60-18-8F (Squid) | C | From Face | 3.00 | 0.0000 | 133.00 | No Ice | 1.27 | 1.27 | 20.00 | |
| Suppressor | | | 0.00 | | | 1/2" Ice | 1.46 | 1.46 | 35.12 | |
| (AT&T) | | | 0.00 | | | 1" Ice | 1.66 | 1.66 | 52.57 | |
| Pirod 15' T-Frame Sector | A | None | | 0.0000 | 133.00 | No Ice | 15.00 | 15.00 | 500.00 | |
| Mount (1) | | | | | | 1/2" Ice | 20.60 | 20.60 | 650.00 | |
| (AT&T) | | | | | | 1" Ice | 26.20 | 26.20 | 800.00 | |
| Pirod 15' T-Frame Sector | B | None | | 0.0000 | 133.00 | No Ice | 15.00 | 15.00 | 500.00 | |
| Mount (1) | | | | | | 1/2" Ice | 20.60 | 20.60 | 650.00 | |
| (AT&T) | | | | | | 1" Ice | 26.20 | 26.20 | 800.00 | |
| Pirod 15' T-Frame Sector | C | None | | 0.0000 | 133.00 | No Ice | 15.00 | 15.00 | 500.00 | |
| Mount (1) | | | | | | 1/2" Ice | 20.60 | 20.60 | 650.00 | |
| (AT&T) | | | | | | 1" Ice | 26.20 | 26.20 | 800.00 | |
| P65-16-XLH-RR | A | From Face | 3.00 | 0.0000 | 133.00 | No Ice | 8.13 | 4.70 | 60.00 | |
| (AT&T) | | | -6.00 | | | 1/2" Ice | 8.59 | 5.15 | 107.28 | |
| | | | 0.00 | | | 1" Ice | 9.05 | 5.60 | 160.59 | |
| RRUS-11 | A | From Face | 3.00 | 0.0000 | 133.00 | No Ice | 2.57 | 1.07 | 50.00 | |
| (AT&T) | | | -6.00 | | | 1/2" Ice | 2.76 | 1.21 | 69.57 | |
| | | | 0.00 | | | 1" Ice | 2.97 | 1.36 | 92.08 | |
| HPA-65R-BUU-H6 Panel | A | From Face | 3.00 | 0.0000 | 133.00 | No Ice | 10.12 | 5.49 | 50.00 | |
| (AT&T) | | | -2.00 | | | 1/2" Ice | 10.69 | 5.94 | 105.33 | |
| | | | 0.00 | | | 1" Ice | 11.26 | 6.41 | 168.95 | |
| RRUS-32 | A | From Face | 3.00 | 0.0000 | 133.00 | No Ice | 3.31 | 2.42 | 77.00 | |
| (AT&T) | | | -2.00 | | | 1/2" Ice | 3.56 | 2.64 | 104.93 | |
| | | | 0.00 | | | 1" Ice | 3.81 | 2.86 | 136.47 | |
| DC6-48-60-18-8F (Squid) | A | From Face | 3.00 | 0.0000 | 133.00 | No Ice | 1.27 | 1.27 | 20.00 | |
| Suppressor | | | 0.00 | | | 1/2" Ice | 1.46 | 1.46 | 35.12 | |
| (AT&T) | | | 0.00 | | | 1" Ice | 1.66 | 1.66 | 52.57 | |
| DC6-48-60-18-8F (Squid) | B | From Leg | 3.00 | 0.0000 | 133.00 | No Ice | 1.27 | 1.27 | 20.00 | |
| Suppressor | | | -2.00 | | | 1/2" Ice | 1.46 | 1.46 | 35.12 | |
| (AT&T) | | | 0.00 | | | 1" Ice | 1.66 | 1.66 | 52.57 | |
| P65-16-XLH-RR | B | From Face | 3.00 | 0.0000 | 133.00 | No Ice | 8.13 | 4.70 | 60.00 | |
| (AT&T) | | | -6.00 | | | 1/2" Ice | 8.59 | 5.15 | 107.28 | |
| | | | 0.00 | | | 1" Ice | 9.05 | 5.60 | 160.59 | |
| RRUS-11 | B | From Face | 3.00 | 0.0000 | 133.00 | No Ice | 2.57 | 1.07 | 50.00 | |

| | | | | | | | | |
|--|----------------|--|--------------------------------|--|--------------------|--|-------------------|--|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | | 22027.01 - Westport | | Page | | 22 of 71 | |
| | Project | | 180-ft Lattice Tower (CSP #32) | | Date | | 08:43:42 04/05/22 | |
| | Client | | Verizon | | Designed by | | TJL | |

| Description | Face or Leg | Offset Type | Offsets: | | Azimuth Adjustment ° | Placement ft | C _{AA} Front ft ² | C _{AA} Side ft ² | Weight lb |
|---|-------------------|----------------|-----------------------|------------|----------------------------|-----------------|---|--|--------------|
| | | | Horz Lateral ft | Vert ft | | | | | |
| (AT&T) | | | -6.00 | | | 1/2" Ice | 2.76 | 1.21 | 69.57 |
| | | | 0.00 | | | 1" Ice | 2.97 | 1.36 | 92.08 |
| HPA-65R-BUU-H6 Panel | B | From Face | 3.00 | 0.0000 | 133.00 | No Ice | 10.12 | 5.49 | 50.00 |
| (AT&T) | | | -2.00 | | | 1/2" Ice | 10.69 | 5.94 | 105.33 |
| | | | 0.00 | | | 1" Ice | 11.26 | 6.41 | 168.95 |
| RRUS-32 | B | From Face | 3.00 | 0.0000 | 133.00 | No Ice | 3.31 | 2.42 | 77.00 |
| (AT&T) | | | -2.00 | | | 1/2" Ice | 3.56 | 2.64 | 104.93 |
| | | | 0.00 | | | 1" Ice | 3.81 | 2.86 | 136.47 |
| P65-16-XLH-RR | C | From Face | 3.00 | 0.0000 | 133.00 | No Ice | 8.13 | 4.70 | 60.00 |
| (AT&T) | | | -6.00 | | | 1/2" Ice | 8.59 | 5.15 | 107.28 |
| | | | 0.00 | | | 1" Ice | 9.05 | 5.60 | 160.59 |
| RRUS-11 | C | From Face | 3.00 | 0.0000 | 133.00 | No Ice | 2.57 | 1.07 | 50.00 |
| (AT&T) | | | -6.00 | | | 1/2" Ice | 2.76 | 1.21 | 69.57 |
| | | | 0.00 | | | 1" Ice | 2.97 | 1.36 | 92.08 |
| HPA-65R-BUU-H6 Panel | C | From Face | 3.00 | 0.0000 | 133.00 | No Ice | 10.12 | 5.49 | 50.00 |
| (AT&T) | | | -2.00 | | | 1/2" Ice | 10.69 | 5.94 | 105.33 |
| | | | 0.00 | | | 1" Ice | 11.26 | 6.41 | 168.95 |
| RRUS-32 | C | From Face | 3.00 | 0.0000 | 133.00 | No Ice | 3.31 | 2.42 | 77.00 |
| (AT&T) | | | -2.00 | | | 1/2" Ice | 3.56 | 2.64 | 104.93 |
| | | | 0.00 | | | 1" Ice | 3.81 | 2.86 | 136.47 |
| *** AT&T Antennas from SMK-004 MODification Analysis * CSP | | | | | | | | | |
| ANT940Y10-WR | A | From Leg | 0.00 | 0.0000 | 187.00 | No Ice | 0.19 | 0.19 | 2.50 |
| (CSP) | | | 0.00 | | | 1/2" Ice | 0.34 | 0.34 | 3.25 |
| | | | 0.00 | | | 1" Ice | 0.49 | 0.49 | 4.00 |
| ANT940Y10-WR | C | From Leg | 0.50 | 0.0000 | 181.00 | No Ice | 0.19 | 0.19 | 2.50 |
| (CSP - Yagi Antenna) | | | 0.00 | | | 1/2" Ice | 0.34 | 0.34 | 3.25 |
| | | | 0.00 | | | 1" Ice | 0.49 | 0.49 | 4.00 |
| RFI BPS7496-180-14 Panel | A | From Face | 4.00 | 0.0000 | 170.00 | No Ice | 5.83 | 3.75 | 20.00 |
| Antenna | | | -6.00 | | | 1/2" Ice | 6.21 | 4.13 | 56.42 |
| (CSP-80) | | | 0.00 | | | 1" Ice | 6.60 | 4.51 | 97.99 |
| RFI BPS7496-180-14 Panel | A | From Face | 4.00 | 0.0000 | 170.00 | No Ice | 5.83 | 3.75 | 20.00 |
| Antenna | | | 0.00 | | | 1/2" Ice | 6.21 | 4.13 | 56.42 |
| (CSP-81) | | | 0.00 | | | 1" Ice | 6.60 | 4.51 | 97.99 |
| RFI BPS7496-180-14 Panel | A | From Face | 4.00 | 0.0000 | 170.00 | No Ice | 5.83 | 3.75 | 20.00 |
| Antenna | | | 6.00 | | | 1/2" Ice | 6.21 | 4.13 | 56.42 |
| (CSP-82) | | | 0.00 | | | 1" Ice | 6.60 | 4.51 | 97.99 |
| SitePro1 USF12-396-U | A | From Leg | 0.00 | 0.0000 | 170.00 | No Ice | 16.23 | 9.80 | 491.09 |
| Mount Assembly w/ (3) 96" | | | 0.00 | | | 1/2" Ice | 22.18 | 13.27 | 630.09 |
| Mount Pipes | | | 0.00 | | | 1" Ice | 28.15 | 16.68 | 815.09 |
| (CSP 47, 80, 81, 82) | | | | | | | | | |
| 432E-83I-01T TTA Unit | A | From Leg | 4.00 | 0.0000 | 170.00 | No Ice | 2.85 | 0.97 | 25.00 |
| (Re-Located TMA (CSP)) | | | 0.00 | | | 1/2" Ice | 3.06 | 1.11 | 44.70 |
| | | | 0.00 | | | 1" Ice | 3.28 | 1.26 | 67.39 |
| 3' Yagi | C | From Leg | 0.50 | 0.0000 | 169.00 | No Ice | 2.08 | 2.08 | 30.95 |
| (CSP) | | | 0.00 | | | 1/2" Ice | 3.79 | 3.79 | 52.87 |
| | | | 0.00 | | | 1" Ice | 5.52 | 5.52 | 85.27 |
| ANT150D | A | From Leg | 0.00 | 0.0000 | 113.00 | No Ice | 0.80 | 0.80 | 5.50 |
| (CSP - 1-Bay Dipole) | | | 0.00 | | | 1/2" Ice | 1.44 | 1.44 | 7.15 |
| | | | 0.00 | | | 1" Ice | 2.08 | 2.08 | 8.80 |
| GPS | C | From Leg | 4.00 | 0.0000 | 60.00 | No Ice | 1.00 | 1.00 | 10.00 |
| (DNK-1 / GPS) | | | 0.00 | | | 1/2" Ice | 1.50 | 1.50 | 15.00 |
| | | | 2.00 | | | 1" Ice | 2.00 | 2.00 | 20.00 |
| 4' Standoff | C | From Leg | 0.00 | 0.0000 | 60.00 | No Ice | 3.42 | 3.42 | 110.00 |
| (DNK-1 / GPS) | | | 0.00 | | | 1/2" Ice | 3.67 | 3.67 | 147.19 |

| | | |
|--|--|----------------------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job 22027.01 - Westport | Page 23 of 71 |
| | Project 180-ft Lattice Tower (CSP #32) | Date 08:43:42 04/05/22 |
| | Client Verizon | Designed by TJL |

| Description | Face or Leg | Offset Type | Offsets: Horz Lateral Vert | Azimuth Adjustment | Placement | C _{AA} Front | C _{AA} Side | Weight |
|-------------|-------------|-------------|----------------------------|--------------------|-----------|-----------------------|----------------------|--------|
| | | | ft | ° | ft | ft ² | ft ² | lb |
| | | | 0.00 | | 1" Ice | 3.92 | 3.92 | 187.07 |

Dishes

| Description | Face or Leg | Dish Type | Offset Type | Offsets: Horz Lateral Vert | Azimuth Adjustment | 3 dB Beam Width | Elevation | Outside Diameter | Aperture Area | Weight |
|----------------------------|-------------|---------------------|-------------|----------------------------|--------------------|-----------------|-----------|------------------|------------------------------|---------------------------|
| | | | | ft | ° | ° | ft | ft | ft ² | lb |
| PA6-65AC (DNK-52 / CSP-42) | C | Paraboloid w/Radome | From Leg | 1.00 0.00 0.00 | -55.0000 | | 177.00 | 6.00 | No Ice 1/2" Ice 1" Ice | 90.00 240.00 390.00 |

222-H Verification Constants

| Constant | Value |
|---------------------------------|-------|
| K _d | 0.85 |
| Ice Thickness Importance Factor | 1.25 |
| Z _g | 900 |
| α | 9.5 |
| K _{zmin} | 0.85 |
| K _c | n/a |
| K _i | 1 |
| f | 1 |
| K _e | 1 |

222-H Section Verification ArRr By Element

| Section Elevation | Elem. Num. | Size | C | C w/Ice | F a c e | e | e w/Ice | A _r | A _r w/Ice | A _r R _r | A _r R _r w/Ice |
|---------------------|------------|--------------|--------|---------|---------|-------|---------|-----------------|----------------------|-------------------------------|-------------------------------------|
| ft | | | | | | | | ft ² | ft ² | ft ² | ft ² |
| T1 180.00-160.00 | 1 | ROHN 3 STD | 45.107 | 31.948 | C | 0.139 | 0.285 | 5.833 | 10.742 | 3.165 | 6.384 |
| | 1 | ROHN 3 STD | 45.107 | 31.948 | A | 0.139 | 0.285 | 5.833 | 10.742 | 3.165 | 6.384 |
| | 2 | ROHN 3 STD | 45.107 | 31.948 | C | 0.139 | 0.285 | 5.833 | 10.742 | 3.165 | 6.384 |
| | 2 | ROHN 3 STD | 45.107 | 31.948 | B | 0.139 | 0.285 | 5.833 | 10.742 | 3.165 | 6.384 |
| | 3 | ROHN 3 STD | 45.107 | 31.948 | B | 0.139 | 0.285 | 5.833 | 10.742 | 3.165 | 6.384 |
| | 3 | ROHN 3 STD | 45.107 | 31.948 | A | 0.139 | 0.285 | 5.833 | 10.742 | 3.165 | 6.384 |
| | 4 | ROHN 1.5 STD | 24.486 | 24.017 | C | 0.139 | 0.285 | 1.306 | 3.331 | 0.740 | 1.980 |
| | 5 | ROHN 1.5 STD | 24.486 | 24.017 | B | 0.139 | 0.285 | 1.306 | 3.331 | 0.740 | 1.980 |
| | 6 | ROHN 1.5 STD | 24.486 | 24.017 | A | 0.139 | 0.285 | 1.306 | 3.331 | 0.740 | 1.980 |
| | 7 | ROHN 1.5 STD | 24.486 | 24.017 | C | 0.139 | 0.285 | 1.315 | 3.354 | 0.745 | 1.993 |
| | 8 | ROHN 2 STD | 30.608 | 26.372 | C | 0.139 | 0.285 | 1.518 | 3.401 | 0.860 | 2.021 |
| | 9 | ROHN 2 STD | 30.608 | 26.372 | C | 0.139 | 0.285 | 1.518 | 3.401 | 0.860 | 2.021 |

| | | | |
|----------------|--------------------------------|--------------------|-------------------|
| Job | 22027.01 - Westport | Page | 24 of 71 |
| Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| Client | Verizon | Designed by | TJL |

| Section Elevation | Elem. Num. | Size | C | C w/Ice | F a c e | e | e w/Ice | A _r | A _r w/Ice | A _r R _r | A _r R _r w/Ice |
|-------------------|------------|--------------|--------|---------|---------|-------|---------|-----------------|----------------------|-------------------------------|-------------------------------------|
| ft | | | | | | | | ft ² | ft ² | ft ² | ft ² |
| | 10 | ROHN 1.5 STD | 24.486 | 24.017 | B | 0.139 | 0.285 | 1.315 | 3.354 | 0.745 | 1.993 |
| | 11 | ROHN 2 STD | 30.608 | 26.372 | B | 0.139 | 0.285 | 1.518 | 3.401 | 0.860 | 2.021 |
| | 12 | ROHN 2 STD | 30.608 | 26.372 | B | 0.139 | 0.285 | 1.518 | 3.401 | 0.860 | 2.021 |
| | 13 | ROHN 1.5 STD | 24.486 | 24.017 | A | 0.139 | 0.285 | 1.315 | 3.354 | 0.745 | 1.993 |
| | 14 | ROHN 2 STD | 30.608 | 26.372 | A | 0.139 | 0.285 | 1.518 | 3.401 | 0.860 | 2.021 |
| | 15 | ROHN 2 STD | 30.608 | 26.372 | A | 0.139 | 0.285 | 1.518 | 3.401 | 0.860 | 2.021 |
| | 19 | ROHN 1.5 STD | 24.486 | 24.017 | C | 0.139 | 0.285 | 1.311 | 3.342 | 0.743 | 1.986 |
| | 20 | ROHN 2 STD | 30.608 | 26.372 | C | 0.139 | 0.285 | 1.517 | 3.398 | 0.859 | 2.019 |
| | 21 | ROHN 2 STD | 30.608 | 26.372 | C | 0.139 | 0.285 | 1.517 | 3.398 | 0.859 | 2.019 |
| | 22 | ROHN 1.5 STD | 24.486 | 24.017 | B | 0.139 | 0.285 | 1.311 | 3.342 | 0.743 | 1.986 |
| | 23 | ROHN 2 STD | 30.608 | 26.372 | B | 0.139 | 0.285 | 1.517 | 3.398 | 0.859 | 2.019 |
| | 24 | ROHN 2 STD | 30.608 | 26.372 | B | 0.139 | 0.285 | 1.517 | 3.398 | 0.859 | 2.019 |
| | 25 | ROHN 1.5 STD | 24.486 | 24.017 | A | 0.139 | 0.285 | 1.311 | 3.342 | 0.743 | 1.986 |
| | 26 | ROHN 2 STD | 30.608 | 26.372 | A | 0.139 | 0.285 | 1.517 | 3.398 | 0.859 | 2.019 |
| | 27 | ROHN 2 STD | 30.608 | 26.372 | A | 0.139 | 0.285 | 1.517 | 3.398 | 0.859 | 2.019 |
| | 31 | ROHN 2 STD | 30.608 | 26.372 | C | 0.139 | 0.285 | 1.515 | 3.394 | 0.858 | 2.017 |
| | 32 | ROHN 2 STD | 30.608 | 26.372 | C | 0.139 | 0.285 | 1.515 | 3.394 | 0.858 | 2.017 |
| | 33 | ROHN 2 STD | 30.608 | 26.372 | B | 0.139 | 0.285 | 1.515 | 3.394 | 0.858 | 2.017 |
| | 34 | ROHN 2 STD | 30.608 | 26.372 | B | 0.139 | 0.285 | 1.515 | 3.394 | 0.858 | 2.017 |
| | 35 | ROHN 2 STD | 30.608 | 26.372 | A | 0.139 | 0.285 | 1.515 | 3.394 | 0.858 | 2.017 |
| | 36 | ROHN 2 STD | 30.608 | 26.372 | A | 0.139 | 0.285 | 1.515 | 3.394 | 0.858 | 2.017 |
| | | | | | A | | Sum: | 24.699 | 51.898 | 13.713 | 30.840 |
| | | | | | B | | | 24.699 | 51.898 | 13.713 | 30.840 |
| | | | | | C | | | 24.699 | 51.898 | 13.713 | 30.840 |
| | T2 | ROHN 4 STD | 57.235 | 36.242 | C | 0.143 | 0.276 | 7.514 | 12.370 | 3.727 | 7.320 |
| 160.00-140.00 | 40 | ROHN 4 STD | 57.235 | 36.242 | A | 0.143 | 0.276 | 7.514 | 12.370 | 3.727 | 7.320 |
| | 41 | ROHN 4 STD | 57.235 | 36.242 | C | 0.143 | 0.276 | 7.514 | 12.370 | 3.727 | 7.320 |
| | 41 | ROHN 4 STD | 57.235 | 36.242 | B | 0.143 | 0.276 | 7.514 | 12.370 | 3.727 | 7.320 |
| | 42 | ROHN 4 STD | 57.235 | 36.242 | B | 0.143 | 0.276 | 7.514 | 12.370 | 3.727 | 7.320 |
| | 42 | ROHN 4 STD | 57.235 | 36.242 | A | 0.143 | 0.276 | 7.514 | 12.370 | 3.727 | 7.320 |
| | 43 | ROHN 1.5 STD | 24.166 | 23.524 | C | 0.143 | 0.276 | 1.526 | 3.863 | 0.865 | 2.286 |
| | 44 | ROHN 2 STD | 30.207 | 25.847 | C | 0.143 | 0.276 | 1.634 | 3.634 | 0.926 | 2.150 |
| | 45 | ROHN 2 STD | 30.207 | 25.847 | C | 0.143 | 0.276 | 1.634 | 3.634 | 0.926 | 2.150 |
| | 46 | ROHN 1.5 STD | 24.166 | 23.524 | B | 0.143 | 0.276 | 1.526 | 3.863 | 0.865 | 2.286 |
| | 47 | ROHN 2 STD | 30.207 | 25.847 | B | 0.143 | 0.276 | 1.634 | 3.634 | 0.926 | 2.150 |
| | 48 | ROHN 2 STD | 30.207 | 25.847 | B | 0.143 | 0.276 | 1.634 | 3.634 | 0.926 | 2.150 |
| | 49 | ROHN 1.5 STD | 24.166 | 23.524 | A | 0.143 | 0.276 | 1.526 | 3.863 | 0.865 | 2.286 |
| | 50 | ROHN 2 STD | 30.207 | 25.847 | A | 0.143 | 0.276 | 1.634 | 3.634 | 0.926 | 2.150 |
| | 51 | ROHN 2 STD | 30.207 | 25.847 | A | 0.143 | 0.276 | 1.634 | 3.634 | 0.926 | 2.150 |
| | 55 | ROHN 1.5 STD | 24.166 | 23.524 | C | 0.143 | 0.276 | 1.416 | 3.584 | 0.803 | 2.121 |
| | 56 | ROHN 2 STD | 30.207 | 25.847 | C | 0.143 | 0.276 | 1.589 | 3.535 | 0.901 | 2.092 |
| | 57 | ROHN 2 STD | 30.207 | 25.847 | C | 0.143 | 0.276 | 1.589 | 3.535 | 0.901 | 2.092 |
| | 58 | ROHN 1.5 STD | 24.166 | 23.524 | B | 0.143 | 0.276 | 1.416 | 3.584 | 0.803 | 2.121 |
| | 59 | ROHN 2 STD | 30.207 | 25.847 | B | 0.143 | 0.276 | 1.589 | 3.535 | 0.901 | 2.092 |
| | 60 | ROHN 2 STD | 30.207 | 25.847 | B | 0.143 | 0.276 | 1.589 | 3.535 | 0.901 | 2.092 |
| | 61 | ROHN 1.5 STD | 24.166 | 23.524 | A | 0.143 | 0.276 | 1.416 | 3.584 | 0.803 | 2.121 |
| | 62 | ROHN 2 STD | 30.207 | 25.847 | A | 0.143 | 0.276 | 1.589 | 3.535 | 0.901 | 2.092 |
| | 63 | ROHN 2 STD | 30.207 | 25.847 | A | 0.143 | 0.276 | 1.589 | 3.535 | 0.901 | 2.092 |
| | 67 | ROHN 1.5 STD | 24.166 | 23.524 | C | 0.143 | 0.276 | 1.306 | 3.306 | 0.741 | 1.956 |
| | 68 | ROHN 2 STD | 30.207 | 25.847 | C | 0.143 | 0.276 | 1.546 | 3.438 | 0.876 | 2.035 |
| | 69 | ROHN 2 STD | 30.207 | 25.847 | C | 0.143 | 0.276 | 1.546 | 3.438 | 0.876 | 2.035 |
| | 70 | ROHN 1.5 STD | 24.166 | 23.524 | B | 0.143 | 0.276 | 1.306 | 3.306 | 0.741 | 1.956 |
| | 71 | ROHN 2 STD | 30.207 | 25.847 | B | 0.143 | 0.276 | 1.546 | 3.438 | 0.876 | 2.035 |
| | 72 | ROHN 2 STD | 30.207 | 25.847 | B | 0.143 | 0.276 | 1.546 | 3.438 | 0.876 | 2.035 |
| | 73 | ROHN 1.5 STD | 24.166 | 23.524 | A | 0.143 | 0.276 | 1.306 | 3.306 | 0.741 | 1.956 |
| | 74 | ROHN 2 STD | 30.207 | 25.847 | A | 0.143 | 0.276 | 1.546 | 3.438 | 0.876 | 2.035 |
| | 75 | ROHN 2 STD | 30.207 | 25.847 | A | 0.143 | 0.276 | 1.546 | 3.438 | 0.876 | 2.035 |
| | | | | | A | | Sum: | 28.812 | 56.708 | 15.269 | 33.556 |
| | | | | | B | | | 28.812 | 56.708 | 15.269 | 33.556 |

| | | | |
|----------------|--------------------------------|--------------------|-------------------|
| Job | 22027.01 - Westport | Page | 25 of 71 |
| Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| Client | Verizon | Designed by | TJL |

| Section Elevation | Elem. Num. | Size | C | C w/Ice | F a c e | e | e w/Ice | A _r | A _r w/Ice | A _r R _r | A _r R _r w/Ice | |
|---------------------|---------------------|------------|------------|---------|---------|-------|---------|-----------------|----------------------|-------------------------------|-------------------------------------|--------|
| ft | | | | | | | | ft ² | ft ² | ft ² | ft ² | |
| T3 140.00-133.33 | 79 | ROHN 5 EH | 70.065 | 40.908 | C | 0.151 | 0.271 | 28.812 | 56.708 | 15.269 | 33.556 | |
| | | | | | C | | | 3.096 | 4.700 | 1.391 | 2.775 | |
| | 79 | ROHN 5 EH | 70.065 | 40.908 | A | 0.151 | 0.271 | 3.096 | 4.700 | 1.391 | 2.775 | |
| | 80 | ROHN 5 EH | 70.065 | 40.908 | C | 0.151 | 0.271 | 3.096 | 4.700 | 1.391 | 2.775 | |
| | 80 | ROHN 5 EH | 70.065 | 40.908 | B | 0.151 | 0.271 | 3.096 | 4.700 | 1.391 | 2.775 | |
| | 81 | ROHN 5 EH | 70.065 | 40.908 | B | 0.151 | 0.271 | 3.096 | 4.700 | 1.391 | 2.775 | |
| | 81 | ROHN 5 EH | 70.065 | 40.908 | A | 0.151 | 0.271 | 3.096 | 4.700 | 1.391 | 2.775 | |
| | 82 | ROHN 2 STD | 29.913 | 25.465 | C | 0.151 | 0.271 | 2.028 | 4.488 | 1.151 | 2.650 | |
| | 83 | ROHN 2 EH | 29.976 | 25.489 | C | 0.151 | 0.271 | 1.670 | 3.691 | 0.948 | 2.180 | |
| | 84 | ROHN 2 EH | 29.976 | 25.489 | C | 0.151 | 0.271 | 1.670 | 3.691 | 0.948 | 2.180 | |
| | 85 | ROHN 2 STD | 29.913 | 25.465 | B | 0.151 | 0.271 | 2.028 | 4.488 | 1.151 | 2.650 | |
| | 86 | ROHN 2 EH | 29.976 | 25.489 | B | 0.151 | 0.271 | 1.670 | 3.691 | 0.948 | 2.180 | |
| | 87 | ROHN 2 EH | 29.976 | 25.489 | B | 0.151 | 0.271 | 1.670 | 3.691 | 0.948 | 2.180 | |
| | 88 | ROHN 2 STD | 29.913 | 25.465 | A | 0.151 | 0.271 | 2.028 | 4.488 | 1.151 | 2.650 | |
| | 89 | ROHN 2 EH | 29.976 | 25.489 | A | 0.151 | 0.271 | 1.670 | 3.691 | 0.948 | 2.180 | |
| | 90 | ROHN 2 EH | 29.976 | 25.489 | A | 0.151 | 0.271 | 1.670 | 3.691 | 0.948 | 2.180 | |
| | | | | | A | | | Sum: | 11.559 | 21.270 | 5.828 | 12.561 |
| | | | | | B | | | | 11.559 | 21.270 | 5.828 | 12.561 |
| | | | | | C | | | | 11.559 | 21.270 | 5.828 | 12.561 |
| T4 133.33-126.67 | 94 | ROHN 5 EH | 69.697 | 40.624 | C | 0.145 | 0.262 | 3.096 | 4.692 | 1.388 | 2.759 | |
| | 94 | ROHN 5 EH | 69.697 | 40.624 | A | 0.145 | 0.262 | 3.096 | 4.692 | 1.388 | 2.759 | |
| | 95 | ROHN 5 EH | 69.697 | 40.624 | C | 0.145 | 0.262 | 3.096 | 4.692 | 1.388 | 2.759 | |
| | 95 | ROHN 5 EH | 69.697 | 40.624 | B | 0.145 | 0.262 | 3.096 | 4.692 | 1.388 | 2.759 | |
| | 96 | ROHN 5 EH | 69.697 | 40.624 | B | 0.145 | 0.262 | 3.096 | 4.692 | 1.388 | 2.759 | |
| | 96 | ROHN 5 EH | 69.697 | 40.624 | A | 0.145 | 0.262 | 3.096 | 4.692 | 1.388 | 2.759 | |
| | 97 | ROHN 2 STD | 29.756 | 25.262 | C | 0.145 | 0.262 | 2.165 | 4.779 | 1.228 | 2.810 | |
| | 98 | ROHN 2 STD | 29.756 | 25.262 | B | 0.145 | 0.262 | 2.165 | 4.779 | 1.228 | 2.810 | |
| | 99 | ROHN 2 STD | 29.756 | 25.262 | A | 0.145 | 0.262 | 2.165 | 4.779 | 1.228 | 2.810 | |
| | 100 | ROHN 2 EH | 29.818 | 25.286 | C | 0.145 | 0.262 | 1.717 | 3.787 | 0.974 | 2.226 | |
| | 101 | ROHN 2 EH | 29.818 | 25.286 | C | 0.145 | 0.262 | 1.717 | 3.787 | 0.974 | 2.226 | |
| | 102 | ROHN 2 EH | 29.818 | 25.286 | B | 0.145 | 0.262 | 1.717 | 3.787 | 0.974 | 2.226 | |
| | 103 | ROHN 2 EH | 29.818 | 25.286 | B | 0.145 | 0.262 | 1.717 | 3.787 | 0.974 | 2.226 | |
| | 104 | ROHN 2 EH | 29.818 | 25.286 | A | 0.145 | 0.262 | 1.717 | 3.787 | 0.974 | 2.226 | |
| | 105 | ROHN 2 EH | 29.818 | 25.286 | A | 0.145 | 0.262 | 1.717 | 3.787 | 0.974 | 2.226 | |
| | | | | | A | | | Sum: | 11.792 | 21.736 | 5.951 | 12.781 |
| | | | | | B | | | | 11.792 | 21.736 | 5.951 | 12.781 |
| | | | | | C | | | | 11.792 | 21.736 | 5.951 | 12.781 |
| | T5 126.67-120.00 | 109 | ROHN 5 EH | 69.312 | 40.327 | C | 0.14 | 0.253 | 3.096 | 4.684 | 1.386 | 2.744 |
| 109 | | ROHN 5 EH | 69.312 | 40.327 | A | 0.14 | 0.253 | 3.096 | 4.684 | 1.386 | 2.744 | |
| 110 | | ROHN 5 EH | 69.312 | 40.327 | C | 0.14 | 0.253 | 3.096 | 4.684 | 1.386 | 2.744 | |
| 110 | | ROHN 5 EH | 69.312 | 40.327 | B | 0.14 | 0.253 | 3.096 | 4.684 | 1.386 | 2.744 | |
| 111 | | ROHN 5 EH | 69.312 | 40.327 | B | 0.14 | 0.253 | 3.096 | 4.684 | 1.386 | 2.744 | |
| 111 | | ROHN 5 EH | 69.312 | 40.327 | A | 0.14 | 0.253 | 3.096 | 4.684 | 1.386 | 2.744 | |
| 112 | | ROHN 2 STD | 29.591 | 25.05 | C | 0.14 | 0.253 | 2.303 | 5.068 | 1.305 | 2.969 | |
| 113 | | ROHN 2 STD | 29.591 | 25.05 | B | 0.14 | 0.253 | 2.303 | 5.068 | 1.305 | 2.969 | |
| 114 | | ROHN 2 STD | 29.591 | 25.05 | A | 0.14 | 0.253 | 2.303 | 5.068 | 1.305 | 2.969 | |
| 115 | | ROHN 2 XXS | 29.591 | 25.05 | C | 0.14 | 0.253 | 1.763 | 3.880 | 0.999 | 2.273 | |
| 116 | | ROHN 2 XXS | 29.591 | 25.05 | C | 0.14 | 0.253 | 1.763 | 3.880 | 0.999 | 2.273 | |
| 117 | | ROHN 2 XXS | 29.591 | 25.05 | B | 0.14 | 0.253 | 1.763 | 3.880 | 0.999 | 2.273 | |
| 118 | | ROHN 2 XXS | 29.591 | 25.05 | B | 0.14 | 0.253 | 1.763 | 3.880 | 0.999 | 2.273 | |
| 119 | | ROHN 2 XXS | 29.591 | 25.05 | A | 0.14 | 0.253 | 1.763 | 3.880 | 0.999 | 2.273 | |
| 120 | | ROHN 2 XXS | 29.591 | 25.05 | A | 0.14 | 0.253 | 1.763 | 3.880 | 0.999 | 2.273 | |
| | | | | | A | | | Sum: | 12.020 | 22.194 | 6.074 | 13.001 |
| | | | | | B | | | | 12.020 | 22.194 | 6.074 | 13.001 |
| | | | | | C | | | | 12.020 | 22.194 | 6.074 | 13.001 |
| T6 120.00-100.00 | | 124 | ROHN 6 EHS | 81.556 | 44.719 | C | 0.133 | 0.222 | 11.065 | 15.775 | 4.541 | 9.127 |

| | | | |
|----------------|--------------------------------|--------------------|-------------------|
| Job | 22027.01 - Westport | Page | 26 of 71 |
| Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| Client | Verizon | Designed by | TJL |

| Section Elevation | Elem. Num. | Size | C | C w/Ice | F a c e | e | e w/Ice | A _r | A _r w/Ice | A _r R _r | A _r R _r w/Ice |
|-------------------|------------|--------------|--------|---------|---------|-------|---------|-----------------|----------------------|-------------------------------|-------------------------------------|
| ft | | | | | | | | ft ² | ft ² | ft ² | ft ² |
| | 124 | ROHN 6 EHS | 81.556 | 44.719 | A | 0.133 | 0.222 | 11.065 | 15.775 | 4.541 | 9.127 |
| | 125 | ROHN 6 EHS | 81.556 | 44.719 | C | 0.133 | 0.222 | 11.065 | 15.775 | 4.541 | 9.127 |
| | 125 | ROHN 6 EHS | 81.556 | 44.719 | B | 0.133 | 0.222 | 11.065 | 15.775 | 4.541 | 9.127 |
| | 126 | ROHN 6 EHS | 81.556 | 44.719 | B | 0.133 | 0.222 | 11.065 | 15.775 | 4.541 | 9.127 |
| | 126 | ROHN 6 EHS | 81.556 | 44.719 | A | 0.133 | 0.222 | 11.065 | 15.775 | 4.541 | 9.127 |
| | 127 | ROHN 2 STD | 29.237 | 24.596 | C | 0.133 | 0.222 | 2.645 | 5.786 | 1.497 | 3.348 |
| | 128 | Pipe 2.5 XXS | 35.392 | 26.964 | C | 0.133 | 0.222 | 2.889 | 5.722 | 1.635 | 3.311 |
| | 129 | Pipe 2.5 XXS | 35.392 | 26.964 | C | 0.133 | 0.222 | 2.889 | 5.722 | 1.635 | 3.311 |
| | 130 | ROHN 2 STD | 29.237 | 24.596 | B | 0.133 | 0.222 | 2.645 | 5.786 | 1.497 | 3.348 |
| | 131 | Pipe 2.5 XXS | 35.392 | 26.964 | B | 0.133 | 0.222 | 2.889 | 5.722 | 1.635 | 3.311 |
| | 132 | Pipe 2.5 XXS | 35.392 | 26.964 | B | 0.133 | 0.222 | 2.889 | 5.722 | 1.635 | 3.311 |
| | 133 | ROHN 2 STD | 29.237 | 24.596 | A | 0.133 | 0.222 | 2.645 | 5.786 | 1.497 | 3.348 |
| | 134 | Pipe 2.5 XXS | 35.392 | 26.964 | A | 0.133 | 0.222 | 2.889 | 5.722 | 1.635 | 3.311 |
| | 135 | Pipe 2.5 XXS | 35.392 | 26.964 | A | 0.133 | 0.222 | 2.889 | 5.722 | 1.635 | 3.311 |
| | 139 | ROHN 2 STD | 29.237 | 24.596 | C | 0.133 | 0.222 | 2.422 | 5.299 | 1.371 | 3.066 |
| | 140 | Pipe 2.5 XXS | 35.392 | 26.964 | C | 0.133 | 0.222 | 2.804 | 5.554 | 1.587 | 3.214 |
| | 141 | Pipe 2.5 XXS | 35.392 | 26.964 | C | 0.133 | 0.222 | 2.804 | 5.554 | 1.587 | 3.214 |
| | 142 | ROHN 2 STD | 29.237 | 24.596 | B | 0.133 | 0.222 | 2.422 | 5.299 | 1.371 | 3.066 |
| | 143 | Pipe 2.5 XXS | 35.392 | 26.964 | B | 0.133 | 0.222 | 2.804 | 5.554 | 1.587 | 3.214 |
| | 144 | Pipe 2.5 XXS | 35.392 | 26.964 | B | 0.133 | 0.222 | 2.804 | 5.554 | 1.587 | 3.214 |
| | 145 | ROHN 2 STD | 29.237 | 24.596 | A | 0.133 | 0.222 | 2.422 | 5.299 | 1.371 | 3.066 |
| | 146 | Pipe 2.5 XXS | 35.392 | 26.964 | A | 0.133 | 0.222 | 2.804 | 5.554 | 1.587 | 3.214 |
| | 147 | Pipe 2.5 XXS | 35.392 | 26.964 | A | 0.133 | 0.222 | 2.804 | 5.554 | 1.587 | 3.214 |
| | | | | | A | | Sum: | 38.583 | 65.187 | 18.396 | 37.718 |
| | | | | | B | | | 38.583 | 65.187 | 18.396 | 37.718 |
| | | | | | C | | | 38.583 | 65.187 | 18.396 | 37.718 |
| T7 100.00-90.00 | 151 | ROHN 6 EH | 80.307 | 43.843 | C | 0.131 | 0.212 | 5.537 | 7.859 | 2.265 | 4.533 |
| | 151 | ROHN 6 EH | 80.307 | 43.843 | A | 0.131 | 0.212 | 5.537 | 7.859 | 2.265 | 4.533 |
| | 152 | ROHN 6 EH | 80.307 | 43.843 | C | 0.131 | 0.212 | 5.537 | 7.859 | 2.265 | 4.533 |
| | 152 | ROHN 6 EH | 80.307 | 43.843 | B | 0.131 | 0.212 | 5.537 | 7.859 | 2.265 | 4.533 |
| | 153 | ROHN 6 EH | 80.307 | 43.843 | B | 0.131 | 0.212 | 5.537 | 7.859 | 2.265 | 4.533 |
| | 153 | ROHN 6 EH | 80.307 | 43.843 | A | 0.131 | 0.212 | 5.537 | 7.859 | 2.265 | 4.533 |
| | 154 | ROHN 2 STD | 28.789 | 24.028 | C | 0.131 | 0.212 | 2.868 | 6.223 | 1.623 | 3.589 |
| | 155 | ROHN 3 STD | 42.426 | 29.273 | C | 0.131 | 0.212 | 3.643 | 6.535 | 2.011 | 3.769 |
| | 156 | ROHN 3 STD | 42.426 | 29.273 | C | 0.131 | 0.212 | 3.643 | 6.535 | 2.011 | 3.769 |
| | 157 | ROHN 2 STD | 28.789 | 24.028 | B | 0.131 | 0.212 | 2.868 | 6.223 | 1.623 | 3.589 |
| | 158 | ROHN 3 STD | 42.426 | 29.273 | B | 0.131 | 0.212 | 3.643 | 6.535 | 2.011 | 3.769 |
| | 159 | ROHN 3 STD | 42.426 | 29.273 | B | 0.131 | 0.212 | 3.643 | 6.535 | 2.011 | 3.769 |
| | 160 | ROHN 2 STD | 28.789 | 24.028 | A | 0.131 | 0.212 | 2.868 | 6.223 | 1.623 | 3.589 |
| | 161 | ROHN 3 STD | 42.426 | 29.273 | A | 0.131 | 0.212 | 3.643 | 6.535 | 2.011 | 3.769 |
| | 162 | ROHN 3 STD | 42.426 | 29.273 | A | 0.131 | 0.212 | 3.643 | 6.535 | 2.011 | 3.769 |
| | | | | | A | | Sum: | 21.227 | 35.011 | 10.175 | 20.193 |
| | | | | | B | | | 21.227 | 35.011 | 10.175 | 20.193 |
| | | | | | C | | | 21.227 | 35.011 | 10.175 | 20.193 |
| T8 90.00-80.00 | 166 | ROHN 6 EH | 79.372 | 43.191 | C | 0.124 | 0.202 | 5.537 | 7.833 | 2.247 | 4.502 |
| | 166 | ROHN 6 EH | 79.372 | 43.191 | A | 0.124 | 0.202 | 5.537 | 7.833 | 2.247 | 4.502 |
| | 167 | ROHN 6 EH | 79.372 | 43.191 | C | 0.124 | 0.202 | 5.537 | 7.833 | 2.247 | 4.502 |
| | 167 | ROHN 6 EH | 79.372 | 43.191 | B | 0.124 | 0.202 | 5.537 | 7.833 | 2.247 | 4.502 |
| | 168 | ROHN 6 EH | 79.372 | 43.191 | B | 0.124 | 0.202 | 5.537 | 7.833 | 2.247 | 4.502 |
| | 168 | ROHN 6 EH | 79.372 | 43.191 | A | 0.124 | 0.202 | 5.537 | 7.833 | 2.247 | 4.502 |
| | 169 | ROHN 2 STD | 28.454 | 23.607 | C | 0.124 | 0.202 | 3.129 | 6.749 | 1.769 | 3.879 |
| | 170 | ROHN 2 STD | 28.454 | 23.607 | B | 0.124 | 0.202 | 3.129 | 6.749 | 1.769 | 3.879 |
| | 171 | ROHN 2 STD | 28.454 | 23.607 | A | 0.124 | 0.202 | 3.129 | 6.749 | 1.769 | 3.879 |
| | 172 | ROHN 3 STD | 41.933 | 28.791 | C | 0.124 | 0.202 | 3.773 | 6.735 | 2.088 | 3.871 |
| | 173 | ROHN 3 STD | 41.933 | 28.791 | C | 0.124 | 0.202 | 3.773 | 6.735 | 2.088 | 3.871 |
| | 174 | ROHN 3 STD | 41.933 | 28.791 | B | 0.124 | 0.202 | 3.773 | 6.735 | 2.088 | 3.871 |
| | 175 | ROHN 3 STD | 41.933 | 28.791 | B | 0.124 | 0.202 | 3.773 | 6.735 | 2.088 | 3.871 |
| | 176 | ROHN 3 STD | 41.933 | 28.791 | A | 0.124 | 0.202 | 3.773 | 6.735 | 2.088 | 3.871 |
| | 177 | ROHN 3 STD | 41.933 | 28.791 | A | 0.124 | 0.202 | 3.773 | 6.735 | 2.088 | 3.871 |
| | | | | | A | | Sum: | 21.747 | 35.885 | 10.439 | 20.625 |

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|----------------|--------------------------------|--------------------|-------------------|
| Job | 22027.01 - Westport | Page | 27 of 71 |
| Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| Client | Verizon | Designed by | TJL |

| Section Elevation | Elem. Num. | Size | C | C w/Ice | F a c e | e | e w/Ice | A _r | A _r w/Ice | A _r R _r | A _r R _r w/Ice | |
|-------------------|------------|--------------|--------------|---------|---------|-------|---------|-----------------|----------------------|-------------------------------|-------------------------------------|--------|
| ft | | | | | | | | ft ² | ft ² | ft ² | ft ² | |
| T9 80.00-60.00 | 184 | ROHN 2.5 STD | 33.748 | 25.148 | B | | | 21.747 | 35.885 | 10.439 | 20.625 | |
| | | | | | C | | | 21.747 | 35.885 | 10.439 | 20.625 | |
| | | 185 | ROHN 3 STD | 41.084 | 27.97 | C | 0.14 | 0.204 | 4.360 | 8.447 | 2.470 | 4.859 |
| | | 186 | ROHN 3 STD | 41.084 | 27.97 | C | 0.14 | 0.204 | 3.995 | 7.071 | 2.231 | 4.067 |
| | | 187 | ROHN 2.5 STD | 33.748 | 25.148 | B | 0.14 | 0.204 | 4.360 | 8.447 | 2.470 | 4.859 |
| | | 188 | ROHN 3 STD | 41.084 | 27.97 | B | 0.14 | 0.204 | 3.995 | 7.071 | 2.231 | 4.067 |
| | | 189 | ROHN 3 STD | 41.084 | 27.97 | B | 0.14 | 0.204 | 3.995 | 7.071 | 2.231 | 4.067 |
| | | 190 | ROHN 2.5 STD | 33.748 | 25.148 | A | 0.14 | 0.204 | 4.360 | 8.447 | 2.470 | 4.859 |
| | | 191 | ROHN 3 STD | 41.084 | 27.97 | A | 0.14 | 0.204 | 3.995 | 7.071 | 2.231 | 4.067 |
| | | 192 | ROHN 3 STD | 41.084 | 27.97 | A | 0.14 | 0.204 | 3.995 | 7.071 | 2.231 | 4.067 |
| | | 196 | ROHN 2.5 STD | 33.748 | 25.148 | C | 0.14 | 0.204 | 4.060 | 7.867 | 2.301 | 4.525 |
| | | 197 | ROHN 3 STD | 41.084 | 27.97 | C | 0.14 | 0.204 | 3.862 | 6.837 | 2.157 | 3.932 |
| | | 198 | ROHN 3 STD | 41.084 | 27.97 | C | 0.14 | 0.204 | 3.862 | 6.837 | 2.157 | 3.932 |
| | | 199 | ROHN 2.5 STD | 33.748 | 25.148 | B | 0.14 | 0.204 | 4.060 | 7.867 | 2.301 | 4.525 |
| | | 200 | ROHN 3 STD | 41.084 | 27.97 | B | 0.14 | 0.204 | 3.862 | 6.837 | 2.157 | 3.932 |
| | | 201 | ROHN 3 STD | 41.084 | 27.97 | B | 0.14 | 0.204 | 3.862 | 6.837 | 2.157 | 3.932 |
| | | 202 | ROHN 2.5 STD | 33.748 | 25.148 | A | 0.14 | 0.204 | 4.060 | 7.867 | 2.301 | 4.525 |
| | | 203 | ROHN 3 STD | 41.084 | 27.97 | A | 0.14 | 0.204 | 3.862 | 6.837 | 2.157 | 3.932 |
| | | 204 | ROHN 3 STD | 41.084 | 27.97 | A | 0.14 | 0.204 | 3.862 | 6.837 | 2.157 | 3.932 |
| | | | | | | A | | Sum: | 24.135 | 44.130 | 13.546 | 25.382 |
| | | | | | B | | | 24.135 | 44.130 | 13.546 | 25.382 | |
| | | | | | C | | | 24.135 | 44.130 | 13.546 | 25.382 | |
| T10 60.00-40.00 | 211 | ROHN 2.5 STD | 32.573 | 23.885 | C | 0.129 | 0.189 | 4.959 | 9.454 | 2.805 | 5.413 | |
| | 212 | ROHN 3 EH | 39.655 | 26.608 | C | 0.129 | 0.189 | 4.269 | 7.448 | 2.404 | 4.264 | |
| | 213 | ROHN 3 EH | 39.655 | 26.608 | C | 0.129 | 0.189 | 4.269 | 7.448 | 2.404 | 4.264 | |
| | 214 | ROHN 2.5 STD | 32.573 | 23.885 | B | 0.129 | 0.189 | 4.959 | 9.454 | 2.805 | 5.413 | |
| | 215 | ROHN 3 EH | 39.655 | 26.608 | B | 0.129 | 0.189 | 4.269 | 7.448 | 2.404 | 4.264 | |
| | 216 | ROHN 3 EH | 39.655 | 26.608 | B | 0.129 | 0.189 | 4.269 | 7.448 | 2.404 | 4.264 | |
| | 217 | ROHN 2.5 STD | 32.573 | 23.885 | A | 0.129 | 0.189 | 4.959 | 9.454 | 2.805 | 5.413 | |
| | 218 | ROHN 3 EH | 39.655 | 26.608 | A | 0.129 | 0.189 | 4.269 | 7.448 | 2.404 | 4.264 | |
| | 219 | ROHN 3 EH | 39.655 | 26.608 | A | 0.129 | 0.189 | 4.269 | 7.448 | 2.404 | 4.264 | |
| | 223 | ROHN 2.5 STD | 32.573 | 23.885 | C | 0.129 | 0.189 | 4.659 | 8.883 | 2.636 | 5.086 | |
| | 224 | ROHN 3 EH | 39.655 | 26.608 | C | 0.129 | 0.189 | 4.130 | 7.206 | 2.326 | 4.126 | |
| | 225 | ROHN 3 EH | 39.655 | 26.608 | C | 0.129 | 0.189 | 4.130 | 7.206 | 2.326 | 4.126 | |
| | 226 | ROHN 2.5 STD | 32.573 | 23.885 | B | 0.129 | 0.189 | 4.659 | 8.883 | 2.636 | 5.086 | |
| | 227 | ROHN 3 EH | 39.655 | 26.608 | B | 0.129 | 0.189 | 4.130 | 7.206 | 2.326 | 4.126 | |
| | 228 | ROHN 3 EH | 39.655 | 26.608 | B | 0.129 | 0.189 | 4.130 | 7.206 | 2.326 | 4.126 | |
| | 229 | ROHN 2.5 STD | 32.573 | 23.885 | A | 0.129 | 0.189 | 4.659 | 8.883 | 2.636 | 5.086 | |
| 230 | ROHN 3 EH | 39.655 | 26.608 | A | 0.129 | 0.189 | 4.130 | 7.206 | 2.326 | 4.126 | | |
| 231 | ROHN 3 EH | 39.655 | 26.608 | A | 0.129 | 0.189 | 4.130 | 7.206 | 2.326 | 4.126 | | |
| | | | | | A | | Sum: | 26.417 | 47.644 | 14.901 | 27.279 | |
| | | | | | B | | | 26.417 | 47.644 | 14.901 | 27.279 | |
| | | | | | C | | | 26.417 | 47.644 | 14.901 | 27.279 | |
| T11 40.00-30.00 | 238 | ROHN 2.5 STD | 31.373 | 22.621 | C | 0.123 | 0.178 | 5.258 | 9.858 | 2.973 | 5.629 | |
| | 239 | ROHN 3 EH | 38.193 | 25.244 | C | 0.123 | 0.178 | 4.410 | 7.579 | 2.493 | 4.328 | |
| | 240 | ROHN 3 EH | 38.193 | 25.244 | C | 0.123 | 0.178 | 4.410 | 7.579 | 2.493 | 4.328 | |
| | 241 | ROHN 2.5 STD | 31.373 | 22.621 | B | 0.123 | 0.178 | 5.258 | 9.858 | 2.973 | 5.629 | |
| | 242 | ROHN 3 EH | 38.193 | 25.244 | B | 0.123 | 0.178 | 4.410 | 7.579 | 2.493 | 4.328 | |
| | 243 | ROHN 3 EH | 38.193 | 25.244 | B | 0.123 | 0.178 | 4.410 | 7.579 | 2.493 | 4.328 | |
| | 244 | ROHN 2.5 STD | 31.373 | 22.621 | A | 0.123 | 0.178 | 5.258 | 9.858 | 2.973 | 5.629 | |
| | 245 | ROHN 3 EH | 38.193 | 25.244 | A | 0.123 | 0.178 | 4.410 | 7.579 | 2.493 | 4.328 | |
| | 246 | ROHN 3 EH | 38.193 | 25.244 | A | 0.123 | 0.178 | 4.410 | 7.579 | 2.493 | 4.328 | |
| | | | | | | A | | Sum: | 14.079 | 25.017 | 7.959 | 14.285 |
| | | | | | B | | | 14.079 | 25.017 | 7.959 | 14.285 | |
| | | | | | C | | | 14.079 | 25.017 | 7.959 | 14.285 | |
| T12 30.00-20.00 | 253 | ROHN 2.5 EH | 30.281 | 21.497 | C | 0.119 | 0.172 | 5.558 | 10.258 | 3.141 | 5.849 | |
| | 254 | ROHN 2.5 EH | 30.281 | 21.497 | B | 0.119 | 0.172 | 5.558 | 10.258 | 3.141 | 5.849 | |
| | 255 | ROHN 2.5 EH | 30.281 | 21.497 | A | 0.119 | 0.172 | 5.558 | 10.258 | 3.141 | 5.849 | |
| | 256 | ROHN 3 EH | 36.864 | 24.029 | C | 0.119 | 0.172 | 4.555 | 7.719 | 2.574 | 4.401 | |

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| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job 22027.01 - Westport | Page 28 of 71 |
| | Project 180-ft Lattice Tower (CSP #32) | Date 08:43:42 04/05/22 |
| | Client Verizon | Designed by TJL |

| Section Elevation | Elem. Num. | Size | C | C w/Ice | F a c e | e | e w/Ice | A _r | A _r w/Ice | A _r R _r | A _r R _r w/Ice | |
|-------------------|------------|--------------|--------|---------|---------|-------|---------|-----------------|----------------------|-------------------------------|-------------------------------------|--------|
| ft | | | | | | | | ft ² | ft ² | ft ² | ft ² | |
| T13 20.00-0.00 | 257 | ROHN 3 EH | 36.864 | 24.029 | C | 0.119 | 0.172 | 4.555 | 7.719 | 2.574 | 4.401 | |
| | 258 | ROHN 3 EH | 36.864 | 24.029 | B | 0.119 | 0.172 | 4.555 | 7.719 | 2.574 | 4.401 | |
| | 259 | ROHN 3 EH | 36.864 | 24.029 | B | 0.119 | 0.172 | 4.555 | 7.719 | 2.574 | 4.401 | |
| | 260 | ROHN 3 EH | 36.864 | 24.029 | A | 0.119 | 0.172 | 4.555 | 7.719 | 2.574 | 4.401 | |
| | 261 | ROHN 3 EH | 36.864 | 24.029 | A | 0.119 | 0.172 | 4.555 | 7.719 | 2.574 | 4.401 | |
| | | | | | | | Sum: | | 14.667 | 25.696 | 8.288 | 14.650 |
| | | | | | | | B | | 14.667 | 25.696 | 8.288 | 14.650 |
| | | | | | | | C | | 14.667 | 25.696 | 8.288 | 14.650 |
| | 268 | P3.5x.226 | 39.951 | 23.889 | C | 0.108 | 0.152 | 8.153 | 12.675 | 4.570 | 7.195 | |
| | 269 | ROHN 3 EH | 34.957 | 21.968 | C | 0.108 | 0.152 | 6.913 | 11.295 | 3.903 | 6.412 | |
| | 270 | ROHN 1.5 STD | 18.977 | 15.822 | C | 0.108 | 0.152 | 0.940 | 2.037 | 0.531 | 1.156 | |
| | 271 | ROHN 2 STD | 23.721 | 17.646 | C | 0.108 | 0.152 | 2.132 | 4.124 | 1.204 | 2.341 | |
| | 272 | ROHN 3 EH | 34.957 | 21.968 | C | 0.108 | 0.152 | 6.913 | 11.295 | 3.903 | 6.412 | |
| | 273 | ROHN 1.5 STD | 18.977 | 15.822 | C | 0.108 | 0.152 | 0.940 | 2.037 | 0.531 | 1.156 | |
| | 274 | ROHN 2 STD | 23.721 | 17.646 | C | 0.108 | 0.152 | 2.132 | 4.124 | 1.204 | 2.341 | |
| | 275 | P3.5x.226 | 39.951 | 23.889 | B | 0.108 | 0.152 | 8.153 | 12.675 | 4.570 | 7.195 | |
| | 276 | ROHN 3 EH | 34.957 | 21.968 | B | 0.108 | 0.152 | 6.913 | 11.295 | 3.903 | 6.412 | |
| | 277 | ROHN 1.5 STD | 18.977 | 15.822 | B | 0.108 | 0.152 | 0.940 | 2.037 | 0.531 | 1.156 | |
| | 278 | ROHN 2 STD | 23.721 | 17.646 | B | 0.108 | 0.152 | 2.132 | 4.124 | 1.204 | 2.341 | |
| | 279 | ROHN 3 EH | 34.957 | 21.968 | B | 0.108 | 0.152 | 6.913 | 11.295 | 3.903 | 6.412 | |
| | 280 | ROHN 1.5 STD | 18.977 | 15.822 | B | 0.108 | 0.152 | 0.940 | 2.037 | 0.531 | 1.156 | |
| | 281 | ROHN 2 STD | 23.721 | 17.646 | B | 0.108 | 0.152 | 2.132 | 4.124 | 1.204 | 2.341 | |
| | 283 | P3.5x.226 | 39.951 | 23.889 | A | 0.108 | 0.152 | 8.153 | 12.675 | 4.570 | 7.195 | |
| | 284 | ROHN 3 EH | 34.957 | 21.968 | A | 0.108 | 0.152 | 6.913 | 11.295 | 3.903 | 6.412 | |
| | 285 | ROHN 1.5 STD | 18.977 | 15.822 | A | 0.108 | 0.152 | 0.940 | 2.037 | 0.531 | 1.156 | |
| | 286 | ROHN 2 STD | 23.721 | 17.646 | A | 0.108 | 0.152 | 2.132 | 4.124 | 1.204 | 2.341 | |
| | 287 | ROHN 3 EH | 34.957 | 21.968 | A | 0.108 | 0.152 | 6.913 | 11.295 | 3.903 | 6.412 | |
| | 288 | ROHN 1.5 STD | 18.977 | 15.822 | A | 0.108 | 0.152 | 0.940 | 2.037 | 0.531 | 1.156 | |
| | 289 | ROHN 2 STD | 23.721 | 17.646 | A | 0.108 | 0.152 | 2.132 | 4.124 | 1.204 | 2.341 | |
| | | | | | | | Sum: | | 28.122 | 47.586 | 15.844 | 27.015 |
| | | | | | | | B | | 28.122 | 47.586 | 15.844 | 27.015 |
| | | | | | | | C | | 28.122 | 47.586 | 15.844 | 27.015 |

222-H Section Verification Tables - No Ice

| Section Elevation | z _{wind} | z _{ice} | K _z | K _d | K _{zt} | t _z | q _z | F a c e | e | A _r R _r |
|-------------------|-------------------|------------------|----------------|----------------|-----------------|----------------|----------------|---------|-------|-------------------------------|
| ft | ft | ft | | | | in | psf | | | ft ² |
| T1 180.00-160.00 | 170.00 | | 1.415 | 1 | 1 | | 52 | A | 0.139 | 13.713 |
| | | | | | | | | B | 0.139 | 13.713 |
| | | | | | | | | C | 0.139 | 13.713 |
| T2 160.00-140.00 | 150.00 | | 1.378 | 1 | 1 | | 51 | A | 0.143 | 15.269 |
| | | | | | | | | B | 0.143 | 15.269 |
| | | | | | | | | C | 0.143 | 15.269 |
| T3 140.00-133.33 | 136.67 | | 1.352 | 1 | 1 | | 50 | A | 0.151 | 5.828 |
| | | | | | | | | B | 0.151 | 5.828 |
| | | | | | | | | C | 0.151 | 5.828 |
| T4 133.33-126.67 | 130.00 | | 1.337 | 1 | 1 | | 49 | A | 0.145 | 5.951 |
| | | | | | | | | B | 0.145 | 5.951 |
| | | | | | | | | C | 0.145 | 5.951 |
| T5 126.67-120.00 | 123.33 | | 1.323 | 1 | 1 | | 49 | A | 0.14 | 6.074 |
| | | | | | | | | B | 0.14 | 6.074 |
| | | | | | | | | B | 0.14 | 6.074 |

| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 29 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Section Elevation | z_{wind} | z_{ice} | K_z | K_h | K_{zt} | t_z | q_z | F a c e | e | $A_s R_r$ |
|----------------------|------------|-----------|-------|-------|----------|-------|-------|--------------------------|-------|-----------------|
| ft | ft | ft | | | | in | psf | | | ft ² |
| T6 120.00-100.00 | 110.00 | | 1.291 | 1 | 1 | | 47 | C | 0.14 | 6.074 |
| | | | | | | | | A | 0.133 | 18.396 |
| | | | | | | | | B | 0.133 | 18.396 |
| T7 100.00-90.00 | 95.00 | | 1.252 | 1 | 1 | | 46 | C | 0.133 | 18.396 |
| | | | | | | | | A | 0.131 | 10.175 |
| | | | | | | | | B | 0.131 | 10.175 |
| T8 90.00-80.00 | 85.00 | | 1.223 | 1 | 1 | | 45 | C | 0.131 | 10.175 |
| | | | | | | | | A | 0.124 | 10.439 |
| | | | | | | | | B | 0.124 | 10.439 |
| T9 80.00-60.00 | 70.00 | | 1.174 | 1 | 1 | | 43 | C | 0.124 | 10.439 |
| | | | | | | | | A | 0.14 | 13.546 |
| | | | | | | | | B | 0.14 | 13.546 |
| T10 60.00-40.00 | 50.00 | | 1.094 | 1 | 1 | | 40 | C | 0.14 | 13.546 |
| | | | | | | | | A | 0.129 | 14.901 |
| | | | | | | | | B | 0.129 | 14.901 |
| T11 40.00-30.00 | 35.00 | | 1.015 | 1 | 1 | | 37 | C | 0.129 | 14.901 |
| | | | | | | | | A | 0.123 | 7.959 |
| | | | | | | | | B | 0.123 | 7.959 |
| T12 30.00-20.00 | 25.00 | | 0.945 | 1 | 1 | | 35 | C | 0.123 | 7.959 |
| | | | | | | | | A | 0.119 | 8.288 |
| | | | | | | | | B | 0.119 | 8.288 |
| T13 20.00-0.00 | 10.00 | | 0.85 | 1 | 1 | | 31 | C | 0.119 | 8.288 |
| | | | | | | | | A | 0.108 | 15.844 |
| | | | | | | | | B | 0.108 | 15.844 |
| | | | | | | | | C | 0.108 | 15.844 |

222-H Section Verification Tables - Ice

| Section Elevation | z_{wind} | z_{ice} | K_z | K_h | K_{zt} | t_z | q_z | F a c e | e | $A_s R_r$ |
|----------------------|------------|-----------|-------|-------|----------|--------|-------|--------------------------|-------|-----------------|
| ft | ft | ft | | | | in | psf | | | ft ² |
| T1 180.00-160.00 | 170.00 | 170.00 | 1.415 | 1 | 1 | 1.4727 | 8 | A | 0.285 | 30.840 |
| | | | | | | | | B | 0.285 | 30.840 |
| | | | | | | | | C | 0.285 | 30.840 |
| T2 160.00-140.00 | 150.00 | 150.00 | 1.378 | 1 | 1 | 1.4543 | 7 | A | 0.276 | 33.556 |
| | | | | | | | | B | 0.276 | 33.556 |
| | | | | | | | | C | 0.276 | 33.556 |
| T3 140.00-133.33 | 136.67 | 136.67 | 1.352 | 1 | 1 | 1.4409 | 7 | A | 0.271 | 12.561 |
| | | | | | | | | B | 0.271 | 12.561 |
| | | | | | | | | C | 0.271 | 12.561 |
| T4 133.33-126.67 | 130.00 | 130.00 | 1.337 | 1 | 1 | 1.4337 | 7 | A | 0.262 | 12.781 |
| | | | | | | | | B | 0.262 | 12.781 |
| | | | | | | | | C | 0.262 | 12.781 |
| T5 126.67-120.00 | 123.33 | 123.33 | 1.323 | 1 | 1 | 1.4262 | 7 | A | 0.253 | 13.001 |
| | | | | | | | | B | 0.253 | 13.001 |
| | | | | | | | | C | 0.253 | 13.001 |
| T6 120.00-100.00 | 110.00 | 110.00 | 1.291 | 1 | 1 | 1.4099 | 7 | A | 0.222 | 37.718 |
| | | | | | | | | B | 0.222 | 37.718 |
| | | | | | | | | C | 0.222 | 37.718 |
| T7 100.00-90.00 | 95.00 | 95.00 | 1.252 | 1 | 1 | 1.3894 | 7 | A | 0.212 | 20.193 |
| | | | | | | | | B | 0.212 | 20.193 |
| | | | | | | | | C | 0.212 | 20.193 |
| T8 90.00-80.00 | 85.00 | 85.00 | 1.223 | 1 | 1 | 1.3740 | 7 | A | 0.202 | 20.625 |
| | | | | | | | | B | 0.202 | 20.625 |
| | | | | | | | | C | 0.202 | 20.625 |
| T9 80.00-60.00 | 70.00 | 70.00 | 1.174 | 1 | 1 | 1.3476 | 6 | A | 0.204 | 25.382 |

| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 30 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Section Elevation | z_{wind} | z_{ice} | K_z | K_h | K_{zt} | t_z | q_z | F_{ac} | e | $A_e R_r$ |
|-------------------|------------|-----------|-------|-------|----------|--------|-------|----------|-------|-----------------|
| ft | ft | ft | | | | in | psf | e | | ft ² |
| T10 60.00-40.00 | 50.00 | 50.00 | 1.094 | 1 | 1 | 1.3030 | 6 | B | 0.204 | 25.382 |
| | | | | | | | | C | 0.204 | 25.382 |
| | | | | | | | | A | 0.189 | 27.279 |
| T11 40.00-30.00 | 35.00 | 35.00 | 1.015 | 1 | 1 | 1.2574 | 6 | B | 0.189 | 27.279 |
| | | | | | | | | C | 0.189 | 27.279 |
| | | | | | | | | A | 0.178 | 14.285 |
| T12 30.00-20.00 | 25.00 | 25.00 | 0.945 | 1 | 1 | 1.2158 | 5 | B | 0.178 | 14.285 |
| | | | | | | | | C | 0.178 | 14.285 |
| | | | | | | | | A | 0.172 | 14.650 |
| T13 20.00-0.00 | 10.00 | 10.00 | 0.85 | 1 | 1 | 1.1093 | 5 | B | 0.172 | 14.650 |
| | | | | | | | | C | 0.172 | 14.650 |
| | | | | | | | | A | 0.152 | 27.015 |
| | | | | | | | | B | 0.152 | 27.015 |
| | | | | | | | | C | 0.152 | 27.015 |

222-H Section Verification Tables - Service

| Section Elevation | z_{wind} | z_{ice} | K_z | K_h | K_{zt} | t_z | q_z | F_{ac} | e | $A_e R_r$ |
|-------------------|------------|-----------|-------|-------|----------|-------|-------|----------|-------|-----------------|
| ft | ft | ft | | | | in | psf | e | | ft ² |
| T1 180.00-160.00 | 170.00 | | 1.415 | 1 | 1 | | 11 | A | 0.139 | 13.993 |
| | | | | | | | | B | 0.139 | 13.993 |
| | | | | | | | | C | 0.139 | 13.993 |
| T2 160.00-140.00 | 150.00 | | 1.378 | 1 | 1 | | 11 | A | 0.143 | 16.334 |
| | | | | | | | | B | 0.143 | 16.334 |
| | | | | | | | | C | 0.143 | 16.334 |
| T3 140.00-133.33 | 136.67 | | 1.352 | 1 | 1 | | 11 | A | 0.151 | 6.561 |
| | | | | | | | | B | 0.151 | 6.561 |
| | | | | | | | | C | 0.151 | 6.561 |
| T4 133.33-126.67 | 130.00 | | 1.337 | 1 | 1 | | 10 | A | 0.145 | 6.687 |
| | | | | | | | | B | 0.145 | 6.687 |
| | | | | | | | | C | 0.145 | 6.687 |
| T5 126.67-120.00 | 123.33 | | 1.323 | 1 | 1 | | 10 | A | 0.14 | 6.810 |
| | | | | | | | | B | 0.14 | 6.810 |
| | | | | | | | | C | 0.14 | 6.810 |
| T6 120.00-100.00 | 110.00 | | 1.291 | 1 | 1 | | 10 | A | 0.133 | 21.840 |
| | | | | | | | | B | 0.133 | 21.840 |
| | | | | | | | | C | 0.133 | 21.840 |
| T7 100.00-90.00 | 95.00 | | 1.252 | 1 | 1 | | 10 | A | 0.131 | 12.011 |
| | | | | | | | | B | 0.131 | 12.011 |
| | | | | | | | | C | 0.131 | 12.011 |
| T8 90.00-80.00 | 85.00 | | 1.223 | 1 | 1 | | 10 | A | 0.124 | 12.296 |
| | | | | | | | | B | 0.124 | 12.296 |
| | | | | | | | | C | 0.124 | 12.296 |
| T9 80.00-60.00 | 70.00 | | 1.174 | 1 | 1 | | 9 | A | 0.14 | 13.674 |
| | | | | | | | | B | 0.14 | 13.674 |
| | | | | | | | | C | 0.14 | 13.674 |
| T10 60.00-40.00 | 50.00 | | 1.094 | 1 | 1 | | 9 | A | 0.129 | 14.945 |
| | | | | | | | | B | 0.129 | 14.945 |
| | | | | | | | | C | 0.129 | 14.945 |
| T11 40.00-30.00 | 35.00 | | 1.015 | 1 | 1 | | 8 | A | 0.123 | 7.959 |
| | | | | | | | | B | 0.123 | 7.959 |
| | | | | | | | | C | 0.123 | 7.959 |
| T12 30.00-20.00 | 25.00 | | 0.945 | 1 | 1 | | 7 | A | 0.119 | 8.288 |
| | | | | | | | | B | 0.119 | 8.288 |
| | | | | | | | | C | 0.119 | 8.288 |

| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 31 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Section Elevation | z_{wind} | z_{ice} | K_z | K_h | K_{zt} | t_z | q_z | F_{ac} | e | A_{R_r} |
|-------------------|------------|-----------|-------|-------|----------|-------|-------|----------|-------|-----------------|
| ft | ft | ft | | | | in | psf | | | ft ² |
| T13 20.00-0.00 | 10.00 | | 0.85 | 1 | 1 | | 7 | A | 0.108 | 15.877 |
| | | | | | | | | B | 0.108 | 15.877 |
| | | | | | | | | C | 0.108 | 15.877 |

Tower Pressures - No Ice

$G_H = 0.850$

| Section Elevation | z | K_z | q_z | A_G | F_{ac} | A_F | A_R | A_{leg} | Leg % | C_{AA} In Face | C_{AA} Out Face |
|-------------------|--------|-------|-------|-----------------|-----------------|-----------------|-----------------|-----------------|-------|------------------|-------------------|
| ft | ft | | psf | ft ² | ft ² | ft ² | ft ² | ft ² | | ft ² | ft ² |
| T1 180.00-160.00 | 170.00 | 1.415 | 52 | 177.503 | A 0.000 | 0.000 | 24.699 | 11.667 | 47.24 | 15.281 | 0.000 |
| | | | | | B 0.000 | 0.000 | 24.699 | | 47.24 | 0.000 | 0.000 |
| | | | | | C 0.000 | 0.000 | 24.699 | | 47.24 | 0.000 | 0.000 |
| T2 160.00-140.00 | 150.00 | 1.378 | 51 | 200.850 | A 0.000 | 0.000 | 28.812 | 15.027 | 52.16 | 56.607 | 0.000 |
| | | | | | B 0.000 | 0.000 | 28.812 | | 52.16 | 0.000 | 0.000 |
| | | | | | C 0.000 | 0.000 | 28.812 | | 52.16 | 0.000 | 0.000 |
| T3 140.00-133.33 | 136.67 | 1.352 | 50 | 76.803 | A 0.000 | 0.000 | 11.559 | 6.192 | 53.57 | 18.869 | 0.000 |
| | | | | | B 0.000 | 0.000 | 11.559 | | 53.57 | 0.000 | 0.000 |
| | | | | | C 0.000 | 0.000 | 11.559 | | 53.57 | 0.000 | 0.000 |
| T4 133.33-126.67 | 130.00 | 1.337 | 49 | 81.431 | A 0.000 | 0.000 | 11.792 | 6.192 | 52.51 | 18.869 | 0.000 |
| | | | | | B 0.000 | 0.000 | 11.792 | | 52.51 | 14.852 | 0.000 |
| | | | | | C 0.000 | 0.000 | 11.792 | | 52.51 | 0.000 | 0.000 |
| T5 126.67-120.00 | 123.33 | 1.323 | 49 | 86.060 | A 0.000 | 0.000 | 12.020 | 6.192 | 51.52 | 18.869 | 0.000 |
| | | | | | B 0.000 | 0.000 | 12.020 | | 51.52 | 24.913 | 0.000 |
| | | | | | C 0.000 | 0.000 | 12.020 | | 51.52 | 0.000 | 0.000 |
| T6 120.00-100.00 | 110.00 | 1.291 | 47 | 289.399 | A 0.000 | 0.000 | 38.583 | 22.130 | 57.36 | 57.426 | 0.000 |
| | | | | | B 0.000 | 0.000 | 38.583 | | 57.36 | 84.017 | 0.000 |
| | | | | | C 0.000 | 0.000 | 38.583 | | 57.36 | 0.000 | 0.000 |
| T7 100.00-90.00 | 95.00 | 1.252 | 46 | 162.540 | A 0.000 | 0.000 | 21.227 | 11.074 | 52.17 | 28.934 | 0.000 |
| | | | | | B 0.000 | 0.000 | 21.227 | | 52.17 | 42.009 | 0.000 |
| | | | | | C 0.000 | 0.000 | 21.227 | | 52.17 | 0.000 | 0.000 |
| T8 90.00-80.00 | 85.00 | 1.223 | 45 | 175.715 | A 0.000 | 0.000 | 21.747 | 11.074 | 50.92 | 28.934 | 0.000 |
| | | | | | B 0.000 | 0.000 | 21.747 | | 50.92 | 42.009 | 0.000 |
| | | | | | C 0.000 | 0.000 | 21.747 | | 50.92 | 0.000 | 0.000 |
| T9 80.00-60.00 | 70.00 | 1.174 | 43 | 390.971 | A 30.496 | 30.496 | 24.135 | 30.496 | 55.82 | 57.930 | 0.000 |
| | | | | | B 30.496 | 30.496 | 24.135 | | 55.82 | 84.017 | 0.000 |
| | | | | | C 30.496 | 30.496 | 24.135 | | 55.82 | 0.000 | 0.000 |
| T10 60.00-40.00 | 50.00 | 1.094 | 40 | 440.971 | A 30.496 | 30.496 | 26.417 | 30.496 | 53.58 | 59.127 | 0.000 |
| | | | | | B 30.496 | 30.496 | 26.417 | | 53.58 | 84.017 | 0.000 |
| | | | | | C 30.496 | 30.496 | 26.417 | | 53.58 | 0.000 | 0.000 |
| T11 40.00-30.00 | 35.00 | 1.015 | 37 | 239.236 | A 15.248 | 15.248 | 14.079 | 15.248 | 51.99 | 29.564 | 0.000 |
| | | | | | B 15.248 | 15.248 | 14.079 | | 51.99 | 42.009 | 0.000 |
| | | | | | C 15.248 | 15.248 | 14.079 | | 51.99 | 0.000 | 0.000 |
| T12 30.00-20.00 | 25.00 | 0.945 | 35 | 251.736 | A 15.248 | 15.248 | 14.667 | 15.248 | 50.97 | 29.564 | 0.000 |
| | | | | | B 15.248 | 15.248 | 14.667 | | 50.97 | 42.009 | 0.000 |
| | | | | | C 15.248 | 15.248 | 14.667 | | 50.97 | 0.000 | 0.000 |
| T13 20.00-0.00 | 10.00 | 0.85 | 31 | 541.368 | A 30.078 | 30.078 | 28.122 | 30.078 | 51.68 | 59.127 | 0.000 |
| | | | | | B 30.078 | 30.078 | 28.122 | | 51.68 | 84.017 | 0.000 |
| | | | | | C 30.078 | 30.078 | 28.122 | | 51.68 | 0.000 | 0.000 |

Tower Pressure - With Ice

| | | |
|--|--|----------------------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job 22027.01 - Westport | Page 32 of 71 |
| | Project 180-ft Lattice Tower (CSP #32) | Date 08:43:42 04/05/22 |
| | Client Verizon | Designed by TJL |

$$G_H = 0.850$$

| Section Elevation ft | z ft | K _Z | q _z psf | t _z in | A _G ft ² | F a c e | A _F ft ² | A _R ft ² | A _{leg} ft ² | Leg % | C _A A _A In Face ft ² | C _A A _A Out Face ft ² |
|-------------------------|---------|----------------|-----------------------|----------------------|-----------------------------------|------------------|-----------------------------------|-----------------------------------|-------------------------------------|----------|--|---|
| T1 180.00-160.00 | 170.00 | 1.415 | 8 | 1.4727 | 182.412 | A | 0.000 | 51.898 | 21.484 | 41.40 | 43.556 | 0.000 |
| | | | | | | B | 0.000 | 51.898 | | | 0.000 | 0.000 |
| | | | | | | C | 0.000 | 51.898 | | | 0.000 | 0.000 |
| T2 160.00-140.00 | 150.00 | 1.378 | 7 | 1.4543 | 205.705 | A | 0.000 | 56.708 | 24.740 | 43.63 | 159.660 | 0.000 |
| | | | | | | B | 0.000 | 56.708 | | | 0.000 | 0.000 |
| | | | | | | C | 0.000 | 56.708 | | | 0.000 | 0.000 |
| T3 140.00-133.33 | 136.67 | 1.352 | 7 | 1.4409 | 78.406 | A | 0.000 | 21.270 | 9.400 | 44.19 | 53.019 | 0.000 |
| | | | | | | B | 0.000 | 21.270 | | | 0.000 | 0.000 |
| | | | | | | C | 0.000 | 21.270 | | | 0.000 | 0.000 |
| T4 133.33-126.67 | 130.00 | 1.337 | 7 | 1.4337 | 83.027 | A | 0.000 | 21.736 | 9.384 | 43.17 | 52.912 | 0.000 |
| | | | | | | B | 0.000 | 21.736 | | | 0.000 | 0.000 |
| | | | | | | C | 0.000 | 21.736 | | | 0.000 | 0.000 |
| T5 126.67-120.00 | 123.33 | 1.323 | 7 | 1.4262 | 87.647 | A | 0.000 | 22.194 | 9.367 | 42.21 | 52.800 | 0.000 |
| | | | | | | B | 0.000 | 22.194 | | | 0.000 | 0.000 |
| | | | | | | C | 0.000 | 22.194 | | | 0.000 | 0.000 |
| T6 120.00-100.00 | 110.00 | 1.291 | 7 | 1.4099 | 294.106 | A | 0.000 | 65.187 | 31.549 | 48.40 | 162.161 | 0.000 |
| | | | | | | B | 0.000 | 65.187 | | | 0.000 | 0.000 |
| | | | | | | C | 0.000 | 65.187 | | | 0.000 | 0.000 |
| T7 100.00-90.00 | 95.00 | 1.252 | 7 | 1.3894 | 164.861 | A | 0.000 | 35.011 | 15.718 | 44.90 | 81.789 | 0.000 |
| | | | | | | B | 0.000 | 35.011 | | | 0.000 | 0.000 |
| | | | | | | C | 0.000 | 35.011 | | | 0.000 | 0.000 |
| T8 90.00-80.00 | 85.00 | 1.223 | 7 | 1.3740 | 178.010 | A | 0.000 | 35.885 | 15.667 | 43.66 | 81.415 | 0.000 |
| | | | | | | B | 0.000 | 35.885 | | | 0.000 | 0.000 |
| | | | | | | C | 0.000 | 35.885 | | | 0.000 | 0.000 |
| T9 80.00-60.00 | 70.00 | 1.174 | 6 | 1.3476 | 395.472 | A | 36.501 | 44.130 | 36.501 | 45.27 | 161.878 | 0.000 |
| | | | | | | B | 36.501 | 44.130 | | | 0.000 | 0.000 |
| | | | | | | C | 36.501 | 44.130 | | | 0.000 | 0.000 |
| T10 60.00-40.00 | 50.00 | 1.094 | 6 | 1.3030 | 445.323 | A | 36.302 | 47.644 | 36.302 | 43.24 | 165.850 | 0.000 |
| | | | | | | B | 36.302 | 47.644 | | | 0.000 | 0.000 |
| | | | | | | C | 36.302 | 47.644 | | | 0.000 | 0.000 |
| T11 40.00-30.00 | 35.00 | 1.015 | 6 | 1.2574 | 241.335 | A | 18.049 | 25.017 | 18.049 | 41.91 | 81.724 | 0.000 |
| | | | | | | B | 18.049 | 25.017 | | | 0.000 | 0.000 |
| | | | | | | C | 18.049 | 25.017 | | | 0.000 | 0.000 |
| T12 30.00-20.00 | 25.00 | 0.945 | 5 | 1.2158 | 253.766 | A | 17.957 | 25.696 | 17.957 | 41.14 | 80.630 | 0.000 |
| | | | | | | B | 17.957 | 25.696 | | | 0.000 | 0.000 |
| | | | | | | C | 17.957 | 25.696 | | | 0.000 | 0.000 |
| T13 20.00-0.00 | 10.00 | 0.85 | 5 | 1.1093 | 545.073 | A | 35.021 | 47.586 | 35.021 | 42.39 | 155.667 | 0.000 |
| | | | | | | B | 35.021 | 47.586 | | | 0.000 | 0.000 |
| | | | | | | C | 35.021 | 47.586 | | | 0.000 | 0.000 |

Tower Pressure - Service

$$G_H = 0.850$$

| Section Elevation ft | z ft | K _Z | q _z psf | A _G ft ² | F a c e | A _F ft ² | A _R ft ² | A _{leg} ft ² | Leg % | C _A A _A In Face ft ² | C _A A _A Out Face ft ² |
|-------------------------|---------|----------------|-----------------------|-----------------------------------|------------------|-----------------------------------|-----------------------------------|-------------------------------------|----------|--|---|
| T1 180.00-160.00 | 170.00 | 1.415 | 11 | 177.503 | A | 0.000 | 24.699 | 11.667 | 47.24 | 15.281 | 0.000 |
| | | | | | B | 0.000 | 24.699 | | | 0.000 | 0.000 |
| | | | | | C | 0.000 | 24.699 | | | 0.000 | 0.000 |
| T2 160.00-140.00 | 150.00 | 1.378 | 11 | 200.850 | A | 0.000 | 28.812 | 15.027 | 52.16 | 56.607 | 0.000 |
| | | | | | B | 0.000 | 28.812 | | | 0.000 | 0.000 |

| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 33 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Section Elevation ft | z ft | K _Z | q _z psf | A _G ft ² | F _a c e | A _F ft ² | A _R ft ² | A _{leg} ft ² | Leg % | C _{AA} In Face ft ² | C _{AA} Out Face ft ² |
|-------------------------|---------|----------------|-----------------------|-----------------------------------|--------------------------|-----------------------------------|-----------------------------------|-------------------------------------|----------|--|---|
| T3 140.00-133.33 | 136.67 | 1.352 | 11 | 76.803 | C | 0.000 | 28.812 | | 52.16 | 0.000 | 0.000 |
| | | | | | A | 0.000 | 11.559 | 6.192 | 53.57 | 18.869 | 0.000 |
| | | | | | B | 0.000 | 11.559 | | 53.57 | 0.000 | 0.000 |
| | | | | | C | 0.000 | 11.559 | | 53.57 | 0.000 | 0.000 |
| T4 133.33-126.67 | 130.00 | 1.337 | 10 | 81.431 | A | 0.000 | 11.792 | 6.192 | 52.51 | 18.869 | 0.000 |
| | | | | | B | 0.000 | 11.792 | | 52.51 | 14.852 | 0.000 |
| | | | | | C | 0.000 | 11.792 | | 52.51 | 0.000 | 0.000 |
| T5 126.67-120.00 | 123.33 | 1.323 | 10 | 86.060 | A | 0.000 | 12.020 | 6.192 | 51.52 | 18.869 | 0.000 |
| | | | | | B | 0.000 | 12.020 | | 51.52 | 24.913 | 0.000 |
| | | | | | C | 0.000 | 12.020 | | 51.52 | 0.000 | 0.000 |
| T6 120.00-100.00 | 110.00 | 1.291 | 10 | 289.399 | A | 0.000 | 38.583 | 22.130 | 57.36 | 57.426 | 0.000 |
| | | | | | B | 0.000 | 38.583 | | 57.36 | 84.017 | 0.000 |
| | | | | | C | 0.000 | 38.583 | | 57.36 | 0.000 | 0.000 |
| T7 100.00-90.00 | 95.00 | 1.252 | 10 | 162.540 | A | 0.000 | 21.227 | 11.074 | 52.17 | 28.934 | 0.000 |
| | | | | | B | 0.000 | 21.227 | | 52.17 | 42.009 | 0.000 |
| | | | | | C | 0.000 | 21.227 | | 52.17 | 0.000 | 0.000 |
| T8 90.00-80.00 | 85.00 | 1.223 | 10 | 175.715 | A | 0.000 | 21.747 | 11.074 | 50.92 | 28.934 | 0.000 |
| | | | | | B | 0.000 | 21.747 | | 50.92 | 42.009 | 0.000 |
| | | | | | C | 0.000 | 21.747 | | 50.92 | 0.000 | 0.000 |
| T9 80.00-60.00 | 70.00 | 1.174 | 9 | 390.971 | A | 30.496 | 24.135 | 30.496 | 55.82 | 57.930 | 0.000 |
| | | | | | B | 30.496 | 24.135 | | 55.82 | 84.017 | 0.000 |
| | | | | | C | 30.496 | 24.135 | | 55.82 | 0.000 | 0.000 |
| T10 60.00-40.00 | 50.00 | 1.094 | 9 | 440.971 | A | 30.496 | 26.417 | 30.496 | 53.58 | 59.127 | 0.000 |
| | | | | | B | 30.496 | 26.417 | | 53.58 | 84.017 | 0.000 |
| | | | | | C | 30.496 | 26.417 | | 53.58 | 0.000 | 0.000 |
| T11 40.00-30.00 | 35.00 | 1.015 | 8 | 239.236 | A | 15.248 | 14.079 | 15.248 | 51.99 | 29.564 | 0.000 |
| | | | | | B | 15.248 | 14.079 | | 51.99 | 42.009 | 0.000 |
| | | | | | C | 15.248 | 14.079 | | 51.99 | 0.000 | 0.000 |
| T12 30.00-20.00 | 25.00 | 0.945 | 7 | 251.736 | A | 15.248 | 14.667 | 15.248 | 50.97 | 29.564 | 0.000 |
| | | | | | B | 15.248 | 14.667 | | 50.97 | 42.009 | 0.000 |
| | | | | | C | 15.248 | 14.667 | | 50.97 | 0.000 | 0.000 |
| T13 20.00-0.00 | 10.00 | 0.85 | 7 | 541.368 | A | 30.078 | 28.122 | 30.078 | 51.68 | 59.127 | 0.000 |
| | | | | | B | 30.078 | 28.122 | | 51.68 | 84.017 | 0.000 |
| | | | | | C | 30.078 | 28.122 | | 51.68 | 0.000 | 0.000 |

Tower Forces - No Ice - Wind Normal To Face

| Section Elevation ft | Add Weight lb | Self Weight lb | F _a c e | e | C _F | q _z psf | D _F | D _R | A _E ft ² | F lb | w plf | Ctrl. Face |
|-------------------------|------------------|-------------------|--------------------------|-------|----------------|-----------------------|----------------|----------------|-----------------------------------|---------|----------|---------------|
| T1 180.00-160.00 | 44.64 | 1250.43 | A | 0.139 | 2.812 | 52 | 1 | 1 | 13.713 | 2381.65 | 119.08 | C |
| | | | B | 0.139 | 2.812 | | 1 | 1 | 13.713 | | | |
| | | | C | 0.139 | 2.812 | | 1 | 1 | 13.713 | | | |
| T2 160.00-140.00 | 250.60 | 1495.62 | A | 0.143 | 2.796 | 51 | 1 | 1 | 15.269 | 4278.29 | 213.91 | C |
| | | | B | 0.143 | 2.796 | | 1 | 1 | 15.269 | | | |
| | | | C | 0.143 | 2.796 | | 1 | 1 | 15.269 | | | |
| T3 140.00-133.33 | 83.53 | 825.91 | A | 0.151 | 2.77 | 50 | 1 | 1 | 5.828 | 1479.17 | 221.88 | C |
| | | | B | 0.151 | 2.77 | | 1 | 1 | 5.828 | | | |
| | | | C | 0.151 | 2.77 | | 1 | 1 | 5.828 | | | |
| T4 133.33-126.67 | 154.34 | 842.18 | A | 0.145 | 2.791 | 49 | 1 | 1 | 5.951 | 2104.08 | 315.61 | C |
| | | | B | 0.145 | 2.791 | | 1 | 1 | 5.951 | | | |
| | | | C | 0.145 | 2.791 | | 1 | 1 | 5.951 | | | |
| T5 126.67-120.00 | 213.57 | 1080.40 | A | 0.14 | 2.81 | 49 | 1 | 1 | 6.074 | 2515.87 | 377.38 | C |
| | | | B | 0.14 | 2.81 | | 1 | 1 | 6.074 | | | |
| | | | C | 0.14 | 2.81 | | 1 | 1 | 6.074 | | | |
| T6 | 698.17 | 3821.31 | A | 0.133 | 2.834 | 47 | 1 | 1 | 18.396 | 7813.22 | 390.66 | C |

| | | |
|--|--|----------------------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job 22027.01 - Westport | Page 34 of 71 |
| | Project 180-ft Lattice Tower (CSP #32) | Date 08:43:42 04/05/22 |
| | Client Verizon | Designed by TJL |

| Section Elevation | Add Weight | Self Weight | F a c e | e | C _F | q _z | D _F | D _R | A _E | F | w | Ctrl. Face |
|-------------------|------------|-------------|---------|-------|----------------|----------------|----------------|----------------|-------------------|----------|--------|------------|
| ft | lb | lb | | | | psf | | | ft ² | lb | plf | |
| 120.00-100.00 | | | B | 0.133 | 2.834 | | 1 | 1 | 18.396 | | | |
| | | | C | 0.133 | 2.834 | | 1 | 1 | 18.396 | | | |
| T7 | 349.61 | 1682.80 | A | 0.131 | 2.844 | 46 | 1 | 1 | 10.175 | 3908.99 | 390.90 | C |
| 100.00-90.00 | | | B | 0.131 | 2.844 | | 1 | 1 | 10.175 | | | |
| | | | C | 0.131 | 2.844 | | 1 | 1 | 10.175 | | | |
| T8 | 349.61 | 1722.73 | A | 0.124 | 2.87 | 45 | 1 | 1 | 10.439 | 3857.63 | 385.76 | C |
| 90.00-80.00 | | | B | 0.124 | 2.87 | | 1 | 1 | 10.439 | | | |
| | | | C | 0.124 | 2.87 | | 1 | 1 | 10.439 | | | |
| T9 | 699.37 | 4897.54 | A | 0.14 | 2.81 | 43 | 1 | 1 | 44.041 | 9750.55 | 487.53 | C |
| 80.00-60.00 | | | B | 0.14 | 2.81 | | 1 | 1 | 44.041 | | | |
| | | | C | 0.14 | 2.81 | | 1 | 1 | 44.041 | | | |
| T10 | 702.22 | 5700.46 | A | 0.129 | 2.85 | 40 | 1 | 1 | 45.397 | 9317.55 | 465.88 | C |
| 60.00-40.00 | | | B | 0.129 | 2.85 | | 1 | 1 | 45.397 | | | |
| | | | C | 0.129 | 2.85 | | 1 | 1 | 45.397 | | | |
| T11 | 351.11 | 2942.46 | A | 0.123 | 2.875 | 37 | 1 | 1 | 23.207 | 4386.09 | 438.61 | C |
| 40.00-30.00 | | | B | 0.123 | 2.875 | | 1 | 1 | 23.207 | | | |
| | | | C | 0.123 | 2.875 | | 1 | 1 | 23.207 | | | |
| T12 | 351.11 | 3139.03 | A | 0.119 | 2.889 | 35 | 1 | 1 | 23.536 | 4124.22 | 412.42 | C |
| 30.00-20.00 | | | B | 0.119 | 2.889 | | 1 | 1 | 23.536 | | | |
| | | | C | 0.119 | 2.889 | | 1 | 1 | 23.536 | | | |
| T13 | 702.22 | 6187.56 | A | 0.108 | 2.934 | 31 | 1 | 1 | 45.922 | 7383.18 | 369.16 | C |
| 20.00-0.00 | | | B | 0.108 | 2.934 | | 1 | 1 | 45.922 | | | |
| | | | C | 0.108 | 2.934 | | 1 | 1 | 45.922 | | | |
| Sum Weight: | 4950.11 | 35588.43 | | | | | | OTM | 4870.17 kip-ft | 63300.51 | | |

Tower Forces - No Ice - Wind 45 To Face

| Section Elevation | Add Weight | Self Weight | F a c e | e | C _F | q _z | D _F | D _R | A _E | F | w | Ctrl. Face |
|-------------------|------------|-------------|---------|-------|----------------|----------------|----------------|----------------|-----------------|---------|--------|------------|
| ft | lb | lb | | | | psf | | | ft ² | lb | plf | |
| T1 | 44.64 | 1250.43 | A | 0.139 | 2.812 | 52 | 0.825 | 1 | 13.713 | 2381.65 | 119.08 | C |
| 180.00-160.00 | | | B | 0.139 | 2.812 | | 0.825 | 1 | 13.713 | | | |
| | | | C | 0.139 | 2.812 | | 0.825 | 1 | 13.713 | | | |
| T2 | 250.60 | 1495.62 | A | 0.143 | 2.796 | 51 | 0.825 | 1 | 15.269 | 4278.29 | 213.91 | C |
| 160.00-140.00 | | | B | 0.143 | 2.796 | | 0.825 | 1 | 15.269 | | | |
| | | | C | 0.143 | 2.796 | | 0.825 | 1 | 15.269 | | | |
| T3 | 83.53 | 825.91 | A | 0.151 | 2.77 | 50 | 0.825 | 1 | 5.828 | 1479.17 | 221.88 | C |
| 140.00-133.33 | | | B | 0.151 | 2.77 | | 0.825 | 1 | 5.828 | | | |
| | | | C | 0.151 | 2.77 | | 0.825 | 1 | 5.828 | | | |
| T4 | 154.34 | 842.18 | A | 0.145 | 2.791 | 49 | 0.825 | 1 | 5.951 | 2104.08 | 315.61 | C |
| 133.33-126.67 | | | B | 0.145 | 2.791 | | 0.825 | 1 | 5.951 | | | |
| | | | C | 0.145 | 2.791 | | 0.825 | 1 | 5.951 | | | |
| T5 | 213.57 | 1080.40 | A | 0.14 | 2.81 | 49 | 0.825 | 1 | 6.074 | 2515.87 | 377.38 | C |
| 126.67-120.00 | | | B | 0.14 | 2.81 | | 0.825 | 1 | 6.074 | | | |
| | | | C | 0.14 | 2.81 | | 0.825 | 1 | 6.074 | | | |
| T6 | 698.17 | 3821.31 | A | 0.133 | 2.834 | 47 | 0.825 | 1 | 18.396 | 7813.22 | 390.66 | C |
| 120.00-100.00 | | | B | 0.133 | 2.834 | | 0.825 | 1 | 18.396 | | | |
| | | | C | 0.133 | 2.834 | | 0.825 | 1 | 18.396 | | | |
| T7 | 349.61 | 1682.80 | A | 0.131 | 2.844 | 46 | 0.825 | 1 | 10.175 | 3908.99 | 390.90 | C |
| 100.00-90.00 | | | B | 0.131 | 2.844 | | 0.825 | 1 | 10.175 | | | |
| | | | C | 0.131 | 2.844 | | 0.825 | 1 | 10.175 | | | |
| T8 | 349.61 | 1722.73 | A | 0.124 | 2.87 | 45 | 0.825 | 1 | 10.439 | 3857.63 | 385.76 | C |

| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 35 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Section Elevation | Add Weight | Self Weight | F a c e | e | C _F | q _z | D _F | D _R | A _E | F | w | Ctrl. Face |
|-------------------|------------|-------------|---------|-------|----------------|----------------|----------------|----------------|-------------------|----------|--------|------------|
| ft | lb | lb | | | | psf | | | ft ² | lb | plf | |
| 90.00-80.00 | | | B | 0.124 | 2.87 | | 0.825 | 1 | 10.439 | | | |
| | | | C | 0.124 | 2.87 | | 0.825 | 1 | 10.439 | | | |
| T9 | 699.37 | 4897.54 | A | 0.14 | 2.81 | 43 | 0.825 | 1 | 38.705 | 9200.27 | 460.01 | C |
| 80.00-60.00 | | | B | 0.14 | 2.81 | | 0.825 | 1 | 38.705 | | | |
| | | | C | 0.14 | 2.81 | | 0.825 | 1 | 38.705 | | | |
| T10 | 702.22 | 5700.46 | A | 0.129 | 2.85 | 40 | 0.825 | 1 | 40.060 | 8797.53 | 439.88 | C |
| 60.00-40.00 | | | B | 0.129 | 2.85 | | 0.825 | 1 | 40.060 | | | |
| | | | C | 0.129 | 2.85 | | 0.825 | 1 | 40.060 | | | |
| T11 | 351.11 | 2942.46 | A | 0.123 | 2.875 | 37 | 0.825 | 1 | 20.539 | 4142.78 | 414.28 | C |
| 40.00-30.00 | | | B | 0.123 | 2.875 | | 0.825 | 1 | 20.539 | | | |
| | | | C | 0.123 | 2.875 | | 0.825 | 1 | 20.539 | | | |
| T12 | 351.11 | 3139.03 | A | 0.119 | 2.889 | 35 | 0.825 | 1 | 20.868 | 3896.40 | 389.64 | C |
| 30.00-20.00 | | | B | 0.119 | 2.889 | | 0.825 | 1 | 20.868 | | | |
| | | | C | 0.119 | 2.889 | | 0.825 | 1 | 20.868 | | | |
| T13 | 702.22 | 6187.56 | A | 0.108 | 2.934 | 31 | 0.825 | 1 | 40.659 | 6972.85 | 348.64 | C |
| 20.00-0.00 | | | B | 0.108 | 2.934 | | 0.825 | 1 | 40.659 | | | |
| | | | C | 0.108 | 2.934 | | 0.825 | 1 | 40.659 | | | |
| Sum Weight: | 4950.11 | 35588.43 | | | | | | OTM | 4787.34 kip-ft | 61348.75 | | |

Tower Forces - No Ice - Wind 60 To Face

| Section Elevation | Add Weight | Self Weight | F a c e | e | C _F | q _z | D _F | D _R | A _E | F | w | Ctrl. Face |
|-------------------|------------|-------------|---------|-------|----------------|----------------|----------------|----------------|-----------------|---------|--------|------------|
| ft | lb | lb | | | | psf | | | ft ² | lb | plf | |
| T1 | 44.64 | 1250.43 | A | 0.139 | 2.812 | 52 | 0.8 | 1 | 13.713 | 2381.65 | 119.08 | C |
| 180.00-160.00 | | | B | 0.139 | 2.812 | | 0.8 | 1 | 13.713 | | | |
| | | | C | 0.139 | 2.812 | | 0.8 | 1 | 13.713 | | | |
| T2 | 250.60 | 1495.62 | A | 0.143 | 2.796 | 51 | 0.8 | 1 | 15.269 | 4278.29 | 213.91 | C |
| 160.00-140.00 | | | B | 0.143 | 2.796 | | 0.8 | 1 | 15.269 | | | |
| | | | C | 0.143 | 2.796 | | 0.8 | 1 | 15.269 | | | |
| T3 | 83.53 | 825.91 | A | 0.151 | 2.77 | 50 | 0.8 | 1 | 5.828 | 1479.17 | 221.88 | C |
| 140.00-133.33 | | | B | 0.151 | 2.77 | | 0.8 | 1 | 5.828 | | | |
| | | | C | 0.151 | 2.77 | | 0.8 | 1 | 5.828 | | | |
| T4 | 154.34 | 842.18 | A | 0.145 | 2.791 | 49 | 0.8 | 1 | 5.951 | 2104.08 | 315.61 | C |
| 133.33-126.67 | | | B | 0.145 | 2.791 | | 0.8 | 1 | 5.951 | | | |
| | | | C | 0.145 | 2.791 | | 0.8 | 1 | 5.951 | | | |
| T5 | 213.57 | 1080.40 | A | 0.14 | 2.81 | 49 | 0.8 | 1 | 6.074 | 2515.87 | 377.38 | C |
| 126.67-120.00 | | | B | 0.14 | 2.81 | | 0.8 | 1 | 6.074 | | | |
| | | | C | 0.14 | 2.81 | | 0.8 | 1 | 6.074 | | | |
| T6 | 698.17 | 3821.31 | A | 0.133 | 2.834 | 47 | 0.8 | 1 | 18.396 | 7813.22 | 390.66 | C |
| 120.00-100.00 | | | B | 0.133 | 2.834 | | 0.8 | 1 | 18.396 | | | |
| | | | C | 0.133 | 2.834 | | 0.8 | 1 | 18.396 | | | |
| T7 | 349.61 | 1682.80 | A | 0.131 | 2.844 | 46 | 0.8 | 1 | 10.175 | 3908.99 | 390.90 | C |
| 100.00-90.00 | | | B | 0.131 | 2.844 | | 0.8 | 1 | 10.175 | | | |
| | | | C | 0.131 | 2.844 | | 0.8 | 1 | 10.175 | | | |
| T8 | 349.61 | 1722.73 | A | 0.124 | 2.87 | 45 | 0.8 | 1 | 10.439 | 3857.63 | 385.76 | C |
| 90.00-80.00 | | | B | 0.124 | 2.87 | | 0.8 | 1 | 10.439 | | | |
| | | | C | 0.124 | 2.87 | | 0.8 | 1 | 10.439 | | | |
| T9 | 699.37 | 4897.54 | A | 0.14 | 2.81 | 43 | 0.8 | 1 | 37.942 | 9121.66 | 456.08 | C |
| 80.00-60.00 | | | B | 0.14 | 2.81 | | 0.8 | 1 | 37.942 | | | |
| | | | C | 0.14 | 2.81 | | 0.8 | 1 | 37.942 | | | |
| T10 | 702.22 | 5700.46 | A | 0.129 | 2.85 | 40 | 0.8 | 1 | 39.297 | 8723.24 | 436.16 | C |

| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 36 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Section Elevation | Add Weight | Self Weight | F a c e | e | C _F | q _z | D _F | D _R | A _E | F | w | Ctrl. Face |
|-------------------|------------|-------------|---------|-------|----------------|----------------|----------------|----------------|-------------------|----------|--------|------------|
| ft | lb | lb | | | | psf | | | ft ² | lb | plf | |
| 60.00-40.00 | | | B | 0.129 | 2.85 | | 0.8 | 1 | 39.297 | | | |
| | | | C | 0.129 | 2.85 | | 0.8 | 1 | 39.297 | | | |
| T11 | 351.11 | 2942.46 | A | 0.123 | 2.875 | 37 | 0.8 | 1 | 20.158 | 4108.02 | 410.80 | C |
| 40.00-30.00 | | | B | 0.123 | 2.875 | | 0.8 | 1 | 20.158 | | | |
| | | | C | 0.123 | 2.875 | | 0.8 | 1 | 20.158 | | | |
| T12 | 351.11 | 3139.03 | A | 0.119 | 2.889 | 35 | 0.8 | 1 | 20.487 | 3863.85 | 386.39 | C |
| 30.00-20.00 | | | B | 0.119 | 2.889 | | 0.8 | 1 | 20.487 | | | |
| | | | C | 0.119 | 2.889 | | 0.8 | 1 | 20.487 | | | |
| T13 | 702.22 | 6187.56 | A | 0.108 | 2.934 | 31 | 0.8 | 1 | 39.907 | 6914.23 | 345.71 | C |
| 20.00-0.00 | | | B | 0.108 | 2.934 | | 0.8 | 1 | 39.907 | | | |
| | | | C | 0.108 | 2.934 | | 0.8 | 1 | 39.907 | | | |
| Sum Weight: | 4950.11 | 35588.43 | | | | | | OTM | 4775.51 kip-ft | 61069.93 | | |

Tower Forces - No Ice - Wind 90 To Face

| Section Elevation | Add Weight | Self Weight | F a c e | e | C _F | q _z | D _F | D _R | A _E | F | w | Ctrl. Face |
|-------------------|------------|-------------|---------|-------|----------------|----------------|----------------|----------------|-----------------|---------|--------|------------|
| ft | lb | lb | | | | psf | | | ft ² | lb | plf | |
| T1 | 44.64 | 1250.43 | A | 0.139 | 2.812 | 52 | 0.85 | 1 | 13.713 | 2381.65 | 119.08 | C |
| 180.00-160.00 | | | B | 0.139 | 2.812 | | 0.85 | 1 | 13.713 | | | |
| | | | C | 0.139 | 2.812 | | 0.85 | 1 | 13.713 | | | |
| T2 | 250.60 | 1495.62 | A | 0.143 | 2.796 | 51 | 0.85 | 1 | 15.269 | 4278.29 | 213.91 | C |
| 160.00-140.00 | | | B | 0.143 | 2.796 | | 0.85 | 1 | 15.269 | | | |
| | | | C | 0.143 | 2.796 | | 0.85 | 1 | 15.269 | | | |
| T3 | 83.53 | 825.91 | A | 0.151 | 2.77 | 50 | 0.85 | 1 | 5.828 | 1479.17 | 221.88 | C |
| 140.00-133.33 | | | B | 0.151 | 2.77 | | 0.85 | 1 | 5.828 | | | |
| | | | C | 0.151 | 2.77 | | 0.85 | 1 | 5.828 | | | |
| T4 | 154.34 | 842.18 | A | 0.145 | 2.791 | 49 | 0.85 | 1 | 5.951 | 2104.08 | 315.61 | C |
| 133.33-126.67 | | | B | 0.145 | 2.791 | | 0.85 | 1 | 5.951 | | | |
| | | | C | 0.145 | 2.791 | | 0.85 | 1 | 5.951 | | | |
| T5 | 213.57 | 1080.40 | A | 0.14 | 2.81 | 49 | 0.85 | 1 | 6.074 | 2515.87 | 377.38 | C |
| 126.67-120.00 | | | B | 0.14 | 2.81 | | 0.85 | 1 | 6.074 | | | |
| | | | C | 0.14 | 2.81 | | 0.85 | 1 | 6.074 | | | |
| T6 | 698.17 | 3821.31 | A | 0.133 | 2.834 | 47 | 0.85 | 1 | 18.396 | 7813.22 | 390.66 | C |
| 120.00-100.00 | | | B | 0.133 | 2.834 | | 0.85 | 1 | 18.396 | | | |
| | | | C | 0.133 | 2.834 | | 0.85 | 1 | 18.396 | | | |
| T7 | 349.61 | 1682.80 | A | 0.131 | 2.844 | 46 | 0.85 | 1 | 10.175 | 3908.99 | 390.90 | C |
| 100.00-90.00 | | | B | 0.131 | 2.844 | | 0.85 | 1 | 10.175 | | | |
| | | | C | 0.131 | 2.844 | | 0.85 | 1 | 10.175 | | | |
| T8 | 349.61 | 1722.73 | A | 0.124 | 2.87 | 45 | 0.85 | 1 | 10.439 | 3857.63 | 385.76 | C |
| 90.00-80.00 | | | B | 0.124 | 2.87 | | 0.85 | 1 | 10.439 | | | |
| | | | C | 0.124 | 2.87 | | 0.85 | 1 | 10.439 | | | |
| T9 | 699.37 | 4897.54 | A | 0.14 | 2.81 | 43 | 0.85 | 1 | 39.467 | 9278.88 | 463.94 | C |
| 80.00-60.00 | | | B | 0.14 | 2.81 | | 0.85 | 1 | 39.467 | | | |
| | | | C | 0.14 | 2.81 | | 0.85 | 1 | 39.467 | | | |
| T10 | 702.22 | 5700.46 | A | 0.129 | 2.85 | 40 | 0.85 | 1 | 40.822 | 8871.82 | 443.59 | C |
| 60.00-40.00 | | | B | 0.129 | 2.85 | | 0.85 | 1 | 40.822 | | | |
| | | | C | 0.129 | 2.85 | | 0.85 | 1 | 40.822 | | | |
| T11 | 351.11 | 2942.46 | A | 0.123 | 2.875 | 37 | 0.85 | 1 | 20.920 | 4177.54 | 417.75 | C |
| 40.00-30.00 | | | B | 0.123 | 2.875 | | 0.85 | 1 | 20.920 | | | |
| | | | C | 0.123 | 2.875 | | 0.85 | 1 | 20.920 | | | |
| T12 | 351.11 | 3139.03 | A | 0.119 | 2.889 | 35 | 0.85 | 1 | 21.249 | 3928.94 | 392.89 | C |

| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 37 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Section Elevation | Add Weight | Self Weight | F a c e | e | C _F | q _z | D _F | D _R | A _E | F | w | Ctrl. Face |
|-------------------|------------|-------------|---------|-------|----------------|----------------|----------------|----------------|-------------------|----------|--------|------------|
| ft | lb | lb | | | | psf | | | ft ² | lb | plf | |
| 30.00-20.00 | | | B | 0.119 | 2.889 | | 0.85 | 1 | 21.249 | | | |
| | | | C | 0.119 | 2.889 | | 0.85 | 1 | 21.249 | | | |
| T13 | 702.22 | 6187.56 | A | 0.108 | 2.934 | 31 | 0.85 | 1 | 41.411 | 7031.47 | 351.57 | C |
| 20.00-0.00 | | | B | 0.108 | 2.934 | | 0.85 | 1 | 41.411 | | | |
| | | | C | 0.108 | 2.934 | | 0.85 | 1 | 41.411 | | | |
| Sum Weight: | 4950.11 | 35588.43 | | | | | | OTM | 4799.17 kip-ft | 61627.57 | | |

Tower Forces - With Ice - Wind Normal To Face

| Section Elevation | Add Weight | Self Weight | F a c e | e | C _F | q _z | D _F | D _R | A _E | F | w | Ctrl. Face |
|-------------------|------------|-------------|---------|-------|----------------|----------------|----------------|----------------|-----------------|----------|--------|------------|
| ft | lb | lb | | | | psf | | | ft ² | lb | plf | |
| T1 | 552.25 | 3542.13 | A | 0.285 | 2.338 | 8 | 1 | 1 | 30.840 | 756.88 | 37.84 | C |
| 180.00-160.00 | | | B | 0.285 | 2.338 | | 1 | 1 | 30.840 | | | |
| | | | C | 0.285 | 2.338 | | 1 | 1 | 30.840 | | | |
| T2 | 2085.47 | 3972.41 | A | 0.276 | 2.363 | 7 | 1 | 1 | 33.556 | 1522.96 | 76.15 | C |
| 160.00-140.00 | | | B | 0.276 | 2.363 | | 1 | 1 | 33.556 | | | |
| | | | C | 0.276 | 2.363 | | 1 | 1 | 33.556 | | | |
| T3 | 688.56 | 1763.59 | A | 0.271 | 2.375 | 7 | 1 | 1 | 12.561 | 517.83 | 77.68 | C |
| 140.00-133.33 | | | B | 0.271 | 2.375 | | 1 | 1 | 12.561 | | | |
| | | | C | 0.271 | 2.375 | | 1 | 1 | 12.561 | | | |
| T4 | 1179.35 | 1804.53 | A | 0.262 | 2.403 | 7 | 1 | 1 | 12.781 | 716.29 | 107.44 | C |
| 133.33-126.67 | | | B | 0.262 | 2.403 | | 1 | 1 | 12.781 | | | |
| | | | C | 0.262 | 2.403 | | 1 | 1 | 12.781 | | | |
| T5 | 1538.76 | 2066.51 | A | 0.253 | 2.428 | 7 | 1 | 1 | 13.001 | 845.34 | 126.80 | C |
| 126.67-120.00 | | | B | 0.253 | 2.428 | | 1 | 1 | 13.001 | | | |
| | | | C | 0.253 | 2.428 | | 1 | 1 | 13.001 | | | |
| T6 | 4956.23 | 6611.25 | A | 0.222 | 2.525 | 7 | 1 | 1 | 37.718 | 2616.59 | 130.83 | C |
| 120.00-100.00 | | | B | 0.222 | 2.525 | | 1 | 1 | 37.718 | | | |
| | | | C | 0.222 | 2.525 | | 1 | 1 | 37.718 | | | |
| T7 | 2460.68 | 3212.73 | A | 0.212 | 2.555 | 7 | 1 | 1 | 20.193 | 1292.98 | 129.30 | C |
| 100.00-90.00 | | | B | 0.212 | 2.555 | | 1 | 1 | 20.193 | | | |
| | | | C | 0.212 | 2.555 | | 1 | 1 | 20.193 | | | |
| T8 | 2438.15 | 3293.32 | A | 0.202 | 2.591 | 7 | 1 | 1 | 20.625 | 1269.39 | 126.94 | C |
| 90.00-80.00 | | | B | 0.202 | 2.591 | | 1 | 1 | 20.625 | | | |
| | | | C | 0.202 | 2.591 | | 1 | 1 | 20.625 | | | |
| T9 | 4802.75 | 9216.41 | A | 0.204 | 2.583 | 6 | 1 | 1 | 61.883 | 2713.14 | 135.66 | C |
| 80.00-60.00 | | | B | 0.204 | 2.583 | | 1 | 1 | 61.883 | | | |
| | | | C | 0.204 | 2.583 | | 1 | 1 | 61.883 | | | |
| T10 | 4735.49 | 10171.64 | A | 0.189 | 2.635 | 6 | 1 | 1 | 63.581 | 2576.44 | 128.82 | C |
| 60.00-40.00 | | | B | 0.189 | 2.635 | | 1 | 1 | 63.581 | | | |
| | | | C | 0.189 | 2.635 | | 1 | 1 | 63.581 | | | |
| T11 | 2301.20 | 5180.35 | A | 0.178 | 2.67 | 6 | 1 | 1 | 32.335 | 1196.61 | 119.66 | C |
| 40.00-30.00 | | | B | 0.178 | 2.67 | | 1 | 1 | 32.335 | | | |
| | | | C | 0.178 | 2.67 | | 1 | 1 | 32.335 | | | |
| T12 | 2241.46 | 5351.10 | A | 0.172 | 2.692 | 5 | 1 | 1 | 32.607 | 1112.34 | 111.23 | C |
| 30.00-20.00 | | | B | 0.172 | 2.692 | | 1 | 1 | 32.607 | | | |
| | | | C | 0.172 | 2.692 | | 1 | 1 | 32.607 | | | |
| T13 | 4184.98 | 9751.96 | A | 0.152 | 2.766 | 5 | 1 | 1 | 62.036 | 1944.19 | 97.21 | C |
| 20.00-0.00 | | | B | 0.152 | 2.766 | | 1 | 1 | 62.036 | | | |
| | | | C | 0.152 | 2.766 | | 1 | 1 | 62.036 | | | |
| Sum Weight: | 34165.35 | 65937.92 | | | | | | OTM | 1551.69 | 19080.98 | | |

| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 38 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Section Elevation | Add Weight | Self Weight | F a c e | e | C _F | q _z psf | D _F | D _R | A _E ft ² | F lb | w plf | Ctrl. Face |
|-------------------|------------|-------------|---------|---|----------------|--------------------|----------------|----------------|--------------------------------|------|-------|------------|
| ft | lb | lb | | | | | | | kip-ft | | | |

Tower Forces - With Ice - Wind 45 To Face

| Section Elevation | Add Weight | Self Weight | F a c e | e | C _F | q _z psf | D _F | D _R | A _E ft ² | F lb | w plf | Ctrl. Face |
|---------------------|------------|-------------|---------|-------|----------------|--------------------|----------------|----------------|--------------------------------|----------|--------|------------|
| T1 180.00-160.00 | 552.25 | 3542.13 | A | 0.285 | 2.338 | 8 | 0.825 | 1 | 30.840 | 756.88 | 37.84 | C |
| | | | B | 0.285 | 2.338 | | 0.825 | 1 | 30.840 | | | |
| | | | C | 0.285 | 2.338 | | 0.825 | 1 | 30.840 | | | |
| T2 160.00-140.00 | 2085.47 | 3972.41 | A | 0.276 | 2.363 | 7 | 0.825 | 1 | 33.556 | 1522.96 | 76.15 | C |
| | | | B | 0.276 | 2.363 | | 0.825 | 1 | 33.556 | | | |
| | | | C | 0.276 | 2.363 | | 0.825 | 1 | 33.556 | | | |
| T3 140.00-133.33 | 688.56 | 1763.59 | A | 0.271 | 2.375 | 7 | 0.825 | 1 | 12.561 | 517.83 | 77.68 | C |
| | | | B | 0.271 | 2.375 | | 0.825 | 1 | 12.561 | | | |
| | | | C | 0.271 | 2.375 | | 0.825 | 1 | 12.561 | | | |
| T4 133.33-126.67 | 1179.35 | 1804.53 | A | 0.262 | 2.403 | 7 | 0.825 | 1 | 12.781 | 716.29 | 107.44 | C |
| | | | B | 0.262 | 2.403 | | 0.825 | 1 | 12.781 | | | |
| | | | C | 0.262 | 2.403 | | 0.825 | 1 | 12.781 | | | |
| T5 126.67-120.00 | 1538.76 | 2066.51 | A | 0.253 | 2.428 | 7 | 0.825 | 1 | 13.001 | 845.34 | 126.80 | C |
| | | | B | 0.253 | 2.428 | | 0.825 | 1 | 13.001 | | | |
| | | | C | 0.253 | 2.428 | | 0.825 | 1 | 13.001 | | | |
| T6 120.00-100.00 | 4956.23 | 6611.25 | A | 0.222 | 2.525 | 7 | 0.825 | 1 | 37.718 | 2616.59 | 130.83 | C |
| | | | B | 0.222 | 2.525 | | 0.825 | 1 | 37.718 | | | |
| | | | C | 0.222 | 2.525 | | 0.825 | 1 | 37.718 | | | |
| T7 100.00-90.00 | 2460.68 | 3212.73 | A | 0.212 | 2.555 | 7 | 0.825 | 1 | 20.193 | 1292.98 | 129.30 | C |
| | | | B | 0.212 | 2.555 | | 0.825 | 1 | 20.193 | | | |
| | | | C | 0.212 | 2.555 | | 0.825 | 1 | 20.193 | | | |
| T8 90.00-80.00 | 2438.15 | 3293.32 | A | 0.202 | 2.591 | 7 | 0.825 | 1 | 20.625 | 1269.39 | 126.94 | C |
| | | | B | 0.202 | 2.591 | | 0.825 | 1 | 20.625 | | | |
| | | | C | 0.202 | 2.591 | | 0.825 | 1 | 20.625 | | | |
| T9 80.00-60.00 | 4802.75 | 9216.41 | A | 0.204 | 2.583 | 6 | 0.825 | 1 | 55.495 | 2623.56 | 131.18 | C |
| | | | B | 0.204 | 2.583 | | 0.825 | 1 | 55.495 | | | |
| | | | C | 0.204 | 2.583 | | 0.825 | 1 | 55.495 | | | |
| T10 60.00-40.00 | 4735.49 | 10171.64 | A | 0.189 | 2.635 | 6 | 0.825 | 1 | 57.228 | 2491.78 | 124.59 | C |
| | | | B | 0.189 | 2.635 | | 0.825 | 1 | 57.228 | | | |
| | | | C | 0.189 | 2.635 | | 0.825 | 1 | 57.228 | | | |
| T11 40.00-30.00 | 2301.20 | 5180.35 | A | 0.178 | 2.67 | 6 | 0.825 | 1 | 29.176 | 1157.05 | 115.71 | C |
| | | | B | 0.178 | 2.67 | | 0.825 | 1 | 29.176 | | | |
| | | | C | 0.178 | 2.67 | | 0.825 | 1 | 29.176 | | | |
| T12 30.00-20.00 | 2241.46 | 5351.10 | A | 0.172 | 2.692 | 5 | 0.825 | 1 | 29.464 | 1075.36 | 107.54 | C |
| | | | B | 0.172 | 2.692 | | 0.825 | 1 | 29.464 | | | |
| | | | C | 0.172 | 2.692 | | 0.825 | 1 | 29.464 | | | |
| T13 20.00-0.00 | 4184.98 | 9751.96 | A | 0.152 | 2.766 | 5 | 0.825 | 1 | 55.907 | 1877.57 | 93.88 | C |
| | | | B | 0.152 | 2.766 | | 0.825 | 1 | 55.907 | | | |
| | | | C | 0.152 | 2.766 | | 0.825 | 1 | 55.907 | | | |
| Sum Weight: | 34165.35 | 65937.92 | | | | | | OTM | 1538.21 kip-ft | 18763.59 | | |

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| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job 22027.01 - Westport | Page 39 of 71 |
| | Project 180-ft Lattice Tower (CSP #32) | Date 08:43:42 04/05/22 |
| | Client Verizon | Designed by TJJ |

Tower Forces - With Ice - Wind 60 To Face

| Section Elevation | Add Weight | Self Weight | F a c e | e | C _F | q _z | D _F | D _R | A _E | F | w | Ctrl. Face |
|---------------------|------------|-------------|---------|-------|----------------|----------------|----------------|----------------|-------------------|----------|--------|------------|
| ft | lb | lb | | | | psf | | | ft ² | lb | plf | |
| T1 180.00-160.00 | 552.25 | 3542.13 | A | 0.285 | 2.338 | 8 | 0.8 | 1 | 30.840 | 756.88 | 37.84 | C |
| | | | B | 0.285 | 2.338 | | 0.8 | 1 | 30.840 | | | |
| | | | C | 0.285 | 2.338 | | 0.8 | 1 | 30.840 | | | |
| T2 160.00-140.00 | 2085.47 | 3972.41 | A | 0.276 | 2.363 | 7 | 0.8 | 1 | 33.556 | 1522.96 | 76.15 | C |
| | | | B | 0.276 | 2.363 | | 0.8 | 1 | 33.556 | | | |
| | | | C | 0.276 | 2.363 | | 0.8 | 1 | 33.556 | | | |
| T3 140.00-133.33 | 688.56 | 1763.59 | A | 0.271 | 2.375 | 7 | 0.8 | 1 | 12.561 | 517.83 | 77.68 | C |
| | | | B | 0.271 | 2.375 | | 0.8 | 1 | 12.561 | | | |
| | | | C | 0.271 | 2.375 | | 0.8 | 1 | 12.561 | | | |
| T4 133.33-126.67 | 1179.35 | 1804.53 | A | 0.262 | 2.403 | 7 | 0.8 | 1 | 12.781 | 716.29 | 107.44 | C |
| | | | B | 0.262 | 2.403 | | 0.8 | 1 | 12.781 | | | |
| | | | C | 0.262 | 2.403 | | 0.8 | 1 | 12.781 | | | |
| T5 126.67-120.00 | 1538.76 | 2066.51 | A | 0.253 | 2.428 | 7 | 0.8 | 1 | 13.001 | 845.34 | 126.80 | C |
| | | | B | 0.253 | 2.428 | | 0.8 | 1 | 13.001 | | | |
| | | | C | 0.253 | 2.428 | | 0.8 | 1 | 13.001 | | | |
| T6 120.00-100.00 | 4956.23 | 6611.25 | A | 0.222 | 2.525 | 7 | 0.8 | 1 | 37.718 | 2616.59 | 130.83 | C |
| | | | B | 0.222 | 2.525 | | 0.8 | 1 | 37.718 | | | |
| | | | C | 0.222 | 2.525 | | 0.8 | 1 | 37.718 | | | |
| T7 100.00-90.00 | 2460.68 | 3212.73 | A | 0.212 | 2.555 | 7 | 0.8 | 1 | 20.193 | 1292.98 | 129.30 | C |
| | | | B | 0.212 | 2.555 | | 0.8 | 1 | 20.193 | | | |
| | | | C | 0.212 | 2.555 | | 0.8 | 1 | 20.193 | | | |
| T8 90.00-80.00 | 2438.15 | 3293.32 | A | 0.202 | 2.591 | 7 | 0.8 | 1 | 20.625 | 1269.39 | 126.94 | C |
| | | | B | 0.202 | 2.591 | | 0.8 | 1 | 20.625 | | | |
| | | | C | 0.202 | 2.591 | | 0.8 | 1 | 20.625 | | | |
| T9 80.00-60.00 | 4802.75 | 9216.41 | A | 0.204 | 2.583 | 6 | 0.8 | 1 | 54.583 | 2610.76 | 130.54 | C |
| | | | B | 0.204 | 2.583 | | 0.8 | 1 | 54.583 | | | |
| | | | C | 0.204 | 2.583 | | 0.8 | 1 | 54.583 | | | |
| T10 60.00-40.00 | 4735.49 | 10171.64 | A | 0.189 | 2.635 | 6 | 0.8 | 1 | 56.321 | 2479.69 | 123.98 | C |
| | | | B | 0.189 | 2.635 | | 0.8 | 1 | 56.321 | | | |
| | | | C | 0.189 | 2.635 | | 0.8 | 1 | 56.321 | | | |
| T11 40.00-30.00 | 2301.20 | 5180.35 | A | 0.178 | 2.67 | 6 | 0.8 | 1 | 28.725 | 1151.40 | 115.14 | C |
| | | | B | 0.178 | 2.67 | | 0.8 | 1 | 28.725 | | | |
| | | | C | 0.178 | 2.67 | | 0.8 | 1 | 28.725 | | | |
| T12 30.00-20.00 | 2241.46 | 5351.10 | A | 0.172 | 2.692 | 5 | 0.8 | 1 | 29.016 | 1070.08 | 107.01 | C |
| | | | B | 0.172 | 2.692 | | 0.8 | 1 | 29.016 | | | |
| | | | C | 0.172 | 2.692 | | 0.8 | 1 | 29.016 | | | |
| T13 20.00-0.00 | 4184.98 | 9751.96 | A | 0.152 | 2.766 | 5 | 0.8 | 1 | 55.032 | 1868.05 | 93.40 | C |
| | | | B | 0.152 | 2.766 | | 0.8 | 1 | 55.032 | | | |
| | | | C | 0.152 | 2.766 | | 0.8 | 1 | 55.032 | | | |
| Sum Weight: | 34165.35 | 65937.92 | | | | | | OTM | 1536.29 kip-ft | 18718.24 | | |

Tower Forces - With Ice - Wind 90 To Face

| Section Elevation | Add Weight | Self Weight | F a c e | e | C _F | q _z | D _F | D _R | A _E | F | w | Ctrl. Face |
|---------------------|------------|-------------|---------|-------|----------------|----------------|----------------|----------------|-----------------|--------|-------|------------|
| ft | lb | lb | | | | psf | | | ft ² | lb | plf | |
| T1 180.00-160.00 | 552.25 | 3542.13 | A | 0.285 | 2.338 | 8 | 0.85 | 1 | 30.840 | 756.88 | 37.84 | C |
| | | | B | 0.285 | 2.338 | | 0.85 | 1 | 30.840 | | | |
| | | | C | 0.285 | 2.338 | | 0.85 | 1 | 30.840 | | | |

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| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job 22027.01 - Westport | Page 40 of 71 |
| | Project 180-ft Lattice Tower (CSP #32) | Date 08:43:42 04/05/22 |
| | Client Verizon | Designed by TJL |

| Section Elevation | Add Weight | Self Weight | F a c e | e | C _F | q _z | D _F | D _R | A _E | F | w | Ctrl. Face |
|---------------------|------------|-------------|---------|-------|----------------|----------------|----------------|----------------|-------------------|----------|--------|------------|
| ft | lb | lb | | | | psf | | | ft ² | lb | plf | |
| T2 160.00-140.00 | 2085.47 | 3972.41 | A | 0.276 | 2.363 | 7 | 0.85 | 1 | 33.556 | 1522.96 | 76.15 | C |
| | | | B | 0.276 | 2.363 | | 0.85 | 1 | 33.556 | | | |
| | | | C | 0.276 | 2.363 | | 0.85 | 1 | 33.556 | | | |
| T3 140.00-133.33 | 688.56 | 1763.59 | A | 0.271 | 2.375 | 7 | 0.85 | 1 | 12.561 | 517.83 | 77.68 | C |
| | | | B | 0.271 | 2.375 | | 0.85 | 1 | 12.561 | | | |
| | | | C | 0.271 | 2.375 | | 0.85 | 1 | 12.561 | | | |
| T4 133.33-126.67 | 1179.35 | 1804.53 | A | 0.262 | 2.403 | 7 | 0.85 | 1 | 12.781 | 716.29 | 107.44 | C |
| | | | B | 0.262 | 2.403 | | 0.85 | 1 | 12.781 | | | |
| | | | C | 0.262 | 2.403 | | 0.85 | 1 | 12.781 | | | |
| T5 126.67-120.00 | 1538.76 | 2066.51 | A | 0.253 | 2.428 | 7 | 0.85 | 1 | 13.001 | 845.34 | 126.80 | C |
| | | | B | 0.253 | 2.428 | | 0.85 | 1 | 13.001 | | | |
| | | | C | 0.253 | 2.428 | | 0.85 | 1 | 13.001 | | | |
| T6 120.00-100.00 | 4956.23 | 6611.25 | A | 0.222 | 2.525 | 7 | 0.85 | 1 | 37.718 | 2616.59 | 130.83 | C |
| | | | B | 0.222 | 2.525 | | 0.85 | 1 | 37.718 | | | |
| | | | C | 0.222 | 2.525 | | 0.85 | 1 | 37.718 | | | |
| T7 100.00-90.00 | 2460.68 | 3212.73 | A | 0.212 | 2.555 | 7 | 0.85 | 1 | 20.193 | 1292.98 | 129.30 | C |
| | | | B | 0.212 | 2.555 | | 0.85 | 1 | 20.193 | | | |
| | | | C | 0.212 | 2.555 | | 0.85 | 1 | 20.193 | | | |
| T8 90.00-80.00 | 2438.15 | 3293.32 | A | 0.202 | 2.591 | 7 | 0.85 | 1 | 20.625 | 1269.39 | 126.94 | C |
| | | | B | 0.202 | 2.591 | | 0.85 | 1 | 20.625 | | | |
| | | | C | 0.202 | 2.591 | | 0.85 | 1 | 20.625 | | | |
| T9 80.00-60.00 | 4802.75 | 9216.41 | A | 0.204 | 2.583 | 6 | 0.85 | 1 | 56.408 | 2636.36 | 131.82 | C |
| | | | B | 0.204 | 2.583 | | 0.85 | 1 | 56.408 | | | |
| | | | C | 0.204 | 2.583 | | 0.85 | 1 | 56.408 | | | |
| T10 60.00-40.00 | 4735.49 | 10171.64 | A | 0.189 | 2.635 | 6 | 0.85 | 1 | 58.136 | 2503.88 | 125.19 | C |
| | | | B | 0.189 | 2.635 | | 0.85 | 1 | 58.136 | | | |
| | | | C | 0.189 | 2.635 | | 0.85 | 1 | 58.136 | | | |
| T11 40.00-30.00 | 2301.20 | 5180.35 | A | 0.178 | 2.67 | 6 | 0.85 | 1 | 29.627 | 1162.70 | 116.27 | C |
| | | | B | 0.178 | 2.67 | | 0.85 | 1 | 29.627 | | | |
| | | | C | 0.178 | 2.67 | | 0.85 | 1 | 29.627 | | | |
| T12 30.00-20.00 | 2241.46 | 5351.10 | A | 0.172 | 2.692 | 5 | 0.85 | 1 | 29.913 | 1080.64 | 108.06 | C |
| | | | B | 0.172 | 2.692 | | 0.85 | 1 | 29.913 | | | |
| | | | C | 0.172 | 2.692 | | 0.85 | 1 | 29.913 | | | |
| T13 20.00-0.00 | 4184.98 | 9751.96 | A | 0.152 | 2.766 | 5 | 0.85 | 1 | 56.783 | 1887.09 | 94.35 | C |
| | | | B | 0.152 | 2.766 | | 0.85 | 1 | 56.783 | | | |
| | | | C | 0.152 | 2.766 | | 0.85 | 1 | 56.783 | | | |
| Sum Weight: | 34165.35 | 65937.92 | | | | | | OTM | 1540.14 kip-ft | 18808.93 | | |

Tower Forces - Service - Wind Normal To Face

| Section Elevation | Add Weight | Self Weight | F a c e | e | C _F | q _z | D _F | D _R | A _E | F | w | Ctrl. Face |
|---------------------|------------|-------------|---------|-------|----------------|----------------|----------------|----------------|-----------------|--------|-------|------------|
| ft | lb | lb | | | | psf | | | ft ² | lb | plf | |
| T1 180.00-160.00 | 44.64 | 1250.43 | A | 0.139 | 2.812 | 11 | 1 | 1 | 13.993 | 514.75 | 25.74 | C |
| | | | B | 0.139 | 2.812 | | 1 | 1 | 13.993 | | | |
| | | | C | 0.139 | 2.812 | | 1 | 1 | 13.993 | | | |
| T2 160.00-140.00 | 250.60 | 1495.62 | A | 0.143 | 2.796 | 11 | 1 | 1 | 16.334 | 938.67 | 46.93 | C |
| | | | B | 0.143 | 2.796 | | 1 | 1 | 16.334 | | | |
| | | | C | 0.143 | 2.796 | | 1 | 1 | 16.334 | | | |
| T3 140.00-133.33 | 83.53 | 825.91 | A | 0.151 | 2.77 | 11 | 1 | 1 | 6.561 | 333.37 | 50.00 | C |
| | | | B | 0.151 | 2.77 | | 1 | 1 | 6.561 | | | |
| | | | C | 0.151 | 2.77 | | 1 | 1 | 6.561 | | | |

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| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job 22027.01 - Westport | Page 41 of 71 |
| | Project 180-ft Lattice Tower (CSP #32) | Date 08:43:42 04/05/22 |
| | Client Verizon | Designed by TJL |

| Section Elevation ft | Add Weight lb | Self Weight lb | F a c e | e | C _F | q _z psf | D _F | D _R | A _E ft ² | F lb | w plf | Ctrl. Face |
|-------------------------|------------------|-------------------|---------|-------|----------------|-----------------------|----------------|----------------|-----------------------------------|----------|----------|------------|
| T4 133.33-126.67 | 154.34 | 842.18 | A | 0.145 | 2.791 | 10 | 1 | 1 | 6.687 | 466.49 | 69.97 | C |
| | | | B | 0.145 | 2.791 | | 1 | 1 | 6.687 | | | |
| | | | C | 0.145 | 2.791 | | 1 | 1 | 6.687 | | | |
| T5 126.67-120.00 | 213.57 | 1080.40 | A | 0.14 | 2.81 | 10 | 1 | 1 | 6.810 | 554.16 | 83.12 | C |
| | | | B | 0.14 | 2.81 | | 1 | 1 | 6.810 | | | |
| | | | C | 0.14 | 2.81 | | 1 | 1 | 6.810 | | | |
| T6 120.00-100.00 | 698.17 | 3821.31 | A | 0.133 | 2.834 | 10 | 1 | 1 | 21.840 | 1748.28 | 87.41 | C |
| | | | B | 0.133 | 2.834 | | 1 | 1 | 21.840 | | | |
| | | | C | 0.133 | 2.834 | | 1 | 1 | 21.840 | | | |
| T7 100.00-90.00 | 349.61 | 1682.80 | A | 0.131 | 2.844 | 10 | 1 | 1 | 12.011 | 876.22 | 87.62 | C |
| | | | B | 0.131 | 2.844 | | 1 | 1 | 12.011 | | | |
| | | | C | 0.131 | 2.844 | | 1 | 1 | 12.011 | | | |
| T8 90.00-80.00 | 349.61 | 1722.73 | A | 0.124 | 2.87 | 10 | 1 | 1 | 12.296 | 865.16 | 86.52 | C |
| | | | B | 0.124 | 2.87 | | 1 | 1 | 12.296 | | | |
| | | | C | 0.124 | 2.87 | | 1 | 1 | 12.296 | | | |
| T9 80.00-60.00 | 699.37 | 4897.54 | A | 0.14 | 2.81 | 9 | 1 | 1 | 44.170 | 2079.86 | 103.99 | C |
| | | | B | 0.14 | 2.81 | | 1 | 1 | 44.170 | | | |
| | | | C | 0.14 | 2.81 | | 1 | 1 | 44.170 | | | |
| T10 60.00-40.00 | 702.22 | 5700.46 | A | 0.129 | 2.85 | 9 | 1 | 1 | 45.441 | 1985.72 | 99.29 | C |
| | | | B | 0.129 | 2.85 | | 1 | 1 | 45.441 | | | |
| | | | C | 0.129 | 2.85 | | 1 | 1 | 45.441 | | | |
| T11 40.00-30.00 | 351.11 | 2942.46 | A | 0.123 | 2.875 | 8 | 1 | 1 | 23.207 | 934.31 | 93.43 | C |
| | | | B | 0.123 | 2.875 | | 1 | 1 | 23.207 | | | |
| | | | C | 0.123 | 2.875 | | 1 | 1 | 23.207 | | | |
| T12 30.00-20.00 | 351.11 | 3139.03 | A | 0.119 | 2.889 | 7 | 1 | 1 | 23.536 | 878.53 | 87.85 | C |
| | | | B | 0.119 | 2.889 | | 1 | 1 | 23.536 | | | |
| | | | C | 0.119 | 2.889 | | 1 | 1 | 23.536 | | | |
| T13 20.00-0.00 | 702.22 | 6187.56 | A | 0.108 | 2.934 | 7 | 1 | 1 | 45.955 | 1573.30 | 78.66 | C |
| | | | B | 0.108 | 2.934 | | 1 | 1 | 45.955 | | | |
| | | | C | 0.108 | 2.934 | | 1 | 1 | 45.955 | | | |
| Sum Weight: | 4950.11 | 35588.43 | | | | | | OTM | 1067.22 kip-ft | 13748.82 | | |

Tower Forces - Service - Wind 45 To Face

| Section Elevation ft | Add Weight lb | Self Weight lb | F a c e | e | C _F | q _z psf | D _F | D _R | A _E ft ² | F lb | w plf | Ctrl. Face |
|-------------------------|------------------|-------------------|---------|-------|----------------|-----------------------|----------------|----------------|-----------------------------------|---------|----------|------------|
| T1 180.00-160.00 | 44.64 | 1250.43 | A | 0.139 | 2.812 | 11 | 0.825 | 1 | 13.993 | 514.75 | 25.74 | C |
| | | | B | 0.139 | 2.812 | | 0.825 | 1 | 13.993 | | | |
| | | | C | 0.139 | 2.812 | | 0.825 | 1 | 13.993 | | | |
| T2 160.00-140.00 | 250.60 | 1495.62 | A | 0.143 | 2.796 | 11 | 0.825 | 1 | 16.334 | 938.67 | 46.93 | C |
| | | | B | 0.143 | 2.796 | | 0.825 | 1 | 16.334 | | | |
| | | | C | 0.143 | 2.796 | | 0.825 | 1 | 16.334 | | | |
| T3 140.00-133.33 | 83.53 | 825.91 | A | 0.151 | 2.77 | 11 | 0.825 | 1 | 6.561 | 333.37 | 50.00 | C |
| | | | B | 0.151 | 2.77 | | 0.825 | 1 | 6.561 | | | |
| | | | C | 0.151 | 2.77 | | 0.825 | 1 | 6.561 | | | |
| T4 133.33-126.67 | 154.34 | 842.18 | A | 0.145 | 2.791 | 10 | 0.825 | 1 | 6.687 | 466.49 | 69.97 | C |
| | | | B | 0.145 | 2.791 | | 0.825 | 1 | 6.687 | | | |
| | | | C | 0.145 | 2.791 | | 0.825 | 1 | 6.687 | | | |
| T5 126.67-120.00 | 213.57 | 1080.40 | A | 0.14 | 2.81 | 10 | 0.825 | 1 | 6.810 | 554.16 | 83.12 | C |
| | | | B | 0.14 | 2.81 | | 0.825 | 1 | 6.810 | | | |
| | | | C | 0.14 | 2.81 | | 0.825 | 1 | 6.810 | | | |

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|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 42 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Section Elevation | Add Weight | Self Weight | F a c e | e | C _F | q _z | D _F | D _R | A _E | F | w | Ctrl. Face |
|---------------------|------------|-------------|---------|-------|----------------|----------------|----------------|----------------|-------------------|----------|-------|------------|
| ft | lb | lb | | | | psf | | | ft ² | lb | plf | |
| T6 120.00-100.00 | 698.17 | 3821.31 | A | 0.133 | 2.834 | 10 | 0.825 | 1 | 21.840 | 1748.28 | 87.41 | C |
| | | | B | 0.133 | 2.834 | | 0.825 | 1 | 21.840 | | | |
| | | | C | 0.133 | 2.834 | | 0.825 | 1 | 21.840 | | | |
| T7 100.00-90.00 | 349.61 | 1682.80 | A | 0.131 | 2.844 | 10 | 0.825 | 1 | 12.011 | 876.22 | 87.62 | C |
| | | | B | 0.131 | 2.844 | | 0.825 | 1 | 12.011 | | | |
| | | | C | 0.131 | 2.844 | | 0.825 | 1 | 12.011 | | | |
| T8 90.00-80.00 | 349.61 | 1722.73 | A | 0.124 | 2.87 | 10 | 0.825 | 1 | 12.296 | 865.16 | 86.52 | C |
| | | | B | 0.124 | 2.87 | | 0.825 | 1 | 12.296 | | | |
| | | | C | 0.124 | 2.87 | | 0.825 | 1 | 12.296 | | | |
| T9 80.00-60.00 | 699.37 | 4897.54 | A | 0.14 | 2.81 | 9 | 0.825 | 1 | 38.833 | 1962.64 | 98.13 | C |
| | | | B | 0.14 | 2.81 | | 0.825 | 1 | 38.833 | | | |
| | | | C | 0.14 | 2.81 | | 0.825 | 1 | 38.833 | | | |
| T10 60.00-40.00 | 702.22 | 5700.46 | A | 0.129 | 2.85 | 9 | 0.825 | 1 | 40.104 | 1874.95 | 93.75 | C |
| | | | B | 0.129 | 2.85 | | 0.825 | 1 | 40.104 | | | |
| | | | C | 0.129 | 2.85 | | 0.825 | 1 | 40.104 | | | |
| T11 40.00-30.00 | 351.11 | 2942.46 | A | 0.123 | 2.875 | 8 | 0.825 | 1 | 20.539 | 882.49 | 88.25 | C |
| | | | B | 0.123 | 2.875 | | 0.825 | 1 | 20.539 | | | |
| | | | C | 0.123 | 2.875 | | 0.825 | 1 | 20.539 | | | |
| T12 30.00-20.00 | 351.11 | 3139.03 | A | 0.119 | 2.889 | 7 | 0.825 | 1 | 20.868 | 830.00 | 83.00 | C |
| | | | B | 0.119 | 2.889 | | 0.825 | 1 | 20.868 | | | |
| | | | C | 0.119 | 2.889 | | 0.825 | 1 | 20.868 | | | |
| T13 20.00-0.00 | 702.22 | 6187.56 | A | 0.108 | 2.934 | 7 | 0.825 | 1 | 40.692 | 1485.89 | 74.29 | C |
| | | | B | 0.108 | 2.934 | | 0.825 | 1 | 40.692 | | | |
| | | | C | 0.108 | 2.934 | | 0.825 | 1 | 40.692 | | | |
| Sum Weight: | 4950.11 | 35588.43 | | | | | | OTM | 1049.58 kip-ft | 13333.06 | | |

Tower Forces - Service - Wind 60 To Face

| Section Elevation | Add Weight | Self Weight | F a c e | e | C _F | q _z | D _F | D _R | A _E | F | w | Ctrl. Face |
|---------------------|------------|-------------|---------|-------|----------------|----------------|----------------|----------------|-----------------|---------|-------|------------|
| ft | lb | lb | | | | psf | | | ft ² | lb | plf | |
| T1 180.00-160.00 | 44.64 | 1250.43 | A | 0.139 | 2.812 | 11 | 0.8 | 1 | 13.993 | 514.75 | 25.74 | C |
| | | | B | 0.139 | 2.812 | | 0.8 | 1 | 13.993 | | | |
| | | | C | 0.139 | 2.812 | | 0.8 | 1 | 13.993 | | | |
| T2 160.00-140.00 | 250.60 | 1495.62 | A | 0.143 | 2.796 | 11 | 0.8 | 1 | 16.334 | 938.67 | 46.93 | C |
| | | | B | 0.143 | 2.796 | | 0.8 | 1 | 16.334 | | | |
| | | | C | 0.143 | 2.796 | | 0.8 | 1 | 16.334 | | | |
| T3 140.00-133.33 | 83.53 | 825.91 | A | 0.151 | 2.77 | 11 | 0.8 | 1 | 6.561 | 333.37 | 50.00 | C |
| | | | B | 0.151 | 2.77 | | 0.8 | 1 | 6.561 | | | |
| | | | C | 0.151 | 2.77 | | 0.8 | 1 | 6.561 | | | |
| T4 133.33-126.67 | 154.34 | 842.18 | A | 0.145 | 2.791 | 10 | 0.8 | 1 | 6.687 | 466.49 | 69.97 | C |
| | | | B | 0.145 | 2.791 | | 0.8 | 1 | 6.687 | | | |
| | | | C | 0.145 | 2.791 | | 0.8 | 1 | 6.687 | | | |
| T5 126.67-120.00 | 213.57 | 1080.40 | A | 0.14 | 2.81 | 10 | 0.8 | 1 | 6.810 | 554.16 | 83.12 | C |
| | | | B | 0.14 | 2.81 | | 0.8 | 1 | 6.810 | | | |
| | | | C | 0.14 | 2.81 | | 0.8 | 1 | 6.810 | | | |
| T6 120.00-100.00 | 698.17 | 3821.31 | A | 0.133 | 2.834 | 10 | 0.8 | 1 | 21.840 | 1748.28 | 87.41 | C |
| | | | B | 0.133 | 2.834 | | 0.8 | 1 | 21.840 | | | |
| | | | C | 0.133 | 2.834 | | 0.8 | 1 | 21.840 | | | |
| T7 100.00-90.00 | 349.61 | 1682.80 | A | 0.131 | 2.844 | 10 | 0.8 | 1 | 12.011 | 876.22 | 87.62 | C |
| | | | B | 0.131 | 2.844 | | 0.8 | 1 | 12.011 | | | |
| | | | C | 0.131 | 2.844 | | 0.8 | 1 | 12.011 | | | |

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| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job 22027.01 - Westport | Page 43 of 71 |
| | Project 180-ft Lattice Tower (CSP #32) | Date 08:43:42 04/05/22 |
| | Client Verizon | Designed by TJL |

| Section Elevation | Add Weight | Self Weight | F a c e | e | C _F | q _z | D _F | D _R | A _E | F | w | Ctrl. Face |
|--------------------|------------|-------------|---------|-------|----------------|----------------|----------------|----------------|-------------------|----------|-------|------------|
| ft | lb | lb | | | | psf | | | ft ² | lb | plf | |
| T8 90.00-80.00 | 349.61 | 1722.73 | A | 0.124 | 2.87 | 10 | 0.8 | 1 | 12.296 | 865.16 | 86.52 | C |
| | | | B | 0.124 | 2.87 | | 0.8 | 1 | 12.296 | | | |
| | | | C | 0.124 | 2.87 | | 0.8 | 1 | 12.296 | | | |
| T9 80.00-60.00 | 699.37 | 4897.54 | A | 0.14 | 2.81 | 9 | 0.8 | 1 | 38.071 | 1945.90 | 97.29 | C |
| | | | B | 0.14 | 2.81 | | 0.8 | 1 | 38.071 | | | |
| | | | C | 0.14 | 2.81 | | 0.8 | 1 | 38.071 | | | |
| T10 60.00-40.00 | 702.22 | 5700.46 | A | 0.129 | 2.85 | 9 | 0.8 | 1 | 39.342 | 1859.13 | 92.96 | C |
| | | | B | 0.129 | 2.85 | | 0.8 | 1 | 39.342 | | | |
| | | | C | 0.129 | 2.85 | | 0.8 | 1 | 39.342 | | | |
| T11 40.00-30.00 | 351.11 | 2942.46 | A | 0.123 | 2.875 | 8 | 0.8 | 1 | 20.158 | 875.08 | 87.51 | C |
| | | | B | 0.123 | 2.875 | | 0.8 | 1 | 20.158 | | | |
| | | | C | 0.123 | 2.875 | | 0.8 | 1 | 20.158 | | | |
| T12 30.00-20.00 | 351.11 | 3139.03 | A | 0.119 | 2.889 | 7 | 0.8 | 1 | 20.487 | 823.07 | 82.31 | C |
| | | | B | 0.119 | 2.889 | | 0.8 | 1 | 20.487 | | | |
| | | | C | 0.119 | 2.889 | | 0.8 | 1 | 20.487 | | | |
| T13 20.00-0.00 | 702.22 | 6187.56 | A | 0.108 | 2.934 | 7 | 0.8 | 1 | 39.940 | 1473.40 | 73.67 | C |
| | | | B | 0.108 | 2.934 | | 0.8 | 1 | 39.940 | | | |
| | | | C | 0.108 | 2.934 | | 0.8 | 1 | 39.940 | | | |
| Sum Weight: | 4950.11 | 35588.43 | | | | | | OTM | 1047.06 kip-ft | 13273.67 | | |

Tower Forces - Service - Wind 90 To Face

| Section Elevation | Add Weight | Self Weight | F a c e | e | C _F | q _z | D _F | D _R | A _E | F | w | Ctrl. Face |
|---------------------|------------|-------------|---------|-------|----------------|----------------|----------------|----------------|-----------------|---------|-------|------------|
| ft | lb | lb | | | | psf | | | ft ² | lb | plf | |
| T1 180.00-160.00 | 44.64 | 1250.43 | A | 0.139 | 2.812 | 11 | 0.85 | 1 | 13.993 | 514.75 | 25.74 | C |
| | | | B | 0.139 | 2.812 | | 0.85 | 1 | 13.993 | | | |
| | | | C | 0.139 | 2.812 | | 0.85 | 1 | 13.993 | | | |
| T2 160.00-140.00 | 250.60 | 1495.62 | A | 0.143 | 2.796 | 11 | 0.85 | 1 | 16.334 | 938.67 | 46.93 | C |
| | | | B | 0.143 | 2.796 | | 0.85 | 1 | 16.334 | | | |
| | | | C | 0.143 | 2.796 | | 0.85 | 1 | 16.334 | | | |
| T3 140.00-133.33 | 83.53 | 825.91 | A | 0.151 | 2.77 | 11 | 0.85 | 1 | 6.561 | 333.37 | 50.00 | C |
| | | | B | 0.151 | 2.77 | | 0.85 | 1 | 6.561 | | | |
| | | | C | 0.151 | 2.77 | | 0.85 | 1 | 6.561 | | | |
| T4 133.33-126.67 | 154.34 | 842.18 | A | 0.145 | 2.791 | 10 | 0.85 | 1 | 6.687 | 466.49 | 69.97 | C |
| | | | B | 0.145 | 2.791 | | 0.85 | 1 | 6.687 | | | |
| | | | C | 0.145 | 2.791 | | 0.85 | 1 | 6.687 | | | |
| T5 126.67-120.00 | 213.57 | 1080.40 | A | 0.14 | 2.81 | 10 | 0.85 | 1 | 6.810 | 554.16 | 83.12 | C |
| | | | B | 0.14 | 2.81 | | 0.85 | 1 | 6.810 | | | |
| | | | C | 0.14 | 2.81 | | 0.85 | 1 | 6.810 | | | |
| T6 120.00-100.00 | 698.17 | 3821.31 | A | 0.133 | 2.834 | 10 | 0.85 | 1 | 21.840 | 1748.28 | 87.41 | C |
| | | | B | 0.133 | 2.834 | | 0.85 | 1 | 21.840 | | | |
| | | | C | 0.133 | 2.834 | | 0.85 | 1 | 21.840 | | | |
| T7 100.00-90.00 | 349.61 | 1682.80 | A | 0.131 | 2.844 | 10 | 0.85 | 1 | 12.011 | 876.22 | 87.62 | C |
| | | | B | 0.131 | 2.844 | | 0.85 | 1 | 12.011 | | | |
| | | | C | 0.131 | 2.844 | | 0.85 | 1 | 12.011 | | | |
| T8 90.00-80.00 | 349.61 | 1722.73 | A | 0.124 | 2.87 | 10 | 0.85 | 1 | 12.296 | 865.16 | 86.52 | C |
| | | | B | 0.124 | 2.87 | | 0.85 | 1 | 12.296 | | | |
| | | | C | 0.124 | 2.87 | | 0.85 | 1 | 12.296 | | | |
| T9 80.00-60.00 | 699.37 | 4897.54 | A | 0.14 | 2.81 | 9 | 0.85 | 1 | 39.595 | 1979.39 | 98.97 | C |
| | | | B | 0.14 | 2.81 | | 0.85 | 1 | 39.595 | | | |
| | | | C | 0.14 | 2.81 | | 0.85 | 1 | 39.595 | | | |

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| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job 22027.01 - Westport | Page 44 of 71 |
| | Project 180-ft Lattice Tower (CSP #32) | Date 08:43:42 04/05/22 |
| | Client Verizon | Designed by TJL |

| Section Elevation | Add Weight | Self Weight | F a c e | e | C _F | q _z | D _F | D _R | A _E | F | w | Ctrl. Face |
|--------------------|------------|-------------|---------|-------|----------------|----------------|----------------|----------------|-------------------|----------|-------|------------|
| ft | lb | lb | | | | psf | | | ft ² | lb | plf | |
| T10 60.00-40.00 | 702.22 | 5700.46 | A | 0.129 | 2.85 | 9 | 0.85 | 1 | 40.867 | 1890.78 | 94.54 | C |
| | | | B | 0.129 | 2.85 | | 0.85 | 1 | 40.867 | | | |
| | | | C | 0.129 | 2.85 | | 0.85 | 1 | 40.867 | | | |
| T11 40.00-30.00 | 351.11 | 2942.46 | A | 0.123 | 2.875 | 8 | 0.85 | 1 | 20.920 | 889.89 | 88.99 | C |
| | | | B | 0.123 | 2.875 | | 0.85 | 1 | 20.920 | | | |
| | | | C | 0.123 | 2.875 | | 0.85 | 1 | 20.920 | | | |
| T12 30.00-20.00 | 351.11 | 3139.03 | A | 0.119 | 2.889 | 7 | 0.85 | 1 | 21.249 | 836.93 | 83.69 | C |
| | | | B | 0.119 | 2.889 | | 0.85 | 1 | 21.249 | | | |
| | | | C | 0.119 | 2.889 | | 0.85 | 1 | 21.249 | | | |
| T13 20.00-0.00 | 702.22 | 6187.56 | A | 0.108 | 2.934 | 7 | 0.85 | 1 | 41.444 | 1498.38 | 74.92 | C |
| | | | B | 0.108 | 2.934 | | 0.85 | 1 | 41.444 | | | |
| | | | C | 0.108 | 2.934 | | 0.85 | 1 | 41.444 | | | |
| Sum Weight: | 4950.11 | 35588.43 | | | | | | OTM | 1052.10 kip-ft | 13392.46 | | |

Force Totals

| Load Case | Vertical Forces | Sum of Forces X | Sum of Forces Z | Sum of Overturning Moments, M _x | Sum of Overturning Moments, M _z | Sum of Torques |
|--------------------------|-----------------|-----------------|-----------------|--|--|----------------|
| | lb | lb | lb | kip-ft | kip-ft | kip-ft |
| Leg Weight | 17198.81 | | | | | |
| Bracing Weight | 18389.62 | | | | | |
| Total Member Self-Weight | 35588.43 | | | -9.27 | 0.35 | |
| Total Weight | 50835.50 | | | -9.27 | 0.35 | |
| Wind 0 deg - No Ice | | -179.86 | -85496.50 | -8097.75 | 30.30 | 13.73 |
| Wind 30 deg - No Ice | | 41209.63 | -72513.41 | -6939.41 | -3893.63 | -20.72 |
| Wind 45 deg - No Ice | | 58111.27 | -58956.54 | -5650.47 | -5502.39 | -35.85 |
| Wind 60 deg - No Ice | | 70856.48 | -41480.23 | -3980.78 | -6715.15 | -48.62 |
| Wind 90 deg - No Ice | | 82220.83 | 1.89 | -10.82 | -7749.21 | -64.39 |
| Wind 120 deg - No Ice | | 72707.49 | 42544.35 | 3997.25 | -6780.96 | -63.27 |
| Wind 135 deg - No Ice | | 58840.04 | 59624.17 | 5641.32 | -5522.60 | -55.95 |
| Wind 150 deg - No Ice | | 41304.60 | 72355.51 | 6891.04 | -3907.17 | -44.89 |
| Wind 180 deg - No Ice | | 200.47 | 83030.33 | 7942.85 | -33.25 | -14.55 |
| Wind 210 deg - No Ice | | -41054.24 | 72235.22 | 6871.63 | 3866.82 | 18.63 |
| Wind 225 deg - No Ice | | -57852.69 | 58657.70 | 5579.04 | 5457.32 | 33.79 |
| Wind 240 deg - No Ice | | -72532.09 | 42296.47 | 3956.64 | 6752.50 | 46.55 |
| Wind 270 deg - No Ice | | -82162.61 | -328.15 | -65.46 | 7739.60 | 62.64 |
| Wind 300 deg - No Ice | | -70900.41 | -41756.48 | -4026.41 | 6721.74 | 62.25 |
| Wind 315 deg - No Ice | | -58288.53 | -59177.75 | -5686.96 | 5531.79 | 54.88 |
| Wind 330 deg - No Ice | | -41478.56 | -72684.78 | -6967.85 | 3938.66 | 43.93 |
| Member Ice | 30349.49 | | | | | |
| Total Weight Ice | 124451.08 | | | -68.34 | -8.05 | |
| Wind 0 deg - Ice | | -27.43 | -23757.52 | -2294.64 | -3.49 | -2.59 |
| Wind 30 deg - Ice | | 11604.90 | -20326.87 | -1984.37 | -1092.76 | -13.71 |
| Wind 45 deg - Ice | | 16383.88 | -16556.64 | -1630.06 | -1541.28 | -17.96 |
| Wind 60 deg - Ice | | 20014.88 | -11674.11 | -1169.92 | -1881.98 | -21.01 |
| Wind 90 deg - Ice | | 23176.95 | -0.61 | -68.74 | -2171.15 | -22.81 |
| Wind 120 deg - Ice | | 20315.39 | 11845.84 | 1038.74 | -1892.62 | -18.56 |
| Wind 135 deg - Ice | | 16501.41 | 16664.53 | 1494.81 | -1544.42 | -14.41 |
| Wind 150 deg - Ice | | 11618.29 | 20301.08 | 1842.83 | -1094.62 | -9.29 |
| Wind 180 deg - Ice | | 30.68 | 23357.66 | 2135.99 | -13.19 | 2.46 |
| Wind 210 deg - Ice | | -11580.41 | 20283.03 | 1839.93 | 1072.33 | 13.38 |
| Wind 225 deg - Ice | | -16343.13 | 16509.55 | 1485.05 | 1517.97 | 17.64 |

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| | Project 180-ft Lattice Tower (CSP #32) | Date 08:43:42 04/05/22 |
| | Client Verizon | Designed by TJJ |

| Load Case | Vertical Forces lb | Sum of Forces X lb | Sum of Forces Z lb | Sum of Overturning Moments, M_x kip-ft | Sum of Overturning Moments, M_z kip-ft | Sum of Torques kip-ft |
|------------------------|-----------------------|--------------------------|--------------------------|---|---|--------------------------|
| Wind 240 deg - Ice | | -20288.66 | 11808.36 | 1032.61 | 1872.08 | 20.68 |
| Wind 270 deg - Ice | | -23167.78 | -50.80 | -77.04 | 2153.43 | 22.54 |
| Wind 300 deg - Ice | | -20020.90 | -11716.07 | -1176.84 | 1866.65 | 18.40 |
| Wind 315 deg - Ice | | -16410.52 | -16590.21 | -1635.59 | 1529.48 | 14.24 |
| Wind 330 deg - Ice | | -11645.70 | -20352.97 | -1988.69 | 1083.38 | 9.14 |
| Total Weight | 50835.50 | | | -9.27 | 0.35 | |
| Wind 0 deg - Service | | -38.31 | -18476.96 | -1755.86 | 9.82 | 2.92 |
| Wind 30 deg - Service | | 8910.73 | -15675.87 | -1505.13 | -840.94 | -4.41 |
| Wind 45 deg - Service | | 12565.90 | -12745.95 | -1225.83 | -1189.81 | -7.64 |
| Wind 60 deg - Service | | 15322.92 | -8968.37 | -863.98 | -1452.88 | -10.36 |
| Wind 90 deg - Service | | 17779.19 | 0.40 | -3.42 | -1677.15 | -13.72 |
| Wind 120 deg - Service | | 15717.21 | 9195.05 | 865.27 | -1466.90 | -13.48 |
| Wind 135 deg - Service | | 12721.14 | 12888.17 | 1221.65 | -1194.11 | -11.92 |
| Wind 150 deg - Service | | 8930.96 | 15642.24 | 1492.60 | -843.83 | -9.56 |
| Wind 180 deg - Service | | 42.70 | 17951.62 | 1720.64 | -3.72 | -3.10 |
| Wind 210 deg - Service | | -8877.63 | 15616.61 | 1488.47 | 841.96 | 3.97 |
| Wind 225 deg - Service | | -12510.81 | 12682.30 | 1208.39 | 1186.93 | 7.20 |
| Wind 240 deg - Service | | -15679.85 | 9142.24 | 856.62 | 1467.56 | 9.92 |
| Wind 270 deg - Service | | -17766.78 | -69.90 | -15.06 | 1681.82 | 13.34 |
| Wind 300 deg - Service | | -15332.27 | -9027.22 | -873.70 | 1461.01 | 13.26 |
| Wind 315 deg - Service | | -12603.66 | -12793.07 | -1233.60 | 1202.80 | 11.69 |
| Wind 330 deg - Service | | -8968.01 | -15712.38 | -1511.19 | 857.26 | 9.36 |

Load Combinations

| Comb. No. | Description |
|-----------|------------------------------------|
| 1 | Dead Only |
| 2 | 1.2 Dead+1.0 Wind 0 deg - No Ice |
| 3 | 0.9 Dead+1.0 Wind 0 deg - No Ice |
| 4 | 1.2 Dead+1.0 Wind 30 deg - No Ice |
| 5 | 0.9 Dead+1.0 Wind 30 deg - No Ice |
| 6 | 1.2 Dead+1.0 Wind 45 deg - No Ice |
| 7 | 0.9 Dead+1.0 Wind 45 deg - No Ice |
| 8 | 1.2 Dead+1.0 Wind 60 deg - No Ice |
| 9 | 0.9 Dead+1.0 Wind 60 deg - No Ice |
| 10 | 1.2 Dead+1.0 Wind 90 deg - No Ice |
| 11 | 0.9 Dead+1.0 Wind 90 deg - No Ice |
| 12 | 1.2 Dead+1.0 Wind 120 deg - No Ice |
| 13 | 0.9 Dead+1.0 Wind 120 deg - No Ice |
| 14 | 1.2 Dead+1.0 Wind 135 deg - No Ice |
| 15 | 0.9 Dead+1.0 Wind 135 deg - No Ice |
| 16 | 1.2 Dead+1.0 Wind 150 deg - No Ice |
| 17 | 0.9 Dead+1.0 Wind 150 deg - No Ice |
| 18 | 1.2 Dead+1.0 Wind 180 deg - No Ice |
| 19 | 0.9 Dead+1.0 Wind 180 deg - No Ice |
| 20 | 1.2 Dead+1.0 Wind 210 deg - No Ice |
| 21 | 0.9 Dead+1.0 Wind 210 deg - No Ice |
| 22 | 1.2 Dead+1.0 Wind 225 deg - No Ice |
| 23 | 0.9 Dead+1.0 Wind 225 deg - No Ice |
| 24 | 1.2 Dead+1.0 Wind 240 deg - No Ice |
| 25 | 0.9 Dead+1.0 Wind 240 deg - No Ice |
| 26 | 1.2 Dead+1.0 Wind 270 deg - No Ice |
| 27 | 0.9 Dead+1.0 Wind 270 deg - No Ice |
| 28 | 1.2 Dead+1.0 Wind 300 deg - No Ice |
| 29 | 0.9 Dead+1.0 Wind 300 deg - No Ice |

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| | Project 180-ft Lattice Tower (CSP #32) | Date 08:43:42 04/05/22 |
| | Client Verizon | Designed by TJL |

| Comb. No. | Description |
|-----------|------------------------------------|
| 30 | 1.2 Dead+1.0 Wind 315 deg - No Ice |
| 31 | 0.9 Dead+1.0 Wind 315 deg - No Ice |
| 32 | 1.2 Dead+1.0 Wind 330 deg - No Ice |
| 33 | 0.9 Dead+1.0 Wind 330 deg - No Ice |
| 34 | 1.2 Dead+1.0 Ice |
| 35 | 1.2 Dead+1.0 Wind 0 deg+1.0 Ice |
| 36 | 1.2 Dead+1.0 Wind 30 deg+1.0 Ice |
| 37 | 1.2 Dead+1.0 Wind 45 deg+1.0 Ice |
| 38 | 1.2 Dead+1.0 Wind 60 deg+1.0 Ice |
| 39 | 1.2 Dead+1.0 Wind 90 deg+1.0 Ice |
| 40 | 1.2 Dead+1.0 Wind 120 deg+1.0 Ice |
| 41 | 1.2 Dead+1.0 Wind 135 deg+1.0 Ice |
| 42 | 1.2 Dead+1.0 Wind 150 deg+1.0 Ice |
| 43 | 1.2 Dead+1.0 Wind 180 deg+1.0 Ice |
| 44 | 1.2 Dead+1.0 Wind 210 deg+1.0 Ice |
| 45 | 1.2 Dead+1.0 Wind 225 deg+1.0 Ice |
| 46 | 1.2 Dead+1.0 Wind 240 deg+1.0 Ice |
| 47 | 1.2 Dead+1.0 Wind 270 deg+1.0 Ice |
| 48 | 1.2 Dead+1.0 Wind 300 deg+1.0 Ice |
| 49 | 1.2 Dead+1.0 Wind 315 deg+1.0 Ice |
| 50 | 1.2 Dead+1.0 Wind 330 deg+1.0 Ice |
| 51 | Dead+Wind 0 deg - Service |
| 52 | Dead+Wind 30 deg - Service |
| 53 | Dead+Wind 45 deg - Service |
| 54 | Dead+Wind 60 deg - Service |
| 55 | Dead+Wind 90 deg - Service |
| 56 | Dead+Wind 120 deg - Service |
| 57 | Dead+Wind 135 deg - Service |
| 58 | Dead+Wind 150 deg - Service |
| 59 | Dead+Wind 180 deg - Service |
| 60 | Dead+Wind 210 deg - Service |
| 61 | Dead+Wind 225 deg - Service |
| 62 | Dead+Wind 240 deg - Service |
| 63 | Dead+Wind 270 deg - Service |
| 64 | Dead+Wind 300 deg - Service |
| 65 | Dead+Wind 315 deg - Service |
| 66 | Dead+Wind 330 deg - Service |

Maximum Member Forces

| Section No. | Elevation ft | Component Type | Condition | Gov. Load Comb. | Axial lb | Major Axis Moment kip-ft | Minor Axis Moment kip-ft | |
|-------------|--------------|----------------|------------------|------------------|----------|--------------------------|--------------------------|-------|
| T1 | 180 - 160 | Leg | Max Tension | 31 | 2501.39 | -0.27 | -0.20 | |
| | | | Max. Compression | 2 | -4179.54 | -0.09 | 0.02 | |
| | | | Max. Mx | 12 | -396.14 | -0.52 | -0.04 | |
| | | | Max. My | 33 | -144.55 | -0.02 | -0.92 | |
| | | | Max. Vy | 3 | 326.70 | 0.52 | 0.30 | |
| | | | Max. Vx | 32 | -472.32 | -0.02 | 0.75 | |
| | | Diagonal | Max Tension | 5 | 3956.69 | 0.00 | 0.00 | |
| | | | Max. Compression | 4 | -4024.05 | 0.00 | 0.00 | |
| | | | Max. Mx | 34 | -75.35 | 0.05 | 0.00 | |
| | | | Max. Vy | 34 | -24.39 | 0.00 | 0.00 | |
| | | | Horizontal | Max Tension | 4 | 2156.77 | -0.01 | -0.00 |
| | | | | Max. Compression | 5 | -2162.24 | -0.01 | -0.00 |
| | | Max. Mx | | 49 | -149.03 | -0.02 | -0.00 | |
| | | Max. My | | 3 | 979.60 | -0.00 | 0.00 | |
| | | Max. Vy | | 49 | 25.79 | -0.02 | -0.00 | |
| | | Max. Vx | | 3 | -0.81 | 0.00 | 0.00 | |

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| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Section No. | Elevation ft | Component Type | Condition | Gov. Load Comb. | Axial lb | Major Axis Moment kip-ft | Minor Axis Moment kip-ft | |
|---------------|------------------|-------------------|------------------|------------------|-----------|--------------------------|--------------------------|-------|
| T2 | 160 - 140 | Top Girt | Max Tension | 33 | 324.64 | -0.01 | 0.00 | |
| | | | Max. Compression | 2 | -355.00 | -0.01 | -0.00 | |
| | | | Max. Mx | 49 | 13.70 | -0.02 | -0.00 | |
| | | | Max. My | 3 | 252.14 | -0.00 | 0.00 | |
| | | | Max. Vy | 49 | -24.91 | -0.02 | -0.00 | |
| | | | Max. Vx | 3 | -0.13 | 0.00 | 0.00 | |
| | | Inner Bracing | Max Tension | 3 | 1.86 | 0.00 | 0.00 | |
| | | | Max. Compression | 18 | -1.85 | 0.00 | 0.00 | |
| | | | Max. Mx | 34 | -0.11 | -0.02 | 0.00 | |
| | | | Max. Vy | 34 | 20.88 | 0.00 | 0.00 | |
| | | | Leg | Max Tension | 19 | 24080.83 | -0.10 | -0.06 |
| | | | | Max. Compression | 2 | -30594.09 | 0.19 | 0.11 |
| | | Max. Mx | | 18 | 23203.08 | -0.20 | -0.11 | |
| | | Max. My | | 2 | 10494.25 | -0.10 | 0.33 | |
| | | Max. Vy | | 18 | -2761.01 | 0.10 | -0.01 | |
| | | Max. Vx | | 10 | 2800.87 | 0.02 | -0.14 | |
| | | Diagonal | Max Tension | 5 | 9020.57 | 0.00 | 0.00 | |
| | | | Max. Compression | 4 | -9091.89 | 0.00 | 0.00 | |
| | | | Max. Mx | 34 | -210.69 | 0.06 | 0.00 | |
| | | | Max. Vy | 34 | -29.98 | 0.00 | 0.00 | |
| Horizontal | Max Tension | | 4 | 5634.75 | -0.01 | -0.00 | | |
| | Max. Compression | | 5 | -5605.24 | -0.01 | -0.00 | | |
| | Max. Mx | 48 | -78.21 | -0.03 | -0.00 | | | |
| | Max. My | 2 | 785.22 | -0.01 | 0.01 | | | |
| | Max. Vy | 48 | -29.97 | -0.03 | -0.00 | | | |
| | Max. Vx | 2 | -2.66 | 0.00 | 0.00 | | | |
| Inner Bracing | Max Tension | 3 | 5.24 | 0.00 | 0.00 | | | |
| | Max. Compression | 18 | -7.11 | 0.00 | 0.00 | | | |
| | Max. Mx | 34 | -3.45 | -0.03 | 0.00 | | | |
| | Max. Vy | 34 | 24.00 | 0.00 | 0.00 | | | |
| | T3 | 140 - 133.333 | Leg | Max Tension | 19 | 33484.45 | -0.20 | -0.11 |
| | | | | Max. Compression | 2 | -40555.03 | 0.10 | -0.00 |
| Max. Mx | | | | 18 | 32633.29 | -0.20 | -0.11 | |
| Max. My | | | | 2 | 15086.18 | -0.10 | 0.33 | |
| Max. Vy | | | | 8 | -80.63 | -0.19 | 0.11 | |
| Max. Vx | | | | 18 | -163.19 | 0.09 | -0.33 | |
| Diagonal | | | Max Tension | 5 | 9125.41 | 0.00 | 0.00 | |
| | | | Max. Compression | 4 | -9235.50 | 0.00 | 0.00 | |
| | | | Max. Mx | 34 | -233.07 | 0.08 | 0.00 | |
| | | | Max. Vy | 34 | -36.43 | 0.00 | 0.00 | |
| | | | Horizontal | Max Tension | 4 | 5963.43 | -0.02 | -0.00 |
| | | | | Max. Compression | 5 | -5934.58 | -0.01 | -0.00 |
| Max. Mx | | | | 48 | -36.78 | -0.05 | -0.00 | |
| Max. My | | | | 18 | 820.34 | -0.03 | -0.01 | |
| Max. Vy | | | | 48 | -38.43 | -0.05 | -0.00 | |
| Max. Vx | | | | 18 | -2.27 | 0.00 | 0.00 | |
| Inner Bracing | | | Max Tension | 3 | 3.88 | 0.00 | 0.00 | |
| | | | Max. Compression | 18 | -6.69 | 0.00 | 0.00 | |
| | | | Max. Mx | 34 | -4.04 | -0.03 | 0.00 | |
| | | | Max. Vy | 34 | 25.42 | 0.00 | 0.00 | |
| | T4 | 133.333 - 126.667 | Leg | Max Tension | 19 | 42586.91 | -0.11 | -0.00 |
| | | | | Max. Compression | 2 | -51672.28 | 1.25 | 0.03 |
| Max. Mx | | | | 18 | 40421.46 | -1.33 | -0.02 | |
| Max. My | | | | 32 | -3515.93 | -0.05 | 1.28 | |
| Max. Vy | | | | 8 | -1960.72 | -0.10 | -0.00 | |
| Max. Vx | | | | 4 | -1939.01 | -0.01 | -0.05 | |
| Diagonal | | | Max Tension | 5 | 11701.09 | 0.00 | 0.00 | |
| | | | Max. Compression | 4 | -11819.63 | 0.00 | 0.00 | |
| | | | Max. Mx | 34 | -229.95 | 0.09 | 0.00 | |
| | | | Max. Vy | 34 | -38.51 | 0.00 | 0.00 | |

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| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Section No. | Elevation ft | Component Type | Condition | Gov. Load Comb. | Axial lb | Major Axis Moment kip-ft | Minor Axis Moment kip-ft | |
|------------------|------------------|------------------|------------------|------------------|-----------|--------------------------|--------------------------|------|
| T5 | 126.667 - 120 | Top Girt | Max Tension | 7 | 7897.09 | -0.01 | 0.00 | |
| | | | Max. Compression | 4 | -7888.88 | -0.02 | -0.00 | |
| | | | Max. Mx | 48 | -334.80 | -0.05 | -0.00 | |
| | | | Max. My | 3 | 220.08 | -0.00 | 0.02 | |
| | | | Max. Vy | 48 | -40.83 | -0.05 | -0.00 | |
| | | Inner Bracing | Max. Vx | 3 | 3.26 | 0.00 | 0.00 | |
| | | | Max Tension | 3 | 6.09 | 0.00 | 0.00 | |
| | | | Max. Compression | 18 | -9.04 | 0.00 | 0.00 | |
| | | | Max. Mx | 34 | -4.25 | -0.04 | 0.00 | |
| | | | Max. Vy | 34 | 26.92 | 0.00 | 0.00 | |
| | | Leg | Max Tension | 19 | 54208.05 | -1.32 | -0.02 | |
| | | | Max. Compression | 2 | -66113.55 | 0.93 | -0.05 | |
| | | | Max. Mx | 18 | 52879.04 | -1.33 | -0.02 | |
| | | | Max. My | 32 | -3552.01 | -0.05 | 1.28 | |
| | | | Max. Vy | 28 | -1444.17 | -1.32 | -0.02 | |
| | | | Max. Vx | 10 | 1398.98 | -0.04 | 1.26 | |
| | | | Diagonal | Max Tension | 5 | 13975.11 | 0.00 | 0.00 |
| | | | | Max. Compression | 4 | -14159.59 | 0.00 | 0.00 |
| | | | | Max. Mx | 34 | -248.22 | 0.13 | 0.00 |
| | | | Top Girt | Max. Vy | 34 | 55.89 | 0.00 | 0.00 |
| Max Tension | 5 | 9698.85 | | -0.02 | -0.00 | | | |
| Max. Compression | 4 | -9707.53 | | -0.02 | -0.00 | | | |
| Max. Mx | 48 | -338.73 | | -0.06 | -0.01 | | | |
| Max. My | 3 | 341.22 | | -0.00 | 0.02 | | | |
| Inner Bracing | Max. Vy | 48 | 43.11 | -0.06 | -0.01 | | | |
| | Max. Vx | 3 | -3.58 | -0.00 | 0.02 | | | |
| | Max Tension | 3 | 6.21 | 0.00 | 0.00 | | | |
| | Max. Compression | 18 | -10.63 | 0.00 | 0.00 | | | |
| | Max. Mx | 34 | -5.20 | -0.04 | 0.00 | | | |
| | Max. Vy | 34 | -28.40 | 0.00 | 0.00 | | | |
| | Leg | Max Tension | 19 | 91026.54 | -0.52 | 0.08 | | |
| | | Max. Compression | 2 | -106512.88 | 0.30 | -0.10 | | |
| | | Max. Mx | 18 | 66842.15 | -0.98 | 0.05 | | |
| | | Max. My | 26 | -8529.04 | -0.02 | -1.04 | | |
| Max. Vy | | 18 | -159.80 | -0.98 | 0.05 | | | |
| Max. Vx | | 26 | -220.32 | -0.02 | -1.04 | | | |
| Diagonal | | Max Tension | 5 | 17952.87 | 0.00 | 0.00 | | |
| | Max. Compression | 4 | -18248.16 | 0.00 | 0.00 | | | |
| | Max. Mx | 34 | -300.43 | 0.28 | 0.00 | | | |
| Horizontal | Max. Vy | 34 | -89.70 | 0.00 | 0.00 | | | |
| | Max Tension | 4 | 10785.12 | -0.03 | -0.00 | | | |
| | Max. Compression | 5 | -10681.88 | -0.02 | -0.00 | | | |
| | Max. Mx | 48 | -289.08 | -0.08 | -0.01 | | | |
| | Max. My | 18 | -1649.18 | -0.04 | -0.02 | | | |
| | Max. Vy | 48 | -49.33 | -0.08 | -0.01 | | | |
| | Max. Vx | 18 | -3.24 | -0.04 | -0.02 | | | |
| | Inner Bracing | Max Tension | 3 | 3.60 | 0.00 | 0.00 | | |
| | | Max. Compression | 18 | -12.12 | 0.00 | 0.00 | | |
| | | Max. Mx | 34 | -8.94 | -0.07 | 0.00 | | |
| Leg | Max. Vy | 34 | -42.45 | 0.00 | 0.00 | | | |
| | Max Tension | 19 | 113052.63 | -0.32 | 0.10 | | | |
| | Max. Compression | 2 | -130316.95 | 0.64 | -0.07 | | | |
| | Max. Mx | 18 | 110478.39 | -0.68 | 0.07 | | | |
| | Max. My | 11 | -7050.15 | -0.02 | 0.70 | | | |
| | Max. Vy | 18 | 147.96 | -0.68 | 0.07 | | | |
| | Max. Vx | 10 | -206.31 | -0.02 | 0.70 | | | |
| | Diagonal | Max Tension | 5 | 16507.23 | 0.00 | 0.00 | | |
| | | Max. Compression | 4 | -16726.55 | 0.00 | 0.00 | | |
| | Horizontal | Max. Mx | 34 | -315.71 | 0.23 | 0.00 | | |
| Max. Vy | | 34 | 71.24 | 0.00 | 0.00 | | | |
| Max Tension | | 6 | 10502.00 | -0.03 | 0.00 | | | |

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|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 49 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Section No. | Elevation ft | Component Type | Condition | Gov. Load Comb. | Axial lb | Major Axis Moment kip-ft | Minor Axis Moment kip-ft | |
|------------------|------------------|------------------|------------------|------------------|-----------|--------------------------|--------------------------|-------|
| T8 | 90 - 80 | Inner Bracing | Max. Compression | 5 | -10479.08 | -0.03 | -0.00 | |
| | | | Max. Mx | 48 | -550.56 | -0.09 | -0.01 | |
| | | | Max. My | 18 | -1563.12 | -0.05 | -0.02 | |
| | | | Max. Vy | 48 | -52.00 | -0.09 | -0.01 | |
| | | | Max. Vx | 18 | 2.49 | -0.05 | -0.02 | |
| | | | Max Tension | 3 | 2.46 | 0.00 | 0.00 | |
| | | | Max. Compression | 43 | -10.80 | 0.00 | 0.00 | |
| | | | Max. Mx | 34 | -9.15 | -0.09 | 0.00 | |
| | | | Max. Vy | 34 | -45.29 | 0.00 | 0.00 | |
| | | | Max Tension | 19 | 132927.94 | -0.67 | 0.07 | |
| | | | Leg | Max. Compression | 2 | -151678.03 | 0.59 | -0.06 |
| | | | | Max. Mx | 18 | 130512.67 | -0.68 | 0.07 |
| | | Max. My | | 11 | -7651.26 | -0.02 | 0.80 | |
| | | Max. Vy | | 18 | -115.85 | -0.68 | 0.07 | |
| | | Max. Vx | | 12 | -177.00 | -0.34 | 0.73 | |
| | | Diagonal | | Max Tension | 5 | 16493.82 | 0.00 | 0.00 |
| | | | | Max. Compression | 4 | -16731.46 | 0.00 | 0.00 |
| | | | | Max. Mx | 34 | -332.21 | 0.26 | 0.00 |
| | | Top Girt | | Max. Vy | 34 | -76.44 | 0.00 | 0.00 |
| | | | | Max Tension | 4 | 10998.86 | -0.04 | -0.00 |
| | | | | Max. Compression | 5 | -10927.81 | -0.03 | -0.00 |
| | | Inner Bracing | | Max. Mx | 48 | -399.99 | -0.10 | -0.01 |
| | | | Max. My | 18 | -1071.21 | -0.06 | -0.02 | |
| | | | Max. Vy | 48 | -55.76 | -0.10 | -0.01 | |
| Max. Vx | 18 | | -2.15 | -0.06 | -0.02 | | | |
| Max Tension | 3 | | 1.51 | 0.00 | 0.00 | | | |
| Max. Compression | 43 | | -11.04 | 0.00 | 0.00 | | | |
| Max. Mx | 34 | | -9.59 | -0.10 | 0.00 | | | |
| Max. Vy | 34 | | 48.77 | 0.00 | 0.00 | | | |
| Leg | Max Tension | | 19 | 171813.55 | -1.16 | 0.05 | | |
| | Max. Compression | | 2 | -194378.21 | 1.74 | -0.07 | | |
| | Max. Mx | | 18 | 168341.14 | -1.76 | 0.07 | | |
| | Max. My | | 11 | -9270.65 | -0.02 | 1.64 | | |
| | Max. Vy | 18 | 261.40 | -1.76 | 0.07 | | | |
| | Max. Vx | 13 | -320.55 | -0.90 | 1.48 | | | |
| | Diagonal | Max Tension | 5 | 17525.59 | 0.00 | 0.00 | | |
| | | Max. Compression | 4 | -17849.15 | 0.00 | 0.00 | | |
| | | Max. Mx | 34 | -408.47 | 0.31 | 0.00 | | |
| | Horizontal | Max. Vy | 34 | -86.22 | 0.00 | 0.00 | | |
| | | Max Tension | 4 | 12579.06 | -0.08 | -0.00 | | |
| | | Max. Compression | 5 | -12460.22 | -0.06 | -0.00 | | |
| Inner Bracing | Max. Mx | 48 | -409.59 | -0.17 | -0.01 | | | |
| | Max. My | 3 | 819.52 | -0.03 | 0.03 | | | |
| | Max. Vy | 48 | -83.56 | -0.17 | -0.01 | | | |
| | Max. Vx | 18 | -2.83 | -0.10 | -0.03 | | | |
| | Max Tension | 3 | 2.53 | 0.00 | 0.00 | | | |
| | Max. Compression | 43 | -12.95 | 0.00 | 0.00 | | | |
| Leg | Max. Mx | 34 | -11.15 | -0.15 | 0.00 | | | |
| | Max. Vy | 34 | 64.61 | 0.00 | 0.00 | | | |
| | Max Tension | 19 | 211153.03 | -1.18 | 0.05 | | | |
| | Max. Compression | 2 | -238636.17 | 1.05 | -0.05 | | | |
| | Max. Mx | 18 | 188169.76 | -1.76 | 0.07 | | | |
| | Max. My | 11 | -9678.01 | -0.02 | 1.64 | | | |
| | Max. Vy | 8 | -307.64 | -1.72 | 0.13 | | | |
| | Max. Vx | 11 | 322.07 | -0.02 | 1.64 | | | |
| | Diagonal | Max Tension | 17 | 18690.11 | 0.00 | 0.00 | | |
| | | Max. Compression | 16 | -19178.65 | 0.00 | 0.00 | | |
| | | Max. Mx | 34 | -513.43 | 0.43 | 0.00 | | |
| | Horizontal | Max. Vy | 34 | -113.22 | 0.00 | 0.00 | | |
| Max Tension | | 16 | 14262.91 | -0.10 | -0.00 | | | |
| Max. Compression | | 15 | -14115.13 | -0.08 | -0.01 | | | |

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|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 50 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Section No. | Elevation ft | Component Type | Condition | Gov. Load Comb. | Axial lb | Major Axis Moment kip-ft | Minor Axis Moment kip-ft | | |
|---------------|------------------|----------------|------------------|-----------------|------------------|--------------------------|--------------------------|------|------|
| T11 | 40 - 30 | Inner Bracing | Max. Mx | 48 | -359.20 | -0.21 | -0.01 | | |
| | | | Max. My | 3 | 1164.86 | -0.04 | 0.03 | | |
| | | | Max. Vy | 48 | -92.20 | -0.21 | -0.01 | | |
| | | | Max. Vx | 3 | -2.60 | 0.00 | 0.00 | | |
| | | | Max Tension | 3 | 0.54 | 0.00 | 0.00 | | |
| | | | Max. Compression | 43 | -15.38 | 0.00 | 0.00 | | |
| | | Leg | Max. Mx | 34 | -13.82 | -0.24 | 0.00 | | |
| | | | Max. Vy | 34 | -90.29 | 0.00 | 0.00 | | |
| | | | Max Tension | 19 | 230783.53 | -1.11 | 0.05 | | |
| | | | Max. Compression | 2 | -261072.47 | 2.44 | -0.04 | | |
| | | | Max. Mx | 2 | -261072.47 | 2.44 | -0.04 | | |
| | | | Max. My | 11 | -11614.54 | -0.04 | 1.15 | | |
| | | Diagonal | Max. Vy | 3 | -302.18 | 2.42 | -0.04 | | |
| | | | Max. Vx | 13 | 247.05 | -0.59 | 1.04 | | |
| | | | Max Tension | 17 | 19250.69 | 0.00 | 0.00 | | |
| | | | Max. Compression | 16 | -19775.01 | 0.00 | 0.00 | | |
| | | | Max. Mx | 34 | -544.00 | 0.46 | 0.00 | | |
| | | | Max. Vy | 34 | -117.43 | 0.00 | 0.00 | | |
| | | Horizontal | Max Tension | 16 | 15039.23 | -0.11 | -0.00 | | |
| | | | Max. Compression | 15 | -14904.94 | -0.09 | -0.01 | | |
| | | | Max. Mx | 48 | -406.70 | -0.22 | -0.01 | | |
| Max. My | 3 | | 980.10 | -0.06 | 0.03 | | | | |
| Max. Vy | 48 | | -95.24 | -0.22 | -0.01 | | | | |
| Max. Vx | 3 | | -2.26 | -0.06 | 0.03 | | | | |
| Inner Bracing | Max Tension | 1 | 0.00 | 0.00 | 0.00 | | | | |
| | Max. Compression | 43 | -15.63 | 0.00 | 0.00 | | | | |
| | Max. Mx | 34 | -14.16 | -0.26 | 0.00 | | | | |
| | Max. Vy | 34 | -93.18 | 0.00 | 0.00 | | | | |
| | Max Tension | 19 | 250199.52 | -2.26 | 0.04 | | | | |
| | Max. Compression | 2 | -283448.84 | -2.08 | -0.11 | | | | |
| T12 | 30 - 20 | Leg | Max. Mx | 2 | -282833.66 | 2.44 | -0.04 | | |
| | | | Max. My | 11 | -13066.30 | -0.37 | 4.13 | | |
| | | | Max. Vy | 2 | 599.38 | 2.44 | -0.04 | | |
| | | | Max. Vx | 10 | -526.47 | -0.50 | 4.13 | | |
| | | | Max Tension | 17 | 19845.87 | 0.00 | 0.00 | | |
| | | | Max. Compression | 16 | -20454.95 | 0.00 | 0.00 | | |
| | | Diagonal | Max. Mx | 34 | -597.67 | 0.49 | 0.00 | | |
| | | | Max. Vy | 34 | -121.65 | 0.00 | 0.00 | | |
| | | | Max Tension | 16 | 15903.26 | -0.17 | -0.00 | | |
| | | | Max. Compression | 17 | -15542.99 | -0.13 | -0.00 | | |
| | | | Max. Mx | 38 | 777.27 | -0.29 | -0.01 | | |
| | | | Max. My | 3 | 688.94 | -0.10 | 0.02 | | |
| | | Top Girt | Max. Vy | 38 | -115.41 | -0.29 | -0.01 | | |
| | | | Max. Vx | 3 | 1.94 | 0.00 | 0.00 | | |
| | | | Max Tension | 1 | 0.00 | 0.00 | 0.00 | | |
| | | | Max. Compression | 43 | -16.45 | 0.00 | 0.00 | | |
| | | | Max. Mx | 34 | -15.21 | -0.29 | 0.00 | | |
| | | | Max. Vy | 34 | 96.06 | 0.00 | 0.00 | | |
| | | T13 | 20 - 0 | Leg | Max Tension | 19 | 267893.42 | 1.25 | 0.12 |
| | | | | | Max. Compression | 2 | -305388.09 | 0.00 | 0.00 |
| | | | | | Max. Mx | 2 | -304652.89 | 7.05 | 0.08 |
| Max. My | 11 | | | | -13855.50 | -0.37 | 4.13 | | |
| Max. Vy | 2 | | | | -1038.36 | 7.05 | 0.08 | | |
| Max. Vx | 10 | | | | 918.62 | -0.50 | 4.13 | | |
| Diagonal | Max Tension | | | 17 | 29394.83 | -0.14 | -0.03 | | |
| | Max. Compression | | | 14 | -30142.64 | 0.00 | 0.00 | | |
| | Max. Mx | | | 32 | 12914.98 | -0.23 | -0.03 | | |
| | Max. My | | | 2 | -25189.50 | -0.03 | 0.04 | | |
| | Max. Vy | | | 36 | -80.75 | -0.20 | -0.00 | | |
| | Max. Vx | | | 2 | 3.63 | -0.03 | 0.04 | | |
| Horizontal | Max Tension | | | 16 | 16623.88 | -0.23 | 0.00 | | |

| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 51 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Section No. | Elevation ft | Component Type | Condition | Gov. Load Comb. | Axial lb | Major Axis Moment kip-ft | Minor Axis Moment kip-ft |
|-------------|--------------|-----------------------|------------------|-----------------|-----------|--------------------------|--------------------------|
| | | | Max. Compression | 15 | -16764.09 | -0.20 | -0.01 |
| | | | Max. Mx | 38 | -822.84 | -0.41 | -0.01 |
| | | | Max. My | 3 | 1708.91 | -0.07 | 0.05 |
| | | | Max. Vy | 38 | 145.05 | -0.41 | -0.01 |
| | | | Max. Vx | 3 | 4.15 | 0.00 | 0.00 |
| | | Redund Horz 1 Bracing | Max Tension | 4 | 1303.63 | 0.00 | 0.00 |
| | | | Max. Compression | 5 | -1167.97 | 0.00 | 0.00 |
| | | | Max. Mx | 34 | 195.62 | 0.04 | 0.00 |
| | | | Max. Vy | 34 | 23.11 | 0.00 | 0.00 |
| | | Redund Diag 1 Bracing | Max Tension | 4 | 1250.87 | 0.00 | 0.00 |
| | | | Max. Compression | 5 | -1095.38 | 0.00 | 0.00 |
| | | | Max. Mx | 34 | 118.86 | 0.07 | 0.00 |
| | | | Max. Vy | 34 | -25.88 | 0.00 | 0.00 |
| | | Redund Hip 1 Bracing | Max Tension | 3 | 1.69 | 0.00 | 0.00 |
| | | | Max. Compression | 18 | -17.64 | 0.00 | 0.00 |
| | | | Max. Mx | 34 | -14.27 | 0.06 | 0.00 |
| | | | Max. Vy | 34 | -38.89 | 0.00 | 0.00 |
| | | Inner Bracing | Max Tension | 1 | 0.00 | 0.00 | 0.00 |
| | | | Max. Compression | 43 | -14.50 | 0.00 | 0.00 |
| | | | Max. Mx | 34 | -12.95 | 0.18 | 0.00 |
| | | | Max. Vy | 34 | -57.34 | 0.00 | 0.00 |

Maximum Reactions

| Location | Condition | Gov. Load Comb. | Vertical lb | Horizontal, X lb | Horizontal, Z lb |
|----------|---------------------|-----------------|-------------|------------------|------------------|
| Leg C | Max. Vert | 24 | 336084.60 | 41493.76 | -25103.83 |
| | Max. H _x | 24 | 336084.60 | 41493.76 | -25103.83 |
| | Max. H _z | 7 | -291273.07 | -35977.50 | 24318.66 |
| | Min. Vert | 9 | -299936.43 | -38110.37 | 23190.13 |
| | Min. H _x | 9 | -299936.43 | -38110.37 | 23190.13 |
| | Min. H _z | 22 | 323721.20 | 38383.64 | -25668.49 |
| Leg B | Max. Vert | 12 | 337955.11 | -41465.99 | -25495.76 |
| | Max. H _x | 29 | -301123.66 | 38059.81 | 23498.94 |
| | Max. H _z | 31 | -293093.92 | 35920.83 | 24749.54 |
| | Min. Vert | 29 | -301123.66 | 38059.81 | 23498.94 |
| | Min. H _x | 12 | 337955.11 | -41465.99 | -25495.76 |
| | Min. H _z | 14 | 327246.27 | -38740.13 | -26464.01 |
| Leg A | Max. Vert | 2 | 347529.29 | 292.49 | 49464.33 |
| | Max. H _x | 27 | 17943.17 | 10231.57 | 1500.24 |
| | Max. H _z | 2 | 347529.29 | 292.49 | 49464.33 |
| | Min. Vert | 19 | -305707.66 | -311.38 | -45170.95 |
| | Min. H _x | 10 | 20862.92 | -10271.05 | 1723.93 |
| | Min. H _z | 19 | -305707.66 | -311.38 | -45170.95 |

Tower Mast Reaction Summary

| | | | | |
|---|----------------|--------------------------------|--------------------|-------------------|
| <p style="text-align: center;">tnxTower</p> <p style="text-align: center;">Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587</p> | Job | 22027.01 - Westport | Page | 52 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Load Combination | Vertical lb | Shear _x lb | Shear _z lb | Overturning Moment, M _x kip-ft | Overturning Moment, M _z kip-ft | Torque kip-ft |
|------------------------------------|----------------|--------------------------|--------------------------|--|--|------------------|
| Dead Only | 50835.50 | -0.00 | 0.00 | -9.27 | 0.35 | 0.00 |
| 1.2 Dead+1.0 Wind 0 deg - No Ice | 61002.60 | -179.86 | -85496.50 | -7842.53 | 30.36 | 13.73 |
| 0.9 Dead+1.0 Wind 0 deg - No Ice | 45751.95 | -179.86 | -85496.50 | -7839.75 | 30.26 | 13.73 |
| 1.2 Dead+1.0 Wind 30 deg - No Ice | 61002.60 | 41209.63 | -72513.41 | -6722.75 | -3767.40 | -20.72 |
| 0.9 Dead+1.0 Wind 30 deg - No Ice | 45751.95 | 41209.63 | -72513.41 | -6719.97 | -3767.51 | -20.72 |
| 1.2 Dead+1.0 Wind 45 deg - No Ice | 61002.60 | 58111.27 | -58956.54 | -5474.47 | -5324.47 | -35.84 |
| 0.9 Dead+1.0 Wind 45 deg - No Ice | 45751.95 | 58111.27 | -58956.54 | -5471.69 | -5324.57 | -35.84 |
| 1.2 Dead+1.0 Wind 60 deg - No Ice | 61002.60 | 70856.48 | -41480.23 | -3857.26 | -6497.94 | -48.62 |
| 0.9 Dead+1.0 Wind 60 deg - No Ice | 45751.95 | 70856.48 | -41480.23 | -3854.48 | -6498.05 | -48.62 |
| 1.2 Dead+1.0 Wind 90 deg - No Ice | 61002.60 | 82220.83 | 1.89 | -12.67 | -7496.83 | -64.39 |
| 0.9 Dead+1.0 Wind 90 deg - No Ice | 45751.95 | 82220.83 | 1.89 | -9.89 | -7496.93 | -64.39 |
| 1.2 Dead+1.0 Wind 120 deg - No Ice | 61002.60 | 72707.49 | 42544.35 | 3866.86 | -6558.26 | -63.27 |
| 0.9 Dead+1.0 Wind 120 deg - No Ice | 45751.95 | 72707.49 | 42544.35 | 3869.64 | -6558.36 | -63.27 |
| 1.2 Dead+1.0 Wind 135 deg - No Ice | 61002.60 | 58840.04 | 59624.17 | 5459.37 | -5342.43 | -55.95 |
| 0.9 Dead+1.0 Wind 135 deg - No Ice | 45751.95 | 58840.04 | 59624.17 | 5462.16 | -5342.54 | -55.95 |
| 1.2 Dead+1.0 Wind 150 deg - No Ice | 61002.60 | 41304.60 | 72355.51 | 6670.67 | -3780.94 | -44.89 |
| 0.9 Dead+1.0 Wind 150 deg - No Ice | 45751.95 | 41304.60 | 72355.51 | 6673.45 | -3781.05 | -44.89 |
| 1.2 Dead+1.0 Wind 180 deg - No Ice | 61002.60 | 200.47 | 83030.33 | 7690.26 | -33.18 | -14.55 |
| 0.9 Dead+1.0 Wind 180 deg - No Ice | 45751.95 | 200.47 | 83030.33 | 7693.04 | -33.28 | -14.55 |
| 1.2 Dead+1.0 Wind 210 deg - No Ice | 61002.60 | -41054.24 | 72235.22 | 6651.27 | 3740.73 | 18.63 |
| 0.9 Dead+1.0 Wind 210 deg - No Ice | 45751.95 | -41054.24 | 72235.22 | 6654.05 | 3740.63 | 18.63 |
| 1.2 Dead+1.0 Wind 225 deg - No Ice | 61002.60 | -57852.69 | 58657.70 | 5399.34 | 5279.53 | 33.78 |
| 0.9 Dead+1.0 Wind 225 deg - No Ice | 45751.95 | -57852.69 | 58657.70 | 5402.12 | 5279.43 | 33.78 |
| 1.2 Dead+1.0 Wind 240 deg - No Ice | 61002.60 | -72532.09 | 42296.47 | 3826.25 | 6529.93 | 46.55 |
| 0.9 Dead+1.0 Wind 240 deg - No Ice | 45751.95 | -72532.09 | 42296.47 | 3829.03 | 6529.83 | 46.55 |
| 1.2 Dead+1.0 Wind 270 deg - No Ice | 61002.60 | -82162.61 | -328.15 | -67.32 | 7487.36 | 62.64 |
| 0.9 Dead+1.0 Wind 270 deg - No Ice | 45751.95 | -82162.61 | -328.15 | -64.54 | 7487.25 | 62.64 |
| 1.2 Dead+1.0 Wind 300 deg - No Ice | 61002.60 | -70900.41 | -41756.48 | -3902.89 | 6504.66 | 62.25 |
| 0.9 Dead+1.0 Wind 300 deg - No Ice | 45751.95 | -70900.41 | -41756.48 | -3900.11 | 6504.56 | 62.25 |
| 1.2 Dead+1.0 Wind 315 deg - No Ice | 61002.60 | -58288.53 | -59177.75 | -5510.96 | 5354.01 | 54.88 |
| 0.9 Dead+1.0 Wind 315 deg - No Ice | 45751.95 | -58288.53 | -59177.75 | -5508.18 | 5353.90 | 54.88 |

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|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 53 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| <i>Load Combination</i> | <i>Vertical</i> | <i>Shear_x</i> | <i>Shear_z</i> | <i>Overturning Moment, M_x</i> | <i>Overturning Moment, M_z</i> | <i>Torque</i> |
|------------------------------------|-----------------|--------------------------|--------------------------|--|--|---------------|
| | <i>lb</i> | <i>lb</i> | <i>lb</i> | <i>kip-ft</i> | <i>kip-ft</i> | <i>kip-ft</i> |
| 1.2 Dead+1.0 Wind 330 deg - No Ice | 61002.60 | -41478.56 | -72684.78 | -6751.19 | 3812.57 | 43.93 |
| 0.9 Dead+1.0 Wind 330 deg - No Ice | 45751.95 | -41478.56 | -72684.78 | -6748.41 | 3812.46 | 43.93 |
| 1.2 Dead+1.0 Ice | 134618.18 | -0.00 | -0.00 | -70.19 | -7.98 | -0.00 |
| 1.2 Dead+1.0 Wind 0 deg+1.0 Ice | 134618.18 | -27.43 | -23757.52 | -2211.84 | -3.42 | -2.59 |
| 1.2 Dead+1.0 Wind 30 deg+1.0 Ice | 134618.18 | 11604.90 | -20326.87 | -1913.72 | -1050.83 | -13.71 |
| 1.2 Dead+1.0 Wind 45 deg+1.0 Ice | 134618.18 | 16383.88 | -16556.64 | -1572.82 | -1482.13 | -17.96 |
| 1.2 Dead+1.0 Wind 60 deg+1.0 Ice | 134618.18 | 20014.88 | -11674.11 | -1130.07 | -1809.68 | -21.01 |
| 1.2 Dead+1.0 Wind 90 deg+1.0 Ice | 134618.18 | 23176.95 | -0.61 | -70.59 | -2087.37 | -22.81 |
| 1.2 Dead+1.0 Wind 120 deg+1.0 Ice | 134618.18 | 20315.39 | 11845.84 | 994.56 | -1819.24 | -18.56 |
| 1.2 Dead+1.0 Wind 135 deg+1.0 Ice | 134618.18 | 16501.41 | 16664.53 | 1433.43 | -1484.82 | -14.41 |
| 1.2 Dead+1.0 Wind 150 deg+1.0 Ice | 134618.18 | 11618.29 | 20301.08 | 1768.48 | -1052.70 | -9.29 |
| 1.2 Dead+1.0 Wind 180 deg+1.0 Ice | 134618.18 | 30.68 | 23357.66 | 2050.74 | -13.12 | 2.46 |
| 1.2 Dead+1.0 Wind 210 deg+1.0 Ice | 134618.18 | -11580.41 | 20283.03 | 1765.58 | 1030.53 | 13.38 |
| 1.2 Dead+1.0 Wind 225 deg+1.0 Ice | 134618.18 | -16343.13 | 16509.55 | 1424.11 | 1458.95 | 17.64 |
| 1.2 Dead+1.0 Wind 240 deg+1.0 Ice | 134618.18 | -20288.66 | 11808.36 | 988.43 | 1798.83 | 20.68 |
| 1.2 Dead+1.0 Wind 270 deg+1.0 Ice | 134618.18 | -23167.78 | -50.80 | -78.89 | 2069.78 | 22.54 |
| 1.2 Dead+1.0 Wind 300 deg+1.0 Ice | 134618.18 | -20020.90 | -11716.07 | -1136.99 | 1794.49 | 18.40 |
| 1.2 Dead+1.0 Wind 315 deg+1.0 Ice | 134618.18 | -16410.52 | -16590.21 | -1578.35 | 1470.46 | 14.24 |
| 1.2 Dead+1.0 Wind 330 deg+1.0 Ice | 134618.18 | -11645.70 | -20352.97 | -1918.04 | 1041.58 | 9.14 |
| Dead+Wind 0 deg - Service | 50835.50 | -38.31 | -18476.96 | -1706.74 | 6.73 | 2.93 |
| Dead+Wind 30 deg - Service | 50835.50 | 8910.73 | -15675.87 | -1464.29 | -816.89 | -4.41 |
| Dead+Wind 45 deg - Service | 50835.50 | 12565.90 | -12745.95 | -1193.74 | -1154.63 | -7.64 |
| Dead+Wind 60 deg - Service | 50835.50 | 15322.92 | -8968.37 | -843.19 | -1409.24 | -10.36 |
| Dead+Wind 90 deg - Service | 50835.50 | 17779.19 | 0.40 | -9.60 | -1625.94 | -13.72 |
| Dead+Wind 120 deg - Service | 50835.50 | 15717.21 | 9195.05 | 831.43 | -1422.09 | -13.48 |
| Dead+Wind 135 deg - Service | 50835.50 | 12721.14 | 12888.17 | 1176.72 | -1158.45 | -11.92 |
| Dead+Wind 150 deg - Service | 50835.50 | 8930.96 | 15642.24 | 1439.40 | -819.77 | -9.56 |
| Dead+Wind 180 deg - Service | 50835.50 | 42.70 | 17951.62 | 1660.51 | -6.81 | -3.10 |
| Dead+Wind 210 deg - Service | 50835.50 | -8877.63 | 15616.61 | 1435.27 | 811.72 | 3.97 |
| Dead+Wind 225 deg - Service | 50835.50 | -12510.81 | 12682.30 | 1163.93 | 1145.57 | 7.20 |
| Dead+Wind 240 deg - Service | 50835.50 | -15679.85 | 9142.24 | 822.78 | 1416.58 | 9.92 |
| Dead+Wind 270 deg - Service | 50835.50 | -17766.78 | -69.90 | -21.24 | 1624.44 | 13.34 |
| Dead+Wind 300 deg - Service | 50835.50 | -15332.27 | -9027.22 | -852.91 | 1411.19 | 13.26 |
| Dead+Wind 315 deg - Service | 50835.50 | -12603.66 | -12793.07 | -1201.51 | 1161.44 | 11.69 |
| Dead+Wind 330 deg - Service | 50835.50 | -8968.01 | -15712.38 | -1470.35 | 827.03 | 9.36 |

Solution Summary

| | | | | |
|---|----------------|--------------------------------|--------------------|-------------------|
| <p style="text-align: center;">tnxTower</p> <p style="text-align: center;">Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587</p> | Job | 22027.01 - Westport | Page | 54 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Load Comb. | Sum of Applied Forces | | | Sum of Reactions | | | % Error |
|------------|-----------------------|------------|-----------|------------------|-----------|-----------|---------|
| | PX lb | PY lb | PZ lb | PX lb | PY lb | PZ lb | |
| 1 | 0.00 | -50835.50 | 0.00 | 0.00 | 50835.50 | 0.00 | 0.000% |
| 2 | -179.86 | -61002.60 | -85496.50 | 179.86 | 61002.60 | 85496.50 | 0.000% |
| 3 | -179.86 | -45751.95 | -85496.50 | 179.86 | 45751.95 | 85496.50 | 0.000% |
| 4 | 41209.63 | -61002.60 | -72513.41 | -41209.63 | 61002.60 | 72513.41 | 0.000% |
| 5 | 41209.63 | -45751.95 | -72513.41 | -41209.63 | 45751.95 | 72513.41 | 0.000% |
| 6 | 58111.27 | -61002.60 | -58956.54 | -58111.27 | 61002.60 | 58956.54 | 0.000% |
| 7 | 58111.27 | -45751.95 | -58956.54 | -58111.27 | 45751.95 | 58956.54 | 0.000% |
| 8 | 70856.48 | -61002.60 | -41480.23 | -70856.48 | 61002.60 | 41480.23 | 0.000% |
| 9 | 70856.48 | -45751.95 | -41480.23 | -70856.48 | 45751.95 | 41480.23 | 0.000% |
| 10 | 82220.83 | -61002.60 | 1.89 | -82220.83 | 61002.60 | -1.89 | 0.000% |
| 11 | 82220.83 | -45751.95 | 1.89 | -82220.83 | 45751.95 | -1.89 | 0.000% |
| 12 | 72707.49 | -61002.60 | 42544.35 | -72707.49 | 61002.60 | -42544.35 | 0.000% |
| 13 | 72707.49 | -45751.95 | 42544.35 | -72707.49 | 45751.95 | -42544.35 | 0.000% |
| 14 | 58840.04 | -61002.60 | 59624.17 | -58840.04 | 61002.60 | -59624.17 | 0.000% |
| 15 | 58840.04 | -45751.95 | 59624.17 | -58840.04 | 45751.95 | -59624.17 | 0.000% |
| 16 | 41304.60 | -61002.60 | 72355.51 | -41304.60 | 61002.60 | -72355.51 | 0.000% |
| 17 | 41304.60 | -45751.95 | 72355.51 | -41304.60 | 45751.95 | -72355.51 | 0.000% |
| 18 | 200.47 | -61002.60 | 83030.33 | -200.47 | 61002.60 | -83030.33 | 0.000% |
| 19 | 200.47 | -45751.95 | 83030.33 | -200.47 | 45751.95 | -83030.33 | 0.000% |
| 20 | -41054.24 | -61002.60 | 72235.22 | 41054.24 | 61002.60 | -72235.22 | 0.000% |
| 21 | -41054.24 | -45751.95 | 72235.22 | 41054.24 | 45751.95 | -72235.22 | 0.000% |
| 22 | -57852.69 | -61002.60 | 58657.70 | 57852.69 | 61002.60 | -58657.70 | 0.000% |
| 23 | -57852.69 | -45751.95 | 58657.70 | 57852.69 | 45751.95 | -58657.70 | 0.000% |
| 24 | -72532.09 | -61002.60 | 42296.47 | 72532.09 | 61002.60 | -42296.47 | 0.000% |
| 25 | -72532.09 | -45751.95 | 42296.47 | 72532.09 | 45751.95 | -42296.47 | 0.000% |
| 26 | -82162.61 | -61002.60 | -328.15 | 82162.61 | 61002.60 | 328.15 | 0.000% |
| 27 | -82162.61 | -45751.95 | -328.15 | 82162.61 | 45751.95 | 328.15 | 0.000% |
| 28 | -70900.41 | -61002.60 | -41756.48 | 70900.41 | 61002.60 | 41756.48 | 0.000% |
| 29 | -70900.41 | -45751.95 | -41756.48 | 70900.41 | 45751.95 | 41756.48 | 0.000% |
| 30 | -58288.53 | -61002.60 | -59177.75 | 58288.53 | 61002.60 | 59177.75 | 0.000% |
| 31 | -58288.53 | -45751.95 | -59177.75 | 58288.53 | 45751.95 | 59177.75 | 0.000% |
| 32 | -41478.56 | -61002.60 | -72684.78 | 41478.56 | 61002.60 | 72684.78 | 0.000% |
| 33 | -41478.56 | -45751.95 | -72684.78 | 41478.56 | 45751.95 | 72684.78 | 0.000% |
| 34 | 0.00 | -134618.18 | 0.00 | 0.00 | 134618.18 | 0.00 | 0.000% |
| 35 | -27.43 | -134618.18 | -23757.52 | 27.43 | 134618.18 | 23757.52 | 0.000% |
| 36 | 11604.90 | -134618.18 | -20326.87 | -11604.90 | 134618.18 | 20326.87 | 0.000% |
| 37 | 16383.88 | -134618.18 | -16556.64 | -16383.88 | 134618.18 | 16556.64 | 0.000% |
| 38 | 20014.88 | -134618.18 | -11674.11 | -20014.88 | 134618.18 | 11674.11 | 0.000% |
| 39 | 23176.95 | -134618.18 | -0.61 | -23176.95 | 134618.18 | 0.61 | 0.000% |
| 40 | 20315.39 | -134618.18 | 11845.84 | -20315.39 | 134618.18 | -11845.84 | 0.000% |
| 41 | 16501.41 | -134618.18 | 16664.53 | -16501.41 | 134618.18 | -16664.53 | 0.000% |
| 42 | 11618.29 | -134618.18 | 20301.08 | -11618.29 | 134618.18 | -20301.08 | 0.000% |
| 43 | 30.68 | -134618.18 | 23357.66 | -30.68 | 134618.18 | -23357.66 | 0.000% |
| 44 | -11580.41 | -134618.18 | 20283.03 | 11580.41 | 134618.18 | -20283.03 | 0.000% |
| 45 | -16343.13 | -134618.18 | 16509.55 | 16343.13 | 134618.18 | -16509.55 | 0.000% |
| 46 | -20288.66 | -134618.18 | 11808.36 | 20288.66 | 134618.18 | -11808.36 | 0.000% |
| 47 | -23167.78 | -134618.18 | -50.80 | 23167.78 | 134618.18 | 50.80 | 0.000% |
| 48 | -20020.90 | -134618.18 | -11716.07 | 20020.90 | 134618.18 | 11716.07 | 0.000% |
| 49 | -16410.52 | -134618.18 | -16590.21 | 16410.52 | 134618.18 | 16590.21 | 0.000% |
| 50 | -11645.70 | -134618.18 | -20352.97 | 11645.70 | 134618.18 | 20352.97 | 0.000% |
| 51 | -38.31 | -50835.50 | -18476.96 | 38.31 | 50835.50 | 18476.96 | 0.000% |
| 52 | 8910.73 | -50835.50 | -15675.87 | -8910.73 | 50835.50 | 15675.87 | 0.000% |
| 53 | 12565.90 | -50835.50 | -12745.95 | -12565.90 | 50835.50 | 12745.95 | 0.000% |
| 54 | 15322.92 | -50835.50 | -8968.37 | -15322.92 | 50835.50 | 8968.37 | 0.000% |
| 55 | 17779.19 | -50835.50 | 0.40 | -17779.19 | 50835.50 | -0.40 | 0.000% |
| 56 | 15717.21 | -50835.50 | 9195.05 | -15717.21 | 50835.50 | -9195.05 | 0.000% |
| 57 | 12721.14 | -50835.50 | 12888.17 | -12721.14 | 50835.50 | -12888.17 | 0.000% |
| 58 | 8930.96 | -50835.50 | 15642.24 | -8930.96 | 50835.50 | -15642.24 | 0.000% |
| 59 | 42.70 | -50835.50 | 17951.62 | -42.70 | 50835.50 | -17951.62 | 0.000% |
| 60 | -8877.63 | -50835.50 | 15616.61 | 8877.63 | 50835.50 | -15616.61 | 0.000% |
| 61 | -12510.81 | -50835.50 | 12682.30 | 12510.81 | 50835.50 | -12682.30 | 0.000% |

| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 55 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Load Comb. | Sum of Applied Forces | | | Sum of Reactions | | | % Error |
|------------|-----------------------|-----------|-----------|------------------|----------|----------|---------|
| | PX lb | PY lb | PZ lb | PX lb | PY lb | PZ lb | |
| 62 | -15679.85 | -50835.50 | 9142.24 | 15679.85 | 50835.50 | -9142.24 | 0.000% |
| 63 | -17766.78 | -50835.50 | -69.90 | 17766.78 | 50835.50 | 69.90 | 0.000% |
| 64 | -15332.27 | -50835.50 | -9027.22 | 15332.27 | 50835.50 | 9027.22 | 0.000% |
| 65 | -12603.66 | -50835.50 | -12793.07 | 12603.66 | 50835.50 | 12793.07 | 0.000% |
| 66 | -8968.01 | -50835.50 | -15712.38 | 8968.01 | 50835.50 | 15712.38 | 0.000% |

Maximum Tower Deflections - Service Wind

| Section No. | Elevation ft | Horz. Deflection in | Gov. Load Comb. | Tilt ° | Twist ° |
|-------------|-------------------|---------------------|-----------------|--------|---------|
| T1 | 180 - 160 | 1.973 | 51 | 0.0852 | 0.0441 |
| T2 | 160 - 140 | 1.612 | 51 | 0.0837 | 0.0379 |
| T3 | 140 - 133.333 | 1.248 | 51 | 0.0758 | 0.0232 |
| T4 | 133.333 - 126.667 | 1.138 | 51 | 0.0733 | 0.0202 |
| T5 | 126.667 - 120 | 1.028 | 51 | 0.0703 | 0.0176 |
| T6 | 120 - 100 | 0.925 | 51 | 0.0667 | 0.0163 |
| T7 | 100 - 90 | 0.661 | 51 | 0.0532 | 0.0138 |
| T8 | 90 - 80 | 0.544 | 51 | 0.0468 | 0.0120 |
| T9 | 80 - 60 | 0.441 | 51 | 0.0398 | 0.0102 |
| T10 | 60 - 40 | 0.265 | 51 | 0.0306 | 0.0071 |
| T11 | 40 - 30 | 0.133 | 51 | 0.0204 | 0.0047 |
| T12 | 30 - 20 | 0.081 | 51 | 0.0149 | 0.0034 |
| T13 | 20 - 0 | 0.043 | 51 | 0.0093 | 0.0024 |

Critical Deflections and Radius of Curvature - Service Wind

| Elevation ft | Appurtenance | Gov. Load Comb. | Deflection in | Tilt ° | Twist ° | Radius of Curvature ft |
|--------------|----------------------------------|-----------------|---------------|--------|---------|------------------------|
| 187.00 | ANT940Y10-WR | 51 | 1.973 | 0.0852 | 0.0441 | 419255 |
| 181.00 | ANT940Y10-WR | 51 | 1.973 | 0.0852 | 0.0441 | 419255 |
| 177.00 | PA6-65AC | 51 | 1.919 | 0.0853 | 0.0436 | 419255 |
| 170.00 | RFI BPS7496-180-14 Panel Antenna | 51 | 1.794 | 0.0852 | 0.0422 | 209628 |
| 169.00 | 3' Yagi | 51 | 1.776 | 0.0851 | 0.0419 | 190571 |
| 160.00 | ROHN 6'x15' Boom Gate (1) | 51 | 1.612 | 0.0837 | 0.0379 | 124888 |
| 133.00 | 800-10798 Kathrein Panel | 51 | 1.132 | 0.0731 | 0.0200 | 395312 |
| 125.00 | LTF12=372 Sector Mount (1) | 51 | 1.002 | 0.0695 | 0.0171 | 67146 |
| 113.00 | ANT150D | 51 | 0.826 | 0.0621 | 0.0155 | 76647 |
| 60.00 | GPS | 51 | 0.265 | 0.0306 | 0.0071 | 100711 |

Maximum Tower Deflections - Design Wind

| Section No. | Elevation ft | Horz. Deflection in | Gov. Load Comb. | Tilt ° | Twist ° |
|-------------|--------------|---------------------|-----------------|--------|---------|
| T1 | 180 - 160 | 9.029 | 2 | 0.3845 | 0.2068 |

| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 56 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Section No. | Elevation ft | Horz. Deflection in | Gov. Load Comb. | Tilt ° | Twist ° |
|-------------|-------------------|------------------------|-----------------|-----------|------------|
| T2 | 160 - 140 | 7.395 | 2 | 0.3796 | 0.1779 |
| T3 | 140 - 133.333 | 5.729 | 2 | 0.3469 | 0.1091 |
| T4 | 133.333 - 126.667 | 5.225 | 2 | 0.3356 | 0.0948 |
| T5 | 126.667 - 120 | 4.723 | 2 | 0.3224 | 0.0825 |
| T6 | 120 - 100 | 4.249 | 2 | 0.3057 | 0.0767 |
| T7 | 100 - 90 | 3.037 | 2 | 0.2440 | 0.0649 |
| T8 | 90 - 80 | 2.502 | 2 | 0.2145 | 0.0562 |
| T9 | 80 - 60 | 2.029 | 2 | 0.1824 | 0.0477 |
| T10 | 60 - 40 | 1.222 | 2 | 0.1405 | 0.0334 |
| T11 | 40 - 30 | 0.613 | 2 | 0.0933 | 0.0219 |
| T12 | 30 - 20 | 0.376 | 3 | 0.0684 | 0.0162 |
| T13 | 20 - 0 | 0.200 | 3 | 0.0424 | 0.0111 |

Critical Deflections and Radius of Curvature - Design Wind

| Elevation ft | Appurtenance | Gov. Load Comb. | Deflection in | Tilt ° | Twist ° | Radius of Curvature ft |
|-----------------|----------------------------------|-----------------|------------------|-----------|------------|---------------------------|
| 187.00 | ANT940Y10-WR | 2 | 9.029 | 0.3845 | 0.2068 | 104944 |
| 181.00 | ANT940Y10-WR | 2 | 9.029 | 0.3845 | 0.2068 | 104944 |
| 177.00 | PA6-65AC | 2 | 8.787 | 0.3849 | 0.2046 | 104944 |
| 170.00 | RFI BPS7496-180-14 Panel Antenna | 2 | 8.222 | 0.3849 | 0.1979 | 52472 |
| 169.00 | 3' Yagi | 2 | 8.140 | 0.3847 | 0.1966 | 47702 |
| 160.00 | ROHN 6'x15' Boom Gate (1) | 2 | 7.395 | 0.3796 | 0.1779 | 31801 |
| 133.00 | 800-10798 Kathrein Panel | 2 | 5.200 | 0.3350 | 0.0941 | 93910 |
| 125.00 | LTF12=372 Sector Mount (1) | 2 | 4.601 | 0.3186 | 0.0802 | 14612 |
| 113.00 | ANT150D | 2 | 3.796 | 0.2849 | 0.0729 | 16662 |
| 60.00 | GPS | 2 | 1.222 | 0.1405 | 0.0334 | 22090 |

Bolt Design Data

| Section No. | Elevation ft | Component Type | Bolt Grade | Bolt Size in | Number Of Bolts | Maximum Load per Bolt lb | Allowable Load per Bolt lb | Ratio Load Allowable | Allowable Ratio | Criteria | |
|-------------|-----------------|----------------|------------|-----------------|-----------------|-----------------------------|-------------------------------|----------------------|-----------------|----------|--------------|
| T1 | 180 | Diagonal | A325N | 0.6250 | 3 | 1341.35 | 13805.80 | 0.097 | ✓ | 1 | Bolt Shear |
| | | Horizontal | A325N | 0.6250 | 2 | 1081.12 | 13805.80 | 0.078 | ✓ | 1 | Bolt Shear |
| | | Top Girt | A325N | 0.6250 | 2 | 177.50 | 13805.80 | 0.013 | ✓ | 1 | Bolt Shear |
| T2 | 160 | Leg | A325N | 0.8750 | 4 | 1321.99 | 41556.00 | 0.032 | ✓ | 1 | Bolt Tension |
| | | Diagonal | A325N | 0.6250 | 3 | 3030.63 | 13805.80 | 0.220 | ✓ | 1 | Bolt Shear |
| | | Horizontal | A325N | 0.6250 | 2 | 2817.38 | 13805.80 | 0.204 | ✓ | 1 | Bolt Shear |
| T3 | 140 | Leg | A325N | 1.0000 | 4 | 8371.11 | 54517.00 | 0.154 | ✓ | 1 | Bolt Tension |
| | | Diagonal | A325N | 0.6250 | 3 | 3078.50 | 13805.80 | 0.223 | ✓ | 1 | Bolt Shear |
| | | Horizontal | A325N | 0.6250 | 2 | 2981.72 | 13805.80 | 0.216 | ✓ | 1 | Bolt Shear |
| T4 | 133.333 | Diagonal | A325N | 0.6250 | 3 | 3939.88 | 13805.80 | 0.285 | ✓ | 1 | Bolt Shear |
| | | Top Girt | A325N | 0.6250 | 2 | 3948.54 | 13805.80 | 0.286 | ✓ | 1 | Bolt Shear |

| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 57 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Section No. | Elevation ft | Component Type | Bolt Grade | Bolt Size in | Number Of Bolts | Maximum Load per Bolt lb | Allowable Load per Bolt lb | Ratio Load Allowable | Allowable Ratio | Criteria |
|-------------|-----------------|----------------|------------|-----------------|-----------------|-----------------------------|-------------------------------|----------------------|-----------------|----------------|
| T5 | 126.667 | Diagonal | A325N | 0.6250 | 3 | 4719.86 | 13805.80 | 0.342 | ✓ | 1 Bolt Shear |
| | | Top Girt | A325N | 0.6250 | 2 | 4853.76 | 13805.80 | 0.352 | ✓ | 1 Bolt Shear |
| T6 | 120 | Leg | A325N | 1.0000 | 6 | 11432.40 | 54517.00 | 0.210 | ✓ | 1 Bolt Tension |
| | | Diagonal | A325N | 0.6250 | 3 | 6082.72 | 13805.80 | 0.441 | ✓ | 1 Bolt Shear |
| T7 | 100 | Horizontal | A325N | 0.6250 | 2 | 5392.56 | 13805.80 | 0.391 | ✓ | 1 Bolt Shear |
| | | Leg | A325N | 1.0000 | 6 | 18842.10 | 54517.00 | 0.346 | ✓ | 1 Bolt Tension |
| T8 | 90 | Diagonal | A325N | 0.6250 | 3 | 5577.15 | 13805.80 | 0.404 | ✓ | 1 Bolt Shear |
| | | Top Girt | A325N | 0.6250 | 2 | 5499.43 | 13805.80 | 0.398 | ✓ | 1 Bolt Shear |
| T9 | 80 | Leg | A325N | 1.0000 | 8 | 19038.00 | 54517.00 | 0.349 | ✓ | 1 Bolt Tension |
| | | Diagonal | A325N | 0.6250 | 3 | 5949.72 | 13805.80 | 0.431 | ✓ | 1 Bolt Shear |
| T10 | 60 | Horizontal | A325N | 0.6250 | 2 | 6289.53 | 13805.80 | 0.456 | ✓ | 1 Bolt Shear |
| | | Leg | A325N | 1.0000 | 8 | 23920.50 | 54517.00 | 0.439 | ✓ | 1 Bolt Tension |
| T11 | 40 | Diagonal | A325N | 0.6250 | 3 | 6392.88 | 13805.80 | 0.463 | ✓ | 1 Bolt Shear |
| | | Horizontal | A325N | 0.6250 | 2 | 7131.46 | 13805.80 | 0.517 | ✓ | 1 Bolt Shear |
| T12 | 30 | Leg | A325N | 1.0000 | 8 | 28847.90 | 54517.00 | 0.529 | ✓ | 1 Bolt Tension |
| | | Diagonal | A325N | 0.6250 | 3 | 6591.67 | 13805.80 | 0.477 | ✓ | 1 Bolt Shear |
| T13 | 20 | Horizontal | A325N | 0.6250 | 2 | 7519.62 | 13805.80 | 0.545 | ✓ | 1 Bolt Shear |
| | | Diagonal | A325N | 0.6250 | 3 | 6818.32 | 13805.80 | 0.494 | ✓ | 1 Bolt Shear |
| T13 | 20 | Top Girt | A325N | 0.6250 | 2 | 7951.63 | 13805.80 | 0.576 | ✓ | 1 Bolt Shear |
| | | Leg | A325N | 1.0000 | 8 | 33486.70 | 54517.00 | 0.614 | ✓ | 1 Bolt Tension |
| T13 | 20 | Diagonal | A325X | 0.6250 | 3 | 10047.50 | 17257.30 | 0.582 | ✓ | 1 Bolt Shear |
| | | Horizontal | A325N | 0.7500 | 2 | 8382.04 | 19880.40 | 0.422 | ✓ | 1 Bolt Shear |

Compression Checks

Leg Design Data (Compression)

| Section No. | Elevation ft | Size | L ft | L _u ft | Kl/r | A in ² | P _u lb | φP _n lb | Ratio $\frac{P_u}{\phi P_n}$ |
|-------------|-----------------|------------|---------|----------------------|----------------|----------------------|----------------------|-----------------------|---------------------------------|
| T1 | 180 - 160 | ROHN 3 STD | 20.00 | 6.67 | 68.8 K=1.00 | 2.2285 | -4179.54 | 70976.40 | 0.059 ¹ ✓ |
| T2 | 160 - 140 | ROHN 4 STD | 20.04 | 6.68 | 53.1 K=1.00 | 3.1741 | -30594.10 | 116229.00 | 0.263 ¹ ✓ |
| T3 | 140 - 133.333 | ROHN 5 EH | 6.68 | 6.68 | 43.6 K=1.00 | 6.1120 | -40555.00 | 239378.00 | 0.169 ¹ ✓ |
| T4 | 133.333 - | ROHN 5 EH | 6.68 | 6.68 | 43.6 | 6.1120 | -51672.30 | 239378.00 | 0.216 ¹ ✓ |

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|--|--|----------------------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job 22027.01 - Westport | Page 58 of 71 |
| | Project 180-ft Lattice Tower (CSP #32) | Date 08:43:42 04/05/22 |
| | Client Verizon | Designed by TJL |

| Section No. | Elevation ft | Size | L ft | L _u ft | Kl/r | A in ² | P _u lb | φP _n lb | Ratio $\frac{P_u}{\phi P_n}$ |
|-------------|-----------------|---|---------|----------------------|----------------|----------------------|----------------------|-----------------------|---------------------------------|
| | 126.667 | | | | K=1.00 | | | | ✓ |
| T5 | 126.667 - 120 | ROHN 5 EH | 6.68 | 6.68 | 43.6 K=1.00 | 6.1120 | -66113.50 | 239378.00 | 0.276 ¹ ✓ |
| T6 | 120 - 100 | ROHN 6 EHS | 20.04 | 10.02 | 54.0 K=1.00 | 6.7133 | -106513.00 | 244017.00 | 0.436 ¹ ✓ |
| T7 | 100 - 90 | ROHN 6 EH | 10.03 | 10.03 | 54.8 K=1.00 | 8.4049 | -130317.00 | 303585.00 | 0.429 ¹ ✓ |
| T8 | 90 - 80 | ROHN 6 EH | 10.03 | 10.03 | 54.8 K=1.00 | 8.4049 | -151678.00 | 303585.00 | 0.500 ¹ ✓ |
| T9 | 80 - 60 | 120deg 9.6250x0.375 BU on ROHN 8 EHS | 20.05 | 10.03 | 42.2 K=1.00 | 13.6005 | -194378.00 | 537270.00 | 0.362 ¹ ✓ |
| T10 | 60 - 40 | 1/3 9.6250x0.375 on ROHN 8 EHS Leg Pipe | 20.05 | 10.03 | 42.2 K=1.00 | 13.6005 | -238636.00 | 460811.00 | 0.518 ¹ ✓ |
| T11 | 40 - 30 | 1/3 9.6250x0.375 on ROHN 8 EHS Leg Pipe | 10.03 | 10.03 | 42.2 K=1.00 | 13.6005 | -261072.00 | 460811.00 | 0.567 ¹ ✓ |
| T12 | 30 - 20 | 1/3 9.6250x0.375 on ROHN 8 EHS Leg Pipe | 10.03 | 10.03 | 42.2 K=1.00 | 13.6005 | -283449.00 | 460811.00 | 0.615 ¹ ✓ |
| T13 | 20 - 0 | 1/3 9.6250x0.375 on ROHN 8 EH Leg Pipe | 20.05 | 10.03 | 42.9 K=1.00 | 16.6002 | -305388.00 | 560408.00 | 0.545 ¹ ✓ |

¹ P_u / φP_n controls

Diagonal Design Data (Compression)

| Section No. | Elevation ft | Size | L ft | L _u ft | Kl/r | A in ² | P _u lb | φP _n lb | Ratio $\frac{P_u}{\phi P_n}$ |
|-------------|-------------------|--------------|---------|----------------------|-----------------|----------------------|----------------------|-----------------------|---------------------------------|
| T1 | 180 - 160 | ROHN 2 STD | 7.94 | 7.67 | 117.0 K=1.00 | 1.0745 | -4024.05 | 17747.50 | 0.227 ¹ ✓ |
| T2 | 160 - 140 | ROHN 2 STD | 8.55 | 8.25 | 125.8 K=1.00 | 1.0745 | -9033.05 | 15331.30 | 0.589 ¹ ✓ |
| T3 | 140 - 133.333 | ROHN 2 EH | 8.77 | 8.42 | 131.5 K=1.00 | 1.4807 | -9235.50 | 19347.50 | 0.477 ¹ ✓ |
| T4 | 133.333 - 126.667 | ROHN 2 EH | 9.00 | 8.66 | 135.3 K=1.00 | 1.4807 | -11819.60 | 18285.10 | 0.646 ¹ ✓ |
| T5 | 126.667 - 120 | ROHN 2 XXS | 9.24 | 8.91 | 152.1 K=1.00 | 2.6559 | -14159.60 | 25935.80 | 0.546 ¹ ✓ |
| T6 | 120 - 100 | Pipe 2.5 XXS | 12.52 | 12.06 | 171.4 K=1.00 | 4.0285 | -18105.30 | 30977.00 | 0.584 ¹ ✓ |
| T7 | 100 - 90 | ROHN 3 STD | 12.92 | 12.49 | 128.8 K=1.00 | 2.2285 | -16726.50 | 30346.40 | 0.551 ¹ ✓ |
| T8 | 90 - 80 | ROHN 3 STD | 13.35 | 12.93 | 133.4 K=1.00 | 2.2285 | -16731.50 | 28290.90 | 0.591 ¹ ✓ |
| T9 | 80 - 60 | ROHN 3 STD | 14.21 | 13.70 | 141.3 K=1.00 | 2.2285 | -17849.10 | 25233.20 | 0.707 ¹ ✓ |
| T10 | 60 - 40 | ROHN 3 EH | 15.12 | 14.64 | 154.6 K=1.00 | 3.0159 | -19178.70 | 28518.80 | 0.672 ¹ ✓ |
| T11 | 40 - 30 | ROHN 3 EH | 15.60 | 15.12 | 159.7 K=1.00 | 3.0159 | -19775.00 | 26718.70 | 0.740 ¹ ✓ |

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|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 59 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Section No. | Elevation ft | Size | L ft | L _u ft | Kl/r | A in ² | P _u lb | φP _n lb | Ratio $\frac{P_u}{\phi P_n}$ |
|-------------|-----------------|-----------|---------|----------------------|-----------------|----------------------|----------------------|-----------------------|---------------------------------|
| T12 | 30 - 20 | ROHN 3 EH | 16.08 | 15.62 | 164.9 K=1.00 | 3.0159 | -20455.00 | 25055.10 | 0.816 ¹ ✓ |
| T13 | 20 - 0 | ROHN 3 EH | 24.33 | 23.70 | 125.1 K=0.50 | 3.0159 | -30142.60 | 43506.30 | 0.693 ¹ ✓ |

¹ P_u / φP_n controls

Horizontal Design Data (Compression)

| Section No. | Elevation ft | Size | L ft | L _u ft | Kl/r | A in ² | P _u lb | φP _n lb | Ratio $\frac{P_u}{\phi P_n}$ |
|-------------|-----------------|--------------|---------|----------------------|-----------------|----------------------|----------------------|-----------------------|---------------------------------|
| T1 | 180 - 160 | ROHN 1.5 STD | 8.60 | 4.15 | 80.0 K=1.00 | 0.7995 | -2162.24 | 22519.90 | 0.096 ¹ ✓ |
| T2 | 160 - 140 | ROHN 1.5 STD | 10.01 | 4.82 | 92.9 K=1.00 | 0.7995 | -5605.24 | 19142.00 | 0.293 ¹ ✓ |
| T3 | 140 - 133.333 | ROHN 2 STD | 10.71 | 5.12 | 78.1 K=1.00 | 1.0745 | -5934.58 | 30956.80 | 0.192 ¹ ✓ |
| T6 | 120 - 100 | ROHN 2 STD | 13.92 | 6.68 | 101.9 K=1.00 | 1.0745 | -10681.90 | 22639.20 | 0.472 ¹ ✓ |
| T7 | 100 - 90 | ROHN 2 STD | 15.04 | 7.24 | 110.5 K=1.00 | 1.0745 | -10479.10 | 19817.20 | 0.529 ¹ ✓ |
| T9 | 80 - 60 | ROHN 2.5 STD | 18.93 | 9.10 | 115.2 K=1.00 | 1.7040 | -12460.20 | 28984.30 | 0.430 ¹ ✓ |
| T10 | 60 - 40 | ROHN 2.5 STD | 21.43 | 10.35 | 131.1 K=1.00 | 1.7040 | -14115.10 | 22405.40 | 0.630 ¹ ✓ |
| T11 | 40 - 30 | ROHN 2.5 STD | 22.68 | 10.97 | 139.0 K=1.00 | 1.7040 | -14904.90 | 19925.90 | 0.748 ¹ ✓ |
| T13 | 20 - 0 | P3.5x.226 | 25.18 | 12.23 | 109.8 K=1.00 | 2.6795 | -16764.10 | 49951.20 | 0.336 ¹ ✓ |

¹ P_u / φP_n controls

Top Girt Design Data (Compression)

| Section No. | Elevation ft | Size | L ft | L _u ft | Kl/r | A in ² | P _u lb | φP _n lb | Ratio $\frac{P_u}{\phi P_n}$ |
|-------------|----------------------|--------------|---------|----------------------|-----------------|----------------------|----------------------|-----------------------|---------------------------------|
| T1 | 180 - 160 | ROHN 1.5 STD | 8.54 | 4.13 | 79.5 K=1.00 | 0.7995 | -355.00 | 22660.50 | 0.016 ¹ ✓ |
| T4 | 133.333 - 126.667 | ROHN 2 STD | 11.40 | 5.47 | 83.4 K=1.00 | 1.0745 | -7888.88 | 29081.40 | 0.271 ¹ ✓ |
| T5 | 126.667 - 120 | ROHN 2 STD | 12.10 | 5.82 | 88.7 K=1.00 | 1.0745 | -9707.53 | 27207.90 | 0.357 ¹ ✓ |
| T8 | 90 - 80 | ROHN 2 STD | 16.36 | 7.90 | 120.5 K=1.00 | 1.0745 | -10927.80 | 16719.60 | 0.654 ¹ ✓ |
| T12 | 30 - 20 | ROHN 2.5 EH | 23.93 | 11.60 | 150.6 | 2.2535 | -15543.00 | 22438.80 | 0.693 ¹ ✓ |

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| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job 22027.01 - Westport | Page 60 of 71 |
| | Project 180-ft Lattice Tower (CSP #32) | Date 08:43:42 04/05/22 |
| | Client Verizon | Designed by TJL |

| Section No. | Elevation ft | Size | L ft | L _u ft | Kl/r | A in ² | P _u lb | φP _n lb | Ratio $\frac{P_u}{\phi P_n}$ |
|-------------|-----------------|------|---------|----------------------|------|----------------------|----------------------|-----------------------|---------------------------------|
| K=1.00 | | | | | | | | | ✓ |

¹ P_u / φP_n controls

Redundant Horizontal (1) Design Data (Compression)

| Section No. | Elevation ft | Size | L ft | L _u ft | Kl/r | A in ² | P _u lb | φP _n lb | Ratio $\frac{P_u}{\phi P_n}$ |
|-------------|-----------------|--------------|---------|----------------------|-----------------|----------------------|----------------------|-----------------------|---------------------------------|
| T13 | 20 - 0 | ROHN 1.5 STD | 6.29 | 5.93 | 114.4 K=1.00 | 0.7995 | -5299.78 | 13802.80 | 0.384 ¹ |
| K=1.00 | | | | | | | | | ✓ |

¹ P_u / φP_n controls

Redundant Diagonal (1) Design Data (Compression)

| Section No. | Elevation ft | Size | L ft | L _u ft | Kl/r | A in ² | P _u lb | φP _n lb | Ratio $\frac{P_u}{\phi P_n}$ |
|-------------|-----------------|------------|---------|----------------------|-----------------|----------------------|----------------------|-----------------------|---------------------------------|
| T13 | 20 - 0 | ROHN 2 STD | 11.50 | 10.77 | 164.2 K=1.00 | 1.0745 | -4841.90 | 8998.85 | 0.538 ¹ |
| K=1.00 | | | | | | | | | ✓ |

¹ P_u / φP_n controls

Redundant Hip (1) Design Data (Compression)

| Section No. | Elevation ft | Size | L ft | L _u ft | Kl/r | A in ² | P _u lb | φP _n lb | Ratio $\frac{P_u}{\phi P_n}$ |
|-------------|-----------------|--------------|---------|----------------------|----------------|----------------------|----------------------|-----------------------|---------------------------------|
| T13 | 20 - 0 | ROHN 2.5 STD | 6.29 | 6.29 | 79.7 K=1.00 | 1.7040 | -17.64 | 48180.50 | 0.000 ¹ |
| K=1.00 | | | | | | | | | ✓ |

¹ P_u / φP_n controls

Inner Bracing Design Data (Compression)

| Section No. | Elevation ft | Size | L ft | L _u ft | Kl/r | A in ² | P _u lb | φP _n lb | Ratio $\frac{P_u}{\phi P_n}$ |
|-------------|-----------------|----------|---------|----------------------|-----------------|----------------------|----------------------|-----------------------|---------------------------------|
| T1 | 180 - 160 | L2x2x1/8 | 4.30 | 4.30 | 129.8 K=1.00 | 0.4844 | -1.85 | 8234.10 | 0.000 ¹ |
| K=1.00 | | | | | | | | | ✓ |

| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 61 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Section No. | Elevation ft | Size | L ft | L _u ft | Kl/r | A in ² | P _u lb | φP _n lb | Ratio $\frac{P_u}{\phi P_n}$ |
|-------------|-------------------|-------------------|---------|----------------------|-----------------|----------------------|----------------------|-----------------------|---------------------------------|
| T2 | 160 - 140 | L2x2x1/8 | 4.31 | 4.31 | 130.2 K=1.00 | 0.4844 | -7.11 | 8181.36 | 0.001 ¹ ✓ |
| T3 | 140 - 133.333 | L2x2x1/8 | 5.35 | 5.35 | 161.6 K=1.00 | 0.4844 | -6.69 | 5306.96 | 0.001 ¹ ✓ |
| T4 | 133.333 - 126.667 | L2x2x1/8 | 5.70 | 5.70 | 172.1 K=1.00 | 0.4844 | -9.04 | 4680.37 | 0.002 ¹ ✓ |
| T5 | 126.667 - 120 | L2x2x1/8 | 6.05 | 6.05 | 182.6 K=1.00 | 0.4844 | -10.63 | 4158.54 | 0.003 ¹ ✓ |
| T6 | 120 - 100 | L2 1/2x2 1/2x3/16 | 6.96 | 6.96 | 168.7 K=1.00 | 0.9020 | -11.39 | 9072.37 | 0.001 ¹ ✓ |
| T7 | 100 - 90 | L2 1/2x2 1/2x3/16 | 7.52 | 7.52 | 182.3 K=1.00 | 0.9020 | -10.80 | 7766.06 | 0.001 ¹ ✓ |
| T8 | 90 - 80 | L2 1/2x2 1/2x3/16 | 8.18 | 8.18 | 198.3 K=1.00 | 0.9020 | -11.04 | 6565.57 | 0.002 ¹ ✓ |
| T9 | 80 - 60 | L3x3x3/16 | 9.46 | 9.46 | 190.5 K=1.00 | 1.0900 | -12.95 | 8593.12 | 0.002 ¹ ✓ |
| T10 | 60 - 40 | L3 1/2x3 1/2x1/4 | 10.71 | 10.71 | 185.2 K=1.00 | 1.6900 | -15.38 | 14095.40 | 0.001 ¹ ✓ |
| T11 | 40 - 30 | L3 1/2x3 1/2x1/4 | 11.34 | 11.34 | 196.1 K=1.00 | 1.6900 | -15.63 | 12584.30 | 0.001 ¹ ✓ |
| T12 | 30 - 20 | L3 1/2x3 1/2x1/4 | 11.96 | 11.96 | 206.9 K=1.00 | 1.6900 | -16.45 | 11303.80 | 0.001 ¹ ✓ |
| T13 | 20 - 0 | ROHN 2 STD | 12.59 | 12.59 | 191.9 K=1.00 | 1.0745 | -14.50 | 6590.81 | 0.002 ¹ ✓ |

¹ P_u / φP_n controls

Tension Checks

Leg Design Data (Tension)

| Section No. | Elevation ft | Size | L ft | L _u ft | Kl/r | A in ² | P _u lb | φP _n lb | Ratio $\frac{P_u}{\phi P_n}$ |
|-------------|-------------------|------------|---------|----------------------|------|----------------------|----------------------|-----------------------|---------------------------------|
| T1 | 180 - 160 | ROHN 3 STD | 20.00 | 6.67 | 68.8 | 2.2285 | 2501.39 | 100281.00 | 0.025 ¹ ✓ |
| T2 | 160 - 140 | ROHN 4 STD | 20.04 | 6.68 | 53.1 | 3.1741 | 24080.80 | 142832.00 | 0.169 ¹ ✓ |
| T3 | 140 - 133.333 | ROHN 5 EH | 6.68 | 6.68 | 43.6 | 6.1120 | 33484.40 | 275039.00 | 0.122 ¹ ✓ |
| T4 | 133.333 - 126.667 | ROHN 5 EH | 6.68 | 6.68 | 43.6 | 6.1120 | 42586.90 | 275039.00 | 0.155 ¹ ✓ |
| T5 | 126.667 - 120 | ROHN 5 EH | 6.68 | 6.68 | 43.6 | 6.1120 | 54208.10 | 275039.00 | 0.197 ¹ ✓ |
| T6 | 120 - 100 | ROHN 6 EHS | 20.04 | 10.02 | 54.0 | 6.7133 | 91026.50 | 302097.00 | 0.301 ¹ ✓ |
| T7 | 100 - 90 | ROHN 6 EH | 10.03 | 10.03 | 54.8 | 8.4049 | 113053.00 | 378222.00 | 0.299 ¹ ✓ |

| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 62 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Section No. | Elevation ft | Size | L ft | L _u ft | Kl/r | A in ² | P _u lb | φP _n lb | Ratio $\frac{P_u}{\phi P_n}$ |
|-------------|-----------------|---|---------|----------------------|------|----------------------|----------------------|-----------------------|---------------------------------|
| T8 | 90 - 80 | ROHN 6 EH | 10.03 | 10.03 | 54.8 | 8.4049 | 132928.00 | 378222.00 | 0.351 ¹ ✓ |
| T9 | 80 - 60 | 120deg 9.6250x0.375 BU on ROHN 8 EHS | 20.05 | 10.03 | 42.2 | 13.6005 | 171814.00 | 612023.00 | 0.281 ¹ ✓ |
| T10 | 60 - 40 | 1/3 9.6250x0.375 on ROHN 8 EHS Leg Pipe | 20.05 | 10.03 | 42.2 | 13.6005 | 211153.00 | 514099.00 | 0.411 ¹ ✓ |
| T11 | 40 - 30 | 1/3 9.6250x0.375 on ROHN 8 EHS Leg Pipe | 10.03 | 10.03 | 42.2 | 13.6005 | 230784.00 | 514099.00 | 0.449 ¹ ✓ |
| T12 | 30 - 20 | 1/3 9.6250x0.375 on ROHN 8 EHS Leg Pipe | 10.03 | 10.03 | 42.2 | 13.6005 | 250200.00 | 514099.00 | 0.487 ¹ ✓ |
| T13 | 20 - 0 | 1/3 9.6250x0.375 on ROHN 8 EH Leg Pipe | 20.05 | 10.03 | 42.9 | 16.6002 | 267893.00 | 627488.00 | 0.427 ¹ ✓ |

¹ P_u / φP_n controls

Diagonal Design Data (Tension)

| Section No. | Elevation ft | Size | L ft | L _u ft | Kl/r | A in ² | P _u lb | φP _n lb | Ratio $\frac{P_u}{\phi P_n}$ |
|-------------|-------------------|--------------|---------|----------------------|-------|----------------------|----------------------|-----------------------|---------------------------------|
| T1 | 180 - 160 | ROHN 2 STD | 7.94 | 7.67 | 117.0 | 1.0745 | 3956.69 | 48353.90 | 0.082 ¹ ✓ |
| T2 | 160 - 140 | ROHN 2 STD | 8.34 | 8.04 | 122.6 | 1.0745 | 9020.57 | 48353.90 | 0.187 ¹ ✓ |
| T3 | 140 - 133.333 | ROHN 2 EH | 8.77 | 8.42 | 131.5 | 1.4807 | 9125.41 | 66630.70 | 0.137 ¹ ✓ |
| T4 | 133.333 - 126.667 | ROHN 2 EH | 9.00 | 8.66 | 135.3 | 1.4807 | 11701.10 | 66630.70 | 0.176 ¹ ✓ |
| T5 | 126.667 - 120 | ROHN 2 XXS | 9.24 | 8.91 | 152.1 | 2.6559 | 13975.10 | 119516.00 | 0.117 ¹ ✓ |
| T6 | 120 - 100 | Pipe 2.5 XXS | 12.19 | 11.73 | 166.7 | 4.0285 | 17952.90 | 181280.00 | 0.099 ¹ ✓ |
| T7 | 100 - 90 | ROHN 3 STD | 12.92 | 12.49 | 128.8 | 2.2285 | 16507.20 | 100281.00 | 0.165 ¹ ✓ |
| T8 | 90 - 80 | ROHN 3 STD | 13.35 | 12.93 | 133.4 | 2.2285 | 16493.80 | 100281.00 | 0.164 ¹ ✓ |
| T9 | 80 - 60 | ROHN 3 STD | 14.21 | 13.70 | 141.3 | 2.2285 | 17525.60 | 100281.00 | 0.175 ¹ ✓ |
| T10 | 60 - 40 | ROHN 3 EH | 15.12 | 14.64 | 154.6 | 3.0159 | 18690.10 | 135717.00 | 0.138 ¹ ✓ |
| T11 | 40 - 30 | ROHN 3 EH | 15.60 | 15.12 | 159.7 | 3.0159 | 19250.70 | 135717.00 | 0.142 ¹ ✓ |
| T12 | 30 - 20 | ROHN 3 EH | 16.08 | 15.62 | 164.9 | 3.0159 | 19845.90 | 135717.00 | 0.146 ¹ ✓ |
| T13 | 20 - 0 | ROHN 3 EH | 24.33 | 23.70 | 250.3 | 3.0159 | 29394.80 | 135717.00 | 0.217 ¹ ✓ |

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|--|--|----------------------------------|
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| | Project 180-ft Lattice Tower (CSP #32) | Date 08:43:42 04/05/22 |
| | Client Verizon | Designed by TJL |

¹ $P_u / \phi P_n$ controls

Horizontal Design Data (Tension)

| Section No. | Elevation <i>ft</i> | Size | <i>L</i> <i>ft</i> | <i>L_u</i> <i>ft</i> | <i>Kl/r</i> | <i>A</i> <i>in²</i> | <i>P_u</i> <i>lb</i> | ϕP_n <i>lb</i> | Ratio $\frac{P_u}{\phi P_n}$ |
|-------------|------------------------|--------------|-----------------------|-----------------------------------|-------------|-----------------------------------|-----------------------------------|-------------------------|---------------------------------|
| T1 | 180 - 160 | ROHN 1.5 STD | 8.60 | 4.15 | 80.0 | 0.7995 | 2156.77 | 35975.60 | 0.060 ¹ |
| T2 | 160 - 140 | ROHN 1.5 STD | 10.01 | 4.82 | 92.9 | 0.7995 | 5634.75 | 35975.60 | 0.157 ¹ |
| T3 | 140 - 133.333 | ROHN 2 STD | 10.71 | 5.12 | 78.1 | 1.0745 | 5963.43 | 48353.90 | 0.123 ¹ |
| T6 | 120 - 100 | ROHN 2 STD | 13.92 | 6.68 | 101.9 | 1.0745 | 10785.10 | 48353.90 | 0.223 ¹ |
| T7 | 100 - 90 | ROHN 2 STD | 15.04 | 7.24 | 110.5 | 1.0745 | 10502.00 | 48353.90 | 0.217 ¹ |
| T9 | 80 - 60 | ROHN 2.5 STD | 18.93 | 9.10 | 115.2 | 1.7040 | 12579.10 | 76682.30 | 0.164 ¹ |
| T10 | 60 - 40 | ROHN 2.5 STD | 21.43 | 10.35 | 131.1 | 1.7040 | 14262.90 | 76682.30 | 0.186 ¹ |
| T11 | 40 - 30 | ROHN 2.5 STD | 22.68 | 10.97 | 139.0 | 1.7040 | 15039.20 | 76682.30 | 0.196 ¹ |
| T13 | 20 - 0 | P3.5x.226 | 25.18 | 12.23 | 109.8 | 2.6795 | 16623.90 | 120579.00 | 0.138 ¹ |

¹ $P_u / \phi P_n$ controls

Top Girt Design Data (Tension)

| Section No. | Elevation <i>ft</i> | Size | <i>L</i> <i>ft</i> | <i>L_u</i> <i>ft</i> | <i>Kl/r</i> | <i>A</i> <i>in²</i> | <i>P_u</i> <i>lb</i> | ϕP_n <i>lb</i> | Ratio $\frac{P_u}{\phi P_n}$ |
|-------------|------------------------|--------------|-----------------------|-----------------------------------|-------------|-----------------------------------|-----------------------------------|-------------------------|---------------------------------|
| T1 | 180 - 160 | ROHN 1.5 STD | 8.54 | 4.13 | 79.5 | 0.7995 | 324.64 | 35975.60 | 0.009 ¹ |
| T4 | 133.333 - 126.667 | ROHN 2 STD | 11.40 | 5.47 | 83.4 | 1.0745 | 7897.09 | 48353.90 | 0.163 ¹ |
| T5 | 126.667 - 120 | ROHN 2 STD | 12.10 | 5.82 | 88.7 | 1.0745 | 9698.85 | 48353.90 | 0.201 ¹ |
| T8 | 90 - 80 | ROHN 2 STD | 16.36 | 7.90 | 120.5 | 1.0745 | 10998.90 | 48353.90 | 0.227 ¹ |
| T12 | 30 - 20 | ROHN 2.5 EH | 23.93 | 11.60 | 150.6 | 2.2535 | 15903.30 | 101409.00 | 0.157 ¹ |

¹ $P_u / \phi P_n$ controls

Redundant Horizontal (1) Design Data (Tension)

| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 64 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Section No. | Elevation ft | Size | L ft | L _u ft | Kl/r | A in ² | P _u lb | φP _n lb | Ratio $\frac{P_u}{\phi P_n}$ |
|-------------|-----------------|--------------|---------|----------------------|-------|----------------------|----------------------|-----------------------|---------------------------------|
| T13 | 20 - 0 | ROHN 1.5 STD | 6.29 | 5.93 | 114.4 | 0.7995 | 5299.78 | 35975.60 | 0.147 ¹ ✓ |

¹ P_u / φP_n controls

Redundant Diagonal (1) Design Data (Tension)

| Section No. | Elevation ft | Size | L ft | L _u ft | Kl/r | A in ² | P _u lb | φP _n lb | Ratio $\frac{P_u}{\phi P_n}$ |
|-------------|-----------------|------------|---------|----------------------|-------|----------------------|----------------------|-----------------------|---------------------------------|
| T13 | 20 - 0 | ROHN 2 STD | 11.50 | 10.77 | 164.2 | 1.0745 | 4841.90 | 48353.90 | 0.100 ¹ ✓ |

¹ P_u / φP_n controls

Redundant Hip (1) Design Data (Tension)

| Section No. | Elevation ft | Size | L ft | L _u ft | Kl/r | A in ² | P _u lb | φP _n lb | Ratio $\frac{P_u}{\phi P_n}$ |
|-------------|-----------------|--------------|---------|----------------------|------|----------------------|----------------------|-----------------------|---------------------------------|
| T13 | 20 - 0 | ROHN 2.5 STD | 6.29 | 6.29 | 79.7 | 1.7040 | 1.69 | 76682.30 | 0.000 ¹ ✓ |

¹ P_u / φP_n controls

Inner Bracing Design Data (Tension)

| Section No. | Elevation ft | Size | L ft | L _u ft | Kl/r | A in ² | P _u lb | φP _n lb | Ratio $\frac{P_u}{\phi P_n}$ |
|-------------|-------------------|-------------------|---------|----------------------|-------|----------------------|----------------------|-----------------------|---------------------------------|
| T1 | 180 - 160 | L2x2x1/8 | 4.30 | 4.30 | 82.4 | 0.4844 | 1.86 | 15693.80 | 0.000 ¹ ✓ |
| T2 | 160 - 140 | L2x2x1/8 | 4.31 | 4.31 | 82.6 | 0.4844 | 5.24 | 15693.80 | 0.000 ¹ ✓ |
| T3 | 140 - 133.333 | L2x2x1/8 | 5.35 | 5.35 | 102.6 | 0.4844 | 3.88 | 15693.80 | 0.000 ¹ ✓ |
| T4 | 133.333 - 126.667 | L2x2x1/8 | 5.70 | 5.70 | 109.3 | 0.4844 | 6.09 | 15693.80 | 0.000 ¹ ✓ |
| T5 | 126.667 - 120 | L2x2x1/8 | 6.05 | 6.05 | 115.9 | 0.4844 | 6.21 | 15693.80 | 0.000 ¹ ✓ |
| T6 | 120 - 100 | L2 1/2x2 1/2x3/16 | 6.40 | 6.40 | 98.7 | 0.9020 | 3.60 | 29224.80 | 0.000 ¹ ✓ |
| T7 | 100 - 90 | L2 1/2x2 1/2x3/16 | 7.52 | 7.52 | 116.0 | 0.9020 | 2.46 | 29224.80 | 0.000 ¹ ✓ |

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| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job 22027.01 - Westport | Page 65 of 71 |
| | Project 180-ft Lattice Tower (CSP #32) | Date 08:43:42 04/05/22 |
| | Client Verizon | Designed by TJL |

| Section No. | Elevation ft | Size | L ft | L _u ft | Kl/r | A in ² | P _u lb | φP _n lb | Ratio P _u / φP _n |
|-------------|-----------------|-------------------|---------|----------------------|-------|----------------------|----------------------|-----------------------|---|
| T8 | 90 - 80 | L2 1/2x2 1/2x3/16 | 8.18 | 8.18 | 126.2 | 0.9020 | 1.51 | 29224.80 | 0.000 ¹ ✓ |
| T9 | 80 - 60 | L3x3x3/16 | 8.84 | 8.84 | 113.0 | 1.0900 | 2.53 | 35316.00 | 0.000 ¹ ✓ |
| T10 | 60 - 40 | L3 1/2x3 1/2x1/4 | 10.09 | 10.09 | 111.1 | 1.6900 | 0.54 | 76050.00 | 0.000 ¹ ✓ |

¹ P_u / φP_n controls

Section Capacity Table

| Section No. | Elevation ft | Component Type | Size | Critical Element | P lb | φP _{allow} lb | % Capacity | Pass Fail |
|-------------|-------------------|-------------------|---|---------------------|------------|---------------------------|---------------|--------------|
| T1 | 180 - 160 | Leg | ROHN 3 STD | 1 | -2843.03 | 70976.40 | 4.0 | Pass |
| | | Leg | ROHN 3 STD | 2 | -2530.83 | 70976.40 | 3.6 | Pass |
| | | Leg | ROHN 3 STD | 3 | -4179.54 | 70976.40 | 5.9 | Pass |
| T2 | 160 - 140 | Leg | ROHN 4 STD | 40 | -26299.20 | 116229.00 | 22.6 | Pass |
| | | Leg | ROHN 4 STD | 41 | -26169.40 | 116229.00 | 22.5 | Pass |
| | | Leg | ROHN 4 STD | 42 | -30594.10 | 116229.00 | 26.3 | Pass |
| T3 | 140 - 133.333 | Leg | ROHN 5 EH | 79 | -35475.40 | 239378.00 | 14.8 | Pass |
| | | Leg | ROHN 5 EH | 80 | -35478.40 | 239378.00 | 14.8 | Pass |
| T4 | 133.333 - 126.667 | Leg | ROHN 5 EH | 81 | -40555.00 | 239378.00 | 16.9 | Pass |
| | | Leg | ROHN 5 EH | 94 | -45927.90 | 239378.00 | 19.2 | Pass |
| | | Leg | ROHN 5 EH | 95 | -46116.20 | 239378.00 | 19.3 | Pass |
| T5 | 126.667 - 120 | Leg | ROHN 5 EH | 96 | -51672.30 | 239378.00 | 21.6 | Pass |
| | | Leg | ROHN 5 EH | 109 | -59694.70 | 239378.00 | 24.9 | Pass |
| | | Leg | ROHN 5 EH | 110 | -60073.10 | 239378.00 | 25.1 | Pass |
| T6 | 120 - 100 | Leg | ROHN 5 EH | 111 | -66113.50 | 239378.00 | 27.6 | Pass |
| | | Leg | ROHN 6 EHS | 124 | -98655.30 | 244017.00 | 40.4 | Pass |
| | | Leg | ROHN 6 EHS | 125 | -99450.20 | 244017.00 | 40.8 | Pass |
| T7 | 100 - 90 | Leg | ROHN 6 EHS | 126 | -106513.00 | 244017.00 | 43.6 | Pass |
| | | Leg | ROHN 6 EH | 151 | -121781.00 | 303585.00 | 40.1 | Pass |
| | | Leg | ROHN 6 EH | 152 | -122773.00 | 303585.00 | 40.4 | Pass |
| T8 | 90 - 80 | Leg | ROHN 6 EH | 153 | -130317.00 | 303585.00 | 42.9 | Pass |
| | | Leg | ROHN 6 EH | 166 | -142670.00 | 303585.00 | 47.0 | Pass |
| | | Leg | ROHN 6 EH | 167 | -143820.00 | 303585.00 | 47.4 | Pass |
| T9 | 80 - 60 | Leg | ROHN 6 EH | 168 | -151678.00 | 303585.00 | 50.0 | Pass |
| | | Leg | 120deg 9.6250x0.375 BU on ROHN 8 EHS | 181 | -184577.00 | 537270.00 | 34.4 | Pass |
| | | Leg | 120deg 9.6250x0.375 BU on ROHN 8 EHS | 182 | -185989.00 | 537270.00 | 34.6 | Pass |
| T10 | 60 - 40 | Leg | 120deg 9.6250x0.375 BU on ROHN 8 EHS | 183 | -194378.00 | 537270.00 | 36.2 | Pass |
| | | Leg | 1/3 9.6250x0.375 on ROHN 8 EHS Leg Pipe | 208 | -228312.00 | 460811.00 | 49.5 | Pass |
| | | Leg | 1/3 9.6250x0.375 on ROHN 8 EHS Leg Pipe | 209 | -229799.00 | 460811.00 | 49.9 | Pass |
| T11 | 40 - 30 | Leg | 1/3 9.6250x0.375 on ROHN 8 EHS Leg Pipe | 210 | -238636.00 | 460811.00 | 51.8 | Pass |
| | | Leg | 1/3 9.6250x0.375 on ROHN 8 EHS Leg Pipe | 235 | -250457.00 | 460811.00 | 54.4 | Pass |
| | | Leg | 1/3 9.6250x0.375 on ROHN 8 EHS Leg Pipe | 236 | -252045.00 | 460811.00 | 54.7 | Pass |

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| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job 22027.01 - Westport | Page 66 of 71 |
| | Project 180-ft Lattice Tower (CSP #32) | Date 08:43:42 04/05/22 |
| | Client Verizon | Designed by TJL |

| Section No. | Elevation ft | Component Type | Size | Critical Element | P lb | ϕP_{allow} lb | % Capacity | Pass Fail |
|-------------|-------------------|----------------|--|------------------|------------|---------------------|------------------|-----------|
| | | | EHS Leg Pipe | | | | | |
| | | Leg | 1/3 9.6250x0.375 on ROHN 8 | 237 | -261072.00 | 460811.00 | 56.7 | Pass |
| T12 | 30 - 20 | Leg | EHS Leg Pipe 1/3 9.6250x0.375 on ROHN 8 | 250 | -272576.00 | 460811.00 | 59.2 | Pass |
| | | Leg | EHS Leg Pipe 1/3 9.6250x0.375 on ROHN 8 | 251 | -274254.00 | 460811.00 | 59.5 | Pass |
| | | Leg | EHS Leg Pipe 1/3 9.6250x0.375 on ROHN 8 | 252 | -283449.00 | 460811.00 | 61.5 | Pass |
| T13 | 20 - 0 | Leg | EHS Leg Pipe 1/3 9.6250x0.375 on ROHN 8 | 265 | -294266.00 | 560408.00 | 52.5 | Pass |
| | | Leg | EH Leg Pipe 1/3 9.6250x0.375 on ROHN 8 | 266 | -296061.00 | 560408.00 | 60.1 (b) 52.8 | Pass |
| | | Leg | EH Leg Pipe 1/3 9.6250x0.375 on ROHN 8 | 267 | -305388.00 | 560408.00 | 60.4 (b) 54.5 | Pass |
| T1 | 180 - 160 | Diagonal | EH Leg Pipe ROHN 2 STD | 8 | -2225.17 | 17747.50 | 12.5 | Pass |
| | | Diagonal | ROHN 2 STD | 9 | -1974.74 | 17747.50 | 11.1 | Pass |
| | | Diagonal | ROHN 2 STD | 11 | -2197.80 | 17747.50 | 12.4 | Pass |
| | | Diagonal | ROHN 2 STD | 12 | -2303.91 | 17747.50 | 13.0 | Pass |
| | | Diagonal | ROHN 2 STD | 14 | -4024.05 | 17747.50 | 22.7 | Pass |
| | | Diagonal | ROHN 2 STD | 15 | -3589.12 | 17747.50 | 20.2 | Pass |
| | | Diagonal | ROHN 2 STD | 20 | -1748.17 | 17782.20 | 9.8 | Pass |
| | | Diagonal | ROHN 2 STD | 21 | -1437.28 | 17782.20 | 8.1 | Pass |
| | | Diagonal | ROHN 2 STD | 23 | -983.64 | 17782.20 | 5.5 | Pass |
| | | Diagonal | ROHN 2 STD | 24 | -1113.54 | 17782.20 | 6.3 | Pass |
| | | Diagonal | ROHN 2 STD | 26 | -2748.87 | 17782.20 | 15.5 | Pass |
| | | Diagonal | ROHN 2 STD | 27 | -2253.06 | 17782.20 | 12.7 | Pass |
| | | Diagonal | ROHN 2 STD | 31 | -513.70 | 17817.00 | 2.9 | Pass |
| | | Diagonal | ROHN 2 STD | 32 | -387.66 | 17817.00 | 2.2 | Pass |
| | | Diagonal | ROHN 2 STD | 33 | -162.04 | 17817.00 | 0.9 | Pass |
| | | Diagonal | ROHN 2 STD | 34 | -155.04 | 17817.00 | 0.9 | Pass |
| | | Diagonal | ROHN 2 STD | 35 | -616.99 | 17817.00 | 3.5 | Pass |
| T2 | 160 - 140 | Diagonal | ROHN 2 STD | 36 | -509.71 | 17817.00 | 2.9 | Pass |
| | | Diagonal | ROHN 2 STD | 44 | -5543.10 | 15331.30 | 36.2 | Pass |
| | | Diagonal | ROHN 2 STD | 45 | -5443.33 | 15331.30 | 35.5 | Pass |
| | | Diagonal | ROHN 2 STD | 47 | -6482.65 | 15331.30 | 42.3 | Pass |
| | | Diagonal | ROHN 2 STD | 48 | -6470.71 | 15331.30 | 42.2 | Pass |
| | | Diagonal | ROHN 2 STD | 50 | -9033.05 | 15331.30 | 58.9 | Pass |
| | | Diagonal | ROHN 2 STD | 51 | -8752.93 | 15331.30 | 57.1 | Pass |
| | | Diagonal | ROHN 2 STD | 56 | -5449.80 | 16154.50 | 33.7 | Pass |
| | | Diagonal | ROHN 2 STD | 57 | -5333.44 | 16154.50 | 33.0 | Pass |
| | | Diagonal | ROHN 2 STD | 59 | -6598.69 | 16154.50 | 40.8 | Pass |
| | | Diagonal | ROHN 2 STD | 60 | -6585.24 | 16154.50 | 40.8 | Pass |
| | | Diagonal | ROHN 2 STD | 62 | -9091.89 | 16154.50 | 56.3 | Pass |
| | | Diagonal | ROHN 2 STD | 63 | -8780.41 | 16154.50 | 54.4 | Pass |
| | | Diagonal | ROHN 2 STD | 68 | -5256.52 | 17005.60 | 30.9 | Pass |
| | | Diagonal | ROHN 2 STD | 69 | -5115.97 | 17005.60 | 30.1 | Pass |
| | | Diagonal | ROHN 2 STD | 71 | -6634.36 | 17005.60 | 39.0 | Pass |
| | | Diagonal | ROHN 2 STD | 72 | -6622.94 | 17005.60 | 38.9 | Pass |
| | | Diagonal | ROHN 2 STD | 74 | -9001.97 | 17005.60 | 52.9 | Pass |
| | | Diagonal | ROHN 2 STD | 75 | -8645.86 | 17005.60 | 50.8 | Pass |
| T3 | 140 - 133.333 | Diagonal | ROHN 2 EH | 83 | -5766.15 | 19347.50 | 29.8 | Pass |
| | | Diagonal | ROHN 2 EH | 84 | -5681.60 | 19347.50 | 29.4 | Pass |
| | | Diagonal | ROHN 2 EH | 86 | -6541.83 | 19347.50 | 33.8 | Pass |
| | | Diagonal | ROHN 2 EH | 87 | -6524.50 | 19347.50 | 33.7 | Pass |
| | | Diagonal | ROHN 2 EH | 89 | -9235.50 | 19347.50 | 47.7 | Pass |
| | | Diagonal | ROHN 2 EH | 90 | -8979.62 | 19347.50 | 46.4 | Pass |
| T4 | 133.333 - 126.667 | Diagonal | ROHN 2 EH | 100 | -8652.11 | 18285.10 | 47.3 | Pass |
| | | Diagonal | ROHN 2 EH | 101 | -8575.33 | 18285.10 | 46.9 | Pass |
| | | Diagonal | ROHN 2 EH | 102 | -9205.04 | 18285.10 | 50.3 | Pass |

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| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 67 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Section No. | Elevation ft | Component Type | Size | Critical Element | P lb | ϕP_{allow} lb | % Capacity | Pass Fail |
|-------------|---------------|----------------|--------------|------------------|-----------|---------------------|------------|-----------|
| T5 | 126.667 - 120 | Diagonal | ROHN 2 EH | 103 | -9194.21 | 18285.10 | 50.3 | Pass |
| | | Diagonal | ROHN 2 EH | 104 | -11819.60 | 18285.10 | 64.6 | Pass |
| | | Diagonal | ROHN 2 EH | 105 | -11586.20 | 18285.10 | 63.4 | Pass |
| | | Diagonal | ROHN 2 XXS | 115 | -11308.00 | 25935.80 | 43.6 | Pass |
| | | Diagonal | ROHN 2 XXS | 116 | -11235.30 | 25935.80 | 43.3 | Pass |
| | | Diagonal | ROHN 2 XXS | 117 | -11834.20 | 25935.80 | 45.6 | Pass |
| | | Diagonal | ROHN 2 XXS | 118 | -11820.10 | 25935.80 | 45.6 | Pass |
| T6 | 120 - 100 | Diagonal | ROHN 2 XXS | 119 | -14159.60 | 25935.80 | 54.6 | Pass |
| | | Diagonal | ROHN 2 XXS | 120 | -13943.50 | 25935.80 | 53.8 | Pass |
| | | Diagonal | Pipe 2.5 XXS | 128 | -14883.30 | 30977.00 | 48.0 | Pass |
| | | Diagonal | Pipe 2.5 XXS | 129 | -14807.20 | 30977.00 | 47.8 | Pass |
| | | Diagonal | Pipe 2.5 XXS | 131 | -16330.00 | 30977.00 | 52.7 | Pass |
| | | Diagonal | Pipe 2.5 XXS | 132 | -16303.10 | 30977.00 | 52.6 | Pass |
| | | Diagonal | Pipe 2.5 XXS | 134 | -18105.30 | 30977.00 | 58.4 | Pass |
| | | Diagonal | Pipe 2.5 XXS | 135 | -17903.80 | 30977.00 | 57.8 | Pass |
| | | Diagonal | Pipe 2.5 XXS | 140 | -14848.10 | 32743.10 | 45.3 | Pass |
| | | Diagonal | Pipe 2.5 XXS | 141 | -14764.80 | 32743.10 | 45.1 | Pass |
| | | Diagonal | Pipe 2.5 XXS | 143 | -15868.90 | 32743.10 | 48.5 | Pass |
| T7 | 100 - 90 | Diagonal | Pipe 2.5 XXS | 144 | -15840.90 | 32743.10 | 48.4 | Pass |
| | | Diagonal | Pipe 2.5 XXS | 146 | -18248.20 | 32743.10 | 55.7 | Pass |
| | | Diagonal | Pipe 2.5 XXS | 147 | -18013.20 | 32743.10 | 55.0 | Pass |
| | | Diagonal | ROHN 3 STD | 155 | -13789.20 | 30346.40 | 45.4 | Pass |
| | | Diagonal | ROHN 3 STD | 156 | -13722.20 | 30346.40 | 45.2 | Pass |
| | | Diagonal | ROHN 3 STD | 158 | -15473.50 | 30346.40 | 51.0 | Pass |
| | | Diagonal | ROHN 3 STD | 159 | -15419.80 | 30346.40 | 50.8 | Pass |
| | | Diagonal | ROHN 3 STD | 161 | -16726.50 | 30346.40 | 55.1 | Pass |
| | | Diagonal | ROHN 3 STD | 162 | -16577.40 | 30346.40 | 54.6 | Pass |
| | | Diagonal | ROHN 3 STD | 172 | -13956.20 | 28290.90 | 49.3 | Pass |
| | | Diagonal | ROHN 3 STD | 173 | -13894.20 | 28290.90 | 49.1 | Pass |
| T8 | 90 - 80 | Diagonal | ROHN 3 STD | 174 | -15878.50 | 28290.90 | 56.1 | Pass |
| | | Diagonal | ROHN 3 STD | 175 | -15830.20 | 28290.90 | 56.0 | Pass |
| | | Diagonal | ROHN 3 STD | 176 | -16731.50 | 28290.90 | 59.1 | Pass |
| | | Diagonal | ROHN 3 STD | 177 | -16603.80 | 28290.90 | 58.7 | Pass |
| | | Diagonal | ROHN 3 STD | 185 | -15295.10 | 25233.20 | 60.6 | Pass |
| | | Diagonal | ROHN 3 STD | 186 | -15241.30 | 25233.20 | 60.4 | Pass |
| | | Diagonal | ROHN 3 STD | 188 | -17589.40 | 25233.20 | 69.7 | Pass |
| T9 | 80 - 60 | Diagonal | ROHN 3 STD | 189 | -17555.40 | 25233.20 | 69.6 | Pass |
| | | Diagonal | ROHN 3 STD | 191 | -17849.10 | 25233.20 | 70.7 | Pass |
| | | Diagonal | ROHN 3 STD | 192 | -17748.30 | 25233.20 | 70.3 | Pass |
| | | Diagonal | ROHN 3 STD | 197 | -14675.20 | 26922.60 | 54.5 | Pass |
| | | Diagonal | ROHN 3 STD | 198 | -14616.70 | 26922.60 | 54.3 | Pass |
| | | Diagonal | ROHN 3 STD | 200 | -16831.60 | 26922.60 | 62.5 | Pass |
| | | Diagonal | ROHN 3 STD | 201 | -16792.50 | 26922.60 | 62.4 | Pass |
| | | Diagonal | ROHN 3 STD | 203 | -17358.00 | 26922.60 | 64.5 | Pass |
| | | Diagonal | ROHN 3 STD | 204 | -17243.00 | 26922.60 | 64.0 | Pass |
| | | Diagonal | ROHN 3 EH | 212 | -16658.80 | 28518.80 | 58.4 | Pass |
| | | Diagonal | ROHN 3 EH | 213 | -16616.60 | 28518.80 | 58.3 | Pass |
| T10 | 60 - 40 | Diagonal | ROHN 3 EH | 215 | -19178.70 | 28518.80 | 67.2 | Pass |
| | | Diagonal | ROHN 3 EH | 216 | -19146.30 | 28518.80 | 67.1 | Pass |
| | | Diagonal | ROHN 3 EH | 218 | -19118.50 | 28518.80 | 67.0 | Pass |
| | | Diagonal | ROHN 3 EH | 219 | -19034.20 | 28518.80 | 66.7 | Pass |
| | | Diagonal | ROHN 3 EH | 224 | -16188.10 | 30411.50 | 53.2 | Pass |
| | | Diagonal | ROHN 3 EH | 225 | -16143.50 | 30411.50 | 53.1 | Pass |
| | | Diagonal | ROHN 3 EH | 227 | -18587.40 | 30411.50 | 61.1 | Pass |
| | | Diagonal | ROHN 3 EH | 228 | -18553.20 | 30411.50 | 61.0 | Pass |
| | | Diagonal | ROHN 3 EH | 230 | -18727.50 | 30411.50 | 61.6 | Pass |
| | | Diagonal | ROHN 3 EH | 231 | -18630.70 | 30411.50 | 61.3 | Pass |
| | | Diagonal | ROHN 3 EH | 239 | -17114.10 | 26718.70 | 64.1 | Pass |
| T11 | 40 - 30 | Diagonal | ROHN 3 EH | 240 | -17072.60 | 26718.70 | 63.9 | Pass |
| | | Diagonal | ROHN 3 EH | 242 | -19775.00 | 26718.70 | 74.0 | Pass |
| | | Diagonal | ROHN 3 EH | 243 | -19742.00 | 26718.70 | 73.9 | Pass |
| | | Diagonal | ROHN 3 EH | | | | | |

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| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Section No. | Elevation ft | Component Type | Size | Critical Element | P lb | ϕP_{allow} lb | % Capacity | Pass Fail | |
|-------------|--------------|----------------|--------------|------------------|------------|---------------------|------------|-----------|------|
| T12 | 30 - 20 | Diagonal | ROHN 3 EH | 245 | -19533.20 | 26718.70 | 73.1 | Pass | |
| | | Diagonal | ROHN 3 EH | 246 | -19460.30 | 26718.70 | 72.8 | Pass | |
| | | Diagonal | ROHN 3 EH | 256 | -17741.30 | 25055.10 | 70.8 | Pass | |
| | | Diagonal | ROHN 3 EH | 257 | -17701.90 | 25055.10 | 70.7 | Pass | |
| | | Diagonal | ROHN 3 EH | 258 | -20455.00 | 25055.10 | 81.6 | Pass | |
| | | Diagonal | ROHN 3 EH | 259 | -20427.50 | 25055.10 | 81.5 | Pass | |
| T13 | 20 - 0 | Diagonal | ROHN 3 EH | 260 | -20085.20 | 25055.10 | 80.2 | Pass | |
| | | Diagonal | ROHN 3 EH | 261 | -20018.40 | 25055.10 | 79.9 | Pass | |
| | | Diagonal | ROHN 3 EH | 269 | -25855.30 | 43506.30 | 59.4 | Pass | |
| | | Diagonal | ROHN 3 EH | 272 | -25806.90 | 43506.30 | 59.3 | Pass | |
| | | Diagonal | ROHN 3 EH | 276 | -30142.60 | 43506.30 | 69.3 | Pass | |
| | | Diagonal | ROHN 3 EH | 279 | -30074.60 | 43506.30 | 69.1 | Pass | |
| | | Diagonal | ROHN 3 EH | 284 | -29226.30 | 43506.30 | 67.2 | Pass | |
| | | Diagonal | ROHN 3 EH | 287 | -29120.20 | 43506.30 | 66.9 | Pass | |
| T1 | 180 - 160 | Horizontal | ROHN 1.5 STD | 7 | -1270.33 | 22519.90 | 5.6 | Pass | |
| | | Horizontal | ROHN 1.5 STD | 10 | -1297.56 | 22519.90 | 5.8 | Pass | |
| | | Horizontal | ROHN 1.5 STD | 13 | -2162.24 | 22519.90 | 9.6 | Pass | |
| | | Horizontal | ROHN 1.5 STD | 19 | -1061.34 | 22590.20 | 4.7 | Pass | |
| | | Horizontal | ROHN 1.5 STD | 22 | -723.76 | 22590.20 | 3.2 | Pass | |
| | | Horizontal | ROHN 1.5 STD | 25 | -1554.62 | 22590.20 | 6.9 | Pass | |
| T2 | 160 - 140 | Horizontal | ROHN 1.5 STD | 43 | -3474.30 | 19142.00 | 18.2 | Pass | |
| | | Horizontal | ROHN 1.5 STD | 46 | -4065.95 | 19142.00 | 21.2 | Pass | |
| | | Horizontal | ROHN 1.5 STD | 49 | -5605.24 | 19142.00 | 29.3 | Pass | |
| | | Horizontal | ROHN 1.5 STD | 55 | -3312.34 | 20895.80 | 15.9 | Pass | |
| | | Horizontal | ROHN 1.5 STD | 58 | -3991.22 | 20895.80 | 19.1 | Pass | |
| | | Horizontal | ROHN 1.5 STD | 61 | -5418.75 | 20895.80 | 25.9 | Pass | |
| | | Horizontal | ROHN 1.5 STD | 67 | -3891.60 | 22661.30 | 17.2 | Pass | |
| | | Horizontal | ROHN 1.5 STD | 70 | -4405.81 | 22661.30 | 19.4 | Pass | |
| | | Horizontal | ROHN 1.5 STD | 73 | -5324.02 | 22661.30 | 23.5 | Pass | |
| | | Horizontal | ROHN 2 STD | 82 | -3777.24 | 30956.80 | 12.2 | Pass | |
| | | | | | | | | 14.0 (b) | |
| | | | | Horizontal | ROHN 2 STD | 85 | -4257.68 | 30956.80 | 13.8 |
| | | | | | | 15.5 (b) | | | |
| | | Horizontal | ROHN 2 STD | 88 | -5934.58 | 30956.80 | 19.2 | Pass | |
| | | | | | | 21.6 (b) | | | |
| T6 | 120 - 100 | Horizontal | ROHN 2 STD | 127 | -8745.39 | 22639.20 | 38.6 | Pass | |
| | | Horizontal | ROHN 2 STD | 130 | -9695.50 | 22639.20 | 42.8 | Pass | |
| | | Horizontal | ROHN 2 STD | 133 | -10681.90 | 22639.20 | 47.2 | Pass | |
| | | Horizontal | ROHN 2 STD | 139 | -8320.12 | 25586.40 | 32.5 | Pass | |
| | | Horizontal | ROHN 2 STD | 142 | -9031.20 | 25586.40 | 35.3 | Pass | |
| | | Horizontal | ROHN 2 STD | 145 | -10266.80 | 25586.40 | 40.1 | Pass | |
| T7 | 100 - 90 | Horizontal | ROHN 2 STD | 154 | -8604.08 | 19817.20 | 43.4 | Pass | |
| | | Horizontal | ROHN 2 STD | 157 | -9844.54 | 19817.20 | 49.7 | Pass | |
| | | Horizontal | ROHN 2 STD | 160 | -10479.10 | 19817.20 | 52.9 | Pass | |
| T9 | 80 - 60 | Horizontal | ROHN 2.5 STD | 184 | -10644.10 | 28984.30 | 36.7 | Pass | |
| | | | | | | | 39.0 (b) | | |
| | | Horizontal | ROHN 2.5 STD | 187 | -12356.50 | 28984.30 | 42.6 | Pass | |
| | | | | | | | 44.9 (b) | | |
| | | Horizontal | ROHN 2.5 STD | 190 | -12460.20 | 28984.30 | 43.0 | Pass | |
| | | | | | | | 45.6 (b) | | |
| | | Horizontal | ROHN 2.5 STD | 196 | -9885.94 | 33028.40 | 29.9 | Pass | |
| | | | | | | | 36.2 (b) | | |
| | | Horizontal | ROHN 2.5 STD | 199 | -11377.30 | 33028.40 | 34.4 | Pass | |
| | | | | | | | 41.6 (b) | | |
| T10 | 60 - 40 | Horizontal | ROHN 2.5 STD | 202 | -11723.50 | 33028.40 | 35.5 | Pass | |
| | | | | | | | 42.9 (b) | | |
| | | Horizontal | ROHN 2.5 STD | 211 | -12142.50 | 22405.40 | 54.2 | Pass | |
| | | Horizontal | ROHN 2.5 STD | 214 | -14115.10 | 22405.40 | 63.0 | Pass | |
| | | Horizontal | ROHN 2.5 STD | 217 | -13987.90 | 22405.40 | 62.4 | Pass | |
| | | Horizontal | ROHN 2.5 STD | 223 | -11541.90 | 25378.10 | 45.5 | Pass | |
| | | Horizontal | ROHN 2.5 STD | 226 | -13408.50 | 25378.10 | 52.8 | Pass | |

| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 69 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Section No. | Elevation ft | Component Type | Size | Critical Element | P lb | ϕP_{allow} lb | % Capacity | Pass Fail |
|-------------|-------------------|-----------------------|--------------|------------------|-----------|---------------------|------------|-----------|
| T11 | 40 - 30 | Horizontal | ROHN 2.5 STD | 229 | -13399.20 | 25378.10 | 52.8 | Pass |
| | | Horizontal | ROHN 2.5 STD | 238 | -12751.10 | 19925.90 | 64.0 | Pass |
| | | Horizontal | ROHN 2.5 STD | 241 | -14904.90 | 19925.90 | 74.8 | Pass |
| T13 | 20 - 0 | Horizontal | ROHN 2.5 STD | 244 | -14610.70 | 19925.90 | 73.3 | Pass |
| | | Horizontal | P3.5x.226 | 268 | -14116.60 | 49951.20 | 28.3 | Pass |
| | | Horizontal | P3.5x.226 | 275 | -16764.10 | 49951.20 | 33.6 | Pass |
| T1 | 180 - 160 | Horizontal | P3.5x.226 | 283 | -16058.60 | 49951.20 | 32.1 | Pass |
| | | Top Girt | ROHN 1.5 STD | 4 | -239.92 | 22660.50 | 1.1 | Pass |
| | | Top Girt | ROHN 1.5 STD | 5 | -126.98 | 22660.50 | 0.6 | Pass |
| T4 | 133.333 - 126.667 | Top Girt | ROHN 1.5 STD | 6 | -355.00 | 22660.50 | 1.6 | Pass |
| | | Top Girt | ROHN 2 STD | 97 | -6108.54 | 29081.40 | 21.0 | Pass |
| | | Top Girt | ROHN 2 STD | 98 | -6471.03 | 29081.40 | 22.3 | Pass |
| T5 | 126.667 - 120 | Top Girt | ROHN 2 STD | 99 | -7888.88 | 29081.40 | 27.1 | Pass |
| | | Top Girt | ROHN 2 STD | 112 | -7776.50 | 27207.90 | 28.6 | Pass |
| | | Top Girt | ROHN 2 STD | 113 | -8380.54 | 27207.90 | 30.8 | Pass |
| T8 | 90 - 80 | Top Girt | ROHN 2 STD | 114 | -9707.53 | 27207.90 | 35.7 | Pass |
| | | Top Girt | ROHN 2 STD | 169 | -9088.58 | 16719.60 | 54.4 | Pass |
| | | Top Girt | ROHN 2 STD | 170 | -10428.40 | 16719.60 | 62.4 | Pass |
| T12 | 30 - 20 | Top Girt | ROHN 2 STD | 171 | -10927.80 | 16719.60 | 65.4 | Pass |
| | | Top Girt | ROHN 2.5 EH | 253 | -13422.10 | 22438.80 | 59.8 | Pass |
| | | Top Girt | ROHN 2.5 EH | 254 | -15543.00 | 22438.80 | 69.3 | Pass |
| T13 | 20 - 0 | Top Girt | ROHN 2.5 EH | 255 | -15250.60 | 22438.80 | 68.0 | Pass |
| | | Redund Horz 1 Bracing | ROHN 1.5 STD | 270 | -5106.78 | 13802.80 | 37.0 | Pass |
| | | Redund Horz 1 Bracing | ROHN 1.5 STD | 273 | -5137.92 | 13802.80 | 37.2 | Pass |
| T13 | 20 - 0 | Redund Horz 1 Bracing | ROHN 1.5 STD | 277 | -5137.92 | 13802.80 | 37.2 | Pass |
| | | Redund Horz 1 Bracing | ROHN 1.5 STD | 280 | -5299.78 | 13802.80 | 38.4 | Pass |
| | | Redund Horz 1 Bracing | ROHN 1.5 STD | 285 | -5299.78 | 13802.80 | 38.4 | Pass |
| T13 | 20 - 0 | Redund Horz 1 Bracing | ROHN 1.5 STD | 288 | -5106.78 | 13802.80 | 37.0 | Pass |
| | | Redund Diag 1 Bracing | ROHN 2 STD | 271 | -4665.57 | 8998.85 | 51.8 | Pass |
| | | Redund Diag 1 Bracing | ROHN 2 STD | 274 | -4694.02 | 8998.85 | 52.2 | Pass |
| T13 | 20 - 0 | Redund Diag 1 Bracing | ROHN 2 STD | 278 | -4694.02 | 8998.85 | 52.2 | Pass |
| | | Redund Diag 1 Bracing | ROHN 2 STD | 281 | -4841.90 | 8998.85 | 53.8 | Pass |
| | | Redund Diag 1 Bracing | ROHN 2 STD | 286 | -4841.90 | 8998.85 | 53.8 | Pass |
| T13 | 20 - 0 | Redund Diag 1 Bracing | ROHN 2 STD | 289 | -4665.57 | 8998.85 | 51.8 | Pass |
| | | Redund Hip 1 Bracing | ROHN 2.5 STD | 282 | -17.45 | 48180.50 | 0.2 | Pass |
| | | Redund Hip 1 Bracing | ROHN 2.5 STD | 290 | -17.64 | 48180.50 | 0.2 | Pass |
| T1 | 180 - 160 | Redund Hip 1 Bracing | ROHN 2.5 STD | 291 | -17.39 | 48180.50 | 0.2 | Pass |
| | | Inner Bracing | L2x2x1/8 | 16 | -1.80 | 8234.10 | 0.4 | Pass |
| | | Inner Bracing | L2x2x1/8 | 17 | -1.85 | 8234.10 | 0.4 | Pass |

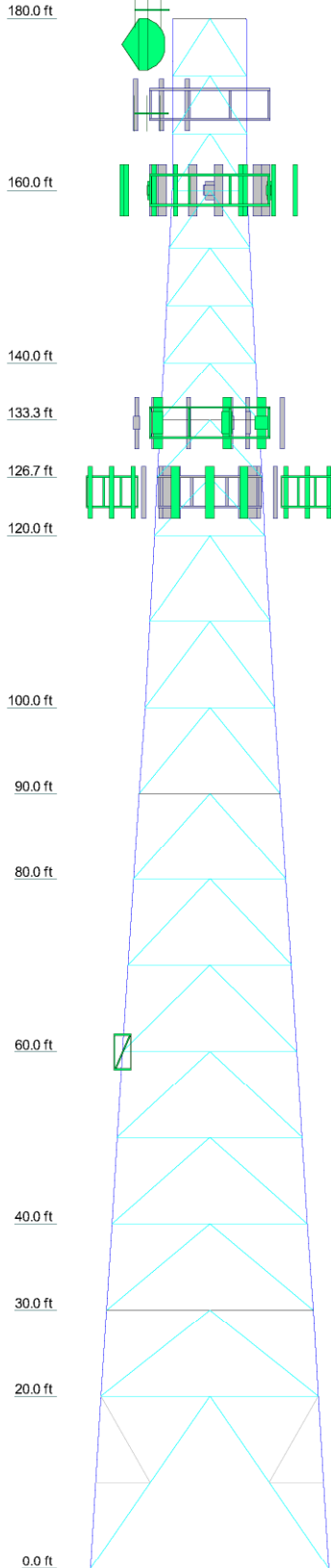
| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 70 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Section No. | Elevation ft | Component Type | Size | Critical Element | P lb | ϕP_{allow} lb | % Capacity | Pass Fail |
|-------------|-------------------|----------------|-------------------|------------------|--------|---------------------|------------|-----------|
| | | Inner Bracing | L2x2x1/8 | 18 | -1.72 | 8234.10 | 0.4 | Pass |
| | | Inner Bracing | L2x2x1/8 | 28 | -1.39 | 8287.35 | 0.4 | Pass |
| | | Inner Bracing | L2x2x1/8 | 29 | -1.41 | 8287.35 | 0.4 | Pass |
| | | Inner Bracing | L2x2x1/8 | 30 | -1.37 | 8287.35 | 0.4 | Pass |
| | | Inner Bracing | L2x2x1/8 | 37 | -0.29 | 8341.12 | 0.4 | Pass |
| | | Inner Bracing | L2x2x1/8 | 38 | -0.28 | 8341.12 | 0.4 | Pass |
| | | Inner Bracing | L2x2x1/8 | 39 | -0.32 | 8341.12 | 0.4 | Pass |
| T2 | 160 - 140 | Inner Bracing | L2x2x1/8 | 52 | -4.41 | 6068.75 | 0.5 | Pass |
| | | Inner Bracing | L2x2x1/8 | 53 | -4.59 | 6068.75 | 0.5 | Pass |
| | | Inner Bracing | L2x2x1/8 | 54 | -4.39 | 6068.75 | 0.5 | Pass |
| | | Inner Bracing | L2x2x1/8 | 64 | -4.82 | 7007.17 | 0.5 | Pass |
| | | Inner Bracing | L2x2x1/8 | 65 | -5.05 | 7007.17 | 0.5 | Pass |
| | | Inner Bracing | L2x2x1/8 | 66 | -4.79 | 7007.17 | 0.5 | Pass |
| | | Inner Bracing | L2x2x1/8 | 76 | -6.73 | 8181.36 | 0.4 | Pass |
| | | Inner Bracing | L2x2x1/8 | 77 | -7.11 | 8181.36 | 0.4 | Pass |
| | | Inner Bracing | L2x2x1/8 | 78 | -6.66 | 8181.36 | 0.4 | Pass |
| T3 | 140 - 133.333 | Inner Bracing | L2x2x1/8 | 91 | -6.46 | 5306.96 | 0.5 | Pass |
| | | Inner Bracing | L2x2x1/8 | 92 | -6.69 | 5306.96 | 0.5 | Pass |
| | | Inner Bracing | L2x2x1/8 | 93 | -6.43 | 5306.96 | 0.5 | Pass |
| T4 | 133.333 - 126.667 | Inner Bracing | L2x2x1/8 | 106 | -8.85 | 4680.37 | 0.6 | Pass |
| | | Inner Bracing | L2x2x1/8 | 107 | -9.04 | 4680.37 | 0.6 | Pass |
| | | Inner Bracing | L2x2x1/8 | 108 | -8.83 | 4680.37 | 0.6 | Pass |
| T5 | 126.667 - 120 | Inner Bracing | L2x2x1/8 | 121 | -10.47 | 4158.54 | 0.6 | Pass |
| | | Inner Bracing | L2x2x1/8 | 122 | -10.63 | 4158.54 | 0.6 | Pass |
| | | Inner Bracing | L2x2x1/8 | 123 | -10.46 | 4158.54 | 0.6 | Pass |
| T6 | 120 - 100 | Inner Bracing | L2 1/2x2 1/2x3/16 | 136 | -11.29 | 9072.37 | 0.5 | Pass |
| | | Inner Bracing | L2 1/2x2 1/2x3/16 | 137 | -11.39 | 9072.37 | 0.5 | Pass |
| | | Inner Bracing | L2 1/2x2 1/2x3/16 | 138 | -11.28 | 9072.37 | 0.5 | Pass |
| | | Inner Bracing | L2 1/2x2 1/2x3/16 | 148 | -11.99 | 10738.30 | 0.4 | Pass |
| | | Inner Bracing | L2 1/2x2 1/2x3/16 | 149 | -12.12 | 10738.30 | 0.4 | Pass |
| | | Inner Bracing | L2 1/2x2 1/2x3/16 | 150 | -11.97 | 10738.30 | 0.4 | Pass |
| T7 | 100 - 90 | Inner Bracing | L2 1/2x2 1/2x3/16 | 163 | -10.72 | 7766.06 | 0.5 | Pass |
| | | Inner Bracing | L2 1/2x2 1/2x3/16 | 164 | -10.80 | 7766.06 | 0.5 | Pass |
| | | Inner Bracing | L2 1/2x2 1/2x3/16 | 165 | -10.75 | 7766.06 | 0.5 | Pass |
| T8 | 90 - 80 | Inner Bracing | L2 1/2x2 1/2x3/16 | 178 | -10.97 | 6565.57 | 0.5 | Pass |
| | | Inner Bracing | L2 1/2x2 1/2x3/16 | 179 | -11.04 | 6565.57 | 0.5 | Pass |
| | | Inner Bracing | L2 1/2x2 1/2x3/16 | 180 | -10.99 | 6565.57 | 0.5 | Pass |
| T9 | 80 - 60 | Inner Bracing | L3x3x3/16 | 193 | -12.87 | 8593.12 | 0.6 | Pass |
| | | Inner Bracing | L3x3x3/16 | 194 | -12.95 | 8593.12 | 0.6 | Pass |
| | | Inner Bracing | L3x3x3/16 | 195 | -12.89 | 8593.12 | 0.6 | Pass |
| | | Inner Bracing | L3x3x3/16 | 205 | -12.42 | 9851.38 | 0.6 | Pass |
| | | Inner Bracing | L3x3x3/16 | 206 | -12.51 | 9851.38 | 0.6 | Pass |
| | | Inner Bracing | L3x3x3/16 | 207 | -12.44 | 9851.38 | 0.6 | Pass |
| T10 | 60 - 40 | Inner Bracing | L3 1/2x3 1/2x1/4 | 220 | -15.32 | 14095.40 | 0.4 | Pass |
| | | Inner Bracing | L3 1/2x3 1/2x1/4 | 221 | -15.38 | 14095.40 | 0.4 | Pass |
| | | Inner Bracing | L3 1/2x3 1/2x1/4 | 222 | -15.33 | 14095.40 | 0.4 | Pass |
| | | Inner Bracing | L3 1/2x3 1/2x1/4 | 232 | -14.83 | 15896.00 | 0.4 | Pass |
| | | Inner Bracing | L3 1/2x3 1/2x1/4 | 233 | -14.90 | 15896.00 | 0.4 | Pass |
| | | Inner Bracing | L3 1/2x3 1/2x1/4 | 234 | -14.84 | 15896.00 | 0.4 | Pass |
| T11 | 40 - 30 | Inner Bracing | L3 1/2x3 1/2x1/4 | 247 | -15.58 | 12584.30 | 0.4 | Pass |
| | | Inner Bracing | L3 1/2x3 1/2x1/4 | 248 | -15.63 | 12584.30 | 0.4 | Pass |
| | | Inner Bracing | L3 1/2x3 1/2x1/4 | 249 | -15.58 | 12584.30 | 0.4 | Pass |
| T12 | 30 - 20 | Inner Bracing | L3 1/2x3 1/2x1/4 | 262 | -16.41 | 11303.80 | 0.4 | Pass |
| | | Inner Bracing | L3 1/2x3 1/2x1/4 | 263 | -16.45 | 11303.80 | 0.4 | Pass |
| | | Inner Bracing | L3 1/2x3 1/2x1/4 | 264 | -16.41 | 11303.80 | 0.4 | Pass |
| T13 | 20 - 0 | Inner Bracing | ROHN 2 STD | 292 | -14.27 | 6590.81 | 0.4 | Pass |
| | | Inner Bracing | ROHN 2 STD | 293 | -14.50 | 6590.81 | 0.4 | Pass |
| | | Inner Bracing | ROHN 2 STD | 294 | -14.25 | 6590.81 | 0.4 | Pass |
| | | | | | | | Summary | |
| | | | | | | Leg (T12) | 61.5 | Pass |

| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 71 of 71 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 08:43:42 04/05/22 |
| | Client | Verizon | Designed by | TJL |

| Section No. | Elevation ft | Component Type | Size | Critical Element | P lb | ϕP_{allow} lb | % Capacity | Pass Fail |
|-------------|--------------|----------------|------|------------------|------|-----------------------------|-------------|-------------|
| | | | | | | Diagonal (T12) | 81.6 | Pass |
| | | | | | | Horizontal (T11) | 74.8 | Pass |
| | | | | | | Top Girt (T12) | 69.3 | Pass |
| | | | | | | Redund Horz 1 Bracing (T13) | 38.4 | Pass |
| | | | | | | Redund Diag 1 Bracing (T13) | 53.8 | Pass |
| | | | | | | Redund Hip 1 Bracing (T13) | 0.2 | Pass |
| | | | | | | Inner Bracing (T9) | 0.6 | Pass |
| | | | | | | Bolt Checks | 61.4 | Pass |
| | | | | | | RATING = | 81.6 | Pass |

| | | | | | | | | | | | | | |
|------------------|--------------|------------|-----------|-----------|------------|------------|-----------|------------|--------|---------------------|-----------|--------|---------|
| Section | T1 | T2 | T3 | T4 | T5 | T6 | T7 | T8 | T9 | T10 | T11 | T12 | T13 |
| Legs | ROHN 3 STD | ROHN 4 STD | ROHN 5 EH | ROHN 2 EH | ROHN 2 STD | ROHN 6 EHS | ROHN 6 EH | ROHN 3 STD | A | ROHN 8 EHS Leg Pipe | ROHN 3 EH | E | B |
| Leg Grade | | | | | | A572-50 | | | | | | | A572-42 |
| Diagonals | ROHN 2 STD | | | | | ROHN 2 STD | | | | | | | |
| Diagonal Grade | | | | | | ROHN 2 STD | | | | | | | |
| Top Girts | | | | | | N.A. | | | | N.A. | | | |
| Horizontals | ROHN 1.5 STD | | | | | ROHN 2 STD | | | | ROHN 2.5 STD | | | |
| Red. Horizontals | | | | | | N.A. | | | | | | | |
| Red. Diagonals | | | | | | N.A. | | | | | | | |
| Red. Hips | | | | | | N.A. | | | | | | | |
| Inner Bracing | | | | | | N.A. | | | | | | | |
| Face Width (ft) | 8.542 | 8.625 | 10.708 | 11.4033 | 12.0977 | 12.792 | 13.492 | 14.192 | 14.892 | 15.592 | 16.292 | 17.000 | 17.700 |
| # Panels @ (ft) | | | | | | | | | | | | | |
| Weight (lb) | | | | | | | | | | | | | |



SHEAR
67870 lb

90 mph

SHEAR
55148 lb

REAC

DESIGNED APPURTENANCE LOADING

| TYPE | ELEVATION | TYPE | ELEVATION |
|--|-----------|--|-----------|
| ANT940Y10-WR (CSP) | 187 | RRUS-32 (ATT) | 133 |
| ANT940Y10-WR (CSP - Yagi Antenna) | 181 | DBC0061F1V51-2 Combiner Units (ATT) | 133 |
| PA6-65AC (DNK-52 / CSP-42) | 177 | 800-10798 Kathrein Panel (ATT) | 133 |
| RFI BPS7496-180-14 Panel Antenna (CSP-80) | 170 | RRUS-32 B66 (ATT) | 133 |
| RFI BPS7496-180-14 Panel Antenna (CSP-81) | 170 | RRUS-32 (ATT) | 133 |
| RFI BPS7496-180-14 Panel Antenna (CSP-82) | 170 | DBC0061F1V51-2 Combiner Units (ATT) | 133 |
| SitePro1 USF-12-396-U Mount Assembly w/ (3) 96" Mount Pipes (CSP 47, 80, 81, 82) | 170 | DC6-48-60-18-8F (Squid) Suppressor (ATT) | 133 |
| 432E-83I-01T TTA Unit (Re-Located TMA (CSP)) | 170 | Pirod 15' T-Frame Sector Mount (1) (ATT) | 133 |
| 3' Yagi (CSP) | 169 | Pirod 15' T-Frame Sector Mount (1) (ATT) | 133 |
| B2/B66A RRH (Verizon) | 160 | P65-16-XLH-RR (ATT) | 133 |
| B5/B13 RRH (Verizon) | 160 | RRUS-11 (ATT) | 133 |
| CBRS RRH-RT4401-48A (Verizon) | 160 | HPA-65R-BUU-H6 Panel (ATT) | 133 |
| RF4439d-25A (B2/B66A RRH) (Verizon - Proposed) | 160 | RRUS-32 (ATT) | 133 |
| RF4440d-13A (B5/B13 RRH) (Verizon - Proposed) | 160 | DC6-48-60-18-8F (Squid) Suppressor (ATT) | 133 |
| JAHH-65B-R3B Panel Antenna (Verizon) | 160 | DC6-48-60-18-8F (Squid) Suppressor (ATT) | 133 |
| JAHH-65B-R3B Panel Antenna (Verizon) | 160 | P65-16-XLH-RR (ATT) | 133 |
| XXDWM-12.5-65-8T-CBRS Panel (Verizon) | 160 | RRUS-11 (ATT) | 133 |
| MT6407-77A (Verizon - Proposed) | 160 | HPA-65R-BUU-H6 Panel (ATT) | 133 |
| CBC78T-DS-43-2X Diplexer (Verizon) | 160 | RRUS-32 (ATT) | 133 |
| B2/B66A RRH (Verizon) | 160 | P65-16-XLH-RR (ATT) | 133 |
| B5/B13 RRH (Verizon) | 160 | RRUS-11 (ATT) | 133 |
| CBRS RRH-RT4401-48A (Verizon) | 160 | HPA-65R-BUU-H6 Panel (ATT) | 133 |
| JAHH-65B-R3B Panel Antenna (Verizon) | 160 | RRUS-32 (ATT) | 133 |
| JAHH-65B-R3B Panel Antenna (Verizon) | 160 | APXVARR24 43-C-NA20 Panel Antenna w/ 96" Pipe (T-Mobile) | 125 |
| XXDWM-12.5-65-8T-CBRS Panel (Verizon) | 160 | APXVARR24 43-C-NA20 Panel Antenna w/ 96" Pipe (T-Mobile) | 125 |
| MT6407-77A (Verizon - Proposed) | 160 | APXVARR24 43-C-NA20 Panel Antenna w/ 96" Pipe (T-Mobile) | 125 |
| CBC78T-DS-43-2X Diplexer (Verizon) | 160 | Ericsson 4449 B71 + B12 Radio Unit (I-Mobile) | 125 |
| B2/B66A RRH (Verizon) | 160 | Ericsson 4449 B71 + B12 Radio Unit (T-Mobile) | 125 |
| B5/B13 RRH (Verizon) | 160 | Ericsson 4449 B71 + B12 Radio Unit (T-Mobile) | 125 |
| CBRS RRH-RT4401-48A (Verizon) | 160 | Ericsson AIR21 B2A B4P Panel (T-Mobile) | 125 |
| JAHH-65B-R3B Panel Antenna (Verizon) | 160 | Ericsson AIR21 B2A B4P Panel (T-Mobile) | 125 |
| JAHH-65B-R3B Panel Antenna (Verizon) | 160 | Ericsson AIR21 B2A B4P Panel (T-Mobile) | 125 |
| XXDWM-12.5-65-8T-CBRS Panel (Verizon) | 160 | Ericsson AIR21 B2A B4P Panel (T-Mobile) | 125 |
| MT6407-77A (Verizon - Proposed) | 160 | Ericsson AIR21 B2A B4P Panel (T-Mobile) | 125 |
| CBC78T-DS-43-2X Diplexer (Verizon) | 160 | Ericsson AIR21 B2A B4P Panel (T-Mobile) | 125 |
| B2/B66A RRH (Verizon) | 160 | Ericsson AIR21 B2A B4P Panel (T-Mobile) | 125 |
| B5/B13 RRH (Verizon) | 160 | Ericsson AIR21 B2A B4P Panel (T-Mobile) | 125 |
| CBRS RRH-RT4401-48A (Verizon) | 160 | Ericsson AIR21 B2A B4P Panel (T-Mobile) | 125 |
| DB-T1-6Z-8AB-0Z Distribution Box (Verizon - Proposed) | 160 | Ericsson AIR21 B2A B4P Panel (T-Mobile) | 125 |
| ROHN 6'x15' Boom Gate (1) (Verizon) | 160 | Ericsson AIR21 B2A B4P Panel (T-Mobile) | 125 |
| ROHN 6'x15' Boom Gate (1) (Verizon) | 160 | Ericsson AIR21 B2A B4P Panel (T-Mobile) | 125 |
| MX06FRO640-02 (Verizon - Proposed) | 160 | Ericsson AIR21 B2A B4P Panel (T-Mobile) | 125 |
| MX06FRO640-02 (Verizon - Proposed) | 160 | Ericsson AIR21 B2A B4P Panel (T-Mobile) | 125 |
| XXDWM-12.5-65-8T-CBRS Panel (Verizon) | 160 | Ericsson AIR21 B2A B4P Panel (T-Mobile) | 125 |
| MT6407-77A (Verizon - Proposed) | 160 | Ericsson AIR21 B2A B4P Panel (T-Mobile) | 125 |
| MX06FRO640-02 (Verizon - Proposed) | 160 | Ericsson AIR21 B2A B4P Panel (T-Mobile) | 125 |
| MX06FRO640-02 (Verizon - Proposed) | 160 | Ericsson AIR21 B2A B4P Panel (T-Mobile) | 125 |
| ROHN 6'x15' Boom Gate (1) (Verizon) | 160 | Ericsson AIR21 B2A B4P Panel (T-Mobile) | 125 |
| 800-10798 Kathrein Panel (ATT) | 133 | Generic Twin TMA unit (T-Mobile) | 125 |
| RRUS-32 B66 (ATT) | 133 | Generic Twin TMA unit (T-Mobile) | 125 |
| RRUS-32 (ATT) | 133 | Generic Twin TMA unit (T-Mobile) | 125 |
| DBC0061F1V51-2 Combiner Units (ATT) | 133 | Generic Twin TMA unit (T-Mobile) | 125 |
| 800-10798 Kathrein Panel (ATT) | 133 | Generic Twin TMA unit (T-Mobile) | 125 |
| RRUS-32 B66 (ATT) | 133 | Generic Twin TMA unit (T-Mobile) | 125 |
| | | ANT150D (CSP - 1-Bay Dipole) | 113 |
| | | 4' Standoff (DNK-1 / GPS) | 60 |
| | | GPS (DNK-1 / GPS) | 60 |

SYMBOL LIST

| MARK | SIZE | MARK | SIZE |
|------|--|------|-------------|
| A | 120deg_9.6250x0.375 BU on ROHN 8 EHS | D | ROHN 2 STD |
| B | 1/3 9.6250x0.375 on ROHN 8 EH Leg Pipe | E | ROHN 2.5 EH |
| C | ROHN 2 XXS | | |

MATERIAL STRENGTH

| GRADE | Fy | Fu | GRADE | Fy | Fu |
|---------|--------|--------|---------|--------|--------|
| A572-50 | 50 ksi | 65 ksi | A572-42 | 42 ksi | 60 ksi |

TOWER DESIGN NOTES

1. Tower designed for a 90 mph basic wind in accordance with the TIA/EIA-222-F Standard.
2. Tower is also designed for a 90 mph basic wind with 0.50 in ice.
3. Deflections are based upon a 90 mph wind.

Centek Engineering Inc. Job: **22027.01 - Westport**

Project: **180-ft Lattice Tower (CSP #32)**

Client: **Verizon** Drawn by: **T.JL** App'd:

Code: **TIA/EIA-222-F** Date: **04/05/22** Scale: **NTS**

Path: Dwg No. **E-1**

\\jason\22027.01\22027.01 Westport\22027.01\Drawings\Tower\Tower.dwg and Sheet 1 of 8.dwg

| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 1 of 3 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 07:56:56 04/05/22 |
| | Client | Verizon | Designed by | TJL |

Load Combinations

| Comb. No. | Description |
|-----------|-----------------------------|
| 1 | Dead Only |
| 2 | Dead+Wind 0 deg - No Ice |
| 3 | Dead+Wind 30 deg - No Ice |
| 4 | Dead+Wind 45 deg - No Ice |
| 5 | Dead+Wind 60 deg - No Ice |
| 6 | Dead+Wind 90 deg - No Ice |
| 7 | Dead+Wind 120 deg - No Ice |
| 8 | Dead+Wind 135 deg - No Ice |
| 9 | Dead+Wind 150 deg - No Ice |
| 10 | Dead+Wind 180 deg - No Ice |
| 11 | Dead+Wind 210 deg - No Ice |
| 12 | Dead+Wind 225 deg - No Ice |
| 13 | Dead+Wind 240 deg - No Ice |
| 14 | Dead+Wind 270 deg - No Ice |
| 15 | Dead+Wind 300 deg - No Ice |
| 16 | Dead+Wind 315 deg - No Ice |
| 17 | Dead+Wind 330 deg - No Ice |
| 18 | Dead+Ice |
| 19 | Dead+Wind 0 deg+Ice |
| 20 | Dead+Wind 30 deg+Ice |
| 21 | Dead+Wind 45 deg+Ice |
| 22 | Dead+Wind 60 deg+Ice |
| 23 | Dead+Wind 90 deg+Ice |
| 24 | Dead+Wind 120 deg+Ice |
| 25 | Dead+Wind 135 deg+Ice |
| 26 | Dead+Wind 150 deg+Ice |
| 27 | Dead+Wind 180 deg+Ice |
| 28 | Dead+Wind 210 deg+Ice |
| 29 | Dead+Wind 225 deg+Ice |
| 30 | Dead+Wind 240 deg+Ice |
| 31 | Dead+Wind 270 deg+Ice |
| 32 | Dead+Wind 300 deg+Ice |
| 33 | Dead+Wind 315 deg+Ice |
| 34 | Dead+Wind 330 deg+Ice |
| 35 | Dead+Wind 0 deg - Service |
| 36 | Dead+Wind 30 deg - Service |
| 37 | Dead+Wind 45 deg - Service |
| 38 | Dead+Wind 60 deg - Service |
| 39 | Dead+Wind 90 deg - Service |
| 40 | Dead+Wind 120 deg - Service |
| 41 | Dead+Wind 135 deg - Service |
| 42 | Dead+Wind 150 deg - Service |
| 43 | Dead+Wind 180 deg - Service |
| 44 | Dead+Wind 210 deg - Service |
| 45 | Dead+Wind 225 deg - Service |
| 46 | Dead+Wind 240 deg - Service |
| 47 | Dead+Wind 270 deg - Service |
| 48 | Dead+Wind 300 deg - Service |
| 49 | Dead+Wind 315 deg - Service |
| 50 | Dead+Wind 330 deg - Service |

Maximum Tower Deflections - Service Wind

| | | |
|--|--|----------------------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job 22027.01 - Westport | Page 2 of 3 |
| | Project 180-ft Lattice Tower (CSP #32) | Date 07:56:56 04/05/22 |
| | Client Verizon | Designed by TJL |

| Section No. | Elevation ft | Horz. Deflection in | Gov. Load Comb. | Tilt ° | Twist ° |
|-------------|-------------------|------------------------|--------------------|-----------|------------|
| T1 | 180 - 160 | 7.031 | 35 | 0.3119 | 0.2302 |
| T2 | 160 - 140 | 5.705 | 35 | 0.3078 | 0.2024 |
| T3 | 140 - 133.333 | 4.349 | 35 | 0.2797 | 0.1362 |
| T4 | 133.333 - 126.667 | 3.942 | 35 | 0.2699 | 0.1208 |
| T5 | 126.667 - 120 | 3.536 | 35 | 0.2585 | 0.1070 |
| T6 | 120 - 100 | 3.157 | 35 | 0.2440 | 0.0981 |
| T7 | 100 - 90 | 2.202 | 35 | 0.1914 | 0.0784 |
| T8 | 90 - 80 | 1.791 | 35 | 0.1666 | 0.0657 |
| T9 | 80 - 60 | 1.435 | 35 | 0.1401 | 0.0540 |
| T10 | 60 - 40 | 0.838 | 35 | 0.1063 | 0.0360 |
| T11 | 40 - 30 | 0.402 | 35 | 0.0697 | 0.0230 |
| T12 | 30 - 20 | 0.239 | 35 | 0.0507 | 0.0168 |
| T13 | 20 - 0 | 0.120 | 35 | 0.0313 | 0.0115 |

Critical Deflections and Radius of Curvature - Service Wind

| Elevation ft | Appurtenance | Gov. Load Comb. | Deflection in | Tilt ° | Twist ° | Radius of Curvature ft |
|-----------------|-------------------------------------|--------------------|------------------|-----------|------------|---------------------------|
| 187.00 | ANT940Y10-WR | 35 | 7.031 | 0.3119 | 0.2302 | 120499 |
| 181.00 | ANT940Y10-WR | 35 | 7.031 | 0.3119 | 0.2302 | 120499 |
| 177.00 | PA6-65AC | 35 | 6.836 | 0.3123 | 0.2279 | 120499 |
| 170.00 | RFI BPS7496-180-14 Panel Antenna | 35 | 6.377 | 0.3123 | 0.2211 | 60249 |
| 169.00 | 3' Yagi | 35 | 6.311 | 0.3122 | 0.2198 | 54772 |
| 160.00 | ROHN 6'x15' Boom Gate (1) | 35 | 5.705 | 0.3078 | 0.2024 | 36528 |
| 133.00 | 800-10798 Kathrein Panel | 35 | 3.922 | 0.2693 | 0.1201 | 105867 |
| 125.00 | LTF12=372 Sector Mount (1) | 35 | 3.438 | 0.2551 | 0.1043 | 16225 |
| 113.00 | ANT150D | 35 | 2.796 | 0.2262 | 0.0913 | 18804 |
| 60.00 | GPS | 35 | 0.838 | 0.1063 | 0.0360 | 27831 |

Maximum Tower Deflections - Design Wind

| Section No. | Elevation ft | Horz. Deflection in | Gov. Load Comb. | Tilt ° | Twist ° |
|-------------|-------------------|------------------------|--------------------|-----------|------------|
| T1 | 180 - 160 | 8.566 | 19 | 0.3783 | 0.3184 |
| T2 | 160 - 140 | 6.957 | 19 | 0.3735 | 0.2895 |
| T3 | 140 - 133.333 | 5.317 | 19 | 0.3395 | 0.2065 |
| T4 | 133.333 - 126.667 | 4.821 | 19 | 0.3279 | 0.1853 |
| T5 | 126.667 - 120 | 4.329 | 19 | 0.3142 | 0.1658 |
| T6 | 120 - 100 | 3.867 | 19 | 0.2969 | 0.1532 |
| T7 | 100 - 90 | 2.703 | 19 | 0.2335 | 0.1247 |
| T8 | 90 - 80 | 2.200 | 19 | 0.2035 | 0.1062 |
| T9 | 80 - 60 | 1.763 | 19 | 0.1714 | 0.0888 |
| T10 | 60 - 40 | 1.030 | 19 | 0.1302 | 0.0609 |
| T11 | 40 - 30 | 0.494 | 19 | 0.0854 | 0.0393 |
| T12 | 30 - 20 | 0.293 | 19 | 0.0622 | 0.0288 |
| T13 | 20 - 0 | 0.148 | 19 | 0.0385 | 0.0197 |

| | | | | |
|--|----------------|--------------------------------|--------------------|-------------------|
| tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587 | Job | 22027.01 - Westport | Page | 3 of 3 |
| | Project | 180-ft Lattice Tower (CSP #32) | Date | 07:56:56 04/05/22 |
| | Client | Verizon | Designed by | TJL |

Critical Deflections and Radius of Curvature - Design Wind

| <i>Elevation</i> | <i>Appurtenance</i> | <i>Gov. Load Comb.</i> | <i>Deflection</i> | <i>Tilt</i> | <i>Twist</i> | <i>Radius of Curvature</i> |
|------------------|----------------------------------|------------------------|-------------------|-------------|--------------|----------------------------|
| <i>ft</i> | | | <i>in</i> | <i>°</i> | <i>°</i> | <i>ft</i> |
| 187.00 | ANT940Y10-WR | 19 | 8.566 | 0.3783 | 0.3184 | 102188 |
| 181.00 | ANT940Y10-WR | 19 | 8.566 | 0.3783 | 0.3184 | 102188 |
| 177.00 | PA6-65AC | 19 | 8.328 | 0.3788 | 0.3166 | 102188 |
| 170.00 | RFI BPS7496-180-14 Panel Antenna | 19 | 7.771 | 0.3789 | 0.3104 | 51094 |
| 169.00 | 3' Yagi | 19 | 7.691 | 0.3788 | 0.3091 | 46449 |
| 160.00 | ROHN 6'x15' Boom Gate (1) | 19 | 6.957 | 0.3735 | 0.2895 | 30882 |
| 133.00 | 800-10798 Kathrein Panel | 19 | 4.797 | 0.3272 | 0.1842 | 88650 |
| 125.00 | LTF12=372 Sector Mount (1) | 19 | 4.209 | 0.3103 | 0.1620 | 13478 |
| 113.00 | ANT150D | 19 | 3.428 | 0.2754 | 0.1434 | 15681 |
| 60.00 | GPS | 19 | 1.030 | 0.1302 | 0.0609 | 22641 |

Anchor Bolt Analysis:

Input Data:

Tower Reactions:

| | | |
|---------------------|-------------------------|-----------------------|
| Tension Force = | Tension := 306-kips | (Input From trnTower) |
| Compression Force = | Compression := 348-kips | (Input From trnTower) |
| Shear Force = | Shear := 50-kips | (Input From trnTower) |

Anchor Bolt Data:

| | | |
|---|-------------------|--------------|
| ASTMA354 Grade BC | | |
| Number of Anchor Bolts = | N := 10 | (User Input) |
| Bolt Ultimate Strength = | $F_u := 125$ -ksi | (User Input) |
| Bolt Yield Strength = | $F_y := 109$ -ksi | (User Input) |
| Bolt Modulus = | E := 29000-ksi | (User Input) |
| Diameter of Anchor Bolts = | D := 1.00-in | (User Input) |
| Threads per Inch = | n := 8 | (User Input) |
| Length from Top of Pier to Bottom of Leveling Nut = | $L_{ar} := 0$ -in | (User Input) |

Anchor Bolt Analysis:

Calculated Anchor Bolt Properties:

Gross Area of Bolt = $A_g := \frac{\pi}{4} \cdot D^2 = 0.785 \cdot \text{in}^2$

Net Area of Bolt = $A_n := \frac{\pi}{4} \cdot \left(D - \frac{0.9743 \cdot \text{in}}{n} \right)^2 = 0.606 \cdot \text{in}^2$

Net Diameter = $D_n := \frac{2 \cdot \sqrt{A_n}}{\sqrt{\pi}} = 0.878 \cdot \text{in}$

Radius of Gyration of Bolt = $r := \frac{D_n}{4} = 0.22 \cdot \text{in}$

Elastic Section Modulus of Bolt = $S_x := \frac{\pi \cdot D_n^3}{32} = 0.066 \cdot \text{in}^3$

Plastic Section Modulus of Bolt = $Z_x := \frac{D_n^3}{6} = 0.113 \cdot \text{in}^3$

Anchor Bolt Design Strength:

Resistance Factor for Flexure = $\phi_f := 0.9$

Resistance Factor for Compression = $\phi_c := 0.9$

Resistance Factor for Tension = $\phi_t := 0.75$

Resistance Factor for Shear = $\phi_v := 0.75$

Design Tensile Strength = $\Phi R_{nt} := \phi_t \cdot F_u \cdot A_n = 56.8 \cdot \text{k}$

Design Compression Strength = $\Phi R_{nc} := \phi_c \cdot F_y \cdot A_g = 77 \cdot \text{k}$

Design Shear Strength (Tension) = $\Phi R_{nv} := \phi_v \cdot 0.5 F_u \cdot A_g = 36.8 \cdot \text{k}$

Design Shear Strength (Compression) = $\Phi R_{nvc} := \phi_c \cdot 0.6 F_y \cdot A_g \cdot 0.75 = 34.7 \cdot \text{k}$

Check Anchor Bolt Tension Force:

Maximum Tensile Force = $P_{ut} := \frac{\text{Tension}}{N} = 30.6 \text{ kips}$

Maximum Compressive Force = $P_{uc} := \frac{\text{Compression}}{N} = 34.8 \text{ kips}$

Maximum Shear Force = $V_u := \frac{\text{Shear}}{N} = 5 \text{ kips}$

Condition1 =
$$\text{Condition1} := \text{if} \left[\left[\left(\frac{P_{ut}}{\Phi R_{nt}} \right)^2 + \left(\frac{V_u}{\Phi R_{nv}} \right)^2 \right] \leq 1.00, \text{"OK"}, \text{"Overstressed"} \right]$$

Condition1 = "OK"

Condition2 =
$$\text{Condition2} := \text{if} \left[\left[\left(\frac{P_{uc}}{\Phi R_{nc}} \right) + \left(\frac{V_u}{\Phi R_{nvc}} \right)^2 \right] \leq 1.00, \text{"OK"}, \text{"Overstressed"} \right]$$

Condition2 = "OK"

Bolt % of Capacity =
$$\max \left[\left(\frac{P_{ut}}{\Phi R_{nt}} \right)^2 + \left(\frac{V_u}{\Phi R_{nv}} \right)^2, \left(\frac{P_{uc}}{\Phi R_{nc}} \right) + \left(\frac{V_u}{\Phi R_{nvc}} \right)^2 \right] = 47.2\%$$

Caisson Foundation:

Input Data:

Tower Data

| | | |
|----------------|--------------------|--------------|
| Uplift = | Uplift := 306-kips | (User Input) |
| Compression = | Comp := 348-kips | (User Input) |
| Shear Force = | Shear := 50-kips | (User Input) |
| Tower Height = | $H_t := 180$ -ft | (User Input) |

Footing Data:

| | | |
|---------------------------------------|-----------------------|--------------|
| Length of Caisson = | $L_c := 27$ -ft | (User Input) |
| Extension of Caisson Above Grade = | $L_{cag} := 1$ -ft | (User Input) |
| Diameter of Caisson = | $d_c := 4.5$ -ft | (User Input) |
| Length of Caisson Above Water Table = | $L_{c.AWT} := 27$ -ft | (User Input) |
| Length of Caisson Below Water Table = | $L_{c.BWT} := 0$ -ft | (User Input) |

Material Properties:

| | | |
|--|-----------------------------|-----------------------------------|
| Concrete Compressive Strength = | $f_c := 4000$ -psi | (User Input) |
| Steel Reinforcement Yield Strength = | $f_y := 60000$ -psi | (User Input) |
| Ultimate Skin Friction (Above Water Table) = | $\mu_1 := 3.73$ -ksf | (User Input) |
| Ultimate Skin Friction (Below Water Table) = | $\mu_2 := 3.73$ -ksf | (User Input) |
| Ultimate Soil Bearing Capacity = | $q_u := 6000$ -psf | (Assumed Conservative User Input) |
| Unit Weight of Soil = | $\gamma_{soil} := 120$ -pcf | (User Input) |
| Unit Weight of Concrete = | $\gamma_{conc} := 150$ -pcf | (User Input) |
| Depth to Neglect = | $n := 5$ -ft | (User Input) |
| Resistance Factor for Bearing = | $\Phi_{sBearing} := 0.75$ | (TIA-222-H 9.7) |
| Resistance Factor for Friction = | $\Phi_{sFriction} := 0.75$ | (TIA-222-H 9.7) |

Calculated Properties:

Adjusted Concrete Unit Weight = $\gamma_c := \gamma_{\text{conc}} - 62.4 \text{pcf} = 87.6 \text{pcf}$

Weight of Concrete Caisson (no water) = $WT_{c,\text{comp}} := \frac{\pi}{4} \cdot (d_c^2 \cdot L_c) \cdot \gamma_{\text{conc}} = 64.412 \cdot \text{kip}$

Weight of Concrete Caisson (water) = $WT_{c,\text{uplift}} := \frac{\pi}{4} \cdot \left[(d_c^2 \cdot L_{c,\text{AWT}}) \cdot \gamma_{\text{conc}} + (d_c^2 \cdot L_{c,\text{BWT}}) \cdot \gamma_c \right] = 64.412 \cdot \text{kip}$

Check Uplift:

Uplift Resistance from Concrete Weight = $Uplift_{\text{conc}} := (WT_{c,\text{uplift}}) \cdot 0.9 = 57.971 \cdot \text{kips}$

Uplift Resistance from Skin Friction = $Uplift_{\text{SF}} := \Phi_{\text{sFriction}} \cdot \pi \cdot d_c \cdot \left[(L_{c,\text{AWT}} - L_{\text{cag}} - n) \cdot \mu_1 + L_{c,\text{BWT}} \cdot \mu_2 \right] = 831 \cdot \text{kips}$

Total Uplift Resistance = $Uplift_{\text{R}} := Uplift_{\text{conc}} + Uplift_{\text{SF}} = 888.494 \cdot \text{kips}$

Uplift Check = $\frac{Uplift}{Uplift_{\text{R}}} = 34.44\%$

$Uplift_Check := \text{if} \left(\frac{Uplift_{\text{R}}}{Uplift} \geq 1.0, \text{"Okay"}, \text{"No Good"} \right)$

Uplift_Check = "Okay"

Check Compression:

Total Compression Force = $Comp_{\text{tot}} := WT_{c,\text{comp}} + Comp = 412 \cdot \text{kips}$

Compression Resistance from Bearing = $Comp_{\text{bearing}} := \Phi_{\text{sBearing}} \cdot \left(\frac{\pi}{4} \cdot d_c^2 \cdot q_u \right) = 72 \cdot \text{kips}$

Compression Resistance from Skin Friction = $Comp_{\text{SF}} := \Phi_{\text{sFriction}} \cdot \pi \cdot d_c \cdot \left[(L_{c,\text{AWT}} - L_{\text{cag}} - n) \cdot \mu_1 + L_{c,\text{BWT}} \cdot \mu_2 \right] = 831 \cdot \text{kips}$

Total Compression Resistance = $Comp_{\text{R}} := Comp_{\text{bearing}} + Comp_{\text{SF}} = 902 \cdot \text{kips}$

Compression Check = $\frac{Comp_{\text{tot}}}{Comp_{\text{R}}} = 45.72\%$

$Compression_Check := \text{if} \left(\frac{Comp_{\text{R}}}{Comp_{\text{tot}}} \geq 1.0, \text{"Okay"}, \text{"No Good"} \right)$

Compression_Check = "Okay"



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 Stamford, CT 06901
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Post-Modification Antenna Mount Analysis Report and PMI Requirements

Mount Fix

SMART Tool Project #: 10115278
 Maser Consulting Connecticut Project #: 21777772A

November 16, 2021

Site Information

Site ID: 469153-VZW / WESTPORT CT
 Site Name: WESTPORT CT
 Carrier Name: Verizon Wireless
 Address: 880 Post Rd. East Unit 1
 Westport, Connecticut 06880
 Fairfield County
 Latitude: 41.137475°
 Longitude: -73.334364°

Structure Information

Tower Type: 180-Ft Self Support
 Mount Type: 15.00-Ft Sector Frame

FUZE ID # 16242132

Analysis Results

Sector Frame: 76.3% Pass

*****Contractor PMI Requirements:**

Included at the end of this MA report

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

Contractor - Please Review Specific Site PMI Requirements Upon Award

Requirements also Noted on Mount Modification Drawings

Requirements may also be Noted on A & E drawings

For additional questions and support, please reach out to:

pmisupport@colliersengineering.com

Report Prepared By: Selene Chen



Executive Summary:

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

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

Sources of Information:

| Document Type | Remarks |
|--|--|
| <i>Radio Frequency Data Sheet (RFDS)</i> | <i>Verizon RFDS Site ID: 325126, dated October 5, 2021</i> |
| <i>Mount Mapping Report</i> | <i>Structural Components, Site ID: 16242132, dated October 19, 2021</i> |
| <i>Mount Analysis Report</i> | <i>Maser Consulting Connecticut, Project #: 21777772A, dated November 2, 2021</i> |
| <i>Mount Modification Drawings</i> | <i>Maser Consulting Connecticut, Project #: 21777772A, dated November 16, 2021</i> |

Analysis Criteria:

| | |
|-------------------------|---|
| Codes and Standards: | ANSI/TIA-222-H |
| Wind Parameters: | Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT} : 118 mph Ice Wind Speed (3-sec. Gust): 50 mph Design Ice Thickness: 1.00 in Risk Category: II Exposure Category: B Topographic Category: 1 Topographic Feature Considered: N/A Topographic Method: N/A Ground Elevation Factor, K_e : 0.998 |
| Seismic Parameters: | S_s : 0.228 g S_1 : 0.056 g |
| 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 |
|----------------------|--------------------------|----------|--------------|------------------------|----------|
| 159.00 | 160.00 | 4 | JMA Wireless | MX06FRO640-02 | Added |
| | | 3 | Samsung | MT6407-77A | |
| | | 1 | Samsung | RF4439d-25A | |
| | | 1 | Samsung | RF4440d-13A | |
| | | 4 | Commscope | JAHH-65B-R3B | Retained |
| | | 3 | Samsung | XXDWMM-12.5-65-8T-CBRS | |
| | | 2 | Commscope | CBC78T-DS-43-2X | |
| | | 3 | Samsung | B2/B66A RRH-BR049 | |
| | | 3 | Samsung | B5/B13 RRH-BR04C | |
| | | 1 | Raycap | RHSDC-6627-PF-48* | |

* Equipment to be flush mounted directly to the Self Support. It is not mounted on Sector Frame mounts and is not included in this mount analysis.

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

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

Standard Conditions:

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

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

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

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

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

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

Analysis Results:

| Component | Utilization % | Pass/Fail |
|----------------------------|----------------------|------------------|
| <i>Standoff Bar</i> | 76.3 % | <i>Pass</i> |
| <i>Face Horizontal</i> | 47.5 % | <i>Pass</i> |
| <i>Standoff Horizontal</i> | 42.9 % | <i>Pass</i> |
| <i>Standoff Diagonal</i> | 32.8 % | <i>Pass</i> |
| <i>Standoff Vertical</i> | 30.0 % | <i>Pass</i> |
| <i>Antenna Pipe</i> | 45.3 % | <i>Pass</i> |
| <i>Unistrut</i> | 22.8 % | <i>Pass</i> |
| <i>Tie Back</i> | 6.3 % | <i>Pass</i> |
| <i>Connection Check</i> | 31.4 % | <i>Pass</i> |

| | |
|---|--------------|
| Structure Rating – (Controlling Utilization of all Components) | 76.3% |
|---|--------------|

Recommendation:

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

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

Attachments:

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



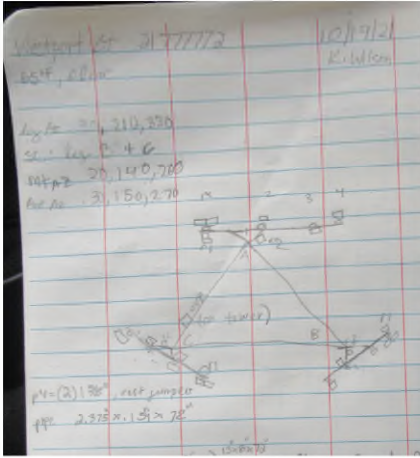


Antenna Mount Mapping Form (PATENT PENDING)

FCC #

| | | | |
|----------------------------|-----------------------|-------------------------------|--------------|
| Tower Owner: | CSP | Mapping Date: | 10/19/2021 |
| Site Name: | WESTPORT_CT | Tower Type: | Self Support |
| Site Number or ID: | 16242132 | Tower Height (Ft.): | 180 |
| Mapping Contractor: | Structural Components | Mount Elevation (Ft.): | 158 |

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| Mount Pipe Configuration and Geometries [Unit = Inches] | | | | | | | |
|---|--------------------------|-------------------------------|--------------------------------------|-------------------|--------------------------|-------------------------------|--------------------------------------|
| Sector / Position | Mount Pipe Size & Length | Vertical Offset Dimension "u" | Horizontal Offset "C1, C2, C3, etc." | Sector / Position | Mount Pipe Size & Length | Vertical Offset Dimension "u" | Horizontal Offset "C1, C2, C3, etc." |
| A1 | 2.375 x .154 x 72 | 56.00 | 3.00 | C1 | 2.375 x .154 x 72 | 56.00 | 3.00 |
| A2 | 2.375 x .154 x 72 | 56.00 | 94.00 | C2 | 2.375 x .154 x 72 | 56.00 | 94.00 |
| A3 | 2.375 x .154 x 72 | 56.00 | 148.50 | C3 | 2.375 x .154 x 72 | 56.00 | 148.50 |
| A4 | 2.375 x .154 x 72 | 56.00 | 169.00 | C4 | 2.375 x .154 x 72 | 56.00 | 169.00 |
| A5 | | | | C5 | | | |
| A6 | | | | C6 | | | |
| B1 | 2.375 x .154 x 72 | 56.00 | 3.00 | D1 | | | |
| B2 | 2.375 x .154 x 72 | 56.00 | 94.00 | D2 | | | |
| B3 | 2.375 x .154 x 72 | 56.00 | 148.50 | D3 | | | |
| B4 | 2.375 x .154 x 72 | 56.00 | 169.00 | D4 | | | |
| B5 | | | | D5 | | | |
| B6 | | | | D6 | | | |

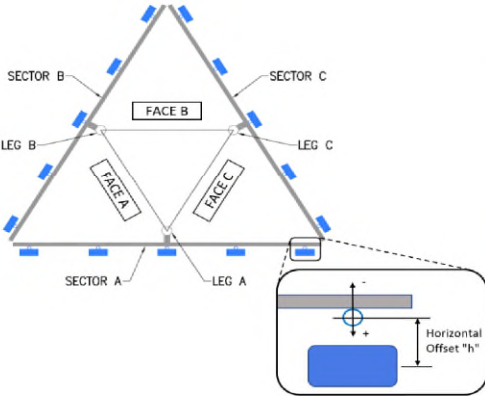
Distance between bottom rail and mount CL elevation (dim d). Unit is inches. See 'Mount Elev Ref' tab for details. :
 Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.) : 0.5
 Distance from top of bottom support rail to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.) : 0

Please enter additional information or comments below.

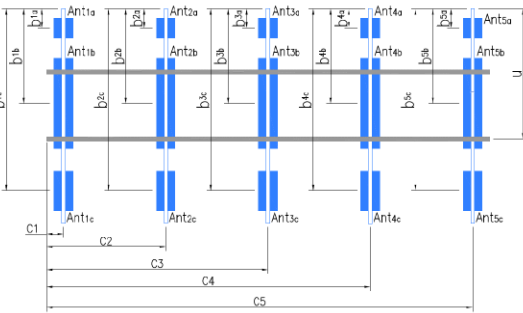
safety climb on all 3 legs, all obstructed

| | | | |
|--|-----|---|-----|
| Tower Face Width at Mount Elev. (ft.): | 105 | Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.): | 4.5 |
|--|-----|---|-----|

For T-Arms/Platforms on monopoles, report the weld size from the main standoff to the plate bolting into the collar mount.



| Ants. Items | Enter antenna model. If not labeled, enter "Unknown". | | | | | | Mounting Locations [Units are inches and degrees] | | | Photos of antennas |
|-------------------|---|-------------|-------------|--------------|-------------------|---------------------------|--|---|---------------------------|--------------------|
| | Antenna Models if Known | Width (in.) | Depth (in.) | Height (in.) | Coax Size and Qty | Antenna Center-line (Ft.) | Vertical Distances "b _{1a} , b _{2a} , b _{3a} , b _{1b} ,..." (Inches) | Horiz. Offset "h" (Use "-" if Ant. is behind) | Antenna Azimuth (Degrees) | |
| Sector A | | | | | | | | | | |
| Ant _{1a} | | | | | | | | | | |
| Ant _{1b} | (2) JAHH-65B-R3B | 13.00 | 8.00 | 72.00 | jumpers | 161 | 20.00 | 14.00 | 30.00 | 63 |
| Ant _{1c} | (2) CBC78TDS432X | 6.50 | 9.75 | 8.00 | jumpers | 160.417 | 27.00 | -7.00 | | 63 |
| Ant _{2a} | | | | | | | | | | |
| Ant _{2b} | RT4408-48 | 8.50 | 5.50 | 16.00 | jumpers | 160.25 | 29.00 | 10.00 | 30.00 | |
| Ant _{2c} | | | | | | | | | | |
| Ant _{3a} | | | | | | | | | | |
| Ant _{3b} | RFV01U-D2A | 16.00 | 10.00 | 15.00 | jumpers | 160.25 | 29.00 | 8.50 | 30.00 | 64 |
| Ant _{3c} | | | | | | | | | | |
| Ant _{4a} | | | | | | | | | | |
| Ant _{4b} | BXA-70063/4CFEDIN | 11.00 | 5.00 | 47.00 | (2) 1 5/8" | 160.25 | 29.00 | 11.50 | 30.00 | 64 |
| Ant _{4c} | | | | | | | | | | |
| Ant _{5a} | | | | | | | | | | |
| Ant _{5b} | | | | | | | | | | |
| Ant _{5c} | | | | | | | | | | |
| Ant on Standoff | RFV01U-D1A | 16.00 | 12.00 | 16.00 | jumpers | 160 | | | | 64 |
| Ant on Standoff | | | | | | | | | | |
| Ant on Tower | | | | | | | | | | |
| Ant on Tower | | | | | | | | | | |



Antenna Layout (Looking Out From Tower)

Observed Safety and Structural Issues During the Mount Mapping

| Issue # | Description of Issue | Photo # |
|---------|----------------------|---------|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |
| 7 | | |
| 8 | | |

Observed Obstructions to Tower Lighting System

| If the tower lighting system is being obstructed by the carrier's equipment (for example: a light nested by the antennas), please provide photos and fill in the information below. | | | | Photo # |
|---|--|---------|--|----------------------|
| Description of Obstruction: | | | | |
| Type of Light: | | Photo # | | Additional Comments: |
| Lighting Technology: | | Photo # | | |
| Elevation (AGL) at base of light (Ft.): | | Photo # | | |
| Is a service loop available? | | Photo # | | |
| Is beacon installed on an extension? | | Photo # | | |

Mapping Notes

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

Standard Conditions

1. Obvious safety and structural issues/deficiencies noticed at the time of the mount mapping are to be reported in this mapping. However, this mount mapping is not a condition assessment of the mount.



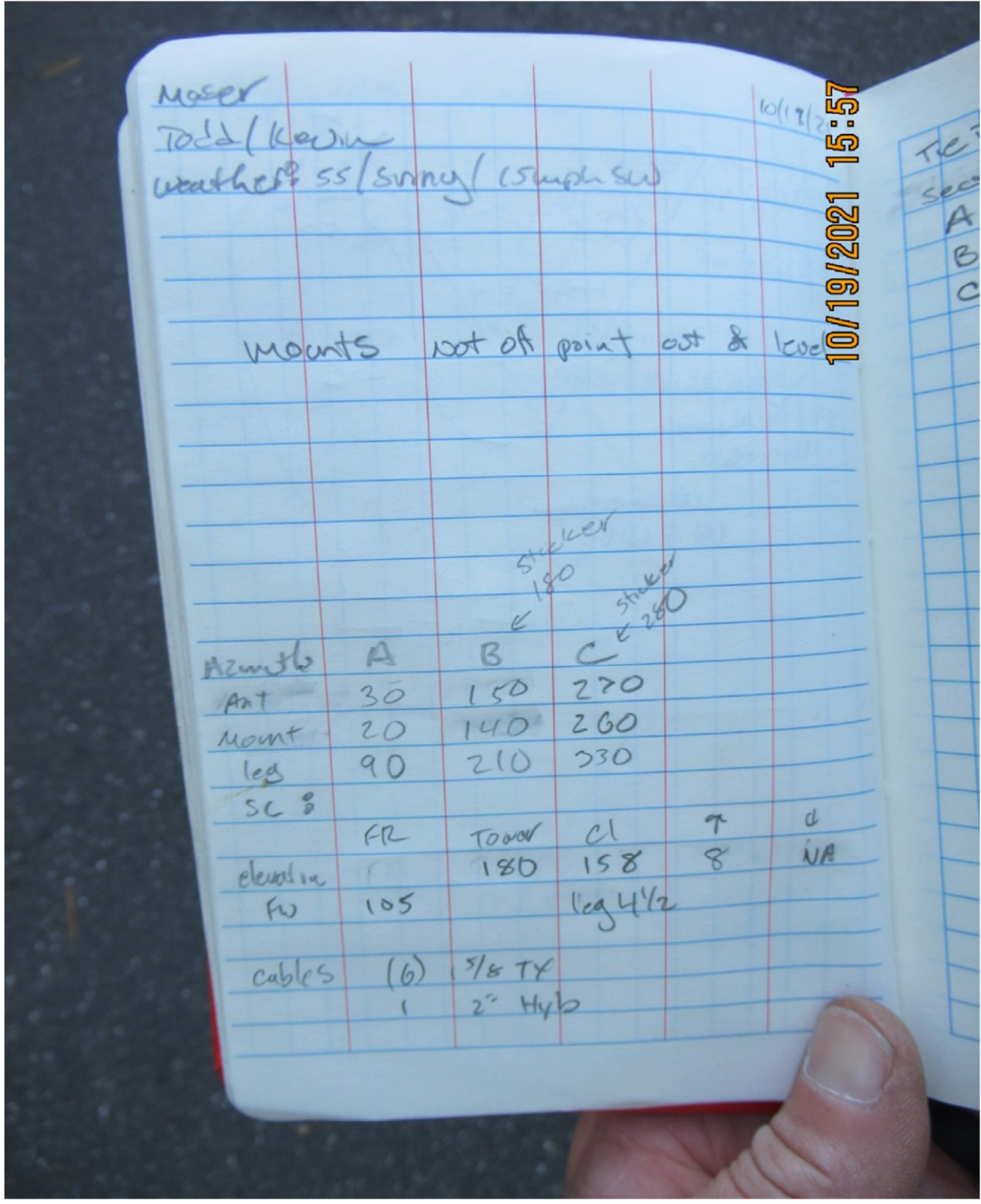
Antenna Mount Mapping Form (PATENT PENDING)

FCC #

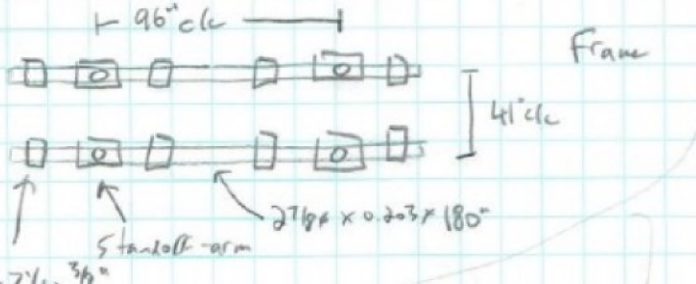
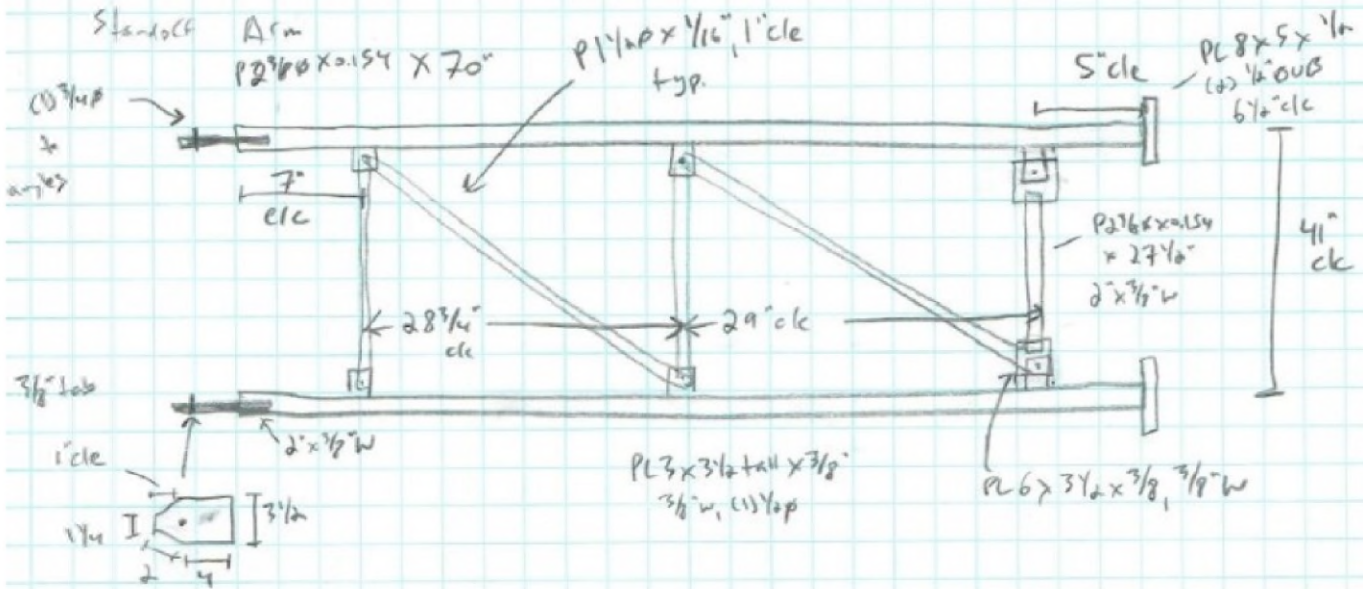
| | | | |
|---------------------|-----------------------|-----------------------|--------------|
| Tower Owner: | CSP | Mapping Date: | 10/19/2021 |
| Site Name: | WESTPORT_CT | Tower Type: | Self Support |
| Site Number or ID: | 16242132 | Tower Height (FT): | 180 |
| Mapping Contractor: | Structural Components | Mount Elevation (FT): | 158 |

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Please Insert Sketches of the Antenna Mount



Leg Attach: $L 4 \times 3 \times \frac{3}{8} \times 5 \frac{1}{2}$ LLV
 (+) $\frac{1}{2}$ " ϕ UB, $1 \frac{3}{4}$ " clc
 41" clc



$P L 6 \times 7 \frac{1}{2} \times \frac{3}{8}$
 (+) $\frac{1}{2}$ " ϕ UB + press
 4 $\frac{1}{2}$ " clc, 5 $\frac{1}{2}$ " clc

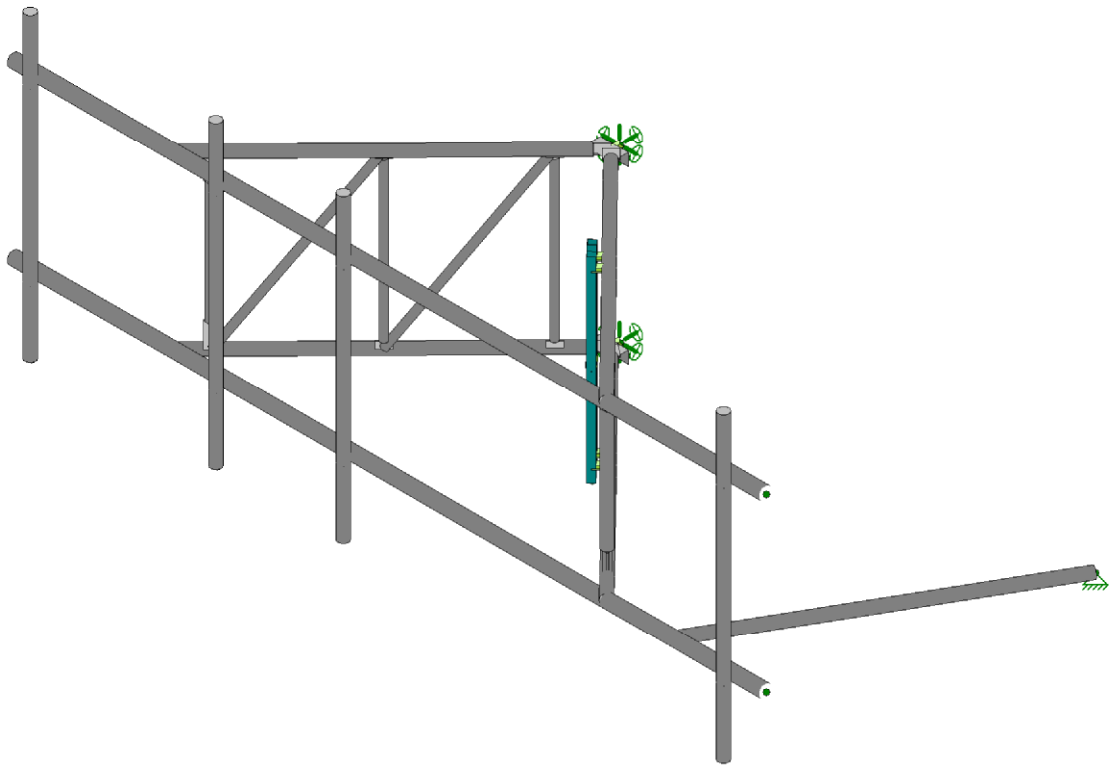
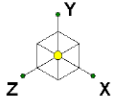
10/17/21

Tie Backs

| Sector | From L | to tower | From R | to tower |
|--------|--------|----------|----------------|----------|
| A | | NA | $\sqrt{\quad}$ | B |
| B | 20" | leg A | NA | |
| C | 12" | leg B | NA | |

cool

10/19/2021 15:57



Envelope Only Solution

Maser Consulting

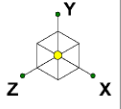
Project No. 10115278

469153-VZW_MT_LOT_SectorA_H

SK - 1

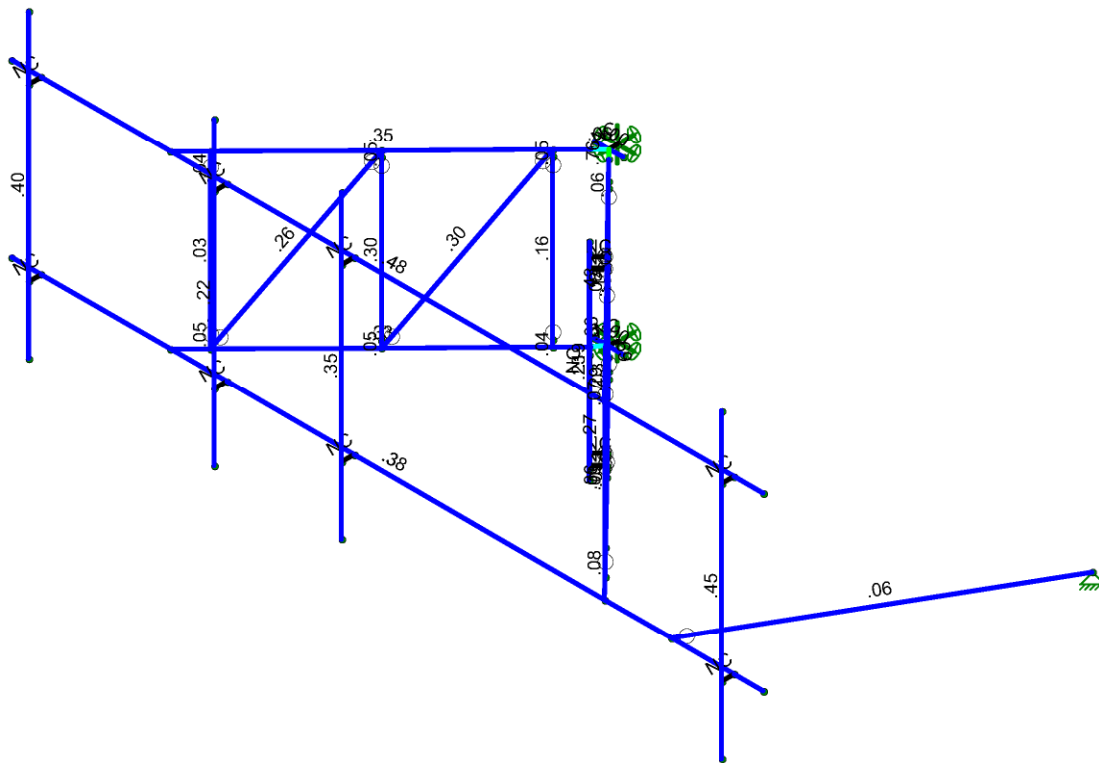
Nov 15, 2021 at 4:58 PM

469153-VZW_MT_LOT_A_H.r3d



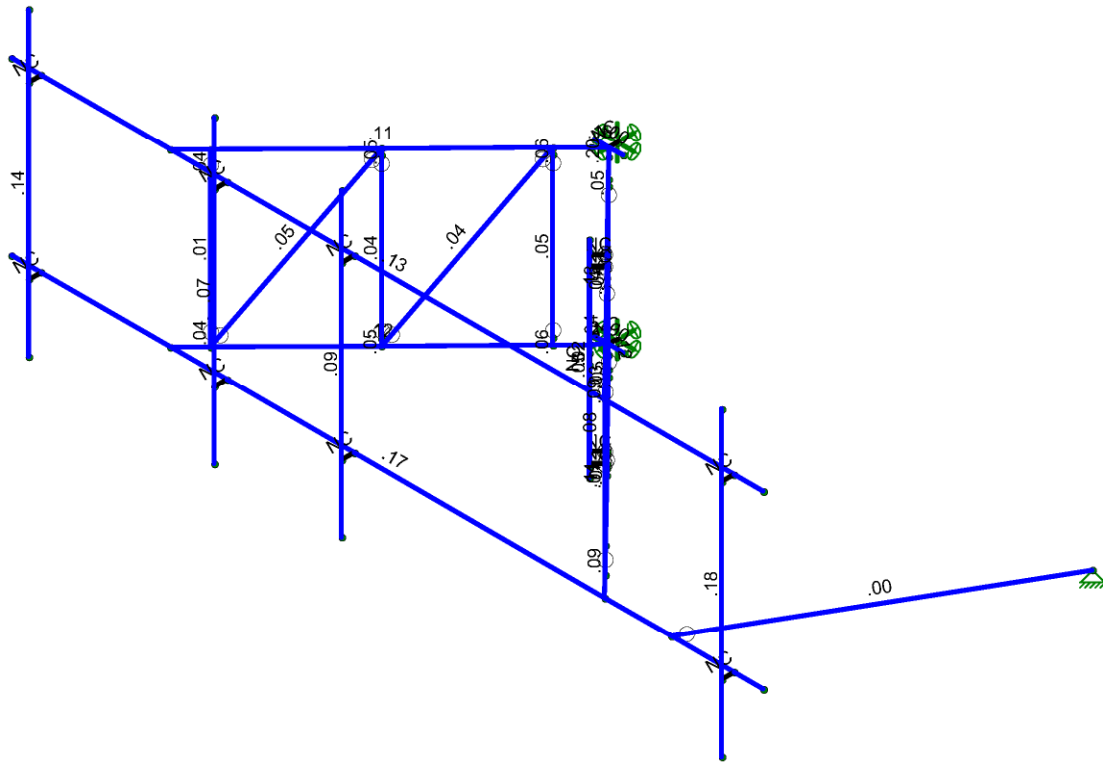
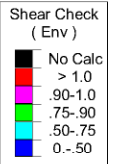
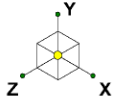
Code Check (Env)

| | |
|---------|---------|
| 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

| | | |
|----------------------|-----------------------------|---------------------------|
| Maser Consulting | 469153-VZW_MT_LOT_SectorA_H | SK - 2 |
| | | Nov 15, 2021 at 4:58 PM |
| Project No. 10115278 | | 469153-VZW_MT_LOT_A_H.r3d |



Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

| | | |
|----------------------|-----------------------------|---------------------------|
| Maser Consulting | 469153-VZW_MT_LOT_SectorA_H | SK - 3 |
| | | Nov 15, 2021 at 4:58 PM |
| Project No. 10115278 | | 469153-VZW_MT_LOT_A_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 | | | | | 48 | | |
| 2 Antenna Di | None | | | | | 48 | | |
| 3 Antenna Wo (0 Deg) | None | | | | | 48 | | |
| 4 Antenna Wo (30 Deg) | None | | | | | 48 | | |
| 5 Antenna Wo (60 Deg) | None | | | | | 48 | | |
| 6 Antenna Wo (90 Deg) | None | | | | | 48 | | |
| 7 Antenna Wo (120 Deg) | None | | | | | 48 | | |
| 8 Antenna Wo (150 Deg) | None | | | | | 48 | | |
| 9 Antenna Wo (180 Deg) | None | | | | | 48 | | |
| 10 Antenna Wo (210 Deg) | None | | | | | 48 | | |
| 11 Antenna Wo (240 Deg) | None | | | | | 48 | | |
| 12 Antenna Wo (270 Deg) | None | | | | | 48 | | |
| 13 Antenna Wo (300 Deg) | None | | | | | 48 | | |
| 14 Antenna Wo (330 Deg) | None | | | | | 48 | | |
| 15 Antenna Wi (0 Deg) | None | | | | | 48 | | |
| 16 Antenna Wi (30 Deg) | None | | | | | 48 | | |
| 17 Antenna Wi (60 Deg) | None | | | | | 48 | | |
| 18 Antenna Wi (90 Deg) | None | | | | | 48 | | |
| 19 Antenna Wi (120 Deg) | None | | | | | 48 | | |
| 20 Antenna Wi (150 Deg) | None | | | | | 48 | | |
| 21 Antenna Wi (180 Deg) | None | | | | | 48 | | |
| 22 Antenna Wi (210 Deg) | None | | | | | 48 | | |
| 23 Antenna Wi (240 Deg) | None | | | | | 48 | | |
| 24 Antenna Wi (270 Deg) | None | | | | | 48 | | |
| 25 Antenna Wi (300 Deg) | None | | | | | 48 | | |
| 26 Antenna Wi (330 Deg) | None | | | | | 48 | | |
| 27 Antenna Wm (0 Deg) | None | | | | | 48 | | |
| 28 Antenna Wm (30 Deg) | None | | | | | 48 | | |
| 29 Antenna Wm (60 Deg) | None | | | | | 48 | | |
| 30 Antenna Wm (90 Deg) | None | | | | | 48 | | |
| 31 Antenna Wm (120 De... | None | | | | | 48 | | |
| 32 Antenna Wm (150 De... | None | | | | | 48 | | |
| 33 Antenna Wm (180 De... | None | | | | | 48 | | |
| 34 Antenna Wm (210 De... | None | | | | | 48 | | |
| 35 Antenna Wm (240 De... | None | | | | | 48 | | |
| 36 Antenna Wm (270 De... | None | | | | | 48 | | |
| 37 Antenna Wm (300 De... | None | | | | | 48 | | |
| 38 Antenna Wm (330 De... | None | | | | | 48 | | |
| 39 Structure D | None | | -1 | | | | | |
| 40 Structure Di | None | | | | | | 41 | |
| 41 Structure Wo (0 Deg) | None | | | | | | 82 | |
| 42 Structure Wo (30 Deg) | None | | | | | | 82 | |
| 43 Structure Wo (60 Deg) | None | | | | | | 82 | |
| 44 Structure Wo (90 Deg) | None | | | | | | 82 | |
| 45 Structure Wo (120 D... | None | | | | | | 82 | |
| 46 Structure Wo (150 D... | None | | | | | | 82 | |
| 47 Structure Wo (180 D... | None | | | | | | 82 | |
| 48 Structure Wo (210 D... | None | | | | | | 82 | |
| 49 Structure Wo (240 D... | None | | | | | | 82 | |
| 50 Structure Wo (270 D... | None | | | | | | 82 | |
| 51 Structure Wo (300 D... | None | | | | | | 82 | |



Company : Maser Consulting
 Designer :
 Job Number : Project No. 10115278
 Model Name : 469153-VZW_MT_LOT_SectorA_H

Nov 15, 2021
 4:59 PM
 Checked By: _____

Load Combinations (Continued)

| | Description | Solve | PDelta | S... | BLCFac... | BLCFac... | BLCFac... | BLCFac... | BLCFac... | BLCFac... | BLCFac... | BLCFac... | BLCFac... | BLCFac... | BLCFac... | | | | | |
|----|--------------------|-------|--------|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------|-----|-------|-----|-------|
| 13 | 1.2D + 1.0Di + ... | Yes | Y | | 1 | 1.2 | 39 | 1.2 | 2 | 1 | 40 | 1 | 15 | 1 | 53 | 1 | | | | |
| 14 | 1.2D + 1.0Di + ... | Yes | Y | | 1 | 1.2 | 39 | 1.2 | 2 | 1 | 40 | 1 | 16 | 1 | 54 | 1 | | | | |
| 15 | 1.2D + 1.0Di + ... | Yes | Y | | 1 | 1.2 | 39 | 1.2 | 2 | 1 | 40 | 1 | 17 | 1 | 55 | 1 | | | | |
| 16 | 1.2D + 1.0Di + ... | Yes | Y | | 1 | 1.2 | 39 | 1.2 | 2 | 1 | 40 | 1 | 18 | 1 | 56 | 1 | | | | |
| 17 | 1.2D + 1.0Di + ... | Yes | Y | | 1 | 1.2 | 39 | 1.2 | 2 | 1 | 40 | 1 | 19 | 1 | 57 | 1 | | | | |
| 18 | 1.2D + 1.0Di + ... | Yes | Y | | 1 | 1.2 | 39 | 1.2 | 2 | 1 | 40 | 1 | 20 | 1 | 58 | 1 | | | | |
| 19 | 1.2D + 1.0Di + ... | Yes | Y | | 1 | 1.2 | 39 | 1.2 | 2 | 1 | 40 | 1 | 21 | 1 | 59 | 1 | | | | |
| 20 | 1.2D + 1.0Di + ... | Yes | Y | | 1 | 1.2 | 39 | 1.2 | 2 | 1 | 40 | 1 | 22 | 1 | 60 | 1 | | | | |
| 21 | 1.2D + 1.0Di + ... | Yes | Y | | 1 | 1.2 | 39 | 1.2 | 2 | 1 | 40 | 1 | 23 | 1 | 61 | 1 | | | | |
| 22 | 1.2D + 1.0Di + ... | Yes | Y | | 1 | 1.2 | 39 | 1.2 | 2 | 1 | 40 | 1 | 24 | 1 | 62 | 1 | | | | |
| 23 | 1.2D + 1.0Di + ... | Yes | Y | | 1 | 1.2 | 39 | 1.2 | 2 | 1 | 40 | 1 | 25 | 1 | 63 | 1 | | | | |
| 24 | 1.2D + 1.0Di + ... | 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 | | | | | | |
| 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 | 1.2D + 1.0Ev + ... | | Y | | 1 | 1.2 | 39 | 1.2 | 81 | 1 | ELY | 1 | 82 | 1 | 83 | | ELZ | 1 | ELX | |
| 53 | 1.2D + 1.0Ev + ... | | Y | | 1 | 1.2 | 39 | 1.2 | 81 | 1 | ELY | 1 | 82 | .866 | 83 | .5 | ELZ | .866 | ELX | .5 |
| 54 | 1.2D + 1.0Ev + ... | | Y | | 1 | 1.2 | 39 | 1.2 | 81 | 1 | ELY | 1 | 82 | .5 | 83 | .866 | ELZ | .5 | ELX | .866 |
| 55 | 1.2D + 1.0Ev + ... | | Y | | 1 | 1.2 | 39 | 1.2 | 81 | 1 | ELY | 1 | 82 | | 83 | 1 | ELZ | | ELX | 1 |
| 56 | 1.2D + 1.0Ev + ... | | Y | | 1 | 1.2 | 39 | 1.2 | 81 | 1 | ELY | 1 | 82 | -.5 | 83 | .866 | ELZ | -.5 | ELX | .866 |
| 57 | 1.2D + 1.0Ev + ... | | Y | | 1 | 1.2 | 39 | 1.2 | 81 | 1 | ELY | 1 | 82 | -.866 | 83 | .5 | ELZ | -.866 | ELX | .5 |
| 58 | 1.2D + 1.0Ev + ... | | Y | | 1 | 1.2 | 39 | 1.2 | 81 | 1 | ELY | 1 | 82 | -1 | 83 | | ELZ | -1 | ELX | |
| 59 | 1.2D + 1.0Ev + ... | | Y | | 1 | 1.2 | 39 | 1.2 | 81 | 1 | ELY | 1 | 82 | -.866 | 83 | -.5 | ELZ | -.866 | ELX | -.5 |
| 60 | 1.2D + 1.0Ev + ... | | Y | | 1 | 1.2 | 39 | 1.2 | 81 | 1 | ELY | 1 | 82 | -.5 | 83 | -.866 | ELZ | -.5 | ELX | -.866 |
| 61 | 1.2D + 1.0Ev + ... | | Y | | 1 | 1.2 | 39 | 1.2 | 81 | 1 | ELY | 1 | 82 | | 83 | -1 | ELZ | | ELX | -1 |
| 62 | 1.2D + 1.0Ev + ... | | Y | | 1 | 1.2 | 39 | 1.2 | 81 | 1 | ELY | 1 | 82 | .5 | 83 | -.866 | ELZ | .5 | ELX | -.866 |
| 63 | 1.2D + 1.0Ev + ... | | Y | | 1 | 1.2 | 39 | 1.2 | 81 | 1 | ELY | 1 | 82 | .866 | 83 | -.5 | ELZ | .866 | ELX | -.5 |
| 64 | 0.9D - 1.0Ev + ... | | Y | | 1 | .9 | 39 | .9 | 81 | -1 | ELY | -1 | 82 | 1 | 83 | | ELZ | 1 | ELX | |



Company : Maser Consulting
 Designer :
 Job Number : Project No. 10115278
 Model Name : 469153-VZW_MT_LOT_SectorA_H

Nov 15, 2021
 4:59 PM
 Checked By: _____

Load Combinations (Continued)

| | Description | Solve | PDelta | S... | BLCFac... | BLCFac... | BLCFac... | BLCFac... | BLCFac... | BLCFac... | BLCFac... | BLCFac... | BLCFac... | BLCFac... | BLCFac... | | | | | |
|----|--------------------|-------|--------|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------|-----|-------|-----|-------|
| 65 | 0.9D - 1.0Ev + ... | | Y | | 1 | .9 | 39 | .9 | 81 | -1 | ELY | -1 | 82 | .866 | 83 | .5 | ELZ | .866 | ELX | .5 |
| 66 | 0.9D - 1.0Ev + ... | | Y | | 1 | .9 | 39 | .9 | 81 | -1 | ELY | -1 | 82 | .5 | 83 | .866 | ELZ | .5 | ELX | .866 |
| 67 | 0.9D - 1.0Ev + ... | | Y | | 1 | .9 | 39 | .9 | 81 | -1 | ELY | -1 | 82 | | 83 | 1 | ELZ | | ELX | 1 |
| 68 | 0.9D - 1.0Ev + ... | | Y | | 1 | .9 | 39 | .9 | 81 | -1 | ELY | -1 | 82 | -.5 | 83 | .866 | ELZ | -.5 | ELX | .866 |
| 69 | 0.9D - 1.0Ev + ... | | Y | | 1 | .9 | 39 | .9 | 81 | -1 | ELY | -1 | 82 | -.866 | 83 | .5 | ELZ | -.866 | ELX | .5 |
| 70 | 0.9D - 1.0Ev + ... | | Y | | 1 | .9 | 39 | .9 | 81 | -1 | ELY | -1 | 82 | -1 | 83 | | ELZ | -1 | ELX | |
| 71 | 0.9D - 1.0Ev + ... | | Y | | 1 | .9 | 39 | .9 | 81 | -1 | ELY | -1 | 82 | -.866 | 83 | -.5 | ELZ | -.866 | ELX | -.5 |
| 72 | 0.9D - 1.0Ev + ... | | Y | | 1 | .9 | 39 | .9 | 81 | -1 | ELY | -1 | 82 | -.5 | 83 | -.866 | ELZ | -.5 | ELX | -.866 |
| 73 | 0.9D - 1.0Ev + ... | | Y | | 1 | .9 | 39 | .9 | 81 | -1 | ELY | -1 | 82 | | 83 | -1 | ELZ | | ELX | -1 |
| 74 | 0.9D - 1.0Ev + ... | | Y | | 1 | .9 | 39 | .9 | 81 | -1 | ELY | -1 | 82 | .5 | 83 | -.866 | ELZ | .5 | ELX | -.866 |
| 75 | 0.9D - 1.0Ev + ... | | Y | | 1 | .9 | 39 | .9 | 81 | -1 | ELY | -1 | 82 | .866 | 83 | -.5 | ELZ | .866 | ELX | -.5 |

Joint Coordinates and Temperatures

| | Label | X [in] | Y [in] | Z [in] | Temp [F] | Detach From Diap... |
|----|-------|------------|--------|-----------|----------|---------------------|
| 1 | N1 | -2. | 0 | 2. | 0 | |
| 2 | N2 | -5.375 | 0 | 2. | 0 | |
| 3 | N3 | 1.375 | 0 | 2. | 0 | |
| 4 | N4 | -2. | 0 | 0 | 0 | |
| 5 | N5 | -2.517638 | -41. | 1.931852 | 0 | |
| 6 | N6 | -5.375 | -41. | 2. | 0 | |
| 7 | N7 | 1.375 | -41. | 2. | 0 | |
| 8 | N10 | -54 | 0 | 55. | 0 | |
| 9 | N11 | 50. | 0 | 55. | 0 | |
| 10 | N11A | -92. | 0 | 55. | 0 | |
| 11 | N12 | 88. | 0 | 55. | 0 | |
| 12 | N14 | -54 | -41. | 55. | 0 | |
| 13 | N15 | 50. | -41. | 55. | 0 | |
| 14 | N16 | -92. | -41. | 55. | 0 | |
| 15 | N17 | 88. | -41. | 55. | 0 | |
| 16 | N17A | -4.101022 | 0 | 4.141426 | 0 | |
| 17 | N18 | 0.101022 | 0 | 4.141426 | 0 | |
| 18 | N19 | -4.101022 | -41. | 4.141426 | 0 | |
| 19 | N20 | 0.101022 | -41. | 4.141426 | 0 | |
| 20 | N21 | 4.653236 | 0 | 8.781183 | 0 | |
| 21 | N22 | 4.653236 | -41. | 8.781183 | 0 | |
| 22 | N23 | 24.963116 | 0 | 29.481637 | 0 | |
| 23 | N24 | 24.963116 | -41. | 29.481637 | 0 | |
| 24 | N25 | 45.272995 | 0 | 50.182091 | 0 | |
| 25 | N26 | 45.272995 | -41. | 50.182091 | 0 | |
| 26 | N27 | 4.653236 | -39.5 | 8.781183 | 0 | |
| 27 | N28 | 24.963116 | -39.5 | 29.481637 | 0 | |
| 28 | N29 | 4.653236 | -1.5 | 8.781183 | 0 | |
| 29 | N30 | 24.963116 | -1.5 | 29.481637 | 0 | |
| 30 | N31 | 45.272995 | -35. | 50.182091 | 0 | |
| 31 | N32 | 45.272995 | -6 | 50.182091 | 0 | |
| 32 | N33 | -8.653236 | 0 | 8.781183 | 0 | |
| 33 | N34 | -8.653236 | -41. | 8.781183 | 0 | |
| 34 | N35 | -28.963116 | 0 | 29.481637 | 0 | |
| 35 | N36 | -28.963116 | -41. | 29.481637 | 0 | |
| 36 | N37 | -49.272995 | 0 | 50.182091 | 0 | |



Joint Coordinates and Temperatures (Continued)

| | Label | X [in] | Y [in] | Z [in] | Temp [F] | Detach From Diap... |
|----|-------|------------|--------|-----------|----------|---------------------|
| 37 | N38 | -49.272995 | -41. | 50.182091 | 0 | |
| 38 | N39 | -8.653236 | -39.5 | 8.781183 | 0 | |
| 39 | N40 | -28.963116 | -39.5 | 29.481637 | 0 | |
| 40 | N41 | -8.653236 | -1.5 | 8.781183 | 0 | |
| 41 | N42 | -28.963116 | -1.5 | 29.481637 | 0 | |
| 42 | N43 | -49.272995 | -35. | 50.182091 | 0 | |
| 43 | N44 | -49.272995 | -6 | 50.182091 | 0 | |
| 44 | N45 | -85. | 0 | 55. | 0 | |
| 45 | N46 | -85. | -41. | 55. | 0 | |
| 46 | N47 | -85. | 0 | 58. | 0 | |
| 47 | N48 | -85. | -41. | 58. | 0 | |
| 48 | N49 | -85. | 15 | 58. | 0 | |
| 49 | N50 | -85. | -57 | 58. | 0 | |
| 50 | N51 | -40.5 | 0 | 55. | 0 | |
| 51 | N52 | -40.5 | -41. | 55. | 0 | |
| 52 | N53 | -40.5 | 0 | 58. | 0 | |
| 53 | N54 | -40.5 | -41. | 58. | 0 | |
| 54 | N55 | -40.5 | 15 | 58. | 0 | |
| 55 | N56 | -40.5 | -57 | 58. | 0 | |
| 56 | N57 | -10. | 0 | 55. | 0 | |
| 57 | N58 | -10. | -41. | 55. | 0 | |
| 58 | N59 | -10. | 0 | 58. | 0 | |
| 59 | N60 | -10. | -41. | 58. | 0 | |
| 60 | N61 | -10. | 15 | 58. | 0 | |
| 61 | N62 | -10. | -57 | 58. | 0 | |
| 62 | N65 | -2. | -41. | 0 | 0 | |
| 63 | N65A | 81 | 0 | 55. | 0 | |
| 64 | N66 | 81 | -41. | 55. | 0 | |
| 65 | N67 | 81 | 0 | 58. | 0 | |
| 66 | N68 | 81 | -41. | 58. | 0 | |
| 67 | N69 | 81 | 15 | 58. | 0 | |
| 68 | N70 | 81 | -57 | 58. | 0 | |
| 69 | N71 | 102.600443 | -41. | -9.151353 | 0 | |
| 70 | N80 | 20.060613 | 0 | 24.484856 | 0 | |
| 71 | N81 | 22.555562 | 0 | 27.027784 | 0 | |
| 72 | N98 | 20.060613 | -41. | 24.484856 | 0 | |
| 73 | N99 | 22.555562 | -41. | 27.027784 | 0 | |
| 74 | N77 | 17.939293 | 0 | 26.606176 | 0 | |
| 75 | N78 | 20.434242 | 0 | 29.149105 | 0 | |
| 76 | N79 | 17.939293 | -41. | 26.606176 | 0 | |
| 77 | N80A | 20.434242 | -41. | 29.149105 | 0 | |
| 78 | N81A | 17.939293 | -44. | 26.606176 | 0 | |
| 79 | N82 | 20.434242 | -44. | 29.149105 | 0 | |
| 80 | N83 | 17.939293 | 3 | 26.606176 | 0 | |
| 81 | N84 | 20.434242 | 3 | 29.149105 | 0 | |
| 82 | N85 | 17.939293 | -20.5 | 26.606176 | 0 | |
| 83 | N86 | 20.434242 | -20.5 | 29.149105 | 0 | |
| 84 | N85A | 66. | -41. | 55. | 0 | |

Hot Rolled Steel Section Sets

| | Label | Shape | Type | Design List | Material | Design R... | A [in ²] | Iyy [in ⁴] | Izz [in ⁴] | J [in ⁴] |
|----|----------------------|----------------|--------|--------------|-----------|-------------|----------------------|------------------------|------------------------|----------------------|
| 1 | Antenna Pipe | PIPE 2.0 | Column | Pipe | A53 Gr. B | Typical | 1.02 | .627 | .627 | 1.25 |
| 2 | Standoff Horizontal | PIPE 2.0 | Beam | Pipe | A53 Gr. B | Typical | 1.02 | .627 | .627 | 1.25 |
| 3 | Standoff Vertical | PIPE 2.0 | Beam | Pipe | A53 Gr. B | Typical | 1.02 | .627 | .627 | 1.25 |
| 4 | Standoff Diagonal | 1.5 w 0.06 th | Beam | Pipe | A53 Gr. B | Typical | .271 | .07 | .07 | .141 |
| 5 | TES Standoff Diag... | PIPE 1.5 | Beam | Pipe | A53 Gr. B | Typical | .749 | .293 | .293 | .586 |
| 6 | Face Horizontal | PIPE 2.5 | Beam | Pipe | A53 Gr. B | Typical | 1.61 | 1.45 | 1.45 | 2.89 |
| 7 | Tie Back | PIPE 2.0 | Beam | Pipe | A53 Gr. B | Typical | 1.02 | .627 | .627 | 1.25 |
| 8 | Standoff Bar | PL3/8X3_HRA... | Beam | RECT | A36 Gr.36 | Typical | 1.125 | .013 | .844 | .049 |
| 9 | Mount Angle | L4X3X6 | Beam | Single Angle | A36 Gr.36 | Typical | 2.49 | 1.89 | 3.94 | .123 |
| 10 | TES Unistrut | L2.5x2.5x3 | Beam | Single Angle | A36 Gr.36 | Typical | .901 | .535 | .535 | .011 |

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 |
| 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 |

Member Primary Data

| | Label | I Joint | J Joint | K Joint | Rotate(deg) | Section/Shape | Type | Design List | Material | Design Rules |
|----|-------|---------|---------|---------|-------------|-------------------|------|--------------|-----------|--------------|
| 1 | M1 | N2 | N3 | | 90 | Mount Angle | Beam | Single Angle | A36 Gr.36 | Typical |
| 2 | M2 | N1 | N4 | | | RIGID | None | None | RIGID | Typical |
| 3 | M3 | N6 | N7 | | 90 | Mount Angle | Beam | Single Angle | A36 Gr.36 | Typical |
| 4 | M5 | N1 | N17A | | 90 | Standoff Bar | Beam | RECT | A36 Gr.36 | Typical |
| 5 | M6 | N1 | N18 | | 90 | Standoff Bar | Beam | RECT | A36 Gr.36 | Typical |
| 6 | M7 | N11A | N12 | | | Face Horizontal | Beam | Pipe | A53 Gr. B | Typical |
| 7 | M8 | N5 | N19 | | 90 | Standoff Bar | Beam | RECT | A36 Gr.36 | Typical |
| 8 | M9 | N5 | N20 | | 90 | Standoff Bar | Beam | RECT | A36 Gr.36 | Typical |
| 9 | M10 | N16 | N17 | | | Face Horizontal | Beam | Pipe | A53 Gr. B | Typical |
| 10 | M11 | N17A | N10 | | | Standoff Horiz... | Beam | Pipe | A53 Gr. B | Typical |
| 11 | M12 | N18 | N11 | | | Standoff Horiz... | Beam | Pipe | A53 Gr. B | Typical |
| 12 | M13 | N19 | N14 | | | Standoff Horiz... | Beam | Pipe | A53 Gr. B | Typical |
| 13 | M14 | N20 | N15 | | | Standoff Horiz... | Beam | Pipe | A53 Gr. B | Typical |
| 14 | M15 | N21 | N29 | N1 | | Standoff Bar | Beam | RECT | A36 Gr.36 | Typical |
| 15 | M16 | N21 | N24 | | 90 | Standoff Diago... | Beam | Pipe | A53 Gr. B | Typical |
| 16 | M17 | N23 | N30 | N1 | | Standoff Bar | Beam | RECT | A36 Gr.36 | Typical |
| 17 | M18 | N23 | N26 | | 90 | Standoff Diago... | Beam | Pipe | A53 Gr. B | Typical |
| 18 | M19 | N26 | N31 | N1 | | Standoff Bar | Beam | RECT | A36 Gr.36 | Typical |
| 19 | M20 | N27 | N22 | N1 | | Standoff Bar | Beam | RECT | A36 Gr.36 | Typical |
| 20 | M21 | N28 | N24 | N1 | | Standoff Bar | Beam | RECT | A36 Gr.36 | Typical |
| 21 | M22 | N29 | N27 | N1 | | Standoff Diago... | Beam | Pipe | A53 Gr. B | Typical |
| 22 | M23 | N30 | N28 | N1 | | Standoff Diago... | Beam | Pipe | A53 Gr. B | Typical |
| 23 | M24 | N31 | N32 | N1 | | Standoff Vertical | Beam | Pipe | A53 Gr. B | Typical |
| 24 | M25 | N32 | N25 | N1 | | Standoff Bar | Beam | RECT | A36 Gr.36 | Typical |
| 25 | M26 | N33 | N41 | N1 | | Standoff Bar | Beam | RECT | A36 Gr.36 | Typical |
| 26 | M27 | N33 | N36 | | 90 | Standoff Diago... | Beam | Pipe | A53 Gr. B | Typical |



Member Advanced Data (Continued)

| | Label | I Release | J Release | I Offset[in] | J Offset[in] | T/C Only | Physical | Defl Rat... | Analysis ... | Inactive | Seismic... |
|----|-------|-----------|-----------|--------------|--------------|----------|----------|-------------|--------------|----------|------------|
| 18 | M19 | OOOOOX | | | | | Yes | | | | None |
| 19 | M20 | | OOOOOO | | | | Yes | | | | None |
| 20 | M21 | | OOOOOO | | | | Yes | | | | None |
| 21 | M22 | | | | | | Yes | | | | None |
| 22 | M23 | | | | | | Yes | | | | None |
| 23 | M24 | | | | | | Yes | | | | None |
| 24 | M25 | | OOOOOO | | | | Yes | Default | | | None |
| 25 | M26 | OOOOOX | | | | | Yes | | | | None |
| 26 | M27 | BenPIN | BenPIN | | | | Yes | | | | None |
| 27 | M28 | OOOOOX | | | | | Yes | | | | None |
| 28 | M29 | BenPIN | BenPIN | | | | Yes | | | | None |
| 29 | M30 | OOOOOX | | | | | Yes | | | | None |
| 30 | M31 | | OOOOOO | | | | Yes | | | | None |
| 31 | M32 | | OOOOOO | | | | Yes | | | | None |
| 32 | M33 | | | | | | Yes | | | | None |
| 33 | M34 | | | | | | Yes | | | | None |
| 34 | M35 | | | | | | Yes | | | | None |
| 35 | M36 | | OOOOOO | | | | Yes | | | | None |
| 36 | M37 | | | | | | Yes | ** NA ** | | | None |
| 37 | M38 | | | | | | Yes | ** NA ** | | | None |
| 38 | MP4A | | | | | | Yes | ** NA ** | | | None |
| 39 | M40 | | | | | | Yes | ** NA ** | | | None |
| 40 | M41 | | | | | | Yes | ** NA ** | | | None |
| 41 | MP3A | | | | | | Yes | ** NA ** | | | None |
| 42 | M43 | | | | | | Yes | ** NA ** | | | None |
| 43 | M44 | | | | | | Yes | ** NA ** | | | None |
| 44 | MP2A | | | | | | Yes | ** NA ** | | | None |
| 45 | M46A | | | | | | Yes | ** NA ** | | | None |
| 46 | M47 | | | | | | Yes | ** NA ** | | | None |
| 47 | M48 | | | | | | Yes | ** NA ** | | | None |
| 48 | MP1A | | | | | | Yes | ** NA ** | | | None |
| 49 | EQUIP | | | | | | Yes | Default | | | None |
| 50 | M51 | | | | | | Yes | | | | None |
| 51 | M52 | | OOOXOO | | | | Yes | ** NA ** | | | None |
| 52 | M53 | | OOOXOO | | | | Yes | ** NA ** | | | None |
| 53 | M54 | | OOOXOO | | | | Yes | ** NA ** | | | None |
| 54 | M55 | | OOOXOO | | | | Yes | ** NA ** | | | None |
| 55 | M55A | BenPIN | | | | | Yes | Default | | | None |
| 56 | OVP | | | | | | Yes | ** NA ** | | | None |

Member Point Loads (BLC 1 : Antenna D)

| | Member Label | Direction | Magnitude [lb,k-ft] | Location[in,%] |
|---|--------------|-----------|---------------------|----------------|
| 1 | MP1A | Y | -43.5 | 6 |
| 2 | MP1A | My | -.035 | 6 |
| 3 | MP1A | Mz | -.024 | 6 |
| 4 | MP1A | Y | -43.5 | 42 |
| 5 | MP1A | My | -.035 | 42 |
| 6 | MP1A | Mz | -.024 | 42 |
| 7 | MP1A | Y | -43.5 | 6 |
| 8 | MP1A | My | -.004 | 6 |



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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|----|--------------|-----------|--------------------|----------------|
| 9 | MP1A | Mz | .042 | 6 |
| 10 | MP1A | Y | -43.5 | 42 |
| 11 | MP1A | My | -.004 | 42 |
| 12 | MP1A | Mz | .042 | 42 |
| 13 | MP4A | Y | -43.5 | 6 |
| 14 | MP4A | My | -.004 | 6 |
| 15 | MP4A | Mz | -.042 | 6 |
| 16 | MP4A | Y | -43.5 | 42 |
| 17 | MP4A | My | -.004 | 42 |
| 18 | MP4A | Mz | -.042 | 42 |
| 19 | MP4A | Y | -43.5 | 6 |
| 20 | MP4A | My | -.035 | 6 |
| 21 | MP4A | Mz | .024 | 6 |
| 22 | MP4A | Y | -43.5 | 42 |
| 23 | MP4A | My | -.035 | 42 |
| 24 | MP4A | Mz | .024 | 42 |
| 25 | MP3A | Y | -43.55 | 12 |
| 26 | MP3A | My | -.022 | 12 |
| 27 | MP3A | Mz | 0 | 12 |
| 28 | MP3A | Y | -43.55 | 36 |
| 29 | MP3A | My | -.022 | 36 |
| 30 | MP3A | Mz | 0 | 36 |
| 31 | MP1A | Y | -74.7 | 24 |
| 32 | MP1A | My | .034 | 24 |
| 33 | MP1A | Mz | -.016 | 24 |
| 34 | MP2A | Y | -70.3 | 42 |
| 35 | MP2A | My | .035 | 42 |
| 36 | MP2A | Mz | 0 | 42 |
| 37 | MP2A | Y | -11.6 | 6 |
| 38 | MP2A | My | -.006 | 6 |
| 39 | MP2A | Mz | 0 | 6 |
| 40 | MP2A | Y | -11.6 | 42 |
| 41 | MP2A | My | -.006 | 42 |
| 42 | MP2A | Mz | 0 | 42 |
| 43 | OVP | Y | -84.4 | 1.8 |
| 44 | OVP | My | 0 | 1.8 |
| 45 | OVP | Mz | 0 | 1.8 |
| 46 | MP3A | Y | -70.3 | 24 |
| 47 | MP3A | My | .035 | 24 |
| 48 | MP3A | Mz | 0 | 24 |

Member Point Loads (BLC 2 : Antenna Di)

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|---|--------------|-----------|--------------------|----------------|
| 1 | MP1A | Y | -98.574 | 6 |
| 2 | MP1A | My | -.079 | 6 |
| 3 | MP1A | Mz | -.054 | 6 |
| 4 | MP1A | Y | -98.574 | 42 |
| 5 | MP1A | My | -.079 | 42 |
| 6 | MP1A | Mz | -.054 | 42 |
| 7 | MP1A | Y | -98.574 | 6 |
| 8 | MP1A | My | -.01 | 6 |



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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|----|--------------|-----------|--------------------|----------------|
| 9 | MP1A | Mz | .095 | 6 |
| 10 | MP1A | Y | -98.574 | 42 |
| 11 | MP1A | My | -.01 | 42 |
| 12 | MP1A | Mz | .095 | 42 |
| 13 | MP4A | Y | -98.574 | 6 |
| 14 | MP4A | My | -.01 | 6 |
| 15 | MP4A | Mz | -.095 | 6 |
| 16 | MP4A | Y | -98.574 | 42 |
| 17 | MP4A | My | -.01 | 42 |
| 18 | MP4A | Mz | -.095 | 42 |
| 19 | MP4A | Y | -98.574 | 6 |
| 20 | MP4A | My | -.079 | 6 |
| 21 | MP4A | Mz | .054 | 6 |
| 22 | MP4A | Y | -98.574 | 42 |
| 23 | MP4A | My | -.079 | 42 |
| 24 | MP4A | Mz | .054 | 42 |
| 25 | MP3A | Y | -36.174 | 12 |
| 26 | MP3A | My | -.018 | 12 |
| 27 | MP3A | Mz | 0 | 12 |
| 28 | MP3A | Y | -36.174 | 36 |
| 29 | MP3A | My | -.018 | 36 |
| 30 | MP3A | Mz | 0 | 36 |
| 31 | MP1A | Y | -45.617 | 24 |
| 32 | MP1A | My | .021 | 24 |
| 33 | MP1A | Mz | -.01 | 24 |
| 34 | MP2A | Y | -43.443 | 42 |
| 35 | MP2A | My | .022 | 42 |
| 36 | MP2A | Mz | 0 | 42 |
| 37 | MP2A | Y | -15.178 | 6 |
| 38 | MP2A | My | -.008 | 6 |
| 39 | MP2A | Mz | 0 | 6 |
| 40 | MP2A | Y | -15.178 | 42 |
| 41 | MP2A | My | -.008 | 42 |
| 42 | MP2A | Mz | 0 | 42 |
| 43 | OVP | Y | -45.617 | 1.8 |
| 44 | OVP | My | 0 | 1.8 |
| 45 | OVP | Mz | 0 | 1.8 |
| 46 | MP3A | Y | -41.028 | 24 |
| 47 | MP3A | My | .021 | 24 |
| 48 | MP3A | Mz | 0 | 24 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|---|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | 0 | 6 |
| 2 | MP1A | Z | -197.178 | 6 |
| 3 | MP1A | Mx | .107 | 6 |
| 4 | MP1A | X | 0 | 42 |
| 5 | MP1A | Z | -197.178 | 42 |
| 6 | MP1A | Mx | .107 | 42 |
| 7 | MP1A | X | 0 | 6 |
| 8 | MP1A | Z | -197.178 | 6 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|----|--------------|-----------|--------------------|----------------|
| 9 | MP1A | Mx | -.191 | 6 |
| 10 | MP1A | X | 0 | 42 |
| 11 | MP1A | Z | -197.178 | 42 |
| 12 | MP1A | Mx | -.191 | 42 |
| 13 | MP4A | X | 0 | 6 |
| 14 | MP4A | Z | -197.178 | 6 |
| 15 | MP4A | Mx | .191 | 6 |
| 16 | MP4A | X | 0 | 42 |
| 17 | MP4A | Z | -197.178 | 42 |
| 18 | MP4A | Mx | .191 | 42 |
| 19 | MP4A | X | 0 | 6 |
| 20 | MP4A | Z | -197.178 | 6 |
| 21 | MP4A | Mx | -.107 | 6 |
| 22 | MP4A | X | 0 | 42 |
| 23 | MP4A | Z | -197.178 | 42 |
| 24 | MP4A | Mx | -.107 | 42 |
| 25 | MP3A | X | 0 | 12 |
| 26 | MP3A | Z | -80.62 | 12 |
| 27 | MP3A | Mx | 0 | 12 |
| 28 | MP3A | X | 0 | 36 |
| 29 | MP3A | Z | -80.62 | 36 |
| 30 | MP3A | Mx | 0 | 36 |
| 31 | MP1A | X | 0 | 24 |
| 32 | MP1A | Z | -60.354 | 24 |
| 33 | MP1A | Mx | .013 | 24 |
| 34 | MP2A | X | 0 | 42 |
| 35 | MP2A | Z | -64.153 | 42 |
| 36 | MP2A | Mx | 0 | 42 |
| 37 | MP2A | X | 0 | 6 |
| 38 | MP2A | Z | -26.244 | 6 |
| 39 | MP2A | Mx | 0 | 6 |
| 40 | MP2A | X | 0 | 42 |
| 41 | MP2A | Z | -26.244 | 42 |
| 42 | MP2A | Mx | 0 | 42 |
| 43 | OVP | X | 0 | 1.8 |
| 44 | OVP | Z | -58.836 | 1.8 |
| 45 | OVP | Mx | 0 | 1.8 |
| 46 | MP3A | X | 0 | 24 |
| 47 | MP3A | Z | -64.153 | 24 |
| 48 | MP3A | Mx | 0 | 24 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|---|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | 77.666 | 6 |
| 2 | MP1A | Z | -134.521 | 6 |
| 3 | MP1A | Mx | .011 | 6 |
| 4 | MP1A | X | 77.666 | 42 |
| 5 | MP1A | Z | -134.521 | 42 |
| 6 | MP1A | Mx | .011 | 42 |
| 7 | MP1A | X | 77.666 | 6 |
| 8 | MP1A | Z | -134.521 | 6 |



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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|----|--------------|-----------|--------------------|----------------|
| 9 | MP1A | Mx | -.138 | 6 |
| 10 | MP1A | X | 77.666 | 42 |
| 11 | MP1A | Z | -134.521 | 42 |
| 12 | MP1A | Mx | -.138 | 42 |
| 13 | MP4A | X | 105.856 | 6 |
| 14 | MP4A | Z | -183.348 | 6 |
| 15 | MP4A | Mx | .167 | 6 |
| 16 | MP4A | X | 105.856 | 42 |
| 17 | MP4A | Z | -183.348 | 42 |
| 18 | MP4A | Mx | .167 | 42 |
| 19 | MP4A | X | 105.856 | 6 |
| 20 | MP4A | Z | -183.348 | 6 |
| 21 | MP4A | Mx | -.185 | 6 |
| 22 | MP4A | X | 105.856 | 42 |
| 23 | MP4A | Z | -183.348 | 42 |
| 24 | MP4A | Mx | -.185 | 42 |
| 25 | MP3A | X | 34.178 | 12 |
| 26 | MP3A | Z | -59.198 | 12 |
| 27 | MP3A | Mx | -.017 | 12 |
| 28 | MP3A | X | 34.178 | 36 |
| 29 | MP3A | Z | -59.198 | 36 |
| 30 | MP3A | Mx | -.017 | 36 |
| 31 | MP1A | X | 24.94 | 24 |
| 32 | MP1A | Z | -43.198 | 24 |
| 33 | MP1A | Mx | .02 | 24 |
| 34 | MP2A | X | 28.935 | 42 |
| 35 | MP2A | Z | -50.118 | 42 |
| 36 | MP2A | Mx | .014 | 42 |
| 37 | MP2A | X | 11.46 | 6 |
| 38 | MP2A | Z | -19.849 | 6 |
| 39 | MP2A | Mx | -.006 | 6 |
| 40 | MP2A | X | 11.46 | 42 |
| 41 | MP2A | Z | -19.849 | 42 |
| 42 | MP2A | Mx | -.006 | 42 |
| 43 | OVP | X | 24.1 | 1.8 |
| 44 | OVP | Z | -41.743 | 1.8 |
| 45 | OVP | Mx | 0 | 1.8 |
| 46 | MP3A | X | 28.399 | 24 |
| 47 | MP3A | Z | -49.189 | 24 |
| 48 | MP3A | Mx | .014 | 24 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|---|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | 110.867 | 6 |
| 2 | MP1A | Z | -64.009 | 6 |
| 3 | MP1A | Mx | -.054 | 6 |
| 4 | MP1A | X | 110.867 | 42 |
| 5 | MP1A | Z | -64.009 | 42 |
| 6 | MP1A | Mx | -.054 | 42 |
| 7 | MP1A | X | 110.867 | 6 |
| 8 | MP1A | Z | -64.009 | 6 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in, %] |
|----|--------------|-----------|--------------------|-----------------|
| 9 | MP1A | Mx | -.073 | 6 |
| 10 | MP1A | X | 110.867 | 42 |
| 11 | MP1A | Z | -64.009 | 42 |
| 12 | MP1A | Mx | -.073 | 42 |
| 13 | MP4A | X | 159.693 | 6 |
| 14 | MP4A | Z | -92.199 | 6 |
| 15 | MP4A | Mx | .073 | 6 |
| 16 | MP4A | X | 159.693 | 42 |
| 17 | MP4A | Z | -92.199 | 42 |
| 18 | MP4A | Mx | .073 | 42 |
| 19 | MP4A | X | 159.693 | 6 |
| 20 | MP4A | Z | -92.199 | 6 |
| 21 | MP4A | Mx | -.179 | 6 |
| 22 | MP4A | X | 159.693 | 42 |
| 23 | MP4A | Z | -92.199 | 42 |
| 24 | MP4A | Mx | -.179 | 42 |
| 25 | MP3A | X | 37.955 | 12 |
| 26 | MP3A | Z | -21.914 | 12 |
| 27 | MP3A | Mx | -.019 | 12 |
| 28 | MP3A | X | 37.955 | 36 |
| 29 | MP3A | Z | -21.914 | 36 |
| 30 | MP3A | Mx | -.019 | 36 |
| 31 | MP1A | X | 37.278 | 24 |
| 32 | MP1A | Z | -21.522 | 24 |
| 33 | MP1A | Mx | .021 | 24 |
| 34 | MP2A | X | 39.236 | 42 |
| 35 | MP2A | Z | -22.653 | 42 |
| 36 | MP2A | Mx | .02 | 42 |
| 37 | MP2A | X | 14.091 | 6 |
| 38 | MP2A | Z | -8.135 | 6 |
| 39 | MP2A | Mx | -.007 | 6 |
| 40 | MP2A | X | 14.091 | 42 |
| 41 | MP2A | Z | -8.135 | 42 |
| 42 | MP2A | Mx | -.007 | 42 |
| 43 | OVP | X | 37.138 | 1.8 |
| 44 | OVP | Z | -21.442 | 1.8 |
| 45 | OVP | Mx | 0 | 1.8 |
| 46 | MP3A | X | 36.451 | 24 |
| 47 | MP3A | Z | -21.045 | 24 |
| 48 | MP3A | Mx | .018 | 24 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in, %] |
|---|--------------|-----------|--------------------|-----------------|
| 1 | MP1A | X | 142.551 | 6 |
| 2 | MP1A | Z | 0 | 6 |
| 3 | MP1A | Mx | -.115 | 6 |
| 4 | MP1A | X | 142.551 | 42 |
| 5 | MP1A | Z | 0 | 42 |
| 6 | MP1A | Mx | -.115 | 42 |
| 7 | MP1A | X | 142.551 | 6 |
| 8 | MP1A | Z | 0 | 6 |



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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|----|--------------|-----------|--------------------|----------------|
| 9 | MP1A | Mx | -.014 | 6 |
| 10 | MP1A | X | 142.551 | 42 |
| 11 | MP1A | Z | 0 | 42 |
| 12 | MP1A | Mx | -.014 | 42 |
| 13 | MP4A | X | 142.551 | 6 |
| 14 | MP4A | Z | 0 | 6 |
| 15 | MP4A | Mx | -.014 | 6 |
| 16 | MP4A | X | 142.551 | 42 |
| 17 | MP4A | Z | 0 | 42 |
| 18 | MP4A | Mx | -.014 | 42 |
| 19 | MP4A | X | 142.551 | 6 |
| 20 | MP4A | Z | 0 | 6 |
| 21 | MP4A | Mx | -.115 | 6 |
| 22 | MP4A | X | 142.551 | 42 |
| 23 | MP4A | Z | 0 | 42 |
| 24 | MP4A | Mx | -.115 | 42 |
| 25 | MP3A | X | 31.563 | 12 |
| 26 | MP3A | Z | 0 | 12 |
| 27 | MP3A | Mx | -.016 | 12 |
| 28 | MP3A | X | 31.563 | 36 |
| 29 | MP3A | Z | 0 | 36 |
| 30 | MP3A | Mx | -.016 | 36 |
| 31 | MP1A | X | 46.682 | 24 |
| 32 | MP1A | Z | 0 | 24 |
| 33 | MP1A | Mx | .021 | 24 |
| 34 | MP2A | X | 39.024 | 42 |
| 35 | MP2A | Z | 0 | 42 |
| 36 | MP2A | Mx | .02 | 42 |
| 37 | MP2A | X | 12.946 | 6 |
| 38 | MP2A | Z | 0 | 6 |
| 39 | MP2A | Mx | -.006 | 6 |
| 40 | MP2A | X | 12.946 | 42 |
| 41 | MP2A | Z | 0 | 42 |
| 42 | MP2A | Mx | -.006 | 42 |
| 43 | OVP | X | 48.201 | 1.8 |
| 44 | OVP | Z | 0 | 1.8 |
| 45 | OVP | Mx | 0 | 1.8 |
| 46 | MP3A | X | 34.735 | 24 |
| 47 | MP3A | Z | 0 | 24 |
| 48 | MP3A | Mx | .017 | 24 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|---|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | 159.693 | 6 |
| 2 | MP1A | Z | 92.199 | 6 |
| 3 | MP1A | Mx | -.179 | 6 |
| 4 | MP1A | X | 159.693 | 42 |
| 5 | MP1A | Z | 92.199 | 42 |
| 6 | MP1A | Mx | -.179 | 42 |
| 7 | MP1A | X | 159.693 | 6 |
| 8 | MP1A | Z | 92.199 | 6 |



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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|----|--------------|-----------|--------------------|----------------|
| 9 | MP1A | Mx | .073 | 6 |
| 10 | MP1A | X | 159.693 | 42 |
| 11 | MP1A | Z | 92.199 | 42 |
| 12 | MP1A | Mx | .073 | 42 |
| 13 | MP4A | X | 110.867 | 6 |
| 14 | MP4A | Z | 64.009 | 6 |
| 15 | MP4A | Mx | -.073 | 6 |
| 16 | MP4A | X | 110.867 | 42 |
| 17 | MP4A | Z | 64.009 | 42 |
| 18 | MP4A | Mx | -.073 | 42 |
| 19 | MP4A | X | 110.867 | 6 |
| 20 | MP4A | Z | 64.009 | 6 |
| 21 | MP4A | Mx | -.054 | 6 |
| 22 | MP4A | X | 110.867 | 42 |
| 23 | MP4A | Z | 64.009 | 42 |
| 24 | MP4A | Mx | -.054 | 42 |
| 25 | MP3A | X | 37.955 | 12 |
| 26 | MP3A | Z | 21.914 | 12 |
| 27 | MP3A | Mx | -.019 | 12 |
| 28 | MP3A | X | 37.955 | 36 |
| 29 | MP3A | Z | 21.914 | 36 |
| 30 | MP3A | Mx | -.019 | 36 |
| 31 | MP1A | X | 49.498 | 24 |
| 32 | MP1A | Z | 28.578 | 24 |
| 33 | MP1A | Mx | .016 | 24 |
| 34 | MP2A | X | 39.236 | 42 |
| 35 | MP2A | Z | 22.653 | 42 |
| 36 | MP2A | Mx | .02 | 42 |
| 37 | MP2A | X | 14.091 | 6 |
| 38 | MP2A | Z | 8.135 | 6 |
| 39 | MP2A | Mx | -.007 | 6 |
| 40 | MP2A | X | 14.091 | 42 |
| 41 | MP2A | Z | 8.135 | 42 |
| 42 | MP2A | Mx | -.007 | 42 |
| 43 | OVP | X | 50.953 | 1.8 |
| 44 | OVP | Z | 29.418 | 1.8 |
| 45 | OVP | Mx | 0 | 1.8 |
| 46 | MP3A | X | 36.451 | 24 |
| 47 | MP3A | Z | 21.045 | 24 |
| 48 | MP3A | Mx | .018 | 24 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|---|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | 105.856 | 6 |
| 2 | MP1A | Z | 183.348 | 6 |
| 3 | MP1A | Mx | -.185 | 6 |
| 4 | MP1A | X | 105.856 | 42 |
| 5 | MP1A | Z | 183.348 | 42 |
| 6 | MP1A | Mx | -.185 | 42 |
| 7 | MP1A | X | 105.856 | 6 |
| 8 | MP1A | Z | 183.348 | 6 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|----|--------------|-----------|--------------------|----------------|
| 9 | MP1A | Mx | .191 | 6 |
| 10 | MP1A | X | 0 | 42 |
| 11 | MP1A | Z | 197.178 | 42 |
| 12 | MP1A | Mx | .191 | 42 |
| 13 | MP4A | X | 0 | 6 |
| 14 | MP4A | Z | 197.178 | 6 |
| 15 | MP4A | Mx | -.191 | 6 |
| 16 | MP4A | X | 0 | 42 |
| 17 | MP4A | Z | 197.178 | 42 |
| 18 | MP4A | Mx | -.191 | 42 |
| 19 | MP4A | X | 0 | 6 |
| 20 | MP4A | Z | 197.178 | 6 |
| 21 | MP4A | Mx | .107 | 6 |
| 22 | MP4A | X | 0 | 42 |
| 23 | MP4A | Z | 197.178 | 42 |
| 24 | MP4A | Mx | .107 | 42 |
| 25 | MP3A | X | 0 | 12 |
| 26 | MP3A | Z | 80.62 | 12 |
| 27 | MP3A | Mx | 0 | 12 |
| 28 | MP3A | X | 0 | 36 |
| 29 | MP3A | Z | 80.62 | 36 |
| 30 | MP3A | Mx | 0 | 36 |
| 31 | MP1A | X | 0 | 24 |
| 32 | MP1A | Z | 60.354 | 24 |
| 33 | MP1A | Mx | -.013 | 24 |
| 34 | MP2A | X | 0 | 42 |
| 35 | MP2A | Z | 64.153 | 42 |
| 36 | MP2A | Mx | 0 | 42 |
| 37 | MP2A | X | 0 | 6 |
| 38 | MP2A | Z | 26.244 | 6 |
| 39 | MP2A | Mx | 0 | 6 |
| 40 | MP2A | X | 0 | 42 |
| 41 | MP2A | Z | 26.244 | 42 |
| 42 | MP2A | Mx | 0 | 42 |
| 43 | OVP | X | 0 | 1.8 |
| 44 | OVP | Z | 58.836 | 1.8 |
| 45 | OVP | Mx | 0 | 1.8 |
| 46 | MP3A | X | 0 | 24 |
| 47 | MP3A | Z | 64.153 | 24 |
| 48 | MP3A | Mx | 0 | 24 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|---|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | -77.666 | 6 |
| 2 | MP1A | Z | 134.521 | 6 |
| 3 | MP1A | Mx | -.011 | 6 |
| 4 | MP1A | X | -77.666 | 42 |
| 5 | MP1A | Z | 134.521 | 42 |
| 6 | MP1A | Mx | -.011 | 42 |
| 7 | MP1A | X | -77.666 | 6 |
| 8 | MP1A | Z | 134.521 | 6 |



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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|----|--------------|-----------|--------------------|----------------|
| 9 | MP1A | Mx | .138 | 6 |
| 10 | MP1A | X | -77.666 | 42 |
| 11 | MP1A | Z | 134.521 | 42 |
| 12 | MP1A | Mx | .138 | 42 |
| 13 | MP4A | X | -105.856 | 6 |
| 14 | MP4A | Z | 183.348 | 6 |
| 15 | MP4A | Mx | -.167 | 6 |
| 16 | MP4A | X | -105.856 | 42 |
| 17 | MP4A | Z | 183.348 | 42 |
| 18 | MP4A | Mx | -.167 | 42 |
| 19 | MP4A | X | -105.856 | 6 |
| 20 | MP4A | Z | 183.348 | 6 |
| 21 | MP4A | Mx | .185 | 6 |
| 22 | MP4A | X | -105.856 | 42 |
| 23 | MP4A | Z | 183.348 | 42 |
| 24 | MP4A | Mx | .185 | 42 |
| 25 | MP3A | X | -34.178 | 12 |
| 26 | MP3A | Z | 59.198 | 12 |
| 27 | MP3A | Mx | .017 | 12 |
| 28 | MP3A | X | -34.178 | 36 |
| 29 | MP3A | Z | 59.198 | 36 |
| 30 | MP3A | Mx | .017 | 36 |
| 31 | MP1A | X | -24.94 | 24 |
| 32 | MP1A | Z | 43.198 | 24 |
| 33 | MP1A | Mx | -.02 | 24 |
| 34 | MP2A | X | -28.935 | 42 |
| 35 | MP2A | Z | 50.118 | 42 |
| 36 | MP2A | Mx | -.014 | 42 |
| 37 | MP2A | X | -11.46 | 6 |
| 38 | MP2A | Z | 19.849 | 6 |
| 39 | MP2A | Mx | .006 | 6 |
| 40 | MP2A | X | -11.46 | 42 |
| 41 | MP2A | Z | 19.849 | 42 |
| 42 | MP2A | Mx | .006 | 42 |
| 43 | OVP | X | -24.1 | 1.8 |
| 44 | OVP | Z | 41.743 | 1.8 |
| 45 | OVP | Mx | 0 | 1.8 |
| 46 | MP3A | X | -28.399 | 24 |
| 47 | MP3A | Z | 49.189 | 24 |
| 48 | MP3A | Mx | -.014 | 24 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|---|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | -110.867 | 6 |
| 2 | MP1A | Z | 64.009 | 6 |
| 3 | MP1A | Mx | .054 | 6 |
| 4 | MP1A | X | -110.867 | 42 |
| 5 | MP1A | Z | 64.009 | 42 |
| 6 | MP1A | Mx | .054 | 42 |
| 7 | MP1A | X | -110.867 | 6 |
| 8 | MP1A | Z | 64.009 | 6 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|----|--------------|-----------|--------------------|----------------|
| 9 | MP1A | Mx | .073 | 6 |
| 10 | MP1A | X | -110.867 | 42 |
| 11 | MP1A | Z | 64.009 | 42 |
| 12 | MP1A | Mx | .073 | 42 |
| 13 | MP4A | X | -159.693 | 6 |
| 14 | MP4A | Z | 92.199 | 6 |
| 15 | MP4A | Mx | -.073 | 6 |
| 16 | MP4A | X | -159.693 | 42 |
| 17 | MP4A | Z | 92.199 | 42 |
| 18 | MP4A | Mx | -.073 | 42 |
| 19 | MP4A | X | -159.693 | 6 |
| 20 | MP4A | Z | 92.199 | 6 |
| 21 | MP4A | Mx | .179 | 6 |
| 22 | MP4A | X | -159.693 | 42 |
| 23 | MP4A | Z | 92.199 | 42 |
| 24 | MP4A | Mx | .179 | 42 |
| 25 | MP3A | X | -37.955 | 12 |
| 26 | MP3A | Z | 21.914 | 12 |
| 27 | MP3A | Mx | .019 | 12 |
| 28 | MP3A | X | -37.955 | 36 |
| 29 | MP3A | Z | 21.914 | 36 |
| 30 | MP3A | Mx | .019 | 36 |
| 31 | MP1A | X | -37.278 | 24 |
| 32 | MP1A | Z | 21.522 | 24 |
| 33 | MP1A | Mx | -.021 | 24 |
| 34 | MP2A | X | -39.236 | 42 |
| 35 | MP2A | Z | 22.653 | 42 |
| 36 | MP2A | Mx | -.02 | 42 |
| 37 | MP2A | X | -14.091 | 6 |
| 38 | MP2A | Z | 8.135 | 6 |
| 39 | MP2A | Mx | .007 | 6 |
| 40 | MP2A | X | -14.091 | 42 |
| 41 | MP2A | Z | 8.135 | 42 |
| 42 | MP2A | Mx | .007 | 42 |
| 43 | OVP | X | -37.138 | 1.8 |
| 44 | OVP | Z | 21.442 | 1.8 |
| 45 | OVP | Mx | 0 | 1.8 |
| 46 | MP3A | X | -36.451 | 24 |
| 47 | MP3A | Z | 21.045 | 24 |
| 48 | MP3A | Mx | -.018 | 24 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|---|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | -142.551 | 6 |
| 2 | MP1A | Z | 0 | 6 |
| 3 | MP1A | Mx | .115 | 6 |
| 4 | MP1A | X | -142.551 | 42 |
| 5 | MP1A | Z | 0 | 42 |
| 6 | MP1A | Mx | .115 | 42 |
| 7 | MP1A | X | -142.551 | 6 |
| 8 | MP1A | Z | 0 | 6 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|----|--------------|-----------|--------------------|----------------|
| 9 | MP1A | Mx | -.073 | 6 |
| 10 | MP1A | X | -159.693 | 42 |
| 11 | MP1A | Z | -92.199 | 42 |
| 12 | MP1A | Mx | -.073 | 42 |
| 13 | MP4A | X | -110.867 | 6 |
| 14 | MP4A | Z | -64.009 | 6 |
| 15 | MP4A | Mx | .073 | 6 |
| 16 | MP4A | X | -110.867 | 42 |
| 17 | MP4A | Z | -64.009 | 42 |
| 18 | MP4A | Mx | .073 | 42 |
| 19 | MP4A | X | -110.867 | 6 |
| 20 | MP4A | Z | -64.009 | 6 |
| 21 | MP4A | Mx | .054 | 6 |
| 22 | MP4A | X | -110.867 | 42 |
| 23 | MP4A | Z | -64.009 | 42 |
| 24 | MP4A | Mx | .054 | 42 |
| 25 | MP3A | X | -37.955 | 12 |
| 26 | MP3A | Z | -21.914 | 12 |
| 27 | MP3A | Mx | .019 | 12 |
| 28 | MP3A | X | -37.955 | 36 |
| 29 | MP3A | Z | -21.914 | 36 |
| 30 | MP3A | Mx | .019 | 36 |
| 31 | MP1A | X | -49.498 | 24 |
| 32 | MP1A | Z | -28.578 | 24 |
| 33 | MP1A | Mx | -.016 | 24 |
| 34 | MP2A | X | -39.236 | 42 |
| 35 | MP2A | Z | -22.653 | 42 |
| 36 | MP2A | Mx | -.02 | 42 |
| 37 | MP2A | X | -14.091 | 6 |
| 38 | MP2A | Z | -8.135 | 6 |
| 39 | MP2A | Mx | .007 | 6 |
| 40 | MP2A | X | -14.091 | 42 |
| 41 | MP2A | Z | -8.135 | 42 |
| 42 | MP2A | Mx | .007 | 42 |
| 43 | OVP | X | -50.953 | 1.8 |
| 44 | OVP | Z | -29.418 | 1.8 |
| 45 | OVP | Mx | 0 | 1.8 |
| 46 | MP3A | X | -36.451 | 24 |
| 47 | MP3A | Z | -21.045 | 24 |
| 48 | MP3A | Mx | -.018 | 24 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|---|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | -105.856 | 6 |
| 2 | MP1A | Z | -183.348 | 6 |
| 3 | MP1A | Mx | .185 | 6 |
| 4 | MP1A | X | -105.856 | 42 |
| 5 | MP1A | Z | -183.348 | 42 |
| 6 | MP1A | Mx | .185 | 42 |
| 7 | MP1A | X | -105.856 | 6 |
| 8 | MP1A | Z | -183.348 | 6 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|----|--------------|-----------|--------------------|----------------|
| 9 | MP1A | Mx | -.027 | 6 |
| 10 | MP1A | X | 15.289 | 42 |
| 11 | MP1A | Z | -26.481 | 42 |
| 12 | MP1A | Mx | -.027 | 42 |
| 13 | MP4A | X | 20.51 | 6 |
| 14 | MP4A | Z | -35.524 | 6 |
| 15 | MP4A | Mx | .032 | 6 |
| 16 | MP4A | X | 20.51 | 42 |
| 17 | MP4A | Z | -35.524 | 42 |
| 18 | MP4A | Mx | .032 | 42 |
| 19 | MP4A | X | 20.51 | 6 |
| 20 | MP4A | Z | -35.524 | 6 |
| 21 | MP4A | Mx | -.036 | 6 |
| 22 | MP4A | X | 20.51 | 42 |
| 23 | MP4A | Z | -35.524 | 42 |
| 24 | MP4A | Mx | -.036 | 42 |
| 25 | MP3A | X | 7.016 | 12 |
| 26 | MP3A | Z | -12.151 | 12 |
| 27 | MP3A | Mx | -.004 | 12 |
| 28 | MP3A | X | 7.016 | 36 |
| 29 | MP3A | Z | -12.151 | 36 |
| 30 | MP3A | Mx | -.004 | 36 |
| 31 | MP1A | X | 5.499 | 24 |
| 32 | MP1A | Z | -9.524 | 24 |
| 33 | MP1A | Mx | .005 | 24 |
| 34 | MP2A | X | 6.288 | 42 |
| 35 | MP2A | Z | -10.892 | 42 |
| 36 | MP2A | Mx | .003 | 42 |
| 37 | MP2A | X | 2.562 | 6 |
| 38 | MP2A | Z | -4.438 | 6 |
| 39 | MP2A | Mx | -.001 | 6 |
| 40 | MP2A | X | 2.562 | 42 |
| 41 | MP2A | Z | -4.438 | 42 |
| 42 | MP2A | Mx | -.001 | 42 |
| 43 | OVP | X | 5.333 | 1.8 |
| 44 | OVP | Z | -9.237 | 1.8 |
| 45 | OVP | Mx | 0 | 1.8 |
| 46 | MP3A | X | 6.183 | 24 |
| 47 | MP3A | Z | -10.71 | 24 |
| 48 | MP3A | Mx | .003 | 24 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|---|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | 22.1 | 6 |
| 2 | MP1A | Z | -12.759 | 6 |
| 3 | MP1A | Mx | -.011 | 6 |
| 4 | MP1A | X | 22.1 | 42 |
| 5 | MP1A | Z | -12.759 | 42 |
| 6 | MP1A | Mx | -.011 | 42 |
| 7 | MP1A | X | 22.1 | 6 |
| 8 | MP1A | Z | -12.759 | 6 |



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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|----|--------------|-----------|--------------------|----------------|
| 9 | MP1A | Mx | -.015 | 6 |
| 10 | MP1A | X | 22.1 | 42 |
| 11 | MP1A | Z | -12.759 | 42 |
| 12 | MP1A | Mx | -.015 | 42 |
| 13 | MP4A | X | 31.143 | 6 |
| 14 | MP4A | Z | -17.98 | 6 |
| 15 | MP4A | Mx | .014 | 6 |
| 16 | MP4A | X | 31.143 | 42 |
| 17 | MP4A | Z | -17.98 | 42 |
| 18 | MP4A | Mx | .014 | 42 |
| 19 | MP4A | X | 31.143 | 6 |
| 20 | MP4A | Z | -17.98 | 6 |
| 21 | MP4A | Mx | -.035 | 6 |
| 22 | MP4A | X | 31.143 | 42 |
| 23 | MP4A | Z | -17.98 | 42 |
| 24 | MP4A | Mx | -.035 | 42 |
| 25 | MP3A | X | 8.084 | 12 |
| 26 | MP3A | Z | -4.667 | 12 |
| 27 | MP3A | Mx | -.004 | 12 |
| 28 | MP3A | X | 8.084 | 36 |
| 29 | MP3A | Z | -4.667 | 36 |
| 30 | MP3A | Mx | -.004 | 36 |
| 31 | MP1A | X | 8.355 | 24 |
| 32 | MP1A | Z | -4.824 | 24 |
| 33 | MP1A | Mx | .005 | 24 |
| 34 | MP2A | X | 8.746 | 42 |
| 35 | MP2A | Z | -5.049 | 42 |
| 36 | MP2A | Mx | .004 | 42 |
| 37 | MP2A | X | 3.286 | 6 |
| 38 | MP2A | Z | -1.897 | 6 |
| 39 | MP2A | Mx | -.002 | 6 |
| 40 | MP2A | X | 3.286 | 42 |
| 41 | MP2A | Z | -1.897 | 42 |
| 42 | MP2A | Mx | -.002 | 42 |
| 43 | OVP | X | 8.327 | 1.8 |
| 44 | OVP | Z | -4.808 | 1.8 |
| 45 | OVP | Mx | 0 | 1.8 |
| 46 | MP3A | X | 8.2 | 24 |
| 47 | MP3A | Z | -4.734 | 24 |
| 48 | MP3A | Mx | .004 | 24 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|---|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | 28.21 | 6 |
| 2 | MP1A | Z | 0 | 6 |
| 3 | MP1A | Mx | -.023 | 6 |
| 4 | MP1A | X | 28.21 | 42 |
| 5 | MP1A | Z | 0 | 42 |
| 6 | MP1A | Mx | -.023 | 42 |
| 7 | MP1A | X | 28.21 | 6 |
| 8 | MP1A | Z | 0 | 6 |



Company : Maser Consulting
 Designer :
 Job Number : Project No. 10115278
 Model Name : 469153-VZW_MT_LOT_SectorA_H

Nov 15, 2021
 4:59 PM
 Checked By: _____

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|----|--------------|-----------|--------------------|----------------|
| 9 | MP1A | Mx | -.003 | 6 |
| 10 | MP1A | X | 28.21 | 42 |
| 11 | MP1A | Z | 0 | 42 |
| 12 | MP1A | Mx | -.003 | 42 |
| 13 | MP4A | X | 28.21 | 6 |
| 14 | MP4A | Z | 0 | 6 |
| 15 | MP4A | Mx | -.003 | 6 |
| 16 | MP4A | X | 28.21 | 42 |
| 17 | MP4A | Z | 0 | 42 |
| 18 | MP4A | Mx | -.003 | 42 |
| 19 | MP4A | X | 28.21 | 6 |
| 20 | MP4A | Z | 0 | 6 |
| 21 | MP4A | Mx | -.023 | 6 |
| 22 | MP4A | X | 28.21 | 42 |
| 23 | MP4A | Z | 0 | 42 |
| 24 | MP4A | Mx | -.023 | 42 |
| 25 | MP3A | X | 6.986 | 12 |
| 26 | MP3A | Z | 0 | 12 |
| 27 | MP3A | Mx | -.003 | 12 |
| 28 | MP3A | X | 6.986 | 36 |
| 29 | MP3A | Z | 0 | 36 |
| 30 | MP3A | Mx | -.003 | 36 |
| 31 | MP1A | X | 10.366 | 24 |
| 32 | MP1A | Z | 0 | 24 |
| 33 | MP1A | Mx | .005 | 24 |
| 34 | MP2A | X | 8.86 | 42 |
| 35 | MP2A | Z | 0 | 42 |
| 36 | MP2A | Mx | .004 | 42 |
| 37 | MP2A | X | 3.129 | 6 |
| 38 | MP2A | Z | 0 | 6 |
| 39 | MP2A | Mx | -.002 | 6 |
| 40 | MP2A | X | 3.129 | 42 |
| 41 | MP2A | Z | 0 | 42 |
| 42 | MP2A | Mx | -.002 | 42 |
| 43 | OVP | X | 10.666 | 1.8 |
| 44 | OVP | Z | 0 | 1.8 |
| 45 | OVP | Mx | 0 | 1.8 |
| 46 | MP3A | X | 8.02 | 24 |
| 47 | MP3A | Z | 0 | 24 |
| 48 | MP3A | Mx | .004 | 24 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|---|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | 31.143 | 6 |
| 2 | MP1A | Z | 17.98 | 6 |
| 3 | MP1A | Mx | -.035 | 6 |
| 4 | MP1A | X | 31.143 | 42 |
| 5 | MP1A | Z | 17.98 | 42 |
| 6 | MP1A | Mx | -.035 | 42 |
| 7 | MP1A | X | 31.143 | 6 |
| 8 | MP1A | Z | 17.98 | 6 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in, %] |
|----|--------------|-----------|--------------------|-----------------|
| 9 | MP1A | Mx | .032 | 6 |
| 10 | MP1A | X | 20.51 | 42 |
| 11 | MP1A | Z | 35.524 | 42 |
| 12 | MP1A | Mx | .032 | 42 |
| 13 | MP4A | X | 15.289 | 6 |
| 14 | MP4A | Z | 26.481 | 6 |
| 15 | MP4A | Mx | -.027 | 6 |
| 16 | MP4A | X | 15.289 | 42 |
| 17 | MP4A | Z | 26.481 | 42 |
| 18 | MP4A | Mx | -.027 | 42 |
| 19 | MP4A | X | 15.289 | 6 |
| 20 | MP4A | Z | 26.481 | 6 |
| 21 | MP4A | Mx | .002 | 6 |
| 22 | MP4A | X | 15.289 | 42 |
| 23 | MP4A | Z | 26.481 | 42 |
| 24 | MP4A | Mx | .002 | 42 |
| 25 | MP3A | X | 7.016 | 12 |
| 26 | MP3A | Z | 12.151 | 12 |
| 27 | MP3A | Mx | -.004 | 12 |
| 28 | MP3A | X | 7.016 | 36 |
| 29 | MP3A | Z | 12.151 | 36 |
| 30 | MP3A | Mx | -.004 | 36 |
| 31 | MP1A | X | 6.892 | 24 |
| 32 | MP1A | Z | 11.937 | 24 |
| 33 | MP1A | Mx | .000601 | 24 |
| 34 | MP2A | X | 6.288 | 42 |
| 35 | MP2A | Z | 10.892 | 42 |
| 36 | MP2A | Mx | .003 | 42 |
| 37 | MP2A | X | 2.562 | 6 |
| 38 | MP2A | Z | 4.438 | 6 |
| 39 | MP2A | Mx | -.001 | 6 |
| 40 | MP2A | X | 2.562 | 42 |
| 41 | MP2A | Z | 4.438 | 42 |
| 42 | MP2A | Mx | -.001 | 42 |
| 43 | OVP | X | 6.908 | 1.8 |
| 44 | OVP | Z | 11.965 | 1.8 |
| 45 | OVP | Mx | 0 | 1.8 |
| 46 | MP3A | X | 6.183 | 24 |
| 47 | MP3A | Z | 10.71 | 24 |
| 48 | MP3A | Mx | .003 | 24 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in, %] |
|---|--------------|-----------|--------------------|-----------------|
| 1 | MP1A | X | 0 | 6 |
| 2 | MP1A | Z | 38.328 | 6 |
| 3 | MP1A | Mx | -.021 | 6 |
| 4 | MP1A | X | 0 | 42 |
| 5 | MP1A | Z | 38.328 | 42 |
| 6 | MP1A | Mx | -.021 | 42 |
| 7 | MP1A | X | 0 | 6 |
| 8 | MP1A | Z | 38.328 | 6 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|----|--------------|-----------|--------------------|----------------|
| 9 | MP1A | Mx | .037 | 6 |
| 10 | MP1A | X | 0 | 42 |
| 11 | MP1A | Z | 38.328 | 42 |
| 12 | MP1A | Mx | .037 | 42 |
| 13 | MP4A | X | 0 | 6 |
| 14 | MP4A | Z | 38.328 | 6 |
| 15 | MP4A | Mx | -.037 | 6 |
| 16 | MP4A | X | 0 | 42 |
| 17 | MP4A | Z | 38.328 | 42 |
| 18 | MP4A | Mx | -.037 | 42 |
| 19 | MP4A | X | 0 | 6 |
| 20 | MP4A | Z | 38.328 | 6 |
| 21 | MP4A | Mx | .021 | 6 |
| 22 | MP4A | X | 0 | 42 |
| 23 | MP4A | Z | 38.328 | 42 |
| 24 | MP4A | Mx | .021 | 42 |
| 25 | MP3A | X | 0 | 12 |
| 26 | MP3A | Z | 16.38 | 12 |
| 27 | MP3A | Mx | 0 | 12 |
| 28 | MP3A | X | 0 | 36 |
| 29 | MP3A | Z | 16.38 | 36 |
| 30 | MP3A | Mx | 0 | 36 |
| 31 | MP1A | X | 0 | 24 |
| 32 | MP1A | Z | 13.066 | 24 |
| 33 | MP1A | Mx | -.003 | 24 |
| 34 | MP2A | X | 0 | 42 |
| 35 | MP2A | Z | 13.816 | 42 |
| 36 | MP2A | Mx | 0 | 42 |
| 37 | MP2A | X | 0 | 6 |
| 38 | MP2A | Z | 5.789 | 6 |
| 39 | MP2A | Mx | 0 | 6 |
| 40 | MP2A | X | 0 | 42 |
| 41 | MP2A | Z | 5.789 | 42 |
| 42 | MP2A | Mx | 0 | 42 |
| 43 | OVP | X | 0 | 1.8 |
| 44 | OVP | Z | 12.766 | 1.8 |
| 45 | OVP | Mx | 0 | 1.8 |
| 46 | MP3A | X | 0 | 24 |
| 47 | MP3A | Z | 13.816 | 24 |
| 48 | MP3A | Mx | 0 | 24 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|---|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | -15.289 | 6 |
| 2 | MP1A | Z | 26.481 | 6 |
| 3 | MP1A | Mx | -.002 | 6 |
| 4 | MP1A | X | -15.289 | 42 |
| 5 | MP1A | Z | 26.481 | 42 |
| 6 | MP1A | Mx | -.002 | 42 |
| 7 | MP1A | X | -15.289 | 6 |
| 8 | MP1A | Z | 26.481 | 6 |



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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|----|--------------|-----------|--------------------|----------------|
| 9 | MP1A | Mx | .027 | 6 |
| 10 | MP1A | X | -15.289 | 42 |
| 11 | MP1A | Z | 26.481 | 42 |
| 12 | MP1A | Mx | .027 | 42 |
| 13 | MP4A | X | -20.51 | 6 |
| 14 | MP4A | Z | 35.524 | 6 |
| 15 | MP4A | Mx | -.032 | 6 |
| 16 | MP4A | X | -20.51 | 42 |
| 17 | MP4A | Z | 35.524 | 42 |
| 18 | MP4A | Mx | -.032 | 42 |
| 19 | MP4A | X | -20.51 | 6 |
| 20 | MP4A | Z | 35.524 | 6 |
| 21 | MP4A | Mx | .036 | 6 |
| 22 | MP4A | X | -20.51 | 42 |
| 23 | MP4A | Z | 35.524 | 42 |
| 24 | MP4A | Mx | .036 | 42 |
| 25 | MP3A | X | -7.016 | 12 |
| 26 | MP3A | Z | 12.151 | 12 |
| 27 | MP3A | Mx | .004 | 12 |
| 28 | MP3A | X | -7.016 | 36 |
| 29 | MP3A | Z | 12.151 | 36 |
| 30 | MP3A | Mx | .004 | 36 |
| 31 | MP1A | X | -5.499 | 24 |
| 32 | MP1A | Z | 9.524 | 24 |
| 33 | MP1A | Mx | -.005 | 24 |
| 34 | MP2A | X | -6.288 | 42 |
| 35 | MP2A | Z | 10.892 | 42 |
| 36 | MP2A | Mx | -.003 | 42 |
| 37 | MP2A | X | -2.562 | 6 |
| 38 | MP2A | Z | 4.438 | 6 |
| 39 | MP2A | Mx | .001 | 6 |
| 40 | MP2A | X | -2.562 | 42 |
| 41 | MP2A | Z | 4.438 | 42 |
| 42 | MP2A | Mx | .001 | 42 |
| 43 | OVP | X | -5.333 | 1.8 |
| 44 | OVP | Z | 9.237 | 1.8 |
| 45 | OVP | Mx | 0 | 1.8 |
| 46 | MP3A | X | -6.183 | 24 |
| 47 | MP3A | Z | 10.71 | 24 |
| 48 | MP3A | Mx | -.003 | 24 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|---|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | -22.1 | 6 |
| 2 | MP1A | Z | 12.759 | 6 |
| 3 | MP1A | Mx | .011 | 6 |
| 4 | MP1A | X | -22.1 | 42 |
| 5 | MP1A | Z | 12.759 | 42 |
| 6 | MP1A | Mx | .011 | 42 |
| 7 | MP1A | X | -22.1 | 6 |
| 8 | MP1A | Z | 12.759 | 6 |



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

| | Member Label | Direction | Magnitude [lb,k-ft] | Location [in,%] |
|----|--------------|-----------|---------------------|-----------------|
| 9 | MP1A | Mx | -.005 | 6 |
| 10 | MP1A | X | 7.166 | 42 |
| 11 | MP1A | Z | -4.137 | 42 |
| 12 | MP1A | Mx | -.005 | 42 |
| 13 | MP4A | X | 10.322 | 6 |
| 14 | MP4A | Z | -5.959 | 6 |
| 15 | MP4A | Mx | .005 | 6 |
| 16 | MP4A | X | 10.322 | 42 |
| 17 | MP4A | Z | -5.959 | 42 |
| 18 | MP4A | Mx | .005 | 42 |
| 19 | MP4A | X | 10.322 | 6 |
| 20 | MP4A | Z | -5.959 | 6 |
| 21 | MP4A | Mx | -.012 | 6 |
| 22 | MP4A | X | 10.322 | 42 |
| 23 | MP4A | Z | -5.959 | 42 |
| 24 | MP4A | Mx | -.012 | 42 |
| 25 | MP3A | X | 2.453 | 12 |
| 26 | MP3A | Z | -1.416 | 12 |
| 27 | MP3A | Mx | -.001 | 12 |
| 28 | MP3A | X | 2.453 | 36 |
| 29 | MP3A | Z | -1.416 | 36 |
| 30 | MP3A | Mx | -.001 | 36 |
| 31 | MP1A | X | 2.41 | 24 |
| 32 | MP1A | Z | -1.391 | 24 |
| 33 | MP1A | Mx | .001 | 24 |
| 34 | MP2A | X | 2.536 | 42 |
| 35 | MP2A | Z | -1.464 | 42 |
| 36 | MP2A | Mx | .001 | 42 |
| 37 | MP2A | X | .911 | 6 |
| 38 | MP2A | Z | -.526 | 6 |
| 39 | MP2A | Mx | -.000456 | 6 |
| 40 | MP2A | X | .911 | 42 |
| 41 | MP2A | Z | -.526 | 42 |
| 42 | MP2A | Mx | -.000456 | 42 |
| 43 | OVP | X | 2.4 | 1.8 |
| 44 | OVP | Z | -1.386 | 1.8 |
| 45 | OVP | Mx | 0 | 1.8 |
| 46 | MP3A | X | 2.356 | 24 |
| 47 | MP3A | Z | -1.36 | 24 |
| 48 | MP3A | Mx | .001 | 24 |

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

| | Member Label | Direction | Magnitude [lb,k-ft] | Location [in,%] |
|---|--------------|-----------|---------------------|-----------------|
| 1 | MP1A | X | 9.214 | 6 |
| 2 | MP1A | Z | 0 | 6 |
| 3 | MP1A | Mx | -.007 | 6 |
| 4 | MP1A | X | 9.214 | 42 |
| 5 | MP1A | Z | 0 | 42 |
| 6 | MP1A | Mx | -.007 | 42 |
| 7 | MP1A | X | 9.214 | 6 |
| 8 | MP1A | Z | 0 | 6 |



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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in, %] |
|----|--------------|-----------|--------------------|-----------------|
| 9 | MP1A | Mx | -.00093 | 6 |
| 10 | MP1A | X | 9.214 | 42 |
| 11 | MP1A | Z | 0 | 42 |
| 12 | MP1A | Mx | -.00093 | 42 |
| 13 | MP4A | X | 9.214 | 6 |
| 14 | MP4A | Z | 0 | 6 |
| 15 | MP4A | Mx | -.00093 | 6 |
| 16 | MP4A | X | 9.214 | 42 |
| 17 | MP4A | Z | 0 | 42 |
| 18 | MP4A | Mx | -.00093 | 42 |
| 19 | MP4A | X | 9.214 | 6 |
| 20 | MP4A | Z | 0 | 6 |
| 21 | MP4A | Mx | -.007 | 6 |
| 22 | MP4A | X | 9.214 | 42 |
| 23 | MP4A | Z | 0 | 42 |
| 24 | MP4A | Mx | -.007 | 42 |
| 25 | MP3A | X | 2.04 | 12 |
| 26 | MP3A | Z | 0 | 12 |
| 27 | MP3A | Mx | -.001 | 12 |
| 28 | MP3A | X | 2.04 | 36 |
| 29 | MP3A | Z | 0 | 36 |
| 30 | MP3A | Mx | -.001 | 36 |
| 31 | MP1A | X | 3.017 | 24 |
| 32 | MP1A | Z | 0 | 24 |
| 33 | MP1A | Mx | .001 | 24 |
| 34 | MP2A | X | 2.522 | 42 |
| 35 | MP2A | Z | 0 | 42 |
| 36 | MP2A | Mx | .001 | 42 |
| 37 | MP2A | X | .837 | 6 |
| 38 | MP2A | Z | 0 | 6 |
| 39 | MP2A | Mx | -.000419 | 6 |
| 40 | MP2A | X | .837 | 42 |
| 41 | MP2A | Z | 0 | 42 |
| 42 | MP2A | Mx | -.000419 | 42 |
| 43 | OVP | X | 3.116 | 1.8 |
| 44 | OVP | Z | 0 | 1.8 |
| 45 | OVP | Mx | 0 | 1.8 |
| 46 | MP3A | X | 2.245 | 24 |
| 47 | MP3A | Z | 0 | 24 |
| 48 | MP3A | Mx | .001 | 24 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in, %] |
|---|--------------|-----------|--------------------|-----------------|
| 1 | MP1A | X | 10.322 | 6 |
| 2 | MP1A | Z | 5.959 | 6 |
| 3 | MP1A | Mx | -.012 | 6 |
| 4 | MP1A | X | 10.322 | 42 |
| 5 | MP1A | Z | 5.959 | 42 |
| 6 | MP1A | Mx | -.012 | 42 |
| 7 | MP1A | X | 10.322 | 6 |
| 8 | MP1A | Z | 5.959 | 6 |



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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in, %] |
|----|--------------|-----------|--------------------|-----------------|
| 9 | MP1A | Mx | .005 | 6 |
| 10 | MP1A | X | 10.322 | 42 |
| 11 | MP1A | Z | 5.959 | 42 |
| 12 | MP1A | Mx | .005 | 42 |
| 13 | MP4A | X | 7.166 | 6 |
| 14 | MP4A | Z | 4.137 | 6 |
| 15 | MP4A | Mx | -.005 | 6 |
| 16 | MP4A | X | 7.166 | 42 |
| 17 | MP4A | Z | 4.137 | 42 |
| 18 | MP4A | Mx | -.005 | 42 |
| 19 | MP4A | X | 7.166 | 6 |
| 20 | MP4A | Z | 4.137 | 6 |
| 21 | MP4A | Mx | -.004 | 6 |
| 22 | MP4A | X | 7.166 | 42 |
| 23 | MP4A | Z | 4.137 | 42 |
| 24 | MP4A | Mx | -.004 | 42 |
| 25 | MP3A | X | 2.453 | 12 |
| 26 | MP3A | Z | 1.416 | 12 |
| 27 | MP3A | Mx | -.001 | 12 |
| 28 | MP3A | X | 2.453 | 36 |
| 29 | MP3A | Z | 1.416 | 36 |
| 30 | MP3A | Mx | -.001 | 36 |
| 31 | MP1A | X | 3.199 | 24 |
| 32 | MP1A | Z | 1.847 | 24 |
| 33 | MP1A | Mx | .001 | 24 |
| 34 | MP2A | X | 2.536 | 42 |
| 35 | MP2A | Z | 1.464 | 42 |
| 36 | MP2A | Mx | .001 | 42 |
| 37 | MP2A | X | .911 | 6 |
| 38 | MP2A | Z | .526 | 6 |
| 39 | MP2A | Mx | -.000456 | 6 |
| 40 | MP2A | X | .911 | 42 |
| 41 | MP2A | Z | .526 | 42 |
| 42 | MP2A | Mx | -.000456 | 42 |
| 43 | OVP | X | 3.293 | 1.8 |
| 44 | OVP | Z | 1.901 | 1.8 |
| 45 | OVP | Mx | 0 | 1.8 |
| 46 | MP3A | X | 2.356 | 24 |
| 47 | MP3A | Z | 1.36 | 24 |
| 48 | MP3A | Mx | .001 | 24 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in, %] |
|---|--------------|-----------|--------------------|-----------------|
| 1 | MP1A | X | 6.842 | 6 |
| 2 | MP1A | Z | 11.851 | 6 |
| 3 | MP1A | Mx | -.012 | 6 |
| 4 | MP1A | X | 6.842 | 42 |
| 5 | MP1A | Z | 11.851 | 42 |
| 6 | MP1A | Mx | -.012 | 42 |
| 7 | MP1A | X | 6.842 | 6 |
| 8 | MP1A | Z | 11.851 | 6 |



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

| | Member Label | Direction | Magnitude [lb,k-ft] | Location [in,%] |
|----|--------------|-----------|---------------------|-----------------|
| 9 | MP1A | Mx | .011 | 6 |
| 10 | MP1A | X | 6.842 | 42 |
| 11 | MP1A | Z | 11.851 | 42 |
| 12 | MP1A | Mx | .011 | 42 |
| 13 | MP4A | X | 5.02 | 6 |
| 14 | MP4A | Z | 8.695 | 6 |
| 15 | MP4A | Mx | -.009 | 6 |
| 16 | MP4A | X | 5.02 | 42 |
| 17 | MP4A | Z | 8.695 | 42 |
| 18 | MP4A | Mx | -.009 | 42 |
| 19 | MP4A | X | 5.02 | 6 |
| 20 | MP4A | Z | 8.695 | 6 |
| 21 | MP4A | Mx | .000687 | 6 |
| 22 | MP4A | X | 5.02 | 42 |
| 23 | MP4A | Z | 8.695 | 42 |
| 24 | MP4A | Mx | .000687 | 42 |
| 25 | MP3A | X | 2.209 | 12 |
| 26 | MP3A | Z | 3.826 | 12 |
| 27 | MP3A | Mx | -.001 | 12 |
| 28 | MP3A | X | 2.209 | 36 |
| 29 | MP3A | Z | 3.826 | 36 |
| 30 | MP3A | Mx | -.001 | 36 |
| 31 | MP1A | X | 2.068 | 24 |
| 32 | MP1A | Z | 3.582 | 24 |
| 33 | MP1A | Mx | .00018 | 24 |
| 34 | MP2A | X | 1.87 | 42 |
| 35 | MP2A | Z | 3.239 | 42 |
| 36 | MP2A | Mx | .000935 | 42 |
| 37 | MP2A | X | .741 | 6 |
| 38 | MP2A | Z | 1.283 | 6 |
| 39 | MP2A | Mx | -.00037 | 6 |
| 40 | MP2A | X | .741 | 42 |
| 41 | MP2A | Z | 1.283 | 42 |
| 42 | MP2A | Mx | -.00037 | 42 |
| 43 | OVP | X | 2.073 | 1.8 |
| 44 | OVP | Z | 3.591 | 1.8 |
| 45 | OVP | Mx | 0 | 1.8 |
| 46 | MP3A | X | 1.836 | 24 |
| 47 | MP3A | Z | 3.179 | 24 |
| 48 | MP3A | Mx | .000918 | 24 |

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

| | Member Label | Direction | Magnitude [lb,k-ft] | Location [in,%] |
|---|--------------|-----------|---------------------|-----------------|
| 1 | MP1A | X | 0 | 6 |
| 2 | MP1A | Z | 12.745 | 6 |
| 3 | MP1A | Mx | -.007 | 6 |
| 4 | MP1A | X | 0 | 42 |
| 5 | MP1A | Z | 12.745 | 42 |
| 6 | MP1A | Mx | -.007 | 42 |
| 7 | MP1A | X | 0 | 6 |
| 8 | MP1A | Z | 12.745 | 6 |



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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|----|--------------|-----------|--------------------|----------------|
| 9 | MP1A | Mx | .012 | 6 |
| 10 | MP1A | X | 0 | 42 |
| 11 | MP1A | Z | 12.745 | 42 |
| 12 | MP1A | Mx | .012 | 42 |
| 13 | MP4A | X | 0 | 6 |
| 14 | MP4A | Z | 12.745 | 6 |
| 15 | MP4A | Mx | -.012 | 6 |
| 16 | MP4A | X | 0 | 42 |
| 17 | MP4A | Z | 12.745 | 42 |
| 18 | MP4A | Mx | -.012 | 42 |
| 19 | MP4A | X | 0 | 6 |
| 20 | MP4A | Z | 12.745 | 6 |
| 21 | MP4A | Mx | .007 | 6 |
| 22 | MP4A | X | 0 | 42 |
| 23 | MP4A | Z | 12.745 | 42 |
| 24 | MP4A | Mx | .007 | 42 |
| 25 | MP3A | X | 0 | 12 |
| 26 | MP3A | Z | 5.211 | 12 |
| 27 | MP3A | Mx | 0 | 12 |
| 28 | MP3A | X | 0 | 36 |
| 29 | MP3A | Z | 5.211 | 36 |
| 30 | MP3A | Mx | 0 | 36 |
| 31 | MP1A | X | 0 | 24 |
| 32 | MP1A | Z | 3.901 | 24 |
| 33 | MP1A | Mx | -.000824 | 24 |
| 34 | MP2A | X | 0 | 42 |
| 35 | MP2A | Z | 4.147 | 42 |
| 36 | MP2A | Mx | 0 | 42 |
| 37 | MP2A | X | 0 | 6 |
| 38 | MP2A | Z | 1.696 | 6 |
| 39 | MP2A | Mx | 0 | 6 |
| 40 | MP2A | X | 0 | 42 |
| 41 | MP2A | Z | 1.696 | 42 |
| 42 | MP2A | Mx | 0 | 42 |
| 43 | OVP | X | 0 | 1.8 |
| 44 | OVP | Z | 3.803 | 1.8 |
| 45 | OVP | Mx | 0 | 1.8 |
| 46 | MP3A | X | 0 | 24 |
| 47 | MP3A | Z | 4.147 | 24 |
| 48 | MP3A | Mx | 0 | 24 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|---|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | -5.02 | 6 |
| 2 | MP1A | Z | 8.695 | 6 |
| 3 | MP1A | Mx | -.000687 | 6 |
| 4 | MP1A | X | -5.02 | 42 |
| 5 | MP1A | Z | 8.695 | 42 |
| 6 | MP1A | Mx | -.000687 | 42 |
| 7 | MP1A | X | -5.02 | 6 |
| 8 | MP1A | Z | 8.695 | 6 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|----|--------------|-----------|--------------------|----------------|
| 9 | MP1A | Mx | .009 | 6 |
| 10 | MP1A | X | -5.02 | 42 |
| 11 | MP1A | Z | 8.695 | 42 |
| 12 | MP1A | Mx | .009 | 42 |
| 13 | MP4A | X | -6.842 | 6 |
| 14 | MP4A | Z | 11.851 | 6 |
| 15 | MP4A | Mx | -.011 | 6 |
| 16 | MP4A | X | -6.842 | 42 |
| 17 | MP4A | Z | 11.851 | 42 |
| 18 | MP4A | Mx | -.011 | 42 |
| 19 | MP4A | X | -6.842 | 6 |
| 20 | MP4A | Z | 11.851 | 6 |
| 21 | MP4A | Mx | .012 | 6 |
| 22 | MP4A | X | -6.842 | 42 |
| 23 | MP4A | Z | 11.851 | 42 |
| 24 | MP4A | Mx | .012 | 42 |
| 25 | MP3A | X | -2.209 | 12 |
| 26 | MP3A | Z | 3.826 | 12 |
| 27 | MP3A | Mx | .001 | 12 |
| 28 | MP3A | X | -2.209 | 36 |
| 29 | MP3A | Z | 3.826 | 36 |
| 30 | MP3A | Mx | .001 | 36 |
| 31 | MP1A | X | -1.612 | 24 |
| 32 | MP1A | Z | 2.792 | 24 |
| 33 | MP1A | Mx | -.001 | 24 |
| 34 | MP2A | X | -1.87 | 42 |
| 35 | MP2A | Z | 3.239 | 42 |
| 36 | MP2A | Mx | -.000935 | 42 |
| 37 | MP2A | X | -.741 | 6 |
| 38 | MP2A | Z | 1.283 | 6 |
| 39 | MP2A | Mx | .00037 | 6 |
| 40 | MP2A | X | -.741 | 42 |
| 41 | MP2A | Z | 1.283 | 42 |
| 42 | MP2A | Mx | .00037 | 42 |
| 43 | OVP | X | -1.558 | 1.8 |
| 44 | OVP | Z | 2.698 | 1.8 |
| 45 | OVP | Mx | 0 | 1.8 |
| 46 | MP3A | X | -1.836 | 24 |
| 47 | MP3A | Z | 3.179 | 24 |
| 48 | MP3A | Mx | -.000918 | 24 |

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

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|---|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | -7.166 | 6 |
| 2 | MP1A | Z | 4.137 | 6 |
| 3 | MP1A | Mx | .004 | 6 |
| 4 | MP1A | X | -7.166 | 42 |
| 5 | MP1A | Z | 4.137 | 42 |
| 6 | MP1A | Mx | .004 | 42 |
| 7 | MP1A | X | -7.166 | 6 |
| 8 | MP1A | Z | 4.137 | 6 |



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

Table with 5 columns: Member Label, Direction, Magnitude [lb, k-ft], Location [in, %]. Rows 9-48 showing load data for members MP1A, MP4A, MP3A, MP2A, and OVP.

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

Table with 5 columns: Member Label, Direction, Magnitude [lb, k-ft], Location [in, %]. Rows 1-8 showing load data for members MP1A.



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

| | Member Label | Direction | Magnitude [lb,k-ft] | Location [in,%] |
|----|--------------|-----------|---------------------|-----------------|
| 9 | MP1A | Mx | -.005 | 6 |
| 10 | MP1A | X | -10.322 | 42 |
| 11 | MP1A | Z | -5.959 | 42 |
| 12 | MP1A | Mx | -.005 | 42 |
| 13 | MP4A | X | -7.166 | 6 |
| 14 | MP4A | Z | -4.137 | 6 |
| 15 | MP4A | Mx | .005 | 6 |
| 16 | MP4A | X | -7.166 | 42 |
| 17 | MP4A | Z | -4.137 | 42 |
| 18 | MP4A | Mx | .005 | 42 |
| 19 | MP4A | X | -7.166 | 6 |
| 20 | MP4A | Z | -4.137 | 6 |
| 21 | MP4A | Mx | .004 | 6 |
| 22 | MP4A | X | -7.166 | 42 |
| 23 | MP4A | Z | -4.137 | 42 |
| 24 | MP4A | Mx | .004 | 42 |
| 25 | MP3A | X | -2.453 | 12 |
| 26 | MP3A | Z | -1.416 | 12 |
| 27 | MP3A | Mx | .001 | 12 |
| 28 | MP3A | X | -2.453 | 36 |
| 29 | MP3A | Z | -1.416 | 36 |
| 30 | MP3A | Mx | .001 | 36 |
| 31 | MP1A | X | -3.199 | 24 |
| 32 | MP1A | Z | -1.847 | 24 |
| 33 | MP1A | Mx | -.001 | 24 |
| 34 | MP2A | X | -2.536 | 42 |
| 35 | MP2A | Z | -1.464 | 42 |
| 36 | MP2A | Mx | -.001 | 42 |
| 37 | MP2A | X | -.911 | 6 |
| 38 | MP2A | Z | -.526 | 6 |
| 39 | MP2A | Mx | .000456 | 6 |
| 40 | MP2A | X | -.911 | 42 |
| 41 | MP2A | Z | -.526 | 42 |
| 42 | MP2A | Mx | .000456 | 42 |
| 43 | OVP | X | -3.293 | 1.8 |
| 44 | OVP | Z | -1.901 | 1.8 |
| 45 | OVP | Mx | 0 | 1.8 |
| 46 | MP3A | X | -2.356 | 24 |
| 47 | MP3A | Z | -1.36 | 24 |
| 48 | MP3A | Mx | -.001 | 24 |

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

| | Member Label | Direction | Magnitude [lb,k-ft] | Location [in,%] |
|---|--------------|-----------|---------------------|-----------------|
| 1 | MP1A | X | -6.842 | 6 |
| 2 | MP1A | Z | -11.851 | 6 |
| 3 | MP1A | Mx | .012 | 6 |
| 4 | MP1A | X | -6.842 | 42 |
| 5 | MP1A | Z | -11.851 | 42 |
| 6 | MP1A | Mx | .012 | 42 |
| 7 | MP1A | X | -6.842 | 6 |
| 8 | MP1A | Z | -11.851 | 6 |



Member Point Loads (BLC 79 : Lv1) (Continued)

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|---|--------------|-----------|--------------------|----------------|
| 1 | M10 | Y | -250 | %50 |

Member Point Loads (BLC 80 : Lv2)

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|---|--------------|-----------|--------------------|----------------|
| 1 | M10 | Y | -250 | 0 |

Member Point Loads (BLC 81 : Antenna Ev)

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|----|--------------|-----------|--------------------|----------------|
| 1 | MP1A | Y | -2.116 | 6 |
| 2 | MP1A | My | -.002 | 6 |
| 3 | MP1A | Mz | -.001 | 6 |
| 4 | MP1A | Y | -2.116 | 42 |
| 5 | MP1A | My | -.002 | 42 |
| 6 | MP1A | Mz | -.001 | 42 |
| 7 | MP1A | Y | -2.116 | 6 |
| 8 | MP1A | My | -.000214 | 6 |
| 9 | MP1A | Mz | .002 | 6 |
| 10 | MP1A | Y | -2.116 | 42 |
| 11 | MP1A | My | -.000214 | 42 |
| 12 | MP1A | Mz | .002 | 42 |
| 13 | MP4A | Y | -2.116 | 6 |
| 14 | MP4A | My | -.000214 | 6 |
| 15 | MP4A | Mz | -.002 | 6 |
| 16 | MP4A | Y | -2.116 | 42 |
| 17 | MP4A | My | -.000214 | 42 |
| 18 | MP4A | Mz | -.002 | 42 |
| 19 | MP4A | Y | -2.116 | 6 |
| 20 | MP4A | My | -.002 | 6 |
| 21 | MP4A | Mz | .001 | 6 |
| 22 | MP4A | Y | -2.116 | 42 |
| 23 | MP4A | My | -.002 | 42 |
| 24 | MP4A | Mz | .001 | 42 |
| 25 | MP3A | Y | -2.118 | 12 |
| 26 | MP3A | My | -.001 | 12 |
| 27 | MP3A | Mz | 0 | 12 |
| 28 | MP3A | Y | -2.118 | 36 |
| 29 | MP3A | My | -.001 | 36 |
| 30 | MP3A | Mz | 0 | 36 |
| 31 | MP1A | Y | -3.633 | 24 |
| 32 | MP1A | My | .002 | 24 |
| 33 | MP1A | Mz | -.000768 | 24 |
| 34 | MP2A | Y | -3.419 | 42 |
| 35 | MP2A | My | .002 | 42 |
| 36 | MP2A | Mz | 0 | 42 |
| 37 | MP2A | Y | -.564 | 6 |
| 38 | MP2A | My | -.000282 | 6 |
| 39 | MP2A | Mz | 0 | 6 |
| 40 | MP2A | Y | -.564 | 42 |
| 41 | MP2A | My | -.000282 | 42 |
| 42 | MP2A | Mz | 0 | 42 |
| 43 | OVP | Y | -4.105 | 1.8 |

Member Point Loads (BLC 81 : Antenna Ev) (Continued)

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|----|--------------|-----------|--------------------|----------------|
| 44 | OVP | My | 0 | 1.8 |
| 45 | OVP | Mz | 0 | 1.8 |
| 46 | MP3A | Y | -3.419 | 24 |
| 47 | MP3A | My | .002 | 24 |
| 48 | MP3A | Mz | 0 | 24 |

Member Point Loads (BLC 82 : Antenna Eh (0 Deg))

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|----|--------------|-----------|--------------------|----------------|
| 1 | MP1A | Z | -5.29 | 6 |
| 2 | MP1A | Mx | .003 | 6 |
| 3 | MP1A | Z | -5.29 | 42 |
| 4 | MP1A | Mx | .003 | 42 |
| 5 | MP1A | Z | -5.29 | 6 |
| 6 | MP1A | Mx | -.005 | 6 |
| 7 | MP1A | Z | -5.29 | 42 |
| 8 | MP1A | Mx | -.005 | 42 |
| 9 | MP4A | Z | -5.29 | 6 |
| 10 | MP4A | Mx | .005 | 6 |
| 11 | MP4A | Z | -5.29 | 42 |
| 12 | MP4A | Mx | .005 | 42 |
| 13 | MP4A | Z | -5.29 | 6 |
| 14 | MP4A | Mx | -.003 | 6 |
| 15 | MP4A | Z | -5.29 | 42 |
| 16 | MP4A | Mx | -.003 | 42 |
| 17 | MP3A | Z | -5.296 | 12 |
| 18 | MP3A | Mx | 0 | 12 |
| 19 | MP3A | Z | -5.296 | 36 |
| 20 | MP3A | Mx | 0 | 36 |
| 21 | MP1A | Z | -9.084 | 24 |
| 22 | MP1A | Mx | .002 | 24 |
| 23 | MP2A | Z | -8.548 | 42 |
| 24 | MP2A | Mx | 0 | 42 |
| 25 | MP2A | Z | -1.411 | 6 |
| 26 | MP2A | Mx | 0 | 6 |
| 27 | MP2A | Z | -1.411 | 42 |
| 28 | MP2A | Mx | 0 | 42 |
| 29 | OVP | Z | -10.263 | 1.8 |
| 30 | OVP | Mx | 0 | 1.8 |
| 31 | MP3A | Z | -8.548 | 24 |
| 32 | MP3A | Mx | 0 | 24 |

Member Point Loads (BLC 83 : Antenna Eh (90 Deg))

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|---|--------------|-----------|--------------------|----------------|
| 1 | MP1A | X | 5.29 | 6 |
| 2 | MP1A | Mx | -.004 | 6 |
| 3 | MP1A | X | 5.29 | 42 |
| 4 | MP1A | Mx | -.004 | 42 |
| 5 | MP1A | X | 5.29 | 6 |
| 6 | MP1A | Mx | -.000534 | 6 |
| 7 | MP1A | X | 5.29 | 42 |
| 8 | MP1A | Mx | -.000534 | 42 |



Member Point Loads (BLC 83 : Antenna Eh (90 Deg)) (Continued)

| | Member Label | Direction | Magnitude[lb,k-ft] | Location[in,%] |
|----|--------------|-----------|--------------------|----------------|
| 9 | MP4A | X | 5.29 | 6 |
| 10 | MP4A | Mx | -.000534 | 6 |
| 11 | MP4A | X | 5.29 | 42 |
| 12 | MP4A | Mx | -.000534 | 42 |
| 13 | MP4A | X | 5.29 | 6 |
| 14 | MP4A | Mx | -.004 | 6 |
| 15 | MP4A | X | 5.29 | 42 |
| 16 | MP4A | Mx | -.004 | 42 |
| 17 | MP3A | X | 5.296 | 12 |
| 18 | MP3A | Mx | -.003 | 12 |
| 19 | MP3A | X | 5.296 | 36 |
| 20 | MP3A | Mx | -.003 | 36 |
| 21 | MP1A | X | 9.084 | 24 |
| 22 | MP1A | Mx | .004 | 24 |
| 23 | MP2A | X | 8.548 | 42 |
| 24 | MP2A | Mx | .004 | 42 |
| 25 | MP2A | X | 1.411 | 6 |
| 26 | MP2A | Mx | -.000705 | 6 |
| 27 | MP2A | X | 1.411 | 42 |
| 28 | MP2A | Mx | -.000705 | 42 |
| 29 | OVP | X | 10.263 | 1.8 |
| 30 | OVP | Mx | 0 | 1.8 |
| 31 | MP3A | X | 8.548 | 24 |
| 32 | MP3A | Mx | .004 | 24 |

Member Distributed Loads (BLC 40 : Structure Di)

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in,%] | End Location[in,%] |
|----|--------------|-----------|---------------------------|--------------------------|----------------------|--------------------|
| 1 | M1 | Y | -8.822 | -8.822 | 0 | %100 |
| 2 | M3 | Y | -8.822 | -8.822 | 0 | %100 |
| 3 | M5 | Y | -5.996 | -5.996 | 0 | %100 |
| 4 | M6 | Y | -5.996 | -5.996 | 0 | %100 |
| 5 | M7 | Y | -5.784 | -5.784 | 0 | %100 |
| 6 | M8 | Y | -5.996 | -5.996 | 0 | %100 |
| 7 | M9 | Y | -5.996 | -5.996 | 0 | %100 |
| 8 | M10 | Y | -5.784 | -5.784 | 0 | %100 |
| 9 | M11 | Y | -5.069 | -5.069 | 0 | %100 |
| 10 | M12 | Y | -5.069 | -5.069 | 0 | %100 |
| 11 | M13 | Y | -5.069 | -5.069 | 0 | %100 |
| 12 | M14 | Y | -5.069 | -5.069 | 0 | %100 |
| 13 | M15 | Y | -5.996 | -5.996 | 0 | %100 |
| 14 | M16 | Y | -4.39 | -4.39 | 0 | %100 |
| 15 | M17 | Y | -5.996 | -5.996 | 0 | %100 |
| 16 | M18 | Y | -4.39 | -4.39 | 0 | %100 |
| 17 | M19 | Y | -5.996 | -5.996 | 0 | %100 |
| 18 | M20 | Y | -5.996 | -5.996 | 0 | %100 |
| 19 | M21 | Y | -5.996 | -5.996 | 0 | %100 |
| 20 | M22 | Y | -4.39 | -4.39 | 0 | %100 |
| 21 | M23 | Y | -4.39 | -4.39 | 0 | %100 |
| 22 | M24 | Y | -5.069 | -5.069 | 0 | %100 |
| 23 | M25 | Y | -5.996 | -5.996 | 0 | %100 |



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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in,%] | End Location[in,%] |
|----|--------------|-----------|---------------------------|--------------------------|----------------------|--------------------|
| 24 | M26 | Y | -5.996 | -5.996 | 0 | %100 |
| 25 | M27 | Y | -4.39 | -4.39 | 0 | %100 |
| 26 | M28 | Y | -5.996 | -5.996 | 0 | %100 |
| 27 | M29 | Y | -4.39 | -4.39 | 0 | %100 |
| 28 | M30 | Y | -5.996 | -5.996 | 0 | %100 |
| 29 | M31 | Y | -5.996 | -5.996 | 0 | %100 |
| 30 | M32 | Y | -5.996 | -5.996 | 0 | %100 |
| 31 | M33 | Y | -4.39 | -4.39 | 0 | %100 |
| 32 | M34 | Y | -4.39 | -4.39 | 0 | %100 |
| 33 | M35 | Y | -5.069 | -5.069 | 0 | %100 |
| 34 | M36 | Y | -5.996 | -5.996 | 0 | %100 |
| 35 | MP4A | Y | -5.069 | -5.069 | 0 | %100 |
| 36 | MP3A | Y | -5.069 | -5.069 | 0 | %100 |
| 37 | MP2A | Y | -5.069 | -5.069 | 0 | %100 |
| 38 | MP1A | Y | -5.069 | -5.069 | 0 | %100 |
| 39 | EQUIP | Y | -6.728 | -6.728 | 0 | %100 |
| 40 | M51 | Y | -6.728 | -6.728 | 0 | %100 |
| 41 | M55A | Y | -5.069 | -5.069 | 0 | %100 |

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in,%] | End Location[in,%] |
|----|--------------|-----------|---------------------------|--------------------------|----------------------|--------------------|
| 1 | M1 | X | 0 | 0 | 0 | %100 |
| 2 | M1 | Z | -10.292 | -10.292 | 0 | %100 |
| 3 | M3 | X | 0 | 0 | 0 | %100 |
| 4 | M3 | Z | -10.292 | -10.292 | 0 | %100 |
| 5 | M5 | X | 0 | 0 | 0 | %100 |
| 6 | M5 | Z | -.631 | -.631 | 0 | %100 |
| 7 | M6 | X | 0 | 0 | 0 | %100 |
| 8 | M6 | Z | -.631 | -.631 | 0 | %100 |
| 9 | M7 | X | 0 | 0 | 0 | %100 |
| 10 | M7 | Z | -9.863 | -9.863 | 0 | %100 |
| 11 | M8 | X | 0 | 0 | 0 | %100 |
| 12 | M8 | Z | -.436 | -.436 | 0 | %100 |
| 13 | M9 | X | 0 | 0 | 0 | %100 |
| 14 | M9 | Z | -.751 | -.751 | 0 | %100 |
| 15 | M10 | X | 0 | 0 | 0 | %100 |
| 16 | M10 | Z | -9.863 | -9.863 | 0 | %100 |
| 17 | M11 | X | 0 | 0 | 0 | %100 |
| 18 | M11 | Z | -3.996 | -3.996 | 0 | %100 |
| 19 | M12 | X | 0 | 0 | 0 | %100 |
| 20 | M12 | Z | -3.996 | -3.996 | 0 | %100 |
| 21 | M13 | X | 0 | 0 | 0 | %100 |
| 22 | M13 | Z | -3.996 | -3.996 | 0 | %100 |
| 23 | M14 | X | 0 | 0 | 0 | %100 |
| 24 | M14 | Z | -3.996 | -3.996 | 0 | %100 |
| 25 | M15 | X | 0 | 0 | 0 | %100 |
| 26 | M15 | Z | -1.358 | -1.358 | 0 | %100 |
| 27 | M16 | X | 0 | 0 | 0 | %100 |
| 28 | M16 | Z | -5.411 | -5.411 | 0 | %100 |
| 29 | M17 | X | 0 | 0 | 0 | %100 |
| 30 | M17 | Z | -1.358 | -1.358 | 0 | %100 |



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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 31 | M18 | X | 0 | 0 | 0 | %100 |
| 32 | M18 | Z | -5.411 | -5.411 | 0 | %100 |
| 33 | M19 | X | 0 | 0 | 0 | %100 |
| 34 | M19 | Z | -1.823 | -1.823 | 0 | %100 |
| 35 | M20 | X | 0 | 0 | 0 | %100 |
| 36 | M20 | Z | -1.358 | -1.358 | 0 | %100 |
| 37 | M21 | X | 0 | 0 | 0 | %100 |
| 38 | M21 | Z | -1.358 | -1.358 | 0 | %100 |
| 39 | M22 | X | 0 | 0 | 0 | %100 |
| 40 | M22 | Z | -5.915 | -5.915 | 0 | %100 |
| 41 | M23 | X | 0 | 0 | 0 | %100 |
| 42 | M23 | Z | -5.915 | -5.915 | 0 | %100 |
| 43 | M24 | X | 0 | 0 | 0 | %100 |
| 44 | M24 | Z | -6.218 | -6.218 | 0 | %100 |
| 45 | M25 | X | 0 | 0 | 0 | %100 |
| 46 | M25 | Z | -1.823 | -1.823 | 0 | %100 |
| 47 | M26 | X | 0 | 0 | 0 | %100 |
| 48 | M26 | Z | -1.358 | -1.358 | 0 | %100 |
| 49 | M27 | X | 0 | 0 | 0 | %100 |
| 50 | M27 | Z | -5.411 | -5.411 | 0 | %100 |
| 51 | M28 | X | 0 | 0 | 0 | %100 |
| 52 | M28 | Z | -1.358 | -1.358 | 0 | %100 |
| 53 | M29 | X | 0 | 0 | 0 | %100 |
| 54 | M29 | Z | -5.411 | -5.411 | 0 | %100 |
| 55 | M30 | X | 0 | 0 | 0 | %100 |
| 56 | M30 | Z | -1.823 | -1.823 | 0 | %100 |
| 57 | M31 | X | 0 | 0 | 0 | %100 |
| 58 | M31 | Z | -1.358 | -1.358 | 0 | %100 |
| 59 | M32 | X | 0 | 0 | 0 | %100 |
| 60 | M32 | Z | -1.358 | -1.358 | 0 | %100 |
| 61 | M33 | X | 0 | 0 | 0 | %100 |
| 62 | M33 | Z | -5.915 | -5.915 | 0 | %100 |
| 63 | M34 | X | 0 | 0 | 0 | %100 |
| 64 | M34 | Z | -5.915 | -5.915 | 0 | %100 |
| 65 | M35 | X | 0 | 0 | 0 | %100 |
| 66 | M35 | Z | -6.218 | -6.218 | 0 | %100 |
| 67 | M36 | X | 0 | 0 | 0 | %100 |
| 68 | M36 | Z | -1.823 | -1.823 | 0 | %100 |
| 69 | MP4A | X | 0 | 0 | 0 | %100 |
| 70 | MP4A | Z | -8.148 | -8.148 | 0 | %100 |
| 71 | MP3A | X | 0 | 0 | 0 | %100 |
| 72 | MP3A | Z | -8.148 | -8.148 | 0 | %100 |
| 73 | MP2A | X | 0 | 0 | 0 | %100 |
| 74 | MP2A | Z | -8.148 | -8.148 | 0 | %100 |
| 75 | MP1A | X | 0 | 0 | 0 | %100 |
| 76 | MP1A | Z | -8.148 | -8.148 | 0 | %100 |
| 77 | EQUIP | X | 0 | 0 | 0 | %100 |
| 78 | EQUIP | Z | -12.817 | -12.817 | 0 | %100 |
| 79 | M51 | X | 0 | 0 | 0 | %100 |
| 80 | M51 | Z | -12.817 | -12.817 | 0 | %100 |
| 81 | M55A | X | 0 | 0 | 0 | %100 |
| 82 | M55A | Z | -2.01 | -2.01 | 0 | %100 |



Company : Maser Consulting
 Designer :
 Job Number : Project No. 10115278
 Model Name : 469153-VZW_MT_LOT_SectorA_H

Nov 15, 2021
 4:59 PM
 Checked By: _____

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 1 | M1 | X | 3.859 | 3.859 | 0 | %100 |
| 2 | M1 | Z | -6.685 | -6.685 | 0 | %100 |
| 3 | M3 | X | 3.859 | 3.859 | 0 | %100 |
| 4 | M3 | Z | -6.685 | -6.685 | 0 | %100 |
| 5 | M5 | X | .04 | .04 | 0 | %100 |
| 6 | M5 | Z | -.069 | -.069 | 0 | %100 |
| 7 | M6 | X | .597 | .597 | 0 | %100 |
| 8 | M6 | Z | -1.034 | -1.034 | 0 | %100 |
| 9 | M7 | X | 3.699 | 3.699 | 0 | %100 |
| 10 | M7 | Z | -6.406 | -6.406 | 0 | %100 |
| 11 | M8 | X | .006 | .006 | 0 | %100 |
| 12 | M8 | Z | -.011 | -.011 | 0 | %100 |
| 13 | M9 | X | .623 | .623 | 0 | %100 |
| 14 | M9 | Z | -1.079 | -1.079 | 0 | %100 |
| 15 | M10 | X | 3.699 | 3.699 | 0 | %100 |
| 16 | M10 | Z | -6.406 | -6.406 | 0 | %100 |
| 17 | M11 | X | .254 | .254 | 0 | %100 |
| 18 | M11 | Z | -.44 | -.44 | 0 | %100 |
| 19 | M12 | X | 3.781 | 3.781 | 0 | %100 |
| 20 | M12 | Z | -6.549 | -6.549 | 0 | %100 |
| 21 | M13 | X | .254 | .254 | 0 | %100 |
| 22 | M13 | Z | -.44 | -.44 | 0 | %100 |
| 23 | M14 | X | 3.781 | 3.781 | 0 | %100 |
| 24 | M14 | Z | -6.549 | -6.549 | 0 | %100 |
| 25 | M15 | X | 1.796 | 1.796 | 0 | %100 |
| 26 | M15 | Z | -3.11 | -3.11 | 0 | %100 |
| 27 | M16 | X | 3.181 | 3.181 | 0 | %100 |
| 28 | M16 | Z | -5.51 | -5.51 | 0 | %100 |
| 29 | M17 | X | 1.796 | 1.796 | 0 | %100 |
| 30 | M17 | Z | -3.11 | -3.11 | 0 | %100 |
| 31 | M18 | X | 3.181 | 3.181 | 0 | %100 |
| 32 | M18 | Z | -5.51 | -5.51 | 0 | %100 |
| 33 | M19 | X | 1.97 | 1.97 | 0 | %100 |
| 34 | M19 | Z | -3.412 | -3.412 | 0 | %100 |
| 35 | M20 | X | 1.796 | 1.796 | 0 | %100 |
| 36 | M20 | Z | -3.11 | -3.11 | 0 | %100 |
| 37 | M21 | X | 1.796 | 1.796 | 0 | %100 |
| 38 | M21 | Z | -3.11 | -3.11 | 0 | %100 |
| 39 | M22 | X | 2.957 | 2.957 | 0 | %100 |
| 40 | M22 | Z | -5.122 | -5.122 | 0 | %100 |
| 41 | M23 | X | 2.957 | 2.957 | 0 | %100 |
| 42 | M23 | Z | -5.122 | -5.122 | 0 | %100 |
| 43 | M24 | X | 3.109 | 3.109 | 0 | %100 |
| 44 | M24 | Z | -5.385 | -5.385 | 0 | %100 |
| 45 | M25 | X | 1.97 | 1.97 | 0 | %100 |
| 46 | M25 | Z | -3.412 | -3.412 | 0 | %100 |
| 47 | M26 | X | 1.796 | 1.796 | 0 | %100 |
| 48 | M26 | Z | -3.11 | -3.11 | 0 | %100 |
| 49 | M27 | X | 2.24 | 2.24 | 0 | %100 |
| 50 | M27 | Z | -3.88 | -3.88 | 0 | %100 |
| 51 | M28 | X | 1.796 | 1.796 | 0 | %100 |
| 52 | M28 | Z | -3.11 | -3.11 | 0 | %100 |



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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 53 | M29 | X | 2.24 | 2.24 | 0 | %100 |
| 54 | M29 | Z | -3.88 | -3.88 | 0 | %100 |
| 55 | M30 | X | 1.97 | 1.97 | 0 | %100 |
| 56 | M30 | Z | -3.412 | -3.412 | 0 | %100 |
| 57 | M31 | X | 1.796 | 1.796 | 0 | %100 |
| 58 | M31 | Z | -3.11 | -3.11 | 0 | %100 |
| 59 | M32 | X | 1.796 | 1.796 | 0 | %100 |
| 60 | M32 | Z | -3.11 | -3.11 | 0 | %100 |
| 61 | M33 | X | 2.957 | 2.957 | 0 | %100 |
| 62 | M33 | Z | -5.122 | -5.122 | 0 | %100 |
| 63 | M34 | X | 2.957 | 2.957 | 0 | %100 |
| 64 | M34 | Z | -5.122 | -5.122 | 0 | %100 |
| 65 | M35 | X | 3.109 | 3.109 | 0 | %100 |
| 66 | M35 | Z | -5.385 | -5.385 | 0 | %100 |
| 67 | M36 | X | 1.97 | 1.97 | 0 | %100 |
| 68 | M36 | Z | -3.412 | -3.412 | 0 | %100 |
| 69 | MP4A | X | 4.074 | 4.074 | 0 | %100 |
| 70 | MP4A | Z | -7.056 | -7.056 | 0 | %100 |
| 71 | MP3A | X | 4.074 | 4.074 | 0 | %100 |
| 72 | MP3A | Z | -7.056 | -7.056 | 0 | %100 |
| 73 | MP2A | X | 4.074 | 4.074 | 0 | %100 |
| 74 | MP2A | Z | -7.056 | -7.056 | 0 | %100 |
| 75 | MP1A | X | 4.074 | 4.074 | 0 | %100 |
| 76 | MP1A | Z | -7.056 | -7.056 | 0 | %100 |
| 77 | EQUIP | X | 6.409 | 6.409 | 0 | %100 |
| 78 | EQUIP | Z | -11.1 | -11.1 | 0 | %100 |
| 79 | M51 | X | 6.409 | 6.409 | 0 | %100 |
| 80 | M51 | Z | -11.1 | -11.1 | 0 | %100 |
| 81 | M55A | X | 5.8e-5 | 5.8e-5 | 0 | %100 |
| 82 | M55A | Z | -.0001 | -.0001 | 0 | %100 |

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 1 | M1 | X | 2.228 | 2.228 | 0 | %100 |
| 2 | M1 | Z | -1.286 | -1.286 | 0 | %100 |
| 3 | M3 | X | 2.228 | 2.228 | 0 | %100 |
| 4 | M3 | Z | -1.286 | -1.286 | 0 | %100 |
| 5 | M5 | X | .08 | .08 | 0 | %100 |
| 6 | M5 | Z | -.046 | -.046 | 0 | %100 |
| 7 | M6 | X | 1.045 | 1.045 | 0 | %100 |
| 8 | M6 | Z | -.603 | -.603 | 0 | %100 |
| 9 | M7 | X | 2.135 | 2.135 | 0 | %100 |
| 10 | M7 | Z | -1.233 | -1.233 | 0 | %100 |
| 11 | M8 | X | .19 | .19 | 0 | %100 |
| 12 | M8 | Z | -.11 | -.11 | 0 | %100 |
| 13 | M9 | X | .986 | .986 | 0 | %100 |
| 14 | M9 | Z | -.569 | -.569 | 0 | %100 |
| 15 | M10 | X | 2.135 | 2.135 | 0 | %100 |
| 16 | M10 | Z | -1.233 | -1.233 | 0 | %100 |
| 17 | M11 | X | .507 | .507 | 0 | %100 |
| 18 | M11 | Z | -.293 | -.293 | 0 | %100 |



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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 19 | M12 | X | 6.617 | 6.617 | 0 | %100 |
| 20 | M12 | Z | -3.82 | -3.82 | 0 | %100 |
| 21 | M13 | X | .507 | .507 | 0 | %100 |
| 22 | M13 | Z | -.293 | -.293 | 0 | %100 |
| 23 | M14 | X | 6.617 | 6.617 | 0 | %100 |
| 24 | M14 | Z | -3.82 | -3.82 | 0 | %100 |
| 25 | M15 | X | 6.979 | 6.979 | 0 | %100 |
| 26 | M15 | Z | -4.029 | -4.029 | 0 | %100 |
| 27 | M16 | X | 5.528 | 5.528 | 0 | %100 |
| 28 | M16 | Z | -3.191 | -3.191 | 0 | %100 |
| 29 | M17 | X | 6.979 | 6.979 | 0 | %100 |
| 30 | M17 | Z | -4.029 | -4.029 | 0 | %100 |
| 31 | M18 | X | 5.528 | 5.528 | 0 | %100 |
| 32 | M18 | Z | -3.191 | -3.191 | 0 | %100 |
| 33 | M19 | X | 7.079 | 7.079 | 0 | %100 |
| 34 | M19 | Z | -4.087 | -4.087 | 0 | %100 |
| 35 | M20 | X | 6.979 | 6.979 | 0 | %100 |
| 36 | M20 | Z | -4.029 | -4.029 | 0 | %100 |
| 37 | M21 | X | 6.979 | 6.979 | 0 | %100 |
| 38 | M21 | Z | -4.029 | -4.029 | 0 | %100 |
| 39 | M22 | X | 5.122 | 5.122 | 0 | %100 |
| 40 | M22 | Z | -2.957 | -2.957 | 0 | %100 |
| 41 | M23 | X | 5.122 | 5.122 | 0 | %100 |
| 42 | M23 | Z | -2.957 | -2.957 | 0 | %100 |
| 43 | M24 | X | 5.385 | 5.385 | 0 | %100 |
| 44 | M24 | Z | -3.109 | -3.109 | 0 | %100 |
| 45 | M25 | X | 7.079 | 7.079 | 0 | %100 |
| 46 | M25 | Z | -4.087 | -4.087 | 0 | %100 |
| 47 | M26 | X | 6.979 | 6.979 | 0 | %100 |
| 48 | M26 | Z | -4.029 | -4.029 | 0 | %100 |
| 49 | M27 | X | 3.898 | 3.898 | 0 | %100 |
| 50 | M27 | Z | -2.25 | -2.25 | 0 | %100 |
| 51 | M28 | X | 6.979 | 6.979 | 0 | %100 |
| 52 | M28 | Z | -4.029 | -4.029 | 0 | %100 |
| 53 | M29 | X | 3.898 | 3.898 | 0 | %100 |
| 54 | M29 | Z | -2.25 | -2.25 | 0 | %100 |
| 55 | M30 | X | 7.079 | 7.079 | 0 | %100 |
| 56 | M30 | Z | -4.087 | -4.087 | 0 | %100 |
| 57 | M31 | X | 6.979 | 6.979 | 0 | %100 |
| 58 | M31 | Z | -4.029 | -4.029 | 0 | %100 |
| 59 | M32 | X | 6.979 | 6.979 | 0 | %100 |
| 60 | M32 | Z | -4.029 | -4.029 | 0 | %100 |
| 61 | M33 | X | 5.122 | 5.122 | 0 | %100 |
| 62 | M33 | Z | -2.957 | -2.957 | 0 | %100 |
| 63 | M34 | X | 5.122 | 5.122 | 0 | %100 |
| 64 | M34 | Z | -2.957 | -2.957 | 0 | %100 |
| 65 | M35 | X | 5.385 | 5.385 | 0 | %100 |
| 66 | M35 | Z | -3.109 | -3.109 | 0 | %100 |
| 67 | M36 | X | 7.079 | 7.079 | 0 | %100 |
| 68 | M36 | Z | -4.087 | -4.087 | 0 | %100 |
| 69 | MP4A | X | 7.056 | 7.056 | 0 | %100 |
| 70 | MP4A | Z | -4.074 | -4.074 | 0 | %100 |



Company : Maser Consulting
 Designer :
 Job Number : Project No. 10115278
 Model Name : 469153-VZW_MT_LOT_SectorA_H

Nov 15, 2021
 4:59 PM
 Checked By: _____

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 37 | M21 | X | 10.292 | 10.292 | 0 | %100 |
| 38 | M21 | Z | 0 | 0 | 0 | %100 |
| 39 | M22 | X | 5.915 | 5.915 | 0 | %100 |
| 40 | M22 | Z | 0 | 0 | 0 | %100 |
| 41 | M23 | X | 5.915 | 5.915 | 0 | %100 |
| 42 | M23 | Z | 0 | 0 | 0 | %100 |
| 43 | M24 | X | 6.218 | 6.218 | 0 | %100 |
| 44 | M24 | Z | 0 | 0 | 0 | %100 |
| 45 | M25 | X | 10.292 | 10.292 | 0 | %100 |
| 46 | M25 | Z | 0 | 0 | 0 | %100 |
| 47 | M26 | X | 10.292 | 10.292 | 0 | %100 |
| 48 | M26 | Z | 0 | 0 | 0 | %100 |
| 49 | M27 | X | 5.452 | 5.452 | 0 | %100 |
| 50 | M27 | Z | 0 | 0 | 0 | %100 |
| 51 | M28 | X | 10.292 | 10.292 | 0 | %100 |
| 52 | M28 | Z | 0 | 0 | 0 | %100 |
| 53 | M29 | X | 5.452 | 5.452 | 0 | %100 |
| 54 | M29 | Z | 0 | 0 | 0 | %100 |
| 55 | M30 | X | 10.292 | 10.292 | 0 | %100 |
| 56 | M30 | Z | 0 | 0 | 0 | %100 |
| 57 | M31 | X | 10.292 | 10.292 | 0 | %100 |
| 58 | M31 | Z | 0 | 0 | 0 | %100 |
| 59 | M32 | X | 10.292 | 10.292 | 0 | %100 |
| 60 | M32 | Z | 0 | 0 | 0 | %100 |
| 61 | M33 | X | 5.915 | 5.915 | 0 | %100 |
| 62 | M33 | Z | 0 | 0 | 0 | %100 |
| 63 | M34 | X | 5.915 | 5.915 | 0 | %100 |
| 64 | M34 | Z | 0 | 0 | 0 | %100 |
| 65 | M35 | X | 6.218 | 6.218 | 0 | %100 |
| 66 | M35 | Z | 0 | 0 | 0 | %100 |
| 67 | M36 | X | 10.292 | 10.292 | 0 | %100 |
| 68 | M36 | Z | 0 | 0 | 0 | %100 |
| 69 | MP4A | X | 8.148 | 8.148 | 0 | %100 |
| 70 | MP4A | Z | 0 | 0 | 0 | %100 |
| 71 | MP3A | X | 8.148 | 8.148 | 0 | %100 |
| 72 | MP3A | Z | 0 | 0 | 0 | %100 |
| 73 | MP2A | X | 8.148 | 8.148 | 0 | %100 |
| 74 | MP2A | Z | 0 | 0 | 0 | %100 |
| 75 | MP1A | X | 8.148 | 8.148 | 0 | %100 |
| 76 | MP1A | Z | 0 | 0 | 0 | %100 |
| 77 | EQUIP | X | 12.817 | 12.817 | 0 | %100 |
| 78 | EQUIP | Z | 0 | 0 | 0 | %100 |
| 79 | M51 | X | 12.817 | 12.817 | 0 | %100 |
| 80 | M51 | Z | 0 | 0 | 0 | %100 |
| 81 | M55A | X | 6.137 | 6.137 | 0 | %100 |
| 82 | M55A | Z | 0 | 0 | 0 | %100 |

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|---|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 1 | M1 | X | 2.228 | 2.228 | 0 | %100 |
| 2 | M1 | Z | 1.286 | 1.286 | 0 | %100 |



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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 3 | M3 | X | 2.228 | 2.228 | 0 | %100 |
| 4 | M3 | Z | 1.286 | 1.286 | 0 | %100 |
| 5 | M5 | X | 1.045 | 1.045 | 0 | %100 |
| 6 | M5 | Z | .603 | .603 | 0 | %100 |
| 7 | M6 | X | .08 | .08 | 0 | %100 |
| 8 | M6 | Z | .046 | .046 | 0 | %100 |
| 9 | M7 | X | 2.135 | 2.135 | 0 | %100 |
| 10 | M7 | Z | 1.233 | 1.233 | 0 | %100 |
| 11 | M8 | X | 1.103 | 1.103 | 0 | %100 |
| 12 | M8 | Z | .637 | .637 | 0 | %100 |
| 13 | M9 | X | .035 | .035 | 0 | %100 |
| 14 | M9 | Z | .02 | .02 | 0 | %100 |
| 15 | M10 | X | 2.135 | 2.135 | 0 | %100 |
| 16 | M10 | Z | 1.233 | 1.233 | 0 | %100 |
| 17 | M11 | X | 6.617 | 6.617 | 0 | %100 |
| 18 | M11 | Z | 3.82 | 3.82 | 0 | %100 |
| 19 | M12 | X | .507 | .507 | 0 | %100 |
| 20 | M12 | Z | .293 | .293 | 0 | %100 |
| 21 | M13 | X | 6.617 | 6.617 | 0 | %100 |
| 22 | M13 | Z | 3.82 | 3.82 | 0 | %100 |
| 23 | M14 | X | .507 | .507 | 0 | %100 |
| 24 | M14 | Z | .293 | .293 | 0 | %100 |
| 25 | M15 | X | 6.979 | 6.979 | 0 | %100 |
| 26 | M15 | Z | 4.029 | 4.029 | 0 | %100 |
| 27 | M16 | X | 3.898 | 3.898 | 0 | %100 |
| 28 | M16 | Z | 2.25 | 2.25 | 0 | %100 |
| 29 | M17 | X | 6.979 | 6.979 | 0 | %100 |
| 30 | M17 | Z | 4.029 | 4.029 | 0 | %100 |
| 31 | M18 | X | 3.898 | 3.898 | 0 | %100 |
| 32 | M18 | Z | 2.25 | 2.25 | 0 | %100 |
| 33 | M19 | X | 7.079 | 7.079 | 0 | %100 |
| 34 | M19 | Z | 4.087 | 4.087 | 0 | %100 |
| 35 | M20 | X | 6.979 | 6.979 | 0 | %100 |
| 36 | M20 | Z | 4.029 | 4.029 | 0 | %100 |
| 37 | M21 | X | 6.979 | 6.979 | 0 | %100 |
| 38 | M21 | Z | 4.029 | 4.029 | 0 | %100 |
| 39 | M22 | X | 5.122 | 5.122 | 0 | %100 |
| 40 | M22 | Z | 2.957 | 2.957 | 0 | %100 |
| 41 | M23 | X | 5.122 | 5.122 | 0 | %100 |
| 42 | M23 | Z | 2.957 | 2.957 | 0 | %100 |
| 43 | M24 | X | 5.385 | 5.385 | 0 | %100 |
| 44 | M24 | Z | 3.109 | 3.109 | 0 | %100 |
| 45 | M25 | X | 7.079 | 7.079 | 0 | %100 |
| 46 | M25 | Z | 4.087 | 4.087 | 0 | %100 |
| 47 | M26 | X | 6.979 | 6.979 | 0 | %100 |
| 48 | M26 | Z | 4.029 | 4.029 | 0 | %100 |
| 49 | M27 | X | 5.528 | 5.528 | 0 | %100 |
| 50 | M27 | Z | 3.191 | 3.191 | 0 | %100 |
| 51 | M28 | X | 6.979 | 6.979 | 0 | %100 |
| 52 | M28 | Z | 4.029 | 4.029 | 0 | %100 |
| 53 | M29 | X | 5.528 | 5.528 | 0 | %100 |
| 54 | M29 | Z | 3.191 | 3.191 | 0 | %100 |

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 55 | M30 | X | 7.079 | 7.079 | 0 | %100 |
| 56 | M30 | Z | 4.087 | 4.087 | 0 | %100 |
| 57 | M31 | X | 6.979 | 6.979 | 0 | %100 |
| 58 | M31 | Z | 4.029 | 4.029 | 0 | %100 |
| 59 | M32 | X | 6.979 | 6.979 | 0 | %100 |
| 60 | M32 | Z | 4.029 | 4.029 | 0 | %100 |
| 61 | M33 | X | 5.122 | 5.122 | 0 | %100 |
| 62 | M33 | Z | 2.957 | 2.957 | 0 | %100 |
| 63 | M34 | X | 5.122 | 5.122 | 0 | %100 |
| 64 | M34 | Z | 2.957 | 2.957 | 0 | %100 |
| 65 | M35 | X | 5.385 | 5.385 | 0 | %100 |
| 66 | M35 | Z | 3.109 | 3.109 | 0 | %100 |
| 67 | M36 | X | 7.079 | 7.079 | 0 | %100 |
| 68 | M36 | Z | 4.087 | 4.087 | 0 | %100 |
| 69 | MP4A | X | 7.056 | 7.056 | 0 | %100 |
| 70 | MP4A | Z | 4.074 | 4.074 | 0 | %100 |
| 71 | MP3A | X | 7.056 | 7.056 | 0 | %100 |
| 72 | MP3A | Z | 4.074 | 4.074 | 0 | %100 |
| 73 | MP2A | X | 7.056 | 7.056 | 0 | %100 |
| 74 | MP2A | Z | 4.074 | 4.074 | 0 | %100 |
| 75 | MP1A | X | 7.056 | 7.056 | 0 | %100 |
| 76 | MP1A | Z | 4.074 | 4.074 | 0 | %100 |
| 77 | EQUIP | X | 11.1 | 11.1 | 0 | %100 |
| 78 | EQUIP | Z | 6.409 | 6.409 | 0 | %100 |
| 79 | M51 | X | 11.1 | 11.1 | 0 | %100 |
| 80 | M51 | Z | 6.409 | 6.409 | 0 | %100 |
| 81 | M55A | X | 7.056 | 7.056 | 0 | %100 |
| 82 | M55A | Z | 4.074 | 4.074 | 0 | %100 |

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 1 | M1 | X | 3.859 | 3.859 | 0 | %100 |
| 2 | M1 | Z | 6.685 | 6.685 | 0 | %100 |
| 3 | M3 | X | 3.859 | 3.859 | 0 | %100 |
| 4 | M3 | Z | 6.685 | 6.685 | 0 | %100 |
| 5 | M5 | X | .597 | .597 | 0 | %100 |
| 6 | M5 | Z | 1.034 | 1.034 | 0 | %100 |
| 7 | M6 | X | .04 | .04 | 0 | %100 |
| 8 | M6 | Z | .069 | .069 | 0 | %100 |
| 9 | M7 | X | 3.699 | 3.699 | 0 | %100 |
| 10 | M7 | Z | 6.406 | 6.406 | 0 | %100 |
| 11 | M8 | X | .534 | .534 | 0 | %100 |
| 12 | M8 | Z | .924 | .924 | 0 | %100 |
| 13 | M9 | X | .074 | .074 | 0 | %100 |
| 14 | M9 | Z | .128 | .128 | 0 | %100 |
| 15 | M10 | X | 3.699 | 3.699 | 0 | %100 |
| 16 | M10 | Z | 6.406 | 6.406 | 0 | %100 |
| 17 | M11 | X | 3.781 | 3.781 | 0 | %100 |
| 18 | M11 | Z | 6.549 | 6.549 | 0 | %100 |
| 19 | M12 | X | .254 | .254 | 0 | %100 |
| 20 | M12 | Z | .44 | .44 | 0 | %100 |



Company : Maser Consulting
 Designer :
 Job Number : Project No. 10115278
 Model Name : 469153-VZW_MT_LOT_SectorA_H

Nov 15, 2021
 4:59 PM
 Checked By: _____

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 21 | M13 | X | 3.781 | 3.781 | 0 | %100 |
| 22 | M13 | Z | 6.549 | 6.549 | 0 | %100 |
| 23 | M14 | X | .254 | .254 | 0 | %100 |
| 24 | M14 | Z | .44 | .44 | 0 | %100 |
| 25 | M15 | X | 1.796 | 1.796 | 0 | %100 |
| 26 | M15 | Z | 3.11 | 3.11 | 0 | %100 |
| 27 | M16 | X | 2.24 | 2.24 | 0 | %100 |
| 28 | M16 | Z | 3.88 | 3.88 | 0 | %100 |
| 29 | M17 | X | 1.796 | 1.796 | 0 | %100 |
| 30 | M17 | Z | 3.11 | 3.11 | 0 | %100 |
| 31 | M18 | X | 2.24 | 2.24 | 0 | %100 |
| 32 | M18 | Z | 3.88 | 3.88 | 0 | %100 |
| 33 | M19 | X | 1.97 | 1.97 | 0 | %100 |
| 34 | M19 | Z | 3.412 | 3.412 | 0 | %100 |
| 35 | M20 | X | 1.796 | 1.796 | 0 | %100 |
| 36 | M20 | Z | 3.11 | 3.11 | 0 | %100 |
| 37 | M21 | X | 1.796 | 1.796 | 0 | %100 |
| 38 | M21 | Z | 3.11 | 3.11 | 0 | %100 |
| 39 | M22 | X | 2.957 | 2.957 | 0 | %100 |
| 40 | M22 | Z | 5.122 | 5.122 | 0 | %100 |
| 41 | M23 | X | 2.957 | 2.957 | 0 | %100 |
| 42 | M23 | Z | 5.122 | 5.122 | 0 | %100 |
| 43 | M24 | X | 3.109 | 3.109 | 0 | %100 |
| 44 | M24 | Z | 5.385 | 5.385 | 0 | %100 |
| 45 | M25 | X | 1.97 | 1.97 | 0 | %100 |
| 46 | M25 | Z | 3.412 | 3.412 | 0 | %100 |
| 47 | M26 | X | 1.796 | 1.796 | 0 | %100 |
| 48 | M26 | Z | 3.11 | 3.11 | 0 | %100 |
| 49 | M27 | X | 3.181 | 3.181 | 0 | %100 |
| 50 | M27 | Z | 5.51 | 5.51 | 0 | %100 |
| 51 | M28 | X | 1.796 | 1.796 | 0 | %100 |
| 52 | M28 | Z | 3.11 | 3.11 | 0 | %100 |
| 53 | M29 | X | 3.181 | 3.181 | 0 | %100 |
| 54 | M29 | Z | 5.51 | 5.51 | 0 | %100 |
| 55 | M30 | X | 1.97 | 1.97 | 0 | %100 |
| 56 | M30 | Z | 3.412 | 3.412 | 0 | %100 |
| 57 | M31 | X | 1.796 | 1.796 | 0 | %100 |
| 58 | M31 | Z | 3.11 | 3.11 | 0 | %100 |
| 59 | M32 | X | 1.796 | 1.796 | 0 | %100 |
| 60 | M32 | Z | 3.11 | 3.11 | 0 | %100 |
| 61 | M33 | X | 2.957 | 2.957 | 0 | %100 |
| 62 | M33 | Z | 5.122 | 5.122 | 0 | %100 |
| 63 | M34 | X | 2.957 | 2.957 | 0 | %100 |
| 64 | M34 | Z | 5.122 | 5.122 | 0 | %100 |
| 65 | M35 | X | 3.109 | 3.109 | 0 | %100 |
| 66 | M35 | Z | 5.385 | 5.385 | 0 | %100 |
| 67 | M36 | X | 1.97 | 1.97 | 0 | %100 |
| 68 | M36 | Z | 3.412 | 3.412 | 0 | %100 |
| 69 | MP4A | X | 4.074 | 4.074 | 0 | %100 |
| 70 | MP4A | Z | 7.056 | 7.056 | 0 | %100 |
| 71 | MP3A | X | 4.074 | 4.074 | 0 | %100 |
| 72 | MP3A | Z | 7.056 | 7.056 | 0 | %100 |



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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 73 | MP2A | X | 4.074 | 4.074 | 0 | %100 |
| 74 | MP2A | Z | 7.056 | 7.056 | 0 | %100 |
| 75 | MP1A | X | 4.074 | 4.074 | 0 | %100 |
| 76 | MP1A | Z | 7.056 | 7.056 | 0 | %100 |
| 77 | EQUIP | X | 6.409 | 6.409 | 0 | %100 |
| 78 | EQUIP | Z | 11.1 | 11.1 | 0 | %100 |
| 79 | M51 | X | 6.409 | 6.409 | 0 | %100 |
| 80 | M51 | Z | 11.1 | 11.1 | 0 | %100 |
| 81 | M55A | X | 3.042 | 3.042 | 0 | %100 |
| 82 | M55A | Z | 5.269 | 5.269 | 0 | %100 |

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 1 | M1 | X | 0 | 0 | 0 | %100 |
| 2 | M1 | Z | 10.292 | 10.292 | 0 | %100 |
| 3 | M3 | X | 0 | 0 | 0 | %100 |
| 4 | M3 | Z | 10.292 | 10.292 | 0 | %100 |
| 5 | M5 | X | 0 | 0 | 0 | %100 |
| 6 | M5 | Z | .631 | .631 | 0 | %100 |
| 7 | M6 | X | 0 | 0 | 0 | %100 |
| 8 | M6 | Z | .631 | .631 | 0 | %100 |
| 9 | M7 | X | 0 | 0 | 0 | %100 |
| 10 | M7 | Z | 9.863 | 9.863 | 0 | %100 |
| 11 | M8 | X | 0 | 0 | 0 | %100 |
| 12 | M8 | Z | .436 | .436 | 0 | %100 |
| 13 | M9 | X | 0 | 0 | 0 | %100 |
| 14 | M9 | Z | .751 | .751 | 0 | %100 |
| 15 | M10 | X | 0 | 0 | 0 | %100 |
| 16 | M10 | Z | 9.863 | 9.863 | 0 | %100 |
| 17 | M11 | X | 0 | 0 | 0 | %100 |
| 18 | M11 | Z | 3.996 | 3.996 | 0 | %100 |
| 19 | M12 | X | 0 | 0 | 0 | %100 |
| 20 | M12 | Z | 3.996 | 3.996 | 0 | %100 |
| 21 | M13 | X | 0 | 0 | 0 | %100 |
| 22 | M13 | Z | 3.996 | 3.996 | 0 | %100 |
| 23 | M14 | X | 0 | 0 | 0 | %100 |
| 24 | M14 | Z | 3.996 | 3.996 | 0 | %100 |
| 25 | M15 | X | 0 | 0 | 0 | %100 |
| 26 | M15 | Z | 1.358 | 1.358 | 0 | %100 |
| 27 | M16 | X | 0 | 0 | 0 | %100 |
| 28 | M16 | Z | 5.411 | 5.411 | 0 | %100 |
| 29 | M17 | X | 0 | 0 | 0 | %100 |
| 30 | M17 | Z | 1.358 | 1.358 | 0 | %100 |
| 31 | M18 | X | 0 | 0 | 0 | %100 |
| 32 | M18 | Z | 5.411 | 5.411 | 0 | %100 |
| 33 | M19 | X | 0 | 0 | 0 | %100 |
| 34 | M19 | Z | 1.823 | 1.823 | 0 | %100 |
| 35 | M20 | X | 0 | 0 | 0 | %100 |
| 36 | M20 | Z | 1.358 | 1.358 | 0 | %100 |
| 37 | M21 | X | 0 | 0 | 0 | %100 |
| 38 | M21 | Z | 1.358 | 1.358 | 0 | %100 |



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

| Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 39 | M22 | X | 0 | 0 | %100 |
| 40 | M22 | Z | 5.915 | 5.915 | %100 |
| 41 | M23 | X | 0 | 0 | %100 |
| 42 | M23 | Z | 5.915 | 5.915 | %100 |
| 43 | M24 | X | 0 | 0 | %100 |
| 44 | M24 | Z | 6.218 | 6.218 | %100 |
| 45 | M25 | X | 0 | 0 | %100 |
| 46 | M25 | Z | 1.823 | 1.823 | %100 |
| 47 | M26 | X | 0 | 0 | %100 |
| 48 | M26 | Z | 1.358 | 1.358 | %100 |
| 49 | M27 | X | 0 | 0 | %100 |
| 50 | M27 | Z | 5.411 | 5.411 | %100 |
| 51 | M28 | X | 0 | 0 | %100 |
| 52 | M28 | Z | 1.358 | 1.358 | %100 |
| 53 | M29 | X | 0 | 0 | %100 |
| 54 | M29 | Z | 5.411 | 5.411 | %100 |
| 55 | M30 | X | 0 | 0 | %100 |
| 56 | M30 | Z | 1.823 | 1.823 | %100 |
| 57 | M31 | X | 0 | 0 | %100 |
| 58 | M31 | Z | 1.358 | 1.358 | %100 |
| 59 | M32 | X | 0 | 0 | %100 |
| 60 | M32 | Z | 1.358 | 1.358 | %100 |
| 61 | M33 | X | 0 | 0 | %100 |
| 62 | M33 | Z | 5.915 | 5.915 | %100 |
| 63 | M34 | X | 0 | 0 | %100 |
| 64 | M34 | Z | 5.915 | 5.915 | %100 |
| 65 | M35 | X | 0 | 0 | %100 |
| 66 | M35 | Z | 6.218 | 6.218 | %100 |
| 67 | M36 | X | 0 | 0 | %100 |
| 68 | M36 | Z | 1.823 | 1.823 | %100 |
| 69 | MP4A | X | 0 | 0 | %100 |
| 70 | MP4A | Z | 8.148 | 8.148 | %100 |
| 71 | MP3A | X | 0 | 0 | %100 |
| 72 | MP3A | Z | 8.148 | 8.148 | %100 |
| 73 | MP2A | X | 0 | 0 | %100 |
| 74 | MP2A | Z | 8.148 | 8.148 | %100 |
| 75 | MP1A | X | 0 | 0 | %100 |
| 76 | MP1A | Z | 8.148 | 8.148 | %100 |
| 77 | EQUIP | X | 0 | 0 | %100 |
| 78 | EQUIP | Z | 12.817 | 12.817 | %100 |
| 79 | M51 | X | 0 | 0 | %100 |
| 80 | M51 | Z | 12.817 | 12.817 | %100 |
| 81 | M55A | X | 0 | 0 | %100 |
| 82 | M55A | Z | 2.01 | 2.01 | %100 |

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

| Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 1 | M1 | X | -3.859 | -3.859 | %100 |
| 2 | M1 | Z | 6.685 | 6.685 | %100 |
| 3 | M3 | X | -3.859 | -3.859 | %100 |
| 4 | M3 | Z | 6.685 | 6.685 | %100 |



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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 5 | M5 | X | -.04 | -.04 | 0 | %100 |
| 6 | M5 | Z | .069 | .069 | 0 | %100 |
| 7 | M6 | X | -.597 | -.597 | 0 | %100 |
| 8 | M6 | Z | 1.034 | 1.034 | 0 | %100 |
| 9 | M7 | X | -3.699 | -3.699 | 0 | %100 |
| 10 | M7 | Z | 6.406 | 6.406 | 0 | %100 |
| 11 | M8 | X | -.006 | -.006 | 0 | %100 |
| 12 | M8 | Z | .011 | .011 | 0 | %100 |
| 13 | M9 | X | -.623 | -.623 | 0 | %100 |
| 14 | M9 | Z | 1.079 | 1.079 | 0 | %100 |
| 15 | M10 | X | -3.699 | -3.699 | 0 | %100 |
| 16 | M10 | Z | 6.406 | 6.406 | 0 | %100 |
| 17 | M11 | X | -.254 | -.254 | 0 | %100 |
| 18 | M11 | Z | .44 | .44 | 0 | %100 |
| 19 | M12 | X | -3.781 | -3.781 | 0 | %100 |
| 20 | M12 | Z | 6.549 | 6.549 | 0 | %100 |
| 21 | M13 | X | -.254 | -.254 | 0 | %100 |
| 22 | M13 | Z | .44 | .44 | 0 | %100 |
| 23 | M14 | X | -3.781 | -3.781 | 0 | %100 |
| 24 | M14 | Z | 6.549 | 6.549 | 0 | %100 |
| 25 | M15 | X | -1.796 | -1.796 | 0 | %100 |
| 26 | M15 | Z | 3.11 | 3.11 | 0 | %100 |
| 27 | M16 | X | -3.181 | -3.181 | 0 | %100 |
| 28 | M16 | Z | 5.51 | 5.51 | 0 | %100 |
| 29 | M17 | X | -1.796 | -1.796 | 0 | %100 |
| 30 | M17 | Z | 3.11 | 3.11 | 0 | %100 |
| 31 | M18 | X | -3.181 | -3.181 | 0 | %100 |
| 32 | M18 | Z | 5.51 | 5.51 | 0 | %100 |
| 33 | M19 | X | -1.97 | -1.97 | 0 | %100 |
| 34 | M19 | Z | 3.412 | 3.412 | 0 | %100 |
| 35 | M20 | X | -1.796 | -1.796 | 0 | %100 |
| 36 | M20 | Z | 3.11 | 3.11 | 0 | %100 |
| 37 | M21 | X | -1.796 | -1.796 | 0 | %100 |
| 38 | M21 | Z | 3.11 | 3.11 | 0 | %100 |
| 39 | M22 | X | -2.957 | -2.957 | 0 | %100 |
| 40 | M22 | Z | 5.122 | 5.122 | 0 | %100 |
| 41 | M23 | X | -2.957 | -2.957 | 0 | %100 |
| 42 | M23 | Z | 5.122 | 5.122 | 0 | %100 |
| 43 | M24 | X | -3.109 | -3.109 | 0 | %100 |
| 44 | M24 | Z | 5.385 | 5.385 | 0 | %100 |
| 45 | M25 | X | -1.97 | -1.97 | 0 | %100 |
| 46 | M25 | Z | 3.412 | 3.412 | 0 | %100 |
| 47 | M26 | X | -1.796 | -1.796 | 0 | %100 |
| 48 | M26 | Z | 3.11 | 3.11 | 0 | %100 |
| 49 | M27 | X | -2.24 | -2.24 | 0 | %100 |
| 50 | M27 | Z | 3.88 | 3.88 | 0 | %100 |
| 51 | M28 | X | -1.796 | -1.796 | 0 | %100 |
| 52 | M28 | Z | 3.11 | 3.11 | 0 | %100 |
| 53 | M29 | X | -2.24 | -2.24 | 0 | %100 |
| 54 | M29 | Z | 3.88 | 3.88 | 0 | %100 |
| 55 | M30 | X | -1.97 | -1.97 | 0 | %100 |
| 56 | M30 | Z | 3.412 | 3.412 | 0 | %100 |



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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 57 | M31 | X | -1.796 | -1.796 | 0 | %100 |
| 58 | M31 | Z | 3.11 | 3.11 | 0 | %100 |
| 59 | M32 | X | -1.796 | -1.796 | 0 | %100 |
| 60 | M32 | Z | 3.11 | 3.11 | 0 | %100 |
| 61 | M33 | X | -2.957 | -2.957 | 0 | %100 |
| 62 | M33 | Z | 5.122 | 5.122 | 0 | %100 |
| 63 | M34 | X | -2.957 | -2.957 | 0 | %100 |
| 64 | M34 | Z | 5.122 | 5.122 | 0 | %100 |
| 65 | M35 | X | -3.109 | -3.109 | 0 | %100 |
| 66 | M35 | Z | 5.385 | 5.385 | 0 | %100 |
| 67 | M36 | X | -1.97 | -1.97 | 0 | %100 |
| 68 | M36 | Z | 3.412 | 3.412 | 0 | %100 |
| 69 | MP4A | X | -4.074 | -4.074 | 0 | %100 |
| 70 | MP4A | Z | 7.056 | 7.056 | 0 | %100 |
| 71 | MP3A | X | -4.074 | -4.074 | 0 | %100 |
| 72 | MP3A | Z | 7.056 | 7.056 | 0 | %100 |
| 73 | MP2A | X | -4.074 | -4.074 | 0 | %100 |
| 74 | MP2A | Z | 7.056 | 7.056 | 0 | %100 |
| 75 | MP1A | X | -4.074 | -4.074 | 0 | %100 |
| 76 | MP1A | Z | 7.056 | 7.056 | 0 | %100 |
| 77 | EQUIP | X | -6.409 | -6.409 | 0 | %100 |
| 78 | EQUIP | Z | 11.1 | 11.1 | 0 | %100 |
| 79 | M51 | X | -6.409 | -6.409 | 0 | %100 |
| 80 | M51 | Z | 11.1 | 11.1 | 0 | %100 |
| 81 | M55A | X | -5.8e-5 | -5.8e-5 | 0 | %100 |
| 82 | M55A | Z | .0001 | .0001 | 0 | %100 |

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 1 | M1 | X | -2.228 | -2.228 | 0 | %100 |
| 2 | M1 | Z | 1.286 | 1.286 | 0 | %100 |
| 3 | M3 | X | -2.228 | -2.228 | 0 | %100 |
| 4 | M3 | Z | 1.286 | 1.286 | 0 | %100 |
| 5 | M5 | X | -.08 | -.08 | 0 | %100 |
| 6 | M5 | Z | .046 | .046 | 0 | %100 |
| 7 | M6 | X | -1.045 | -1.045 | 0 | %100 |
| 8 | M6 | Z | .603 | .603 | 0 | %100 |
| 9 | M7 | X | -2.135 | -2.135 | 0 | %100 |
| 10 | M7 | Z | 1.233 | 1.233 | 0 | %100 |
| 11 | M8 | X | -.19 | -.19 | 0 | %100 |
| 12 | M8 | Z | .11 | .11 | 0 | %100 |
| 13 | M9 | X | -.986 | -.986 | 0 | %100 |
| 14 | M9 | Z | .569 | .569 | 0 | %100 |
| 15 | M10 | X | -2.135 | -2.135 | 0 | %100 |
| 16 | M10 | Z | 1.233 | 1.233 | 0 | %100 |
| 17 | M11 | X | -.507 | -.507 | 0 | %100 |
| 18 | M11 | Z | .293 | .293 | 0 | %100 |
| 19 | M12 | X | -6.617 | -6.617 | 0 | %100 |
| 20 | M12 | Z | 3.82 | 3.82 | 0 | %100 |
| 21 | M13 | X | -.507 | -.507 | 0 | %100 |
| 22 | M13 | Z | .293 | .293 | 0 | %100 |



Company : Maser Consulting
 Designer :
 Job Number : Project No. 10115278
 Model Name : 469153-VZW_MT_LOT_SectorA_H

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 23 | M14 | X | -6.617 | -6.617 | 0 | %100 |
| 24 | M14 | Z | 3.82 | 3.82 | 0 | %100 |
| 25 | M15 | X | -6.979 | -6.979 | 0 | %100 |
| 26 | M15 | Z | 4.029 | 4.029 | 0 | %100 |
| 27 | M16 | X | -5.528 | -5.528 | 0 | %100 |
| 28 | M16 | Z | 3.191 | 3.191 | 0 | %100 |
| 29 | M17 | X | -6.979 | -6.979 | 0 | %100 |
| 30 | M17 | Z | 4.029 | 4.029 | 0 | %100 |
| 31 | M18 | X | -5.528 | -5.528 | 0 | %100 |
| 32 | M18 | Z | 3.191 | 3.191 | 0 | %100 |
| 33 | M19 | X | -7.079 | -7.079 | 0 | %100 |
| 34 | M19 | Z | 4.087 | 4.087 | 0 | %100 |
| 35 | M20 | X | -6.979 | -6.979 | 0 | %100 |
| 36 | M20 | Z | 4.029 | 4.029 | 0 | %100 |
| 37 | M21 | X | -6.979 | -6.979 | 0 | %100 |
| 38 | M21 | Z | 4.029 | 4.029 | 0 | %100 |
| 39 | M22 | X | -5.122 | -5.122 | 0 | %100 |
| 40 | M22 | Z | 2.957 | 2.957 | 0 | %100 |
| 41 | M23 | X | -5.122 | -5.122 | 0 | %100 |
| 42 | M23 | Z | 2.957 | 2.957 | 0 | %100 |
| 43 | M24 | X | -5.385 | -5.385 | 0 | %100 |
| 44 | M24 | Z | 3.109 | 3.109 | 0 | %100 |
| 45 | M25 | X | -7.079 | -7.079 | 0 | %100 |
| 46 | M25 | Z | 4.087 | 4.087 | 0 | %100 |
| 47 | M26 | X | -6.979 | -6.979 | 0 | %100 |
| 48 | M26 | Z | 4.029 | 4.029 | 0 | %100 |
| 49 | M27 | X | -3.898 | -3.898 | 0 | %100 |
| 50 | M27 | Z | 2.25 | 2.25 | 0 | %100 |
| 51 | M28 | X | -6.979 | -6.979 | 0 | %100 |
| 52 | M28 | Z | 4.029 | 4.029 | 0 | %100 |
| 53 | M29 | X | -3.898 | -3.898 | 0 | %100 |
| 54 | M29 | Z | 2.25 | 2.25 | 0 | %100 |
| 55 | M30 | X | -7.079 | -7.079 | 0 | %100 |
| 56 | M30 | Z | 4.087 | 4.087 | 0 | %100 |
| 57 | M31 | X | -6.979 | -6.979 | 0 | %100 |
| 58 | M31 | Z | 4.029 | 4.029 | 0 | %100 |
| 59 | M32 | X | -6.979 | -6.979 | 0 | %100 |
| 60 | M32 | Z | 4.029 | 4.029 | 0 | %100 |
| 61 | M33 | X | -5.122 | -5.122 | 0 | %100 |
| 62 | M33 | Z | 2.957 | 2.957 | 0 | %100 |
| 63 | M34 | X | -5.122 | -5.122 | 0 | %100 |
| 64 | M34 | Z | 2.957 | 2.957 | 0 | %100 |
| 65 | M35 | X | -5.385 | -5.385 | 0 | %100 |
| 66 | M35 | Z | 3.109 | 3.109 | 0 | %100 |
| 67 | M36 | X | -7.079 | -7.079 | 0 | %100 |
| 68 | M36 | Z | 4.087 | 4.087 | 0 | %100 |
| 69 | MP4A | X | -7.056 | -7.056 | 0 | %100 |
| 70 | MP4A | Z | 4.074 | 4.074 | 0 | %100 |
| 71 | MP3A | X | -7.056 | -7.056 | 0 | %100 |
| 72 | MP3A | Z | 4.074 | 4.074 | 0 | %100 |
| 73 | MP2A | X | -7.056 | -7.056 | 0 | %100 |
| 74 | MP2A | Z | 4.074 | 4.074 | 0 | %100 |



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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 75 | MP1A | X | -7.056 | -7.056 | 0 | %100 |
| 76 | MP1A | Z | 4.074 | 4.074 | 0 | %100 |
| 77 | EQUIP | X | -11.1 | -11.1 | 0 | %100 |
| 78 | EQUIP | Z | 6.409 | 6.409 | 0 | %100 |
| 79 | M51 | X | -11.1 | -11.1 | 0 | %100 |
| 80 | M51 | Z | 6.409 | 6.409 | 0 | %100 |
| 81 | M55A | X | -1.787 | -1.787 | 0 | %100 |
| 82 | M55A | Z | 1.032 | 1.032 | 0 | %100 |

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 1 | M1 | X | 0 | 0 | 0 | %100 |
| 2 | M1 | Z | 0 | 0 | 0 | %100 |
| 3 | M3 | X | 0 | 0 | 0 | %100 |
| 4 | M3 | Z | 0 | 0 | 0 | %100 |
| 5 | M5 | X | -.655 | -.655 | 0 | %100 |
| 6 | M5 | Z | 0 | 0 | 0 | %100 |
| 7 | M6 | X | -.655 | -.655 | 0 | %100 |
| 8 | M6 | Z | 0 | 0 | 0 | %100 |
| 9 | M7 | X | 0 | 0 | 0 | %100 |
| 10 | M7 | Z | 0 | 0 | 0 | %100 |
| 11 | M8 | X | -.85 | -.85 | 0 | %100 |
| 12 | M8 | Z | 0 | 0 | 0 | %100 |
| 13 | M9 | X | -.535 | -.535 | 0 | %100 |
| 14 | M9 | Z | 0 | 0 | 0 | %100 |
| 15 | M10 | X | 0 | 0 | 0 | %100 |
| 16 | M10 | Z | 0 | 0 | 0 | %100 |
| 17 | M11 | X | -4.151 | -4.151 | 0 | %100 |
| 18 | M11 | Z | 0 | 0 | 0 | %100 |
| 19 | M12 | X | -4.151 | -4.151 | 0 | %100 |
| 20 | M12 | Z | 0 | 0 | 0 | %100 |
| 21 | M13 | X | -4.151 | -4.151 | 0 | %100 |
| 22 | M13 | Z | 0 | 0 | 0 | %100 |
| 23 | M14 | X | -4.151 | -4.151 | 0 | %100 |
| 24 | M14 | Z | 0 | 0 | 0 | %100 |
| 25 | M15 | X | -10.292 | -10.292 | 0 | %100 |
| 26 | M15 | Z | 0 | 0 | 0 | %100 |
| 27 | M16 | X | -5.452 | -5.452 | 0 | %100 |
| 28 | M16 | Z | 0 | 0 | 0 | %100 |
| 29 | M17 | X | -10.292 | -10.292 | 0 | %100 |
| 30 | M17 | Z | 0 | 0 | 0 | %100 |
| 31 | M18 | X | -5.452 | -5.452 | 0 | %100 |
| 32 | M18 | Z | 0 | 0 | 0 | %100 |
| 33 | M19 | X | -10.292 | -10.292 | 0 | %100 |
| 34 | M19 | Z | 0 | 0 | 0 | %100 |
| 35 | M20 | X | -10.292 | -10.292 | 0 | %100 |
| 36 | M20 | Z | 0 | 0 | 0 | %100 |
| 37 | M21 | X | -10.292 | -10.292 | 0 | %100 |
| 38 | M21 | Z | 0 | 0 | 0 | %100 |
| 39 | M22 | X | -5.915 | -5.915 | 0 | %100 |
| 40 | M22 | Z | 0 | 0 | 0 | %100 |



Company : Maser Consulting
 Designer :
 Job Number : Project No. 10115278
 Model Name : 469153-VZW_MT_LOT_SectorA_H

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 7 | M6 | X | -.08 | -.08 | 0 | %100 |
| 8 | M6 | Z | -.046 | -.046 | 0 | %100 |
| 9 | M7 | X | -2.135 | -2.135 | 0 | %100 |
| 10 | M7 | Z | -1.233 | -1.233 | 0 | %100 |
| 11 | M8 | X | -1.103 | -1.103 | 0 | %100 |
| 12 | M8 | Z | -.637 | -.637 | 0 | %100 |
| 13 | M9 | X | -.035 | -.035 | 0 | %100 |
| 14 | M9 | Z | -.02 | -.02 | 0 | %100 |
| 15 | M10 | X | -2.135 | -2.135 | 0 | %100 |
| 16 | M10 | Z | -1.233 | -1.233 | 0 | %100 |
| 17 | M11 | X | -6.617 | -6.617 | 0 | %100 |
| 18 | M11 | Z | -3.82 | -3.82 | 0 | %100 |
| 19 | M12 | X | -.507 | -.507 | 0 | %100 |
| 20 | M12 | Z | -.293 | -.293 | 0 | %100 |
| 21 | M13 | X | -6.617 | -6.617 | 0 | %100 |
| 22 | M13 | Z | -3.82 | -3.82 | 0 | %100 |
| 23 | M14 | X | -.507 | -.507 | 0 | %100 |
| 24 | M14 | Z | -.293 | -.293 | 0 | %100 |
| 25 | M15 | X | -6.979 | -6.979 | 0 | %100 |
| 26 | M15 | Z | -4.029 | -4.029 | 0 | %100 |
| 27 | M16 | X | -3.898 | -3.898 | 0 | %100 |
| 28 | M16 | Z | -2.25 | -2.25 | 0 | %100 |
| 29 | M17 | X | -6.979 | -6.979 | 0 | %100 |
| 30 | M17 | Z | -4.029 | -4.029 | 0 | %100 |
| 31 | M18 | X | -3.898 | -3.898 | 0 | %100 |
| 32 | M18 | Z | -2.25 | -2.25 | 0 | %100 |
| 33 | M19 | X | -7.079 | -7.079 | 0 | %100 |
| 34 | M19 | Z | -4.087 | -4.087 | 0 | %100 |
| 35 | M20 | X | -6.979 | -6.979 | 0 | %100 |
| 36 | M20 | Z | -4.029 | -4.029 | 0 | %100 |
| 37 | M21 | X | -6.979 | -6.979 | 0 | %100 |
| 38 | M21 | Z | -4.029 | -4.029 | 0 | %100 |
| 39 | M22 | X | -5.122 | -5.122 | 0 | %100 |
| 40 | M22 | Z | -2.957 | -2.957 | 0 | %100 |
| 41 | M23 | X | -5.122 | -5.122 | 0 | %100 |
| 42 | M23 | Z | -2.957 | -2.957 | 0 | %100 |
| 43 | M24 | X | -5.385 | -5.385 | 0 | %100 |
| 44 | M24 | Z | -3.109 | -3.109 | 0 | %100 |
| 45 | M25 | X | -7.079 | -7.079 | 0 | %100 |
| 46 | M25 | Z | -4.087 | -4.087 | 0 | %100 |
| 47 | M26 | X | -6.979 | -6.979 | 0 | %100 |
| 48 | M26 | Z | -4.029 | -4.029 | 0 | %100 |
| 49 | M27 | X | -5.528 | -5.528 | 0 | %100 |
| 50 | M27 | Z | -3.191 | -3.191 | 0 | %100 |
| 51 | M28 | X | -6.979 | -6.979 | 0 | %100 |
| 52 | M28 | Z | -4.029 | -4.029 | 0 | %100 |
| 53 | M29 | X | -5.528 | -5.528 | 0 | %100 |
| 54 | M29 | Z | -3.191 | -3.191 | 0 | %100 |
| 55 | M30 | X | -7.079 | -7.079 | 0 | %100 |
| 56 | M30 | Z | -4.087 | -4.087 | 0 | %100 |
| 57 | M31 | X | -6.979 | -6.979 | 0 | %100 |
| 58 | M31 | Z | -4.029 | -4.029 | 0 | %100 |

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 59 | M32 | X | -6.979 | -6.979 | 0 | %100 |
| 60 | M32 | Z | -4.029 | -4.029 | 0 | %100 |
| 61 | M33 | X | -5.122 | -5.122 | 0 | %100 |
| 62 | M33 | Z | -2.957 | -2.957 | 0 | %100 |
| 63 | M34 | X | -5.122 | -5.122 | 0 | %100 |
| 64 | M34 | Z | -2.957 | -2.957 | 0 | %100 |
| 65 | M35 | X | -5.385 | -5.385 | 0 | %100 |
| 66 | M35 | Z | -3.109 | -3.109 | 0 | %100 |
| 67 | M36 | X | -7.079 | -7.079 | 0 | %100 |
| 68 | M36 | Z | -4.087 | -4.087 | 0 | %100 |
| 69 | MP4A | X | -7.056 | -7.056 | 0 | %100 |
| 70 | MP4A | Z | -4.074 | -4.074 | 0 | %100 |
| 71 | MP3A | X | -7.056 | -7.056 | 0 | %100 |
| 72 | MP3A | Z | -4.074 | -4.074 | 0 | %100 |
| 73 | MP2A | X | -7.056 | -7.056 | 0 | %100 |
| 74 | MP2A | Z | -4.074 | -4.074 | 0 | %100 |
| 75 | MP1A | X | -7.056 | -7.056 | 0 | %100 |
| 76 | MP1A | Z | -4.074 | -4.074 | 0 | %100 |
| 77 | EQUIP | X | -11.1 | -11.1 | 0 | %100 |
| 78 | EQUIP | Z | -6.409 | -6.409 | 0 | %100 |
| 79 | M51 | X | -11.1 | -11.1 | 0 | %100 |
| 80 | M51 | Z | -6.409 | -6.409 | 0 | %100 |
| 81 | M55A | X | -7.056 | -7.056 | 0 | %100 |
| 82 | M55A | Z | -4.074 | -4.074 | 0 | %100 |

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 1 | M1 | X | -3.859 | -3.859 | 0 | %100 |
| 2 | M1 | Z | -6.685 | -6.685 | 0 | %100 |
| 3 | M3 | X | -3.859 | -3.859 | 0 | %100 |
| 4 | M3 | Z | -6.685 | -6.685 | 0 | %100 |
| 5 | M5 | X | -.597 | -.597 | 0 | %100 |
| 6 | M5 | Z | -1.034 | -1.034 | 0 | %100 |
| 7 | M6 | X | -.04 | -.04 | 0 | %100 |
| 8 | M6 | Z | -.069 | -.069 | 0 | %100 |
| 9 | M7 | X | -3.699 | -3.699 | 0 | %100 |
| 10 | M7 | Z | -6.406 | -6.406 | 0 | %100 |
| 11 | M8 | X | -.534 | -.534 | 0 | %100 |
| 12 | M8 | Z | -.924 | -.924 | 0 | %100 |
| 13 | M9 | X | -.074 | -.074 | 0 | %100 |
| 14 | M9 | Z | -.128 | -.128 | 0 | %100 |
| 15 | M10 | X | -3.699 | -3.699 | 0 | %100 |
| 16 | M10 | Z | -6.406 | -6.406 | 0 | %100 |
| 17 | M11 | X | -3.781 | -3.781 | 0 | %100 |
| 18 | M11 | Z | -6.549 | -6.549 | 0 | %100 |
| 19 | M12 | X | -.254 | -.254 | 0 | %100 |
| 20 | M12 | Z | -.44 | -.44 | 0 | %100 |
| 21 | M13 | X | -3.781 | -3.781 | 0 | %100 |
| 22 | M13 | Z | -6.549 | -6.549 | 0 | %100 |
| 23 | M14 | X | -.254 | -.254 | 0 | %100 |
| 24 | M14 | Z | -.44 | -.44 | 0 | %100 |

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 25 | M15 | X | -1.796 | -1.796 | 0 | %100 |
| 26 | M15 | Z | -3.11 | -3.11 | 0 | %100 |
| 27 | M16 | X | -2.24 | -2.24 | 0 | %100 |
| 28 | M16 | Z | -3.88 | -3.88 | 0 | %100 |
| 29 | M17 | X | -1.796 | -1.796 | 0 | %100 |
| 30 | M17 | Z | -3.11 | -3.11 | 0 | %100 |
| 31 | M18 | X | -2.24 | -2.24 | 0 | %100 |
| 32 | M18 | Z | -3.88 | -3.88 | 0 | %100 |
| 33 | M19 | X | -1.97 | -1.97 | 0 | %100 |
| 34 | M19 | Z | -3.412 | -3.412 | 0 | %100 |
| 35 | M20 | X | -1.796 | -1.796 | 0 | %100 |
| 36 | M20 | Z | -3.11 | -3.11 | 0 | %100 |
| 37 | M21 | X | -1.796 | -1.796 | 0 | %100 |
| 38 | M21 | Z | -3.11 | -3.11 | 0 | %100 |
| 39 | M22 | X | -2.957 | -2.957 | 0 | %100 |
| 40 | M22 | Z | -5.122 | -5.122 | 0 | %100 |
| 41 | M23 | X | -2.957 | -2.957 | 0 | %100 |
| 42 | M23 | Z | -5.122 | -5.122 | 0 | %100 |
| 43 | M24 | X | -3.109 | -3.109 | 0 | %100 |
| 44 | M24 | Z | -5.385 | -5.385 | 0 | %100 |
| 45 | M25 | X | -1.97 | -1.97 | 0 | %100 |
| 46 | M25 | Z | -3.412 | -3.412 | 0 | %100 |
| 47 | M26 | X | -1.796 | -1.796 | 0 | %100 |
| 48 | M26 | Z | -3.11 | -3.11 | 0 | %100 |
| 49 | M27 | X | -3.181 | -3.181 | 0 | %100 |
| 50 | M27 | Z | -5.51 | -5.51 | 0 | %100 |
| 51 | M28 | X | -1.796 | -1.796 | 0 | %100 |
| 52 | M28 | Z | -3.11 | -3.11 | 0 | %100 |
| 53 | M29 | X | -3.181 | -3.181 | 0 | %100 |
| 54 | M29 | Z | -5.51 | -5.51 | 0 | %100 |
| 55 | M30 | X | -1.97 | -1.97 | 0 | %100 |
| 56 | M30 | Z | -3.412 | -3.412 | 0 | %100 |
| 57 | M31 | X | -1.796 | -1.796 | 0 | %100 |
| 58 | M31 | Z | -3.11 | -3.11 | 0 | %100 |
| 59 | M32 | X | -1.796 | -1.796 | 0 | %100 |
| 60 | M32 | Z | -3.11 | -3.11 | 0 | %100 |
| 61 | M33 | X | -2.957 | -2.957 | 0 | %100 |
| 62 | M33 | Z | -5.122 | -5.122 | 0 | %100 |
| 63 | M34 | X | -2.957 | -2.957 | 0 | %100 |
| 64 | M34 | Z | -5.122 | -5.122 | 0 | %100 |
| 65 | M35 | X | -3.109 | -3.109 | 0 | %100 |
| 66 | M35 | Z | -5.385 | -5.385 | 0 | %100 |
| 67 | M36 | X | -1.97 | -1.97 | 0 | %100 |
| 68 | M36 | Z | -3.412 | -3.412 | 0 | %100 |
| 69 | MP4A | X | -4.074 | -4.074 | 0 | %100 |
| 70 | MP4A | Z | -7.056 | -7.056 | 0 | %100 |
| 71 | MP3A | X | -4.074 | -4.074 | 0 | %100 |
| 72 | MP3A | Z | -7.056 | -7.056 | 0 | %100 |
| 73 | MP2A | X | -4.074 | -4.074 | 0 | %100 |
| 74 | MP2A | Z | -7.056 | -7.056 | 0 | %100 |
| 75 | MP1A | X | -4.074 | -4.074 | 0 | %100 |
| 76 | MP1A | Z | -7.056 | -7.056 | 0 | %100 |



Company : Maser Consulting
 Designer :
 Job Number : Project No. 10115278
 Model Name : 469153-VZW_MT_LOT_SectorA_H

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 43 | M24 | X | 0 | 0 | 0 | %100 |
| 44 | M24 | Z | -2.221 | -2.221 | 0 | %100 |
| 45 | M25 | X | 0 | 0 | 0 | %100 |
| 46 | M25 | Z | -1.17 | -1.17 | 0 | %100 |
| 47 | M26 | X | 0 | 0 | 0 | %100 |
| 48 | M26 | Z | -1.085 | -1.085 | 0 | %100 |
| 49 | M27 | X | 0 | 0 | 0 | %100 |
| 50 | M27 | Z | -2.09 | -2.09 | 0 | %100 |
| 51 | M28 | X | 0 | 0 | 0 | %100 |
| 52 | M28 | Z | -1.085 | -1.085 | 0 | %100 |
| 53 | M29 | X | 0 | 0 | 0 | %100 |
| 54 | M29 | Z | -2.09 | -2.09 | 0 | %100 |
| 55 | M30 | X | 0 | 0 | 0 | %100 |
| 56 | M30 | Z | -1.17 | -1.17 | 0 | %100 |
| 57 | M31 | X | 0 | 0 | 0 | %100 |
| 58 | M31 | Z | -1.085 | -1.085 | 0 | %100 |
| 59 | M32 | X | 0 | 0 | 0 | %100 |
| 60 | M32 | Z | -1.085 | -1.085 | 0 | %100 |
| 61 | M33 | X | 0 | 0 | 0 | %100 |
| 62 | M33 | Z | -2.27 | -2.27 | 0 | %100 |
| 63 | M34 | X | 0 | 0 | 0 | %100 |
| 64 | M34 | Z | -2.27 | -2.27 | 0 | %100 |
| 65 | M35 | X | 0 | 0 | 0 | %100 |
| 66 | M35 | Z | -2.221 | -2.221 | 0 | %100 |
| 67 | M36 | X | 0 | 0 | 0 | %100 |
| 68 | M36 | Z | -1.17 | -1.17 | 0 | %100 |
| 69 | MP4A | X | 0 | 0 | 0 | %100 |
| 70 | MP4A | Z | -2.905 | -2.905 | 0 | %100 |
| 71 | MP3A | X | 0 | 0 | 0 | %100 |
| 72 | MP3A | Z | -2.905 | -2.905 | 0 | %100 |
| 73 | MP2A | X | 0 | 0 | 0 | %100 |
| 74 | MP2A | Z | -2.905 | -2.905 | 0 | %100 |
| 75 | MP1A | X | 0 | 0 | 0 | %100 |
| 76 | MP1A | Z | -2.905 | -2.905 | 0 | %100 |
| 77 | EQUIP | X | 0 | 0 | 0 | %100 |
| 78 | EQUIP | Z | -3.612 | -3.612 | 0 | %100 |
| 79 | M51 | X | 0 | 0 | 0 | %100 |
| 80 | M51 | Z | -3.612 | -3.612 | 0 | %100 |
| 81 | M55A | X | 0 | 0 | 0 | %100 |
| 82 | M55A | Z | -.717 | -.717 | 0 | %100 |

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|---|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 1 | M1 | X | 1.012 | 1.012 | 0 | %100 |
| 2 | M1 | Z | -1.753 | -1.753 | 0 | %100 |
| 3 | M3 | X | 1.012 | 1.012 | 0 | %100 |
| 4 | M3 | Z | -1.753 | -1.753 | 0 | %100 |
| 5 | M5 | X | .033 | .033 | 0 | %100 |
| 6 | M5 | Z | -.058 | -.058 | 0 | %100 |
| 7 | M6 | X | .497 | .497 | 0 | %100 |
| 8 | M6 | Z | -.862 | -.862 | 0 | %100 |



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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 9 | M7 | X | 1.205 | 1.205 | 0 | %100 |
| 10 | M7 | Z | -2.087 | -2.087 | 0 | %100 |
| 11 | M8 | X | .005 | .005 | 0 | %100 |
| 12 | M8 | Z | -.009 | -.009 | 0 | %100 |
| 13 | M9 | X | .519 | .519 | 0 | %100 |
| 14 | M9 | Z | -.899 | -.899 | 0 | %100 |
| 15 | M10 | X | 1.205 | 1.205 | 0 | %100 |
| 16 | M10 | Z | -2.087 | -2.087 | 0 | %100 |
| 17 | M11 | X | .09 | .09 | 0 | %100 |
| 18 | M11 | Z | -.157 | -.157 | 0 | %100 |
| 19 | M12 | X | 1.348 | 1.348 | 0 | %100 |
| 20 | M12 | Z | -2.335 | -2.335 | 0 | %100 |
| 21 | M13 | X | .09 | .09 | 0 | %100 |
| 22 | M13 | Z | -.157 | -.157 | 0 | %100 |
| 23 | M14 | X | 1.348 | 1.348 | 0 | %100 |
| 24 | M14 | Z | -2.335 | -2.335 | 0 | %100 |
| 25 | M15 | X | .743 | .743 | 0 | %100 |
| 26 | M15 | Z | -1.287 | -1.287 | 0 | %100 |
| 27 | M16 | X | 1.229 | 1.229 | 0 | %100 |
| 28 | M16 | Z | -2.128 | -2.128 | 0 | %100 |
| 29 | M17 | X | .743 | .743 | 0 | %100 |
| 30 | M17 | Z | -1.287 | -1.287 | 0 | %100 |
| 31 | M18 | X | 1.229 | 1.229 | 0 | %100 |
| 32 | M18 | Z | -2.128 | -2.128 | 0 | %100 |
| 33 | M19 | X | .775 | .775 | 0 | %100 |
| 34 | M19 | Z | -1.342 | -1.342 | 0 | %100 |
| 35 | M20 | X | .743 | .743 | 0 | %100 |
| 36 | M20 | Z | -1.287 | -1.287 | 0 | %100 |
| 37 | M21 | X | .743 | .743 | 0 | %100 |
| 38 | M21 | Z | -1.287 | -1.287 | 0 | %100 |
| 39 | M22 | X | 1.135 | 1.135 | 0 | %100 |
| 40 | M22 | Z | -1.966 | -1.966 | 0 | %100 |
| 41 | M23 | X | 1.135 | 1.135 | 0 | %100 |
| 42 | M23 | Z | -1.966 | -1.966 | 0 | %100 |
| 43 | M24 | X | 1.111 | 1.111 | 0 | %100 |
| 44 | M24 | Z | -1.924 | -1.924 | 0 | %100 |
| 45 | M25 | X | .775 | .775 | 0 | %100 |
| 46 | M25 | Z | -1.342 | -1.342 | 0 | %100 |
| 47 | M26 | X | .743 | .743 | 0 | %100 |
| 48 | M26 | Z | -1.287 | -1.287 | 0 | %100 |
| 49 | M27 | X | .865 | .865 | 0 | %100 |
| 50 | M27 | Z | -1.498 | -1.498 | 0 | %100 |
| 51 | M28 | X | .743 | .743 | 0 | %100 |
| 52 | M28 | Z | -1.287 | -1.287 | 0 | %100 |
| 53 | M29 | X | .865 | .865 | 0 | %100 |
| 54 | M29 | Z | -1.498 | -1.498 | 0 | %100 |
| 55 | M30 | X | .775 | .775 | 0 | %100 |
| 56 | M30 | Z | -1.342 | -1.342 | 0 | %100 |
| 57 | M31 | X | .743 | .743 | 0 | %100 |
| 58 | M31 | Z | -1.287 | -1.287 | 0 | %100 |
| 59 | M32 | X | .743 | .743 | 0 | %100 |
| 60 | M32 | Z | -1.287 | -1.287 | 0 | %100 |

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 79 | M51 | X | 3.128 | 3.128 | 0 | % 100 |
| 80 | M51 | Z | -1.806 | -1.806 | 0 | % 100 |
| 81 | M55A | X | .637 | .637 | 0 | % 100 |
| 82 | M55A | Z | -.368 | -.368 | 0 | % 100 |

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 1 | M1 | X | 0 | 0 | 0 | % 100 |
| 2 | M1 | Z | 0 | 0 | 0 | % 100 |
| 3 | M3 | X | 0 | 0 | 0 | % 100 |
| 4 | M3 | Z | 0 | 0 | 0 | % 100 |
| 5 | M5 | X | .546 | .546 | 0 | % 100 |
| 6 | M5 | Z | 0 | 0 | 0 | % 100 |
| 7 | M6 | X | .546 | .546 | 0 | % 100 |
| 8 | M6 | Z | 0 | 0 | 0 | % 100 |
| 9 | M7 | X | 0 | 0 | 0 | % 100 |
| 10 | M7 | Z | 0 | 0 | 0 | % 100 |
| 11 | M8 | X | .708 | .708 | 0 | % 100 |
| 12 | M8 | Z | 0 | 0 | 0 | % 100 |
| 13 | M9 | X | .446 | .446 | 0 | % 100 |
| 14 | M9 | Z | 0 | 0 | 0 | % 100 |
| 15 | M10 | X | 0 | 0 | 0 | % 100 |
| 16 | M10 | Z | 0 | 0 | 0 | % 100 |
| 17 | M11 | X | 1.48 | 1.48 | 0 | % 100 |
| 18 | M11 | Z | 0 | 0 | 0 | % 100 |
| 19 | M12 | X | 1.48 | 1.48 | 0 | % 100 |
| 20 | M12 | Z | 0 | 0 | 0 | % 100 |
| 21 | M13 | X | 1.48 | 1.48 | 0 | % 100 |
| 22 | M13 | Z | 0 | 0 | 0 | % 100 |
| 23 | M14 | X | 1.48 | 1.48 | 0 | % 100 |
| 24 | M14 | Z | 0 | 0 | 0 | % 100 |
| 25 | M15 | X | 2.689 | 2.689 | 0 | % 100 |
| 26 | M15 | Z | 0 | 0 | 0 | % 100 |
| 27 | M16 | X | 2.106 | 2.106 | 0 | % 100 |
| 28 | M16 | Z | 0 | 0 | 0 | % 100 |
| 29 | M17 | X | 2.689 | 2.689 | 0 | % 100 |
| 30 | M17 | Z | 0 | 0 | 0 | % 100 |
| 31 | M18 | X | 2.106 | 2.106 | 0 | % 100 |
| 32 | M18 | Z | 0 | 0 | 0 | % 100 |
| 33 | M19 | X | 2.691 | 2.691 | 0 | % 100 |
| 34 | M19 | Z | 0 | 0 | 0 | % 100 |
| 35 | M20 | X | 2.689 | 2.689 | 0 | % 100 |
| 36 | M20 | Z | 0 | 0 | 0 | % 100 |
| 37 | M21 | X | 2.689 | 2.689 | 0 | % 100 |
| 38 | M21 | Z | 0 | 0 | 0 | % 100 |
| 39 | M22 | X | 2.27 | 2.27 | 0 | % 100 |
| 40 | M22 | Z | 0 | 0 | 0 | % 100 |
| 41 | M23 | X | 2.27 | 2.27 | 0 | % 100 |
| 42 | M23 | Z | 0 | 0 | 0 | % 100 |
| 43 | M24 | X | 2.221 | 2.221 | 0 | % 100 |
| 44 | M24 | Z | 0 | 0 | 0 | % 100 |



Company : Maser Consulting
 Designer :
 Job Number : Project No. 10115278
 Model Name : 469153-VZW_MT_LOT_SectorA_H

Nov 15, 2021
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Member Distributed Loads (BLC 56 : Structure Wi (90 Deg)) (Continued)

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 45 | M25 | X | 2.691 | 2.691 | 0 | %100 |
| 46 | M25 | Z | 0 | 0 | 0 | %100 |
| 47 | M26 | X | 2.689 | 2.689 | 0 | %100 |
| 48 | M26 | Z | 0 | 0 | 0 | %100 |
| 49 | M27 | X | 2.106 | 2.106 | 0 | %100 |
| 50 | M27 | Z | 0 | 0 | 0 | %100 |
| 51 | M28 | X | 2.689 | 2.689 | 0 | %100 |
| 52 | M28 | Z | 0 | 0 | 0 | %100 |
| 53 | M29 | X | 2.106 | 2.106 | 0 | %100 |
| 54 | M29 | Z | 0 | 0 | 0 | %100 |
| 55 | M30 | X | 2.691 | 2.691 | 0 | %100 |
| 56 | M30 | Z | 0 | 0 | 0 | %100 |
| 57 | M31 | X | 2.689 | 2.689 | 0 | %100 |
| 58 | M31 | Z | 0 | 0 | 0 | %100 |
| 59 | M32 | X | 2.689 | 2.689 | 0 | %100 |
| 60 | M32 | Z | 0 | 0 | 0 | %100 |
| 61 | M33 | X | 2.27 | 2.27 | 0 | %100 |
| 62 | M33 | Z | 0 | 0 | 0 | %100 |
| 63 | M34 | X | 2.27 | 2.27 | 0 | %100 |
| 64 | M34 | Z | 0 | 0 | 0 | %100 |
| 65 | M35 | X | 2.221 | 2.221 | 0 | %100 |
| 66 | M35 | Z | 0 | 0 | 0 | %100 |
| 67 | M36 | X | 2.691 | 2.691 | 0 | %100 |
| 68 | M36 | Z | 0 | 0 | 0 | %100 |
| 69 | MP4A | X | 2.905 | 2.905 | 0 | %100 |
| 70 | MP4A | Z | 0 | 0 | 0 | %100 |
| 71 | MP3A | X | 2.905 | 2.905 | 0 | %100 |
| 72 | MP3A | Z | 0 | 0 | 0 | %100 |
| 73 | MP2A | X | 2.905 | 2.905 | 0 | %100 |
| 74 | MP2A | Z | 0 | 0 | 0 | %100 |
| 75 | MP1A | X | 2.905 | 2.905 | 0 | %100 |
| 76 | MP1A | Z | 0 | 0 | 0 | %100 |
| 77 | EQUIP | X | 3.612 | 3.612 | 0 | %100 |
| 78 | EQUIP | Z | 0 | 0 | 0 | %100 |
| 79 | M51 | X | 3.612 | 3.612 | 0 | %100 |
| 80 | M51 | Z | 0 | 0 | 0 | %100 |
| 81 | M55A | X | 2.188 | 2.188 | 0 | %100 |
| 82 | M55A | Z | 0 | 0 | 0 | %100 |

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 1 | M1 | X | .584 | .584 | 0 | %100 |
| 2 | M1 | Z | .337 | .337 | 0 | %100 |
| 3 | M3 | X | .584 | .584 | 0 | %100 |
| 4 | M3 | Z | .337 | .337 | 0 | %100 |
| 5 | M5 | X | .871 | .871 | 0 | %100 |
| 6 | M5 | Z | .503 | .503 | 0 | %100 |
| 7 | M6 | X | .067 | .067 | 0 | %100 |
| 8 | M6 | Z | .038 | .038 | 0 | %100 |
| 9 | M7 | X | .696 | .696 | 0 | %100 |
| 10 | M7 | Z | .402 | .402 | 0 | %100 |



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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 11 | M8 | X | .919 | .919 | 0 | %100 |
| 12 | M8 | Z | .531 | .531 | 0 | %100 |
| 13 | M9 | X | .029 | .029 | 0 | %100 |
| 14 | M9 | Z | .017 | .017 | 0 | %100 |
| 15 | M10 | X | .696 | .696 | 0 | %100 |
| 16 | M10 | Z | .402 | .402 | 0 | %100 |
| 17 | M11 | X | 2.359 | 2.359 | 0 | %100 |
| 18 | M11 | Z | 1.362 | 1.362 | 0 | %100 |
| 19 | M12 | X | .181 | .181 | 0 | %100 |
| 20 | M12 | Z | .104 | .104 | 0 | %100 |
| 21 | M13 | X | 2.359 | 2.359 | 0 | %100 |
| 22 | M13 | Z | 1.362 | 1.362 | 0 | %100 |
| 23 | M14 | X | .181 | .181 | 0 | %100 |
| 24 | M14 | Z | .104 | .104 | 0 | %100 |
| 25 | M15 | X | 1.981 | 1.981 | 0 | %100 |
| 26 | M15 | Z | 1.144 | 1.144 | 0 | %100 |
| 27 | M16 | X | 1.505 | 1.505 | 0 | %100 |
| 28 | M16 | Z | .869 | .869 | 0 | %100 |
| 29 | M17 | X | 1.981 | 1.981 | 0 | %100 |
| 30 | M17 | Z | 1.144 | 1.144 | 0 | %100 |
| 31 | M18 | X | 1.505 | 1.505 | 0 | %100 |
| 32 | M18 | Z | .869 | .869 | 0 | %100 |
| 33 | M19 | X | 2.001 | 2.001 | 0 | %100 |
| 34 | M19 | Z | 1.155 | 1.155 | 0 | %100 |
| 35 | M20 | X | 1.981 | 1.981 | 0 | %100 |
| 36 | M20 | Z | 1.144 | 1.144 | 0 | %100 |
| 37 | M21 | X | 1.981 | 1.981 | 0 | %100 |
| 38 | M21 | Z | 1.144 | 1.144 | 0 | %100 |
| 39 | M22 | X | 1.966 | 1.966 | 0 | %100 |
| 40 | M22 | Z | 1.135 | 1.135 | 0 | %100 |
| 41 | M23 | X | 1.966 | 1.966 | 0 | %100 |
| 42 | M23 | Z | 1.135 | 1.135 | 0 | %100 |
| 43 | M24 | X | 1.924 | 1.924 | 0 | %100 |
| 44 | M24 | Z | 1.111 | 1.111 | 0 | %100 |
| 45 | M25 | X | 2.001 | 2.001 | 0 | %100 |
| 46 | M25 | Z | 1.155 | 1.155 | 0 | %100 |
| 47 | M26 | X | 1.981 | 1.981 | 0 | %100 |
| 48 | M26 | Z | 1.144 | 1.144 | 0 | %100 |
| 49 | M27 | X | 2.135 | 2.135 | 0 | %100 |
| 50 | M27 | Z | 1.233 | 1.233 | 0 | %100 |
| 51 | M28 | X | 1.981 | 1.981 | 0 | %100 |
| 52 | M28 | Z | 1.144 | 1.144 | 0 | %100 |
| 53 | M29 | X | 2.135 | 2.135 | 0 | %100 |
| 54 | M29 | Z | 1.233 | 1.233 | 0 | %100 |
| 55 | M30 | X | 2.001 | 2.001 | 0 | %100 |
| 56 | M30 | Z | 1.155 | 1.155 | 0 | %100 |
| 57 | M31 | X | 1.981 | 1.981 | 0 | %100 |
| 58 | M31 | Z | 1.144 | 1.144 | 0 | %100 |
| 59 | M32 | X | 1.981 | 1.981 | 0 | %100 |
| 60 | M32 | Z | 1.144 | 1.144 | 0 | %100 |
| 61 | M33 | X | 1.966 | 1.966 | 0 | %100 |
| 62 | M33 | Z | 1.135 | 1.135 | 0 | %100 |



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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 29 | M17 | X | .743 | .743 | 0 | %100 |
| 30 | M17 | Z | 1.287 | 1.287 | 0 | %100 |
| 31 | M18 | X | .865 | .865 | 0 | %100 |
| 32 | M18 | Z | 1.498 | 1.498 | 0 | %100 |
| 33 | M19 | X | .775 | .775 | 0 | %100 |
| 34 | M19 | Z | 1.342 | 1.342 | 0 | %100 |
| 35 | M20 | X | .743 | .743 | 0 | %100 |
| 36 | M20 | Z | 1.287 | 1.287 | 0 | %100 |
| 37 | M21 | X | .743 | .743 | 0 | %100 |
| 38 | M21 | Z | 1.287 | 1.287 | 0 | %100 |
| 39 | M22 | X | 1.135 | 1.135 | 0 | %100 |
| 40 | M22 | Z | 1.966 | 1.966 | 0 | %100 |
| 41 | M23 | X | 1.135 | 1.135 | 0 | %100 |
| 42 | M23 | Z | 1.966 | 1.966 | 0 | %100 |
| 43 | M24 | X | 1.111 | 1.111 | 0 | %100 |
| 44 | M24 | Z | 1.924 | 1.924 | 0 | %100 |
| 45 | M25 | X | .775 | .775 | 0 | %100 |
| 46 | M25 | Z | 1.342 | 1.342 | 0 | %100 |
| 47 | M26 | X | .743 | .743 | 0 | %100 |
| 48 | M26 | Z | 1.287 | 1.287 | 0 | %100 |
| 49 | M27 | X | 1.229 | 1.229 | 0 | %100 |
| 50 | M27 | Z | 2.128 | 2.128 | 0 | %100 |
| 51 | M28 | X | .743 | .743 | 0 | %100 |
| 52 | M28 | Z | 1.287 | 1.287 | 0 | %100 |
| 53 | M29 | X | 1.229 | 1.229 | 0 | %100 |
| 54 | M29 | Z | 2.128 | 2.128 | 0 | %100 |
| 55 | M30 | X | .775 | .775 | 0 | %100 |
| 56 | M30 | Z | 1.342 | 1.342 | 0 | %100 |
| 57 | M31 | X | .743 | .743 | 0 | %100 |
| 58 | M31 | Z | 1.287 | 1.287 | 0 | %100 |
| 59 | M32 | X | .743 | .743 | 0 | %100 |
| 60 | M32 | Z | 1.287 | 1.287 | 0 | %100 |
| 61 | M33 | X | 1.135 | 1.135 | 0 | %100 |
| 62 | M33 | Z | 1.966 | 1.966 | 0 | %100 |
| 63 | M34 | X | 1.135 | 1.135 | 0 | %100 |
| 64 | M34 | Z | 1.966 | 1.966 | 0 | %100 |
| 65 | M35 | X | 1.111 | 1.111 | 0 | %100 |
| 66 | M35 | Z | 1.924 | 1.924 | 0 | %100 |
| 67 | M36 | X | .775 | .775 | 0 | %100 |
| 68 | M36 | Z | 1.342 | 1.342 | 0 | %100 |
| 69 | MP4A | X | 1.452 | 1.452 | 0 | %100 |
| 70 | MP4A | Z | 2.515 | 2.515 | 0 | %100 |
| 71 | MP3A | X | 1.452 | 1.452 | 0 | %100 |
| 72 | MP3A | Z | 2.515 | 2.515 | 0 | %100 |
| 73 | MP2A | X | 1.452 | 1.452 | 0 | %100 |
| 74 | MP2A | Z | 2.515 | 2.515 | 0 | %100 |
| 75 | MP1A | X | 1.452 | 1.452 | 0 | %100 |
| 76 | MP1A | Z | 2.515 | 2.515 | 0 | %100 |
| 77 | EQUIP | X | 1.806 | 1.806 | 0 | %100 |
| 78 | EQUIP | Z | 3.128 | 3.128 | 0 | %100 |
| 79 | M51 | X | 1.806 | 1.806 | 0 | %100 |
| 80 | M51 | Z | 3.128 | 3.128 | 0 | %100 |



Company : Maser Consulting
 Designer :
 Job Number : Project No. 10115278
 Model Name : 469153-VZW_MT_LOT_SectorA_H

Nov 15, 2021
 4:59 PM
 Checked By: _____

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in,%] | End Location[in,%] |
|----|--------------|-----------|---------------------------|--------------------------|----------------------|--------------------|
| 81 | M55A | X | 1.084 | 1.084 | 0 | %100 |
| 82 | M55A | Z | 1.878 | 1.878 | 0 | %100 |

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in,%] | End Location[in,%] |
|----|--------------|-----------|---------------------------|--------------------------|----------------------|--------------------|
| 1 | M1 | X | 0 | 0 | 0 | %100 |
| 2 | M1 | Z | 2.699 | 2.699 | 0 | %100 |
| 3 | M3 | X | 0 | 0 | 0 | %100 |
| 4 | M3 | Z | 2.699 | 2.699 | 0 | %100 |
| 5 | M5 | X | 0 | 0 | 0 | %100 |
| 6 | M5 | Z | .526 | .526 | 0 | %100 |
| 7 | M6 | X | 0 | 0 | 0 | %100 |
| 8 | M6 | Z | .526 | .526 | 0 | %100 |
| 9 | M7 | X | 0 | 0 | 0 | %100 |
| 10 | M7 | Z | 3.213 | 3.213 | 0 | %100 |
| 11 | M8 | X | 0 | 0 | 0 | %100 |
| 12 | M8 | Z | .364 | .364 | 0 | %100 |
| 13 | M9 | X | 0 | 0 | 0 | %100 |
| 14 | M9 | Z | .626 | .626 | 0 | %100 |
| 15 | M10 | X | 0 | 0 | 0 | %100 |
| 16 | M10 | Z | 3.213 | 3.213 | 0 | %100 |
| 17 | M11 | X | 0 | 0 | 0 | %100 |
| 18 | M11 | Z | 1.425 | 1.425 | 0 | %100 |
| 19 | M12 | X | 0 | 0 | 0 | %100 |
| 20 | M12 | Z | 1.425 | 1.425 | 0 | %100 |
| 21 | M13 | X | 0 | 0 | 0 | %100 |
| 22 | M13 | Z | 1.425 | 1.425 | 0 | %100 |
| 23 | M14 | X | 0 | 0 | 0 | %100 |
| 24 | M14 | Z | 1.425 | 1.425 | 0 | %100 |
| 25 | M15 | X | 0 | 0 | 0 | %100 |
| 26 | M15 | Z | 1.085 | 1.085 | 0 | %100 |
| 27 | M16 | X | 0 | 0 | 0 | %100 |
| 28 | M16 | Z | 2.09 | 2.09 | 0 | %100 |
| 29 | M17 | X | 0 | 0 | 0 | %100 |
| 30 | M17 | Z | 1.085 | 1.085 | 0 | %100 |
| 31 | M18 | X | 0 | 0 | 0 | %100 |
| 32 | M18 | Z | 2.09 | 2.09 | 0 | %100 |
| 33 | M19 | X | 0 | 0 | 0 | %100 |
| 34 | M19 | Z | 1.17 | 1.17 | 0 | %100 |
| 35 | M20 | X | 0 | 0 | 0 | %100 |
| 36 | M20 | Z | 1.085 | 1.085 | 0 | %100 |
| 37 | M21 | X | 0 | 0 | 0 | %100 |
| 38 | M21 | Z | 1.085 | 1.085 | 0 | %100 |
| 39 | M22 | X | 0 | 0 | 0 | %100 |
| 40 | M22 | Z | 2.27 | 2.27 | 0 | %100 |
| 41 | M23 | X | 0 | 0 | 0 | %100 |
| 42 | M23 | Z | 2.27 | 2.27 | 0 | %100 |
| 43 | M24 | X | 0 | 0 | 0 | %100 |
| 44 | M24 | Z | 2.221 | 2.221 | 0 | %100 |
| 45 | M25 | X | 0 | 0 | 0 | %100 |
| 46 | M25 | Z | 1.17 | 1.17 | 0 | %100 |



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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in,%] | End Location[in,%] |
|----|--------------|-----------|---------------------------|--------------------------|----------------------|--------------------|
| 13 | M9 | X | -.519 | -.519 | 0 | %100 |
| 14 | M9 | Z | .899 | .899 | 0 | %100 |
| 15 | M10 | X | -1.205 | -1.205 | 0 | %100 |
| 16 | M10 | Z | 2.087 | 2.087 | 0 | %100 |
| 17 | M11 | X | -.09 | -.09 | 0 | %100 |
| 18 | M11 | Z | .157 | .157 | 0 | %100 |
| 19 | M12 | X | -1.348 | -1.348 | 0 | %100 |
| 20 | M12 | Z | 2.335 | 2.335 | 0 | %100 |
| 21 | M13 | X | -.09 | -.09 | 0 | %100 |
| 22 | M13 | Z | .157 | .157 | 0 | %100 |
| 23 | M14 | X | -1.348 | -1.348 | 0 | %100 |
| 24 | M14 | Z | 2.335 | 2.335 | 0 | %100 |
| 25 | M15 | X | -.743 | -.743 | 0 | %100 |
| 26 | M15 | Z | 1.287 | 1.287 | 0 | %100 |
| 27 | M16 | X | -1.229 | -1.229 | 0 | %100 |
| 28 | M16 | Z | 2.128 | 2.128 | 0 | %100 |
| 29 | M17 | X | -.743 | -.743 | 0 | %100 |
| 30 | M17 | Z | 1.287 | 1.287 | 0 | %100 |
| 31 | M18 | X | -1.229 | -1.229 | 0 | %100 |
| 32 | M18 | Z | 2.128 | 2.128 | 0 | %100 |
| 33 | M19 | X | -.775 | -.775 | 0 | %100 |
| 34 | M19 | Z | 1.342 | 1.342 | 0 | %100 |
| 35 | M20 | X | -.743 | -.743 | 0 | %100 |
| 36 | M20 | Z | 1.287 | 1.287 | 0 | %100 |
| 37 | M21 | X | -.743 | -.743 | 0 | %100 |
| 38 | M21 | Z | 1.287 | 1.287 | 0 | %100 |
| 39 | M22 | X | -1.135 | -1.135 | 0 | %100 |
| 40 | M22 | Z | 1.966 | 1.966 | 0 | %100 |
| 41 | M23 | X | -1.135 | -1.135 | 0 | %100 |
| 42 | M23 | Z | 1.966 | 1.966 | 0 | %100 |
| 43 | M24 | X | -1.111 | -1.111 | 0 | %100 |
| 44 | M24 | Z | 1.924 | 1.924 | 0 | %100 |
| 45 | M25 | X | -.775 | -.775 | 0 | %100 |
| 46 | M25 | Z | 1.342 | 1.342 | 0 | %100 |
| 47 | M26 | X | -.743 | -.743 | 0 | %100 |
| 48 | M26 | Z | 1.287 | 1.287 | 0 | %100 |
| 49 | M27 | X | -.865 | -.865 | 0 | %100 |
| 50 | M27 | Z | 1.498 | 1.498 | 0 | %100 |
| 51 | M28 | X | -.743 | -.743 | 0 | %100 |
| 52 | M28 | Z | 1.287 | 1.287 | 0 | %100 |
| 53 | M29 | X | -.865 | -.865 | 0 | %100 |
| 54 | M29 | Z | 1.498 | 1.498 | 0 | %100 |
| 55 | M30 | X | -.775 | -.775 | 0 | %100 |
| 56 | M30 | Z | 1.342 | 1.342 | 0 | %100 |
| 57 | M31 | X | -.743 | -.743 | 0 | %100 |
| 58 | M31 | Z | 1.287 | 1.287 | 0 | %100 |
| 59 | M32 | X | -.743 | -.743 | 0 | %100 |
| 60 | M32 | Z | 1.287 | 1.287 | 0 | %100 |
| 61 | M33 | X | -1.135 | -1.135 | 0 | %100 |
| 62 | M33 | Z | 1.966 | 1.966 | 0 | %100 |
| 63 | M34 | X | -1.135 | -1.135 | 0 | %100 |
| 64 | M34 | Z | 1.966 | 1.966 | 0 | %100 |



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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 31 | M18 | X | -2.135 | -2.135 | 0 | %100 |
| 32 | M18 | Z | 1.233 | 1.233 | 0 | %100 |
| 33 | M19 | X | -2.001 | -2.001 | 0 | %100 |
| 34 | M19 | Z | 1.155 | 1.155 | 0 | %100 |
| 35 | M20 | X | -1.981 | -1.981 | 0 | %100 |
| 36 | M20 | Z | 1.144 | 1.144 | 0 | %100 |
| 37 | M21 | X | -1.981 | -1.981 | 0 | %100 |
| 38 | M21 | Z | 1.144 | 1.144 | 0 | %100 |
| 39 | M22 | X | -1.966 | -1.966 | 0 | %100 |
| 40 | M22 | Z | 1.135 | 1.135 | 0 | %100 |
| 41 | M23 | X | -1.966 | -1.966 | 0 | %100 |
| 42 | M23 | Z | 1.135 | 1.135 | 0 | %100 |
| 43 | M24 | X | -1.924 | -1.924 | 0 | %100 |
| 44 | M24 | Z | 1.111 | 1.111 | 0 | %100 |
| 45 | M25 | X | -2.001 | -2.001 | 0 | %100 |
| 46 | M25 | Z | 1.155 | 1.155 | 0 | %100 |
| 47 | M26 | X | -1.981 | -1.981 | 0 | %100 |
| 48 | M26 | Z | 1.144 | 1.144 | 0 | %100 |
| 49 | M27 | X | -1.505 | -1.505 | 0 | %100 |
| 50 | M27 | Z | .869 | .869 | 0 | %100 |
| 51 | M28 | X | -1.981 | -1.981 | 0 | %100 |
| 52 | M28 | Z | 1.144 | 1.144 | 0 | %100 |
| 53 | M29 | X | -1.505 | -1.505 | 0 | %100 |
| 54 | M29 | Z | .869 | .869 | 0 | %100 |
| 55 | M30 | X | -2.001 | -2.001 | 0 | %100 |
| 56 | M30 | Z | 1.155 | 1.155 | 0 | %100 |
| 57 | M31 | X | -1.981 | -1.981 | 0 | %100 |
| 58 | M31 | Z | 1.144 | 1.144 | 0 | %100 |
| 59 | M32 | X | -1.981 | -1.981 | 0 | %100 |
| 60 | M32 | Z | 1.144 | 1.144 | 0 | %100 |
| 61 | M33 | X | -1.966 | -1.966 | 0 | %100 |
| 62 | M33 | Z | 1.135 | 1.135 | 0 | %100 |
| 63 | M34 | X | -1.966 | -1.966 | 0 | %100 |
| 64 | M34 | Z | 1.135 | 1.135 | 0 | %100 |
| 65 | M35 | X | -1.924 | -1.924 | 0 | %100 |
| 66 | M35 | Z | 1.111 | 1.111 | 0 | %100 |
| 67 | M36 | X | -2.001 | -2.001 | 0 | %100 |
| 68 | M36 | Z | 1.155 | 1.155 | 0 | %100 |
| 69 | MP4A | X | -2.515 | -2.515 | 0 | %100 |
| 70 | MP4A | Z | 1.452 | 1.452 | 0 | %100 |
| 71 | MP3A | X | -2.515 | -2.515 | 0 | %100 |
| 72 | MP3A | Z | 1.452 | 1.452 | 0 | %100 |
| 73 | MP2A | X | -2.515 | -2.515 | 0 | %100 |
| 74 | MP2A | Z | 1.452 | 1.452 | 0 | %100 |
| 75 | MP1A | X | -2.515 | -2.515 | 0 | %100 |
| 76 | MP1A | Z | 1.452 | 1.452 | 0 | %100 |
| 77 | EQUIP | X | -3.128 | -3.128 | 0 | %100 |
| 78 | EQUIP | Z | 1.806 | 1.806 | 0 | %100 |
| 79 | M51 | X | -3.128 | -3.128 | 0 | %100 |
| 80 | M51 | Z | 1.806 | 1.806 | 0 | %100 |
| 81 | M55A | X | -.637 | -.637 | 0 | %100 |
| 82 | M55A | Z | .368 | .368 | 0 | %100 |



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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 1 | M1 | X | 0 | 0 | 0 | %100 |
| 2 | M1 | Z | 0 | 0 | 0 | %100 |
| 3 | M3 | X | 0 | 0 | 0 | %100 |
| 4 | M3 | Z | 0 | 0 | 0 | %100 |
| 5 | M5 | X | -.546 | -.546 | 0 | %100 |
| 6 | M5 | Z | 0 | 0 | 0 | %100 |
| 7 | M6 | X | -.546 | -.546 | 0 | %100 |
| 8 | M6 | Z | 0 | 0 | 0 | %100 |
| 9 | M7 | X | 0 | 0 | 0 | %100 |
| 10 | M7 | Z | 0 | 0 | 0 | %100 |
| 11 | M8 | X | -.708 | -.708 | 0 | %100 |
| 12 | M8 | Z | 0 | 0 | 0 | %100 |
| 13 | M9 | X | -.446 | -.446 | 0 | %100 |
| 14 | M9 | Z | 0 | 0 | 0 | %100 |
| 15 | M10 | X | 0 | 0 | 0 | %100 |
| 16 | M10 | Z | 0 | 0 | 0 | %100 |
| 17 | M11 | X | -1.48 | -1.48 | 0 | %100 |
| 18 | M11 | Z | 0 | 0 | 0 | %100 |
| 19 | M12 | X | -1.48 | -1.48 | 0 | %100 |
| 20 | M12 | Z | 0 | 0 | 0 | %100 |
| 21 | M13 | X | -1.48 | -1.48 | 0 | %100 |
| 22 | M13 | Z | 0 | 0 | 0 | %100 |
| 23 | M14 | X | -1.48 | -1.48 | 0 | %100 |
| 24 | M14 | Z | 0 | 0 | 0 | %100 |
| 25 | M15 | X | -2.689 | -2.689 | 0 | %100 |
| 26 | M15 | Z | 0 | 0 | 0 | %100 |
| 27 | M16 | X | -2.106 | -2.106 | 0 | %100 |
| 28 | M16 | Z | 0 | 0 | 0 | %100 |
| 29 | M17 | X | -2.689 | -2.689 | 0 | %100 |
| 30 | M17 | Z | 0 | 0 | 0 | %100 |
| 31 | M18 | X | -2.106 | -2.106 | 0 | %100 |
| 32 | M18 | Z | 0 | 0 | 0 | %100 |
| 33 | M19 | X | -2.691 | -2.691 | 0 | %100 |
| 34 | M19 | Z | 0 | 0 | 0 | %100 |
| 35 | M20 | X | -2.689 | -2.689 | 0 | %100 |
| 36 | M20 | Z | 0 | 0 | 0 | %100 |
| 37 | M21 | X | -2.689 | -2.689 | 0 | %100 |
| 38 | M21 | Z | 0 | 0 | 0 | %100 |
| 39 | M22 | X | -2.27 | -2.27 | 0 | %100 |
| 40 | M22 | Z | 0 | 0 | 0 | %100 |
| 41 | M23 | X | -2.27 | -2.27 | 0 | %100 |
| 42 | M23 | Z | 0 | 0 | 0 | %100 |
| 43 | M24 | X | -2.221 | -2.221 | 0 | %100 |
| 44 | M24 | Z | 0 | 0 | 0 | %100 |
| 45 | M25 | X | -2.691 | -2.691 | 0 | %100 |
| 46 | M25 | Z | 0 | 0 | 0 | %100 |
| 47 | M26 | X | -2.689 | -2.689 | 0 | %100 |
| 48 | M26 | Z | 0 | 0 | 0 | %100 |
| 49 | M27 | X | -2.106 | -2.106 | 0 | %100 |
| 50 | M27 | Z | 0 | 0 | 0 | %100 |
| 51 | M28 | X | -2.689 | -2.689 | 0 | %100 |
| 52 | M28 | Z | 0 | 0 | 0 | %100 |

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in,%) | End Location[in,%) |
|----|--------------|-----------|---------------------------|--------------------------|----------------------|--------------------|
| 53 | M29 | X | -2.106 | -2.106 | 0 | %100 |
| 54 | M29 | Z | 0 | 0 | 0 | %100 |
| 55 | M30 | X | -2.691 | -2.691 | 0 | %100 |
| 56 | M30 | Z | 0 | 0 | 0 | %100 |
| 57 | M31 | X | -2.689 | -2.689 | 0 | %100 |
| 58 | M31 | Z | 0 | 0 | 0 | %100 |
| 59 | M32 | X | -2.689 | -2.689 | 0 | %100 |
| 60 | M32 | Z | 0 | 0 | 0 | %100 |
| 61 | M33 | X | -2.27 | -2.27 | 0 | %100 |
| 62 | M33 | Z | 0 | 0 | 0 | %100 |
| 63 | M34 | X | -2.27 | -2.27 | 0 | %100 |
| 64 | M34 | Z | 0 | 0 | 0 | %100 |
| 65 | M35 | X | -2.221 | -2.221 | 0 | %100 |
| 66 | M35 | Z | 0 | 0 | 0 | %100 |
| 67 | M36 | X | -2.691 | -2.691 | 0 | %100 |
| 68 | M36 | Z | 0 | 0 | 0 | %100 |
| 69 | MP4A | X | -2.905 | -2.905 | 0 | %100 |
| 70 | MP4A | Z | 0 | 0 | 0 | %100 |
| 71 | MP3A | X | -2.905 | -2.905 | 0 | %100 |
| 72 | MP3A | Z | 0 | 0 | 0 | %100 |
| 73 | MP2A | X | -2.905 | -2.905 | 0 | %100 |
| 74 | MP2A | Z | 0 | 0 | 0 | %100 |
| 75 | MP1A | X | -2.905 | -2.905 | 0 | %100 |
| 76 | MP1A | Z | 0 | 0 | 0 | %100 |
| 77 | EQUIP | X | -3.612 | -3.612 | 0 | %100 |
| 78 | EQUIP | Z | 0 | 0 | 0 | %100 |
| 79 | M51 | X | -3.612 | -3.612 | 0 | %100 |
| 80 | M51 | Z | 0 | 0 | 0 | %100 |
| 81 | M55A | X | -2.188 | -2.188 | 0 | %100 |
| 82 | M55A | Z | 0 | 0 | 0 | %100 |

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in,%) | End Location[in,%) |
|----|--------------|-----------|---------------------------|--------------------------|----------------------|--------------------|
| 1 | M1 | X | -.584 | -.584 | 0 | %100 |
| 2 | M1 | Z | -.337 | -.337 | 0 | %100 |
| 3 | M3 | X | -.584 | -.584 | 0 | %100 |
| 4 | M3 | Z | -.337 | -.337 | 0 | %100 |
| 5 | M5 | X | -.871 | -.871 | 0 | %100 |
| 6 | M5 | Z | -.503 | -.503 | 0 | %100 |
| 7 | M6 | X | -.067 | -.067 | 0 | %100 |
| 8 | M6 | Z | -.038 | -.038 | 0 | %100 |
| 9 | M7 | X | -.696 | -.696 | 0 | %100 |
| 10 | M7 | Z | -.402 | -.402 | 0 | %100 |
| 11 | M8 | X | -.919 | -.919 | 0 | %100 |
| 12 | M8 | Z | -.531 | -.531 | 0 | %100 |
| 13 | M9 | X | -.029 | -.029 | 0 | %100 |
| 14 | M9 | Z | -.017 | -.017 | 0 | %100 |
| 15 | M10 | X | -.696 | -.696 | 0 | %100 |
| 16 | M10 | Z | -.402 | -.402 | 0 | %100 |
| 17 | M11 | X | -2.359 | -2.359 | 0 | %100 |
| 18 | M11 | Z | -1.362 | -1.362 | 0 | %100 |



Company : Maser Consulting
 Designer :
 Job Number : Project No. 10115278
 Model Name : 469153-VZW_MT_LOT_SectorA_H

Nov 15, 2021
 4:59 PM
 Checked By: _____

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 19 | M12 | X | -.181 | -.181 | 0 | %100 |
| 20 | M12 | Z | -.104 | -.104 | 0 | %100 |
| 21 | M13 | X | -2.359 | -2.359 | 0 | %100 |
| 22 | M13 | Z | -1.362 | -1.362 | 0 | %100 |
| 23 | M14 | X | -.181 | -.181 | 0 | %100 |
| 24 | M14 | Z | -.104 | -.104 | 0 | %100 |
| 25 | M15 | X | -1.981 | -1.981 | 0 | %100 |
| 26 | M15 | Z | -1.144 | -1.144 | 0 | %100 |
| 27 | M16 | X | -1.505 | -1.505 | 0 | %100 |
| 28 | M16 | Z | -.869 | -.869 | 0 | %100 |
| 29 | M17 | X | -1.981 | -1.981 | 0 | %100 |
| 30 | M17 | Z | -1.144 | -1.144 | 0 | %100 |
| 31 | M18 | X | -1.505 | -1.505 | 0 | %100 |
| 32 | M18 | Z | -.869 | -.869 | 0 | %100 |
| 33 | M19 | X | -2.001 | -2.001 | 0 | %100 |
| 34 | M19 | Z | -1.155 | -1.155 | 0 | %100 |
| 35 | M20 | X | -1.981 | -1.981 | 0 | %100 |
| 36 | M20 | Z | -1.144 | -1.144 | 0 | %100 |
| 37 | M21 | X | -1.981 | -1.981 | 0 | %100 |
| 38 | M21 | Z | -1.144 | -1.144 | 0 | %100 |
| 39 | M22 | X | -1.966 | -1.966 | 0 | %100 |
| 40 | M22 | Z | -1.135 | -1.135 | 0 | %100 |
| 41 | M23 | X | -1.966 | -1.966 | 0 | %100 |
| 42 | M23 | Z | -1.135 | -1.135 | 0 | %100 |
| 43 | M24 | X | -1.924 | -1.924 | 0 | %100 |
| 44 | M24 | Z | -1.111 | -1.111 | 0 | %100 |
| 45 | M25 | X | -2.001 | -2.001 | 0 | %100 |
| 46 | M25 | Z | -1.155 | -1.155 | 0 | %100 |
| 47 | M26 | X | -1.981 | -1.981 | 0 | %100 |
| 48 | M26 | Z | -1.144 | -1.144 | 0 | %100 |
| 49 | M27 | X | -2.135 | -2.135 | 0 | %100 |
| 50 | M27 | Z | -1.233 | -1.233 | 0 | %100 |
| 51 | M28 | X | -1.981 | -1.981 | 0 | %100 |
| 52 | M28 | Z | -1.144 | -1.144 | 0 | %100 |
| 53 | M29 | X | -2.135 | -2.135 | 0 | %100 |
| 54 | M29 | Z | -1.233 | -1.233 | 0 | %100 |
| 55 | M30 | X | -2.001 | -2.001 | 0 | %100 |
| 56 | M30 | Z | -1.155 | -1.155 | 0 | %100 |
| 57 | M31 | X | -1.981 | -1.981 | 0 | %100 |
| 58 | M31 | Z | -1.144 | -1.144 | 0 | %100 |
| 59 | M32 | X | -1.981 | -1.981 | 0 | %100 |
| 60 | M32 | Z | -1.144 | -1.144 | 0 | %100 |
| 61 | M33 | X | -1.966 | -1.966 | 0 | %100 |
| 62 | M33 | Z | -1.135 | -1.135 | 0 | %100 |
| 63 | M34 | X | -1.966 | -1.966 | 0 | %100 |
| 64 | M34 | Z | -1.135 | -1.135 | 0 | %100 |
| 65 | M35 | X | -1.924 | -1.924 | 0 | %100 |
| 66 | M35 | Z | -1.111 | -1.111 | 0 | %100 |
| 67 | M36 | X | -2.001 | -2.001 | 0 | %100 |
| 68 | M36 | Z | -1.155 | -1.155 | 0 | %100 |
| 69 | MP4A | X | -2.515 | -2.515 | 0 | %100 |
| 70 | MP4A | Z | -1.452 | -1.452 | 0 | %100 |



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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 71 | MP3A | X | -2.515 | -2.515 | 0 | %100 |
| 72 | MP3A | Z | -1.452 | -1.452 | 0 | %100 |
| 73 | MP2A | X | -2.515 | -2.515 | 0 | %100 |
| 74 | MP2A | Z | -1.452 | -1.452 | 0 | %100 |
| 75 | MP1A | X | -2.515 | -2.515 | 0 | %100 |
| 76 | MP1A | Z | -1.452 | -1.452 | 0 | %100 |
| 77 | EQUIP | X | -3.128 | -3.128 | 0 | %100 |
| 78 | EQUIP | Z | -1.806 | -1.806 | 0 | %100 |
| 79 | M51 | X | -3.128 | -3.128 | 0 | %100 |
| 80 | M51 | Z | -1.806 | -1.806 | 0 | %100 |
| 81 | M55A | X | -2.515 | -2.515 | 0 | %100 |
| 82 | M55A | Z | -1.452 | -1.452 | 0 | %100 |

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 1 | M1 | X | -1.012 | -1.012 | 0 | %100 |
| 2 | M1 | Z | -1.753 | -1.753 | 0 | %100 |
| 3 | M3 | X | -1.012 | -1.012 | 0 | %100 |
| 4 | M3 | Z | -1.753 | -1.753 | 0 | %100 |
| 5 | M5 | X | -.497 | -.497 | 0 | %100 |
| 6 | M5 | Z | -.862 | -.862 | 0 | %100 |
| 7 | M6 | X | -.033 | -.033 | 0 | %100 |
| 8 | M6 | Z | -.058 | -.058 | 0 | %100 |
| 9 | M7 | X | -1.205 | -1.205 | 0 | %100 |
| 10 | M7 | Z | -2.087 | -2.087 | 0 | %100 |
| 11 | M8 | X | -.445 | -.445 | 0 | %100 |
| 12 | M8 | Z | -.77 | -.77 | 0 | %100 |
| 13 | M9 | X | -.062 | -.062 | 0 | %100 |
| 14 | M9 | Z | -.107 | -.107 | 0 | %100 |
| 15 | M10 | X | -1.205 | -1.205 | 0 | %100 |
| 16 | M10 | Z | -2.087 | -2.087 | 0 | %100 |
| 17 | M11 | X | -1.348 | -1.348 | 0 | %100 |
| 18 | M11 | Z | -2.335 | -2.335 | 0 | %100 |
| 19 | M12 | X | -.09 | -.09 | 0 | %100 |
| 20 | M12 | Z | -.157 | -.157 | 0 | %100 |
| 21 | M13 | X | -1.348 | -1.348 | 0 | %100 |
| 22 | M13 | Z | -2.335 | -2.335 | 0 | %100 |
| 23 | M14 | X | -.09 | -.09 | 0 | %100 |
| 24 | M14 | Z | -.157 | -.157 | 0 | %100 |
| 25 | M15 | X | -.743 | -.743 | 0 | %100 |
| 26 | M15 | Z | -1.287 | -1.287 | 0 | %100 |
| 27 | M16 | X | -.865 | -.865 | 0 | %100 |
| 28 | M16 | Z | -1.498 | -1.498 | 0 | %100 |
| 29 | M17 | X | -.743 | -.743 | 0 | %100 |
| 30 | M17 | Z | -1.287 | -1.287 | 0 | %100 |
| 31 | M18 | X | -.865 | -.865 | 0 | %100 |
| 32 | M18 | Z | -1.498 | -1.498 | 0 | %100 |
| 33 | M19 | X | -.775 | -.775 | 0 | %100 |
| 34 | M19 | Z | -1.342 | -1.342 | 0 | %100 |
| 35 | M20 | X | -.743 | -.743 | 0 | %100 |
| 36 | M20 | Z | -1.287 | -1.287 | 0 | %100 |



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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 3 | M3 | X | 0 | 0 | 0 | %100 |
| 4 | M3 | Z | -.665 | -.665 | 0 | %100 |
| 5 | M5 | X | 0 | 0 | 0 | %100 |
| 6 | M5 | Z | -.041 | -.041 | 0 | %100 |
| 7 | M6 | X | 0 | 0 | 0 | %100 |
| 8 | M6 | Z | -.041 | -.041 | 0 | %100 |
| 9 | M7 | X | 0 | 0 | 0 | %100 |
| 10 | M7 | Z | -.638 | -.638 | 0 | %100 |
| 11 | M8 | X | 0 | 0 | 0 | %100 |
| 12 | M8 | Z | -.028 | -.028 | 0 | %100 |
| 13 | M9 | X | 0 | 0 | 0 | %100 |
| 14 | M9 | Z | -.049 | -.049 | 0 | %100 |
| 15 | M10 | X | 0 | 0 | 0 | %100 |
| 16 | M10 | Z | -.638 | -.638 | 0 | %100 |
| 17 | M11 | X | 0 | 0 | 0 | %100 |
| 18 | M11 | Z | -.258 | -.258 | 0 | %100 |
| 19 | M12 | X | 0 | 0 | 0 | %100 |
| 20 | M12 | Z | -.258 | -.258 | 0 | %100 |
| 21 | M13 | X | 0 | 0 | 0 | %100 |
| 22 | M13 | Z | -.258 | -.258 | 0 | %100 |
| 23 | M14 | X | 0 | 0 | 0 | %100 |
| 24 | M14 | Z | -.258 | -.258 | 0 | %100 |
| 25 | M15 | X | 0 | 0 | 0 | %100 |
| 26 | M15 | Z | -.088 | -.088 | 0 | %100 |
| 27 | M16 | X | 0 | 0 | 0 | %100 |
| 28 | M16 | Z | -.35 | -.35 | 0 | %100 |
| 29 | M17 | X | 0 | 0 | 0 | %100 |
| 30 | M17 | Z | -.088 | -.088 | 0 | %100 |
| 31 | M18 | X | 0 | 0 | 0 | %100 |
| 32 | M18 | Z | -.35 | -.35 | 0 | %100 |
| 33 | M19 | X | 0 | 0 | 0 | %100 |
| 34 | M19 | Z | -.118 | -.118 | 0 | %100 |
| 35 | M20 | X | 0 | 0 | 0 | %100 |
| 36 | M20 | Z | -.088 | -.088 | 0 | %100 |
| 37 | M21 | X | 0 | 0 | 0 | %100 |
| 38 | M21 | Z | -.088 | -.088 | 0 | %100 |
| 39 | M22 | X | 0 | 0 | 0 | %100 |
| 40 | M22 | Z | -.382 | -.382 | 0 | %100 |
| 41 | M23 | X | 0 | 0 | 0 | %100 |
| 42 | M23 | Z | -.382 | -.382 | 0 | %100 |
| 43 | M24 | X | 0 | 0 | 0 | %100 |
| 44 | M24 | Z | -.402 | -.402 | 0 | %100 |
| 45 | M25 | X | 0 | 0 | 0 | %100 |
| 46 | M25 | Z | -.118 | -.118 | 0 | %100 |
| 47 | M26 | X | 0 | 0 | 0 | %100 |
| 48 | M26 | Z | -.088 | -.088 | 0 | %100 |
| 49 | M27 | X | 0 | 0 | 0 | %100 |
| 50 | M27 | Z | -.35 | -.35 | 0 | %100 |
| 51 | M28 | X | 0 | 0 | 0 | %100 |
| 52 | M28 | Z | -.088 | -.088 | 0 | %100 |
| 53 | M29 | X | 0 | 0 | 0 | %100 |
| 54 | M29 | Z | -.35 | -.35 | 0 | %100 |



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 Job Number : Project No. 10115278
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Member Distributed Loads (BLC 65 : Structure Wm (0 Deg)) (Continued)

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 55 | M30 | X | 0 | 0 | 0 | %100 |
| 56 | M30 | Z | -.118 | -.118 | 0 | %100 |
| 57 | M31 | X | 0 | 0 | 0 | %100 |
| 58 | M31 | Z | -.088 | -.088 | 0 | %100 |
| 59 | M32 | X | 0 | 0 | 0 | %100 |
| 60 | M32 | Z | -.088 | -.088 | 0 | %100 |
| 61 | M33 | X | 0 | 0 | 0 | %100 |
| 62 | M33 | Z | -.382 | -.382 | 0 | %100 |
| 63 | M34 | X | 0 | 0 | 0 | %100 |
| 64 | M34 | Z | -.382 | -.382 | 0 | %100 |
| 65 | M35 | X | 0 | 0 | 0 | %100 |
| 66 | M35 | Z | -.402 | -.402 | 0 | %100 |
| 67 | M36 | X | 0 | 0 | 0 | %100 |
| 68 | M36 | Z | -.118 | -.118 | 0 | %100 |
| 69 | MP4A | X | 0 | 0 | 0 | %100 |
| 70 | MP4A | Z | -.527 | -.527 | 0 | %100 |
| 71 | MP3A | X | 0 | 0 | 0 | %100 |
| 72 | MP3A | Z | -.527 | -.527 | 0 | %100 |
| 73 | MP2A | X | 0 | 0 | 0 | %100 |
| 74 | MP2A | Z | -.527 | -.527 | 0 | %100 |
| 75 | MP1A | X | 0 | 0 | 0 | %100 |
| 76 | MP1A | Z | -.527 | -.527 | 0 | %100 |
| 77 | EQUIP | X | 0 | 0 | 0 | %100 |
| 78 | EQUIP | Z | -.828 | -.828 | 0 | %100 |
| 79 | M51 | X | 0 | 0 | 0 | %100 |
| 80 | M51 | Z | -.828 | -.828 | 0 | %100 |
| 81 | M55A | X | 0 | 0 | 0 | %100 |
| 82 | M55A | Z | -.13 | -.13 | 0 | %100 |

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 1 | M1 | X | .249 | .249 | 0 | %100 |
| 2 | M1 | Z | -.432 | -.432 | 0 | %100 |
| 3 | M3 | X | .249 | .249 | 0 | %100 |
| 4 | M3 | Z | -.432 | -.432 | 0 | %100 |
| 5 | M5 | X | .003 | .003 | 0 | %100 |
| 6 | M5 | Z | -.004 | -.004 | 0 | %100 |
| 7 | M6 | X | .039 | .039 | 0 | %100 |
| 8 | M6 | Z | -.067 | -.067 | 0 | %100 |
| 9 | M7 | X | .239 | .239 | 0 | %100 |
| 10 | M7 | Z | -.414 | -.414 | 0 | %100 |
| 11 | M8 | X | .0004 | .0004 | 0 | %100 |
| 12 | M8 | Z | -.000692 | -.000692 | 0 | %100 |
| 13 | M9 | X | .04 | .04 | 0 | %100 |
| 14 | M9 | Z | -.07 | -.07 | 0 | %100 |
| 15 | M10 | X | .239 | .239 | 0 | %100 |
| 16 | M10 | Z | -.414 | -.414 | 0 | %100 |
| 17 | M11 | X | .016 | .016 | 0 | %100 |
| 18 | M11 | Z | -.028 | -.028 | 0 | %100 |
| 19 | M12 | X | .244 | .244 | 0 | %100 |
| 20 | M12 | Z | -.423 | -.423 | 0 | %100 |



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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 21 | M13 | X | .016 | .016 | 0 | %100 |
| 22 | M13 | Z | -.028 | -.028 | 0 | %100 |
| 23 | M14 | X | .244 | .244 | 0 | %100 |
| 24 | M14 | Z | -.423 | -.423 | 0 | %100 |
| 25 | M15 | X | .116 | .116 | 0 | %100 |
| 26 | M15 | Z | -.201 | -.201 | 0 | %100 |
| 27 | M16 | X | .206 | .206 | 0 | %100 |
| 28 | M16 | Z | -.356 | -.356 | 0 | %100 |
| 29 | M17 | X | .116 | .116 | 0 | %100 |
| 30 | M17 | Z | -.201 | -.201 | 0 | %100 |
| 31 | M18 | X | .206 | .206 | 0 | %100 |
| 32 | M18 | Z | -.356 | -.356 | 0 | %100 |
| 33 | M19 | X | .127 | .127 | 0 | %100 |
| 34 | M19 | Z | -.221 | -.221 | 0 | %100 |
| 35 | M20 | X | .116 | .116 | 0 | %100 |
| 36 | M20 | Z | -.201 | -.201 | 0 | %100 |
| 37 | M21 | X | .116 | .116 | 0 | %100 |
| 38 | M21 | Z | -.201 | -.201 | 0 | %100 |
| 39 | M22 | X | .191 | .191 | 0 | %100 |
| 40 | M22 | Z | -.331 | -.331 | 0 | %100 |
| 41 | M23 | X | .191 | .191 | 0 | %100 |
| 42 | M23 | Z | -.331 | -.331 | 0 | %100 |
| 43 | M24 | X | .201 | .201 | 0 | %100 |
| 44 | M24 | Z | -.348 | -.348 | 0 | %100 |
| 45 | M25 | X | .127 | .127 | 0 | %100 |
| 46 | M25 | Z | -.221 | -.221 | 0 | %100 |
| 47 | M26 | X | .116 | .116 | 0 | %100 |
| 48 | M26 | Z | -.201 | -.201 | 0 | %100 |
| 49 | M27 | X | .145 | .145 | 0 | %100 |
| 50 | M27 | Z | -.251 | -.251 | 0 | %100 |
| 51 | M28 | X | .116 | .116 | 0 | %100 |
| 52 | M28 | Z | -.201 | -.201 | 0 | %100 |
| 53 | M29 | X | .145 | .145 | 0 | %100 |
| 54 | M29 | Z | -.251 | -.251 | 0 | %100 |
| 55 | M30 | X | .127 | .127 | 0 | %100 |
| 56 | M30 | Z | -.221 | -.221 | 0 | %100 |
| 57 | M31 | X | .116 | .116 | 0 | %100 |
| 58 | M31 | Z | -.201 | -.201 | 0 | %100 |
| 59 | M32 | X | .116 | .116 | 0 | %100 |
| 60 | M32 | Z | -.201 | -.201 | 0 | %100 |
| 61 | M33 | X | .191 | .191 | 0 | %100 |
| 62 | M33 | Z | -.331 | -.331 | 0 | %100 |
| 63 | M34 | X | .191 | .191 | 0 | %100 |
| 64 | M34 | Z | -.331 | -.331 | 0 | %100 |
| 65 | M35 | X | .201 | .201 | 0 | %100 |
| 66 | M35 | Z | -.348 | -.348 | 0 | %100 |
| 67 | M36 | X | .127 | .127 | 0 | %100 |
| 68 | M36 | Z | -.221 | -.221 | 0 | %100 |
| 69 | MP4A | X | .263 | .263 | 0 | %100 |
| 70 | MP4A | Z | -.456 | -.456 | 0 | %100 |
| 71 | MP3A | X | .263 | .263 | 0 | %100 |
| 72 | MP3A | Z | -.456 | -.456 | 0 | %100 |



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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 73 | MP2A | X | .263 | .263 | 0 | % 100 |
| 74 | MP2A | Z | -.456 | -.456 | 0 | % 100 |
| 75 | MP1A | X | .263 | .263 | 0 | % 100 |
| 76 | MP1A | Z | -.456 | -.456 | 0 | % 100 |
| 77 | EQUIP | X | .414 | .414 | 0 | % 100 |
| 78 | EQUIP | Z | -.717 | -.717 | 0 | % 100 |
| 79 | M51 | X | .414 | .414 | 0 | % 100 |
| 80 | M51 | Z | -.717 | -.717 | 0 | % 100 |
| 81 | M55A | X | 4e-6 | 4e-6 | 0 | % 100 |
| 82 | M55A | Z | -6e-6 | -6e-6 | 0 | % 100 |

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 1 | M1 | X | .144 | .144 | 0 | % 100 |
| 2 | M1 | Z | -.083 | -.083 | 0 | % 100 |
| 3 | M3 | X | .144 | .144 | 0 | % 100 |
| 4 | M3 | Z | -.083 | -.083 | 0 | % 100 |
| 5 | M5 | X | .005 | .005 | 0 | % 100 |
| 6 | M5 | Z | -.003 | -.003 | 0 | % 100 |
| 7 | M6 | X | .068 | .068 | 0 | % 100 |
| 8 | M6 | Z | -.039 | -.039 | 0 | % 100 |
| 9 | M7 | X | .138 | .138 | 0 | % 100 |
| 10 | M7 | Z | -.08 | -.08 | 0 | % 100 |
| 11 | M8 | X | .012 | .012 | 0 | % 100 |
| 12 | M8 | Z | -.007 | -.007 | 0 | % 100 |
| 13 | M9 | X | .064 | .064 | 0 | % 100 |
| 14 | M9 | Z | -.037 | -.037 | 0 | % 100 |
| 15 | M10 | X | .138 | .138 | 0 | % 100 |
| 16 | M10 | Z | -.08 | -.08 | 0 | % 100 |
| 17 | M11 | X | .033 | .033 | 0 | % 100 |
| 18 | M11 | Z | -.019 | -.019 | 0 | % 100 |
| 19 | M12 | X | .428 | .428 | 0 | % 100 |
| 20 | M12 | Z | -.247 | -.247 | 0 | % 100 |
| 21 | M13 | X | .033 | .033 | 0 | % 100 |
| 22 | M13 | Z | -.019 | -.019 | 0 | % 100 |
| 23 | M14 | X | .428 | .428 | 0 | % 100 |
| 24 | M14 | Z | -.247 | -.247 | 0 | % 100 |
| 25 | M15 | X | .451 | .451 | 0 | % 100 |
| 26 | M15 | Z | -.26 | -.26 | 0 | % 100 |
| 27 | M16 | X | .357 | .357 | 0 | % 100 |
| 28 | M16 | Z | -.206 | -.206 | 0 | % 100 |
| 29 | M17 | X | .451 | .451 | 0 | % 100 |
| 30 | M17 | Z | -.26 | -.26 | 0 | % 100 |
| 31 | M18 | X | .357 | .357 | 0 | % 100 |
| 32 | M18 | Z | -.206 | -.206 | 0 | % 100 |
| 33 | M19 | X | .458 | .458 | 0 | % 100 |
| 34 | M19 | Z | -.264 | -.264 | 0 | % 100 |
| 35 | M20 | X | .451 | .451 | 0 | % 100 |
| 36 | M20 | Z | -.26 | -.26 | 0 | % 100 |
| 37 | M21 | X | .451 | .451 | 0 | % 100 |
| 38 | M21 | Z | -.26 | -.26 | 0 | % 100 |



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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 5 | M5 | X | .042 | .042 | 0 | %100 |
| 6 | M5 | Z | 0 | 0 | 0 | %100 |
| 7 | M6 | X | .042 | .042 | 0 | %100 |
| 8 | M6 | Z | 0 | 0 | 0 | %100 |
| 9 | M7 | X | 0 | 0 | 0 | %100 |
| 10 | M7 | Z | 0 | 0 | 0 | %100 |
| 11 | M8 | X | .055 | .055 | 0 | %100 |
| 12 | M8 | Z | 0 | 0 | 0 | %100 |
| 13 | M9 | X | .035 | .035 | 0 | %100 |
| 14 | M9 | Z | 0 | 0 | 0 | %100 |
| 15 | M10 | X | 0 | 0 | 0 | %100 |
| 16 | M10 | Z | 0 | 0 | 0 | %100 |
| 17 | M11 | X | .268 | .268 | 0 | %100 |
| 18 | M11 | Z | 0 | 0 | 0 | %100 |
| 19 | M12 | X | .268 | .268 | 0 | %100 |
| 20 | M12 | Z | 0 | 0 | 0 | %100 |
| 21 | M13 | X | .268 | .268 | 0 | %100 |
| 22 | M13 | Z | 0 | 0 | 0 | %100 |
| 23 | M14 | X | .268 | .268 | 0 | %100 |
| 24 | M14 | Z | 0 | 0 | 0 | %100 |
| 25 | M15 | X | .665 | .665 | 0 | %100 |
| 26 | M15 | Z | 0 | 0 | 0 | %100 |
| 27 | M16 | X | .352 | .352 | 0 | %100 |
| 28 | M16 | Z | 0 | 0 | 0 | %100 |
| 29 | M17 | X | .665 | .665 | 0 | %100 |
| 30 | M17 | Z | 0 | 0 | 0 | %100 |
| 31 | M18 | X | .352 | .352 | 0 | %100 |
| 32 | M18 | Z | 0 | 0 | 0 | %100 |
| 33 | M19 | X | .665 | .665 | 0 | %100 |
| 34 | M19 | Z | 0 | 0 | 0 | %100 |
| 35 | M20 | X | .665 | .665 | 0 | %100 |
| 36 | M20 | Z | 0 | 0 | 0 | %100 |
| 37 | M21 | X | .665 | .665 | 0 | %100 |
| 38 | M21 | Z | 0 | 0 | 0 | %100 |
| 39 | M22 | X | .382 | .382 | 0 | %100 |
| 40 | M22 | Z | 0 | 0 | 0 | %100 |
| 41 | M23 | X | .382 | .382 | 0 | %100 |
| 42 | M23 | Z | 0 | 0 | 0 | %100 |
| 43 | M24 | X | .402 | .402 | 0 | %100 |
| 44 | M24 | Z | 0 | 0 | 0 | %100 |
| 45 | M25 | X | .665 | .665 | 0 | %100 |
| 46 | M25 | Z | 0 | 0 | 0 | %100 |
| 47 | M26 | X | .665 | .665 | 0 | %100 |
| 48 | M26 | Z | 0 | 0 | 0 | %100 |
| 49 | M27 | X | .352 | .352 | 0 | %100 |
| 50 | M27 | Z | 0 | 0 | 0 | %100 |
| 51 | M28 | X | .665 | .665 | 0 | %100 |
| 52 | M28 | Z | 0 | 0 | 0 | %100 |
| 53 | M29 | X | .352 | .352 | 0 | %100 |
| 54 | M29 | Z | 0 | 0 | 0 | %100 |
| 55 | M30 | X | .665 | .665 | 0 | %100 |
| 56 | M30 | Z | 0 | 0 | 0 | %100 |



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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in,%] | End Location[in,%] |
|----|--------------|-----------|---------------------------|--------------------------|----------------------|--------------------|
| 57 | M31 | X | .665 | .665 | 0 | %100 |
| 58 | M31 | Z | 0 | 0 | 0 | %100 |
| 59 | M32 | X | .665 | .665 | 0 | %100 |
| 60 | M32 | Z | 0 | 0 | 0 | %100 |
| 61 | M33 | X | .382 | .382 | 0 | %100 |
| 62 | M33 | Z | 0 | 0 | 0 | %100 |
| 63 | M34 | X | .382 | .382 | 0 | %100 |
| 64 | M34 | Z | 0 | 0 | 0 | %100 |
| 65 | M35 | X | .402 | .402 | 0 | %100 |
| 66 | M35 | Z | 0 | 0 | 0 | %100 |
| 67 | M36 | X | .665 | .665 | 0 | %100 |
| 68 | M36 | Z | 0 | 0 | 0 | %100 |
| 69 | MP4A | X | .527 | .527 | 0 | %100 |
| 70 | MP4A | Z | 0 | 0 | 0 | %100 |
| 71 | MP3A | X | .527 | .527 | 0 | %100 |
| 72 | MP3A | Z | 0 | 0 | 0 | %100 |
| 73 | MP2A | X | .527 | .527 | 0 | %100 |
| 74 | MP2A | Z | 0 | 0 | 0 | %100 |
| 75 | MP1A | X | .527 | .527 | 0 | %100 |
| 76 | MP1A | Z | 0 | 0 | 0 | %100 |
| 77 | EQUIP | X | .828 | .828 | 0 | %100 |
| 78 | EQUIP | Z | 0 | 0 | 0 | %100 |
| 79 | M51 | X | .828 | .828 | 0 | %100 |
| 80 | M51 | Z | 0 | 0 | 0 | %100 |
| 81 | M55A | X | .397 | .397 | 0 | %100 |
| 82 | M55A | Z | 0 | 0 | 0 | %100 |

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in,%] | End Location[in,%] |
|----|--------------|-----------|---------------------------|--------------------------|----------------------|--------------------|
| 1 | M1 | X | .144 | .144 | 0 | %100 |
| 2 | M1 | Z | .083 | .083 | 0 | %100 |
| 3 | M3 | X | .144 | .144 | 0 | %100 |
| 4 | M3 | Z | .083 | .083 | 0 | %100 |
| 5 | M5 | X | .068 | .068 | 0 | %100 |
| 6 | M5 | Z | .039 | .039 | 0 | %100 |
| 7 | M6 | X | .005 | .005 | 0 | %100 |
| 8 | M6 | Z | .003 | .003 | 0 | %100 |
| 9 | M7 | X | .138 | .138 | 0 | %100 |
| 10 | M7 | Z | .08 | .08 | 0 | %100 |
| 11 | M8 | X | .071 | .071 | 0 | %100 |
| 12 | M8 | Z | .041 | .041 | 0 | %100 |
| 13 | M9 | X | .002 | .002 | 0 | %100 |
| 14 | M9 | Z | .001 | .001 | 0 | %100 |
| 15 | M10 | X | .138 | .138 | 0 | %100 |
| 16 | M10 | Z | .08 | .08 | 0 | %100 |
| 17 | M11 | X | .428 | .428 | 0 | %100 |
| 18 | M11 | Z | .247 | .247 | 0 | %100 |
| 19 | M12 | X | .033 | .033 | 0 | %100 |
| 20 | M12 | Z | .019 | .019 | 0 | %100 |
| 21 | M13 | X | .428 | .428 | 0 | %100 |
| 22 | M13 | Z | .247 | .247 | 0 | %100 |



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 Designer :
 Job Number : Project No. 10115278
 Model Name : 469153-VZW_MT_LOT_SectorA_H

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 23 | M14 | X | .033 | .033 | 0 | %100 |
| 24 | M14 | Z | .019 | .019 | 0 | %100 |
| 25 | M15 | X | .451 | .451 | 0 | %100 |
| 26 | M15 | Z | .26 | .26 | 0 | %100 |
| 27 | M16 | X | .252 | .252 | 0 | %100 |
| 28 | M16 | Z | .145 | .145 | 0 | %100 |
| 29 | M17 | X | .451 | .451 | 0 | %100 |
| 30 | M17 | Z | .26 | .26 | 0 | %100 |
| 31 | M18 | X | .252 | .252 | 0 | %100 |
| 32 | M18 | Z | .145 | .145 | 0 | %100 |
| 33 | M19 | X | .458 | .458 | 0 | %100 |
| 34 | M19 | Z | .264 | .264 | 0 | %100 |
| 35 | M20 | X | .451 | .451 | 0 | %100 |
| 36 | M20 | Z | .26 | .26 | 0 | %100 |
| 37 | M21 | X | .451 | .451 | 0 | %100 |
| 38 | M21 | Z | .26 | .26 | 0 | %100 |
| 39 | M22 | X | .331 | .331 | 0 | %100 |
| 40 | M22 | Z | .191 | .191 | 0 | %100 |
| 41 | M23 | X | .331 | .331 | 0 | %100 |
| 42 | M23 | Z | .191 | .191 | 0 | %100 |
| 43 | M24 | X | .348 | .348 | 0 | %100 |
| 44 | M24 | Z | .201 | .201 | 0 | %100 |
| 45 | M25 | X | .458 | .458 | 0 | %100 |
| 46 | M25 | Z | .264 | .264 | 0 | %100 |
| 47 | M26 | X | .451 | .451 | 0 | %100 |
| 48 | M26 | Z | .26 | .26 | 0 | %100 |
| 49 | M27 | X | .357 | .357 | 0 | %100 |
| 50 | M27 | Z | .206 | .206 | 0 | %100 |
| 51 | M28 | X | .451 | .451 | 0 | %100 |
| 52 | M28 | Z | .26 | .26 | 0 | %100 |
| 53 | M29 | X | .357 | .357 | 0 | %100 |
| 54 | M29 | Z | .206 | .206 | 0 | %100 |
| 55 | M30 | X | .458 | .458 | 0 | %100 |
| 56 | M30 | Z | .264 | .264 | 0 | %100 |
| 57 | M31 | X | .451 | .451 | 0 | %100 |
| 58 | M31 | Z | .26 | .26 | 0 | %100 |
| 59 | M32 | X | .451 | .451 | 0 | %100 |
| 60 | M32 | Z | .26 | .26 | 0 | %100 |
| 61 | M33 | X | .331 | .331 | 0 | %100 |
| 62 | M33 | Z | .191 | .191 | 0 | %100 |
| 63 | M34 | X | .331 | .331 | 0 | %100 |
| 64 | M34 | Z | .191 | .191 | 0 | %100 |
| 65 | M35 | X | .348 | .348 | 0 | %100 |
| 66 | M35 | Z | .201 | .201 | 0 | %100 |
| 67 | M36 | X | .458 | .458 | 0 | %100 |
| 68 | M36 | Z | .264 | .264 | 0 | %100 |
| 69 | MP4A | X | .456 | .456 | 0 | %100 |
| 70 | MP4A | Z | .263 | .263 | 0 | %100 |
| 71 | MP3A | X | .456 | .456 | 0 | %100 |
| 72 | MP3A | Z | .263 | .263 | 0 | %100 |
| 73 | MP2A | X | .456 | .456 | 0 | %100 |
| 74 | MP2A | Z | .263 | .263 | 0 | %100 |



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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in,%] | End Location[in,%] |
|----|--------------|-----------|---------------------------|--------------------------|----------------------|--------------------|
| 75 | MP1A | X | .456 | .456 | 0 | %100 |
| 76 | MP1A | Z | .263 | .263 | 0 | %100 |
| 77 | EQUIP | X | .717 | .717 | 0 | %100 |
| 78 | EQUIP | Z | .414 | .414 | 0 | %100 |
| 79 | M51 | X | .717 | .717 | 0 | %100 |
| 80 | M51 | Z | .414 | .414 | 0 | %100 |
| 81 | M55A | X | .456 | .456 | 0 | %100 |
| 82 | M55A | Z | .263 | .263 | 0 | %100 |

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in,%] | End Location[in,%] |
|----|--------------|-----------|---------------------------|--------------------------|----------------------|--------------------|
| 1 | M1 | X | .249 | .249 | 0 | %100 |
| 2 | M1 | Z | .432 | .432 | 0 | %100 |
| 3 | M3 | X | .249 | .249 | 0 | %100 |
| 4 | M3 | Z | .432 | .432 | 0 | %100 |
| 5 | M5 | X | .039 | .039 | 0 | %100 |
| 6 | M5 | Z | .067 | .067 | 0 | %100 |
| 7 | M6 | X | .003 | .003 | 0 | %100 |
| 8 | M6 | Z | .004 | .004 | 0 | %100 |
| 9 | M7 | X | .239 | .239 | 0 | %100 |
| 10 | M7 | Z | .414 | .414 | 0 | %100 |
| 11 | M8 | X | .034 | .034 | 0 | %100 |
| 12 | M8 | Z | .06 | .06 | 0 | %100 |
| 13 | M9 | X | .005 | .005 | 0 | %100 |
| 14 | M9 | Z | .008 | .008 | 0 | %100 |
| 15 | M10 | X | .239 | .239 | 0 | %100 |
| 16 | M10 | Z | .414 | .414 | 0 | %100 |
| 17 | M11 | X | .244 | .244 | 0 | %100 |
| 18 | M11 | Z | .423 | .423 | 0 | %100 |
| 19 | M12 | X | .016 | .016 | 0 | %100 |
| 20 | M12 | Z | .028 | .028 | 0 | %100 |
| 21 | M13 | X | .244 | .244 | 0 | %100 |
| 22 | M13 | Z | .423 | .423 | 0 | %100 |
| 23 | M14 | X | .016 | .016 | 0 | %100 |
| 24 | M14 | Z | .028 | .028 | 0 | %100 |
| 25 | M15 | X | .116 | .116 | 0 | %100 |
| 26 | M15 | Z | .201 | .201 | 0 | %100 |
| 27 | M16 | X | .145 | .145 | 0 | %100 |
| 28 | M16 | Z | .251 | .251 | 0 | %100 |
| 29 | M17 | X | .116 | .116 | 0 | %100 |
| 30 | M17 | Z | .201 | .201 | 0 | %100 |
| 31 | M18 | X | .145 | .145 | 0 | %100 |
| 32 | M18 | Z | .251 | .251 | 0 | %100 |
| 33 | M19 | X | .127 | .127 | 0 | %100 |
| 34 | M19 | Z | .221 | .221 | 0 | %100 |
| 35 | M20 | X | .116 | .116 | 0 | %100 |
| 36 | M20 | Z | .201 | .201 | 0 | %100 |
| 37 | M21 | X | .116 | .116 | 0 | %100 |
| 38 | M21 | Z | .201 | .201 | 0 | %100 |
| 39 | M22 | X | .191 | .191 | 0 | %100 |
| 40 | M22 | Z | .331 | .331 | 0 | %100 |



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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 7 | M6 | X | 0 | 0 | 0 | %100 |
| 8 | M6 | Z | .041 | .041 | 0 | %100 |
| 9 | M7 | X | 0 | 0 | 0 | %100 |
| 10 | M7 | Z | .638 | .638 | 0 | %100 |
| 11 | M8 | X | 0 | 0 | 0 | %100 |
| 12 | M8 | Z | .028 | .028 | 0 | %100 |
| 13 | M9 | X | 0 | 0 | 0 | %100 |
| 14 | M9 | Z | .049 | .049 | 0 | %100 |
| 15 | M10 | X | 0 | 0 | 0 | %100 |
| 16 | M10 | Z | .638 | .638 | 0 | %100 |
| 17 | M11 | X | 0 | 0 | 0 | %100 |
| 18 | M11 | Z | .258 | .258 | 0 | %100 |
| 19 | M12 | X | 0 | 0 | 0 | %100 |
| 20 | M12 | Z | .258 | .258 | 0 | %100 |
| 21 | M13 | X | 0 | 0 | 0 | %100 |
| 22 | M13 | Z | .258 | .258 | 0 | %100 |
| 23 | M14 | X | 0 | 0 | 0 | %100 |
| 24 | M14 | Z | .258 | .258 | 0 | %100 |
| 25 | M15 | X | 0 | 0 | 0 | %100 |
| 26 | M15 | Z | .088 | .088 | 0 | %100 |
| 27 | M16 | X | 0 | 0 | 0 | %100 |
| 28 | M16 | Z | .35 | .35 | 0 | %100 |
| 29 | M17 | X | 0 | 0 | 0 | %100 |
| 30 | M17 | Z | .088 | .088 | 0 | %100 |
| 31 | M18 | X | 0 | 0 | 0 | %100 |
| 32 | M18 | Z | .35 | .35 | 0 | %100 |
| 33 | M19 | X | 0 | 0 | 0 | %100 |
| 34 | M19 | Z | .118 | .118 | 0 | %100 |
| 35 | M20 | X | 0 | 0 | 0 | %100 |
| 36 | M20 | Z | .088 | .088 | 0 | %100 |
| 37 | M21 | X | 0 | 0 | 0 | %100 |
| 38 | M21 | Z | .088 | .088 | 0 | %100 |
| 39 | M22 | X | 0 | 0 | 0 | %100 |
| 40 | M22 | Z | .382 | .382 | 0 | %100 |
| 41 | M23 | X | 0 | 0 | 0 | %100 |
| 42 | M23 | Z | .382 | .382 | 0 | %100 |
| 43 | M24 | X | 0 | 0 | 0 | %100 |
| 44 | M24 | Z | .402 | .402 | 0 | %100 |
| 45 | M25 | X | 0 | 0 | 0 | %100 |
| 46 | M25 | Z | .118 | .118 | 0 | %100 |
| 47 | M26 | X | 0 | 0 | 0 | %100 |
| 48 | M26 | Z | .088 | .088 | 0 | %100 |
| 49 | M27 | X | 0 | 0 | 0 | %100 |
| 50 | M27 | Z | .35 | .35 | 0 | %100 |
| 51 | M28 | X | 0 | 0 | 0 | %100 |
| 52 | M28 | Z | .088 | .088 | 0 | %100 |
| 53 | M29 | X | 0 | 0 | 0 | %100 |
| 54 | M29 | Z | .35 | .35 | 0 | %100 |
| 55 | M30 | X | 0 | 0 | 0 | %100 |
| 56 | M30 | Z | .118 | .118 | 0 | %100 |
| 57 | M31 | X | 0 | 0 | 0 | %100 |
| 58 | M31 | Z | .088 | .088 | 0 | %100 |



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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in,%] | End Location[in,%] |
|----|--------------|-----------|---------------------------|--------------------------|----------------------|--------------------|
| 25 | M15 | X | -.116 | -.116 | 0 | %100 |
| 26 | M15 | Z | .201 | .201 | 0 | %100 |
| 27 | M16 | X | -.206 | -.206 | 0 | %100 |
| 28 | M16 | Z | .356 | .356 | 0 | %100 |
| 29 | M17 | X | -.116 | -.116 | 0 | %100 |
| 30 | M17 | Z | .201 | .201 | 0 | %100 |
| 31 | M18 | X | -.206 | -.206 | 0 | %100 |
| 32 | M18 | Z | .356 | .356 | 0 | %100 |
| 33 | M19 | X | -.127 | -.127 | 0 | %100 |
| 34 | M19 | Z | .221 | .221 | 0 | %100 |
| 35 | M20 | X | -.116 | -.116 | 0 | %100 |
| 36 | M20 | Z | .201 | .201 | 0 | %100 |
| 37 | M21 | X | -.116 | -.116 | 0 | %100 |
| 38 | M21 | Z | .201 | .201 | 0 | %100 |
| 39 | M22 | X | -.191 | -.191 | 0 | %100 |
| 40 | M22 | Z | .331 | .331 | 0 | %100 |
| 41 | M23 | X | -.191 | -.191 | 0 | %100 |
| 42 | M23 | Z | .331 | .331 | 0 | %100 |
| 43 | M24 | X | -.201 | -.201 | 0 | %100 |
| 44 | M24 | Z | .348 | .348 | 0 | %100 |
| 45 | M25 | X | -.127 | -.127 | 0 | %100 |
| 46 | M25 | Z | .221 | .221 | 0 | %100 |
| 47 | M26 | X | -.116 | -.116 | 0 | %100 |
| 48 | M26 | Z | .201 | .201 | 0 | %100 |
| 49 | M27 | X | -.145 | -.145 | 0 | %100 |
| 50 | M27 | Z | .251 | .251 | 0 | %100 |
| 51 | M28 | X | -.116 | -.116 | 0 | %100 |
| 52 | M28 | Z | .201 | .201 | 0 | %100 |
| 53 | M29 | X | -.145 | -.145 | 0 | %100 |
| 54 | M29 | Z | .251 | .251 | 0 | %100 |
| 55 | M30 | X | -.127 | -.127 | 0 | %100 |
| 56 | M30 | Z | .221 | .221 | 0 | %100 |
| 57 | M31 | X | -.116 | -.116 | 0 | %100 |
| 58 | M31 | Z | .201 | .201 | 0 | %100 |
| 59 | M32 | X | -.116 | -.116 | 0 | %100 |
| 60 | M32 | Z | .201 | .201 | 0 | %100 |
| 61 | M33 | X | -.191 | -.191 | 0 | %100 |
| 62 | M33 | Z | .331 | .331 | 0 | %100 |
| 63 | M34 | X | -.191 | -.191 | 0 | %100 |
| 64 | M34 | Z | .331 | .331 | 0 | %100 |
| 65 | M35 | X | -.201 | -.201 | 0 | %100 |
| 66 | M35 | Z | .348 | .348 | 0 | %100 |
| 67 | M36 | X | -.127 | -.127 | 0 | %100 |
| 68 | M36 | Z | .221 | .221 | 0 | %100 |
| 69 | MP4A | X | -.263 | -.263 | 0 | %100 |
| 70 | MP4A | Z | .456 | .456 | 0 | %100 |
| 71 | MP3A | X | -.263 | -.263 | 0 | %100 |
| 72 | MP3A | Z | .456 | .456 | 0 | %100 |
| 73 | MP2A | X | -.263 | -.263 | 0 | %100 |
| 74 | MP2A | Z | .456 | .456 | 0 | %100 |
| 75 | MP1A | X | -.263 | -.263 | 0 | %100 |
| 76 | MP1A | Z | .456 | .456 | 0 | %100 |



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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 77 | EQUIP | X | -.414 | -.414 | 0 | %100 |
| 78 | EQUIP | Z | .717 | .717 | 0 | %100 |
| 79 | M51 | X | -.414 | -.414 | 0 | %100 |
| 80 | M51 | Z | .717 | .717 | 0 | %100 |
| 81 | M55A | X | -4e-6 | -4e-6 | 0 | %100 |
| 82 | M55A | Z | 6e-6 | 6e-6 | 0 | %100 |

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 1 | M1 | X | -.144 | -.144 | 0 | %100 |
| 2 | M1 | Z | .083 | .083 | 0 | %100 |
| 3 | M3 | X | -.144 | -.144 | 0 | %100 |
| 4 | M3 | Z | .083 | .083 | 0 | %100 |
| 5 | M5 | X | -.005 | -.005 | 0 | %100 |
| 6 | M5 | Z | .003 | .003 | 0 | %100 |
| 7 | M6 | X | -.068 | -.068 | 0 | %100 |
| 8 | M6 | Z | .039 | .039 | 0 | %100 |
| 9 | M7 | X | -.138 | -.138 | 0 | %100 |
| 10 | M7 | Z | .08 | .08 | 0 | %100 |
| 11 | M8 | X | -.012 | -.012 | 0 | %100 |
| 12 | M8 | Z | .007 | .007 | 0 | %100 |
| 13 | M9 | X | -.064 | -.064 | 0 | %100 |
| 14 | M9 | Z | .037 | .037 | 0 | %100 |
| 15 | M10 | X | -.138 | -.138 | 0 | %100 |
| 16 | M10 | Z | .08 | .08 | 0 | %100 |
| 17 | M11 | X | -.033 | -.033 | 0 | %100 |
| 18 | M11 | Z | .019 | .019 | 0 | %100 |
| 19 | M12 | X | -.428 | -.428 | 0 | %100 |
| 20 | M12 | Z | .247 | .247 | 0 | %100 |
| 21 | M13 | X | -.033 | -.033 | 0 | %100 |
| 22 | M13 | Z | .019 | .019 | 0 | %100 |
| 23 | M14 | X | -.428 | -.428 | 0 | %100 |
| 24 | M14 | Z | .247 | .247 | 0 | %100 |
| 25 | M15 | X | -.451 | -.451 | 0 | %100 |
| 26 | M15 | Z | .26 | .26 | 0 | %100 |
| 27 | M16 | X | -.357 | -.357 | 0 | %100 |
| 28 | M16 | Z | .206 | .206 | 0 | %100 |
| 29 | M17 | X | -.451 | -.451 | 0 | %100 |
| 30 | M17 | Z | .26 | .26 | 0 | %100 |
| 31 | M18 | X | -.357 | -.357 | 0 | %100 |
| 32 | M18 | Z | .206 | .206 | 0 | %100 |
| 33 | M19 | X | -.458 | -.458 | 0 | %100 |
| 34 | M19 | Z | .264 | .264 | 0 | %100 |
| 35 | M20 | X | -.451 | -.451 | 0 | %100 |
| 36 | M20 | Z | .26 | .26 | 0 | %100 |
| 37 | M21 | X | -.451 | -.451 | 0 | %100 |
| 38 | M21 | Z | .26 | .26 | 0 | %100 |
| 39 | M22 | X | -.331 | -.331 | 0 | %100 |
| 40 | M22 | Z | .191 | .191 | 0 | %100 |
| 41 | M23 | X | -.331 | -.331 | 0 | %100 |
| 42 | M23 | Z | .191 | .191 | 0 | %100 |



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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 43 | M24 | X | -.348 | -.348 | 0 | %100 |
| 44 | M24 | Z | .201 | .201 | 0 | %100 |
| 45 | M25 | X | -.458 | -.458 | 0 | %100 |
| 46 | M25 | Z | .264 | .264 | 0 | %100 |
| 47 | M26 | X | -.451 | -.451 | 0 | %100 |
| 48 | M26 | Z | .26 | .26 | 0 | %100 |
| 49 | M27 | X | -.252 | -.252 | 0 | %100 |
| 50 | M27 | Z | .145 | .145 | 0 | %100 |
| 51 | M28 | X | -.451 | -.451 | 0 | %100 |
| 52 | M28 | Z | .26 | .26 | 0 | %100 |
| 53 | M29 | X | -.252 | -.252 | 0 | %100 |
| 54 | M29 | Z | .145 | .145 | 0 | %100 |
| 55 | M30 | X | -.458 | -.458 | 0 | %100 |
| 56 | M30 | Z | .264 | .264 | 0 | %100 |
| 57 | M31 | X | -.451 | -.451 | 0 | %100 |
| 58 | M31 | Z | .26 | .26 | 0 | %100 |
| 59 | M32 | X | -.451 | -.451 | 0 | %100 |
| 60 | M32 | Z | .26 | .26 | 0 | %100 |
| 61 | M33 | X | -.331 | -.331 | 0 | %100 |
| 62 | M33 | Z | .191 | .191 | 0 | %100 |
| 63 | M34 | X | -.331 | -.331 | 0 | %100 |
| 64 | M34 | Z | .191 | .191 | 0 | %100 |
| 65 | M35 | X | -.348 | -.348 | 0 | %100 |
| 66 | M35 | Z | .201 | .201 | 0 | %100 |
| 67 | M36 | X | -.458 | -.458 | 0 | %100 |
| 68 | M36 | Z | .264 | .264 | 0 | %100 |
| 69 | MP4A | X | -.456 | -.456 | 0 | %100 |
| 70 | MP4A | Z | .263 | .263 | 0 | %100 |
| 71 | MP3A | X | -.456 | -.456 | 0 | %100 |
| 72 | MP3A | Z | .263 | .263 | 0 | %100 |
| 73 | MP2A | X | -.456 | -.456 | 0 | %100 |
| 74 | MP2A | Z | .263 | .263 | 0 | %100 |
| 75 | MP1A | X | -.456 | -.456 | 0 | %100 |
| 76 | MP1A | Z | .263 | .263 | 0 | %100 |
| 77 | EQUIP | X | -.717 | -.717 | 0 | %100 |
| 78 | EQUIP | Z | .414 | .414 | 0 | %100 |
| 79 | M51 | X | -.717 | -.717 | 0 | %100 |
| 80 | M51 | Z | .414 | .414 | 0 | %100 |
| 81 | M55A | X | -.116 | -.116 | 0 | %100 |
| 82 | M55A | Z | .067 | .067 | 0 | %100 |

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|---|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 1 | M1 | X | 0 | 0 | 0 | %100 |
| 2 | M1 | Z | 0 | 0 | 0 | %100 |
| 3 | M3 | X | 0 | 0 | 0 | %100 |
| 4 | M3 | Z | 0 | 0 | 0 | %100 |
| 5 | M5 | X | -.042 | -.042 | 0 | %100 |
| 6 | M5 | Z | 0 | 0 | 0 | %100 |
| 7 | M6 | X | -.042 | -.042 | 0 | %100 |
| 8 | M6 | Z | 0 | 0 | 0 | %100 |



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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 9 | M7 | X | 0 | 0 | 0 | %100 |
| 10 | M7 | Z | 0 | 0 | 0 | %100 |
| 11 | M8 | X | -.055 | -.055 | 0 | %100 |
| 12 | M8 | Z | 0 | 0 | 0 | %100 |
| 13 | M9 | X | -.035 | -.035 | 0 | %100 |
| 14 | M9 | Z | 0 | 0 | 0 | %100 |
| 15 | M10 | X | 0 | 0 | 0 | %100 |
| 16 | M10 | Z | 0 | 0 | 0 | %100 |
| 17 | M11 | X | -.268 | -.268 | 0 | %100 |
| 18 | M11 | Z | 0 | 0 | 0 | %100 |
| 19 | M12 | X | -.268 | -.268 | 0 | %100 |
| 20 | M12 | Z | 0 | 0 | 0 | %100 |
| 21 | M13 | X | -.268 | -.268 | 0 | %100 |
| 22 | M13 | Z | 0 | 0 | 0 | %100 |
| 23 | M14 | X | -.268 | -.268 | 0 | %100 |
| 24 | M14 | Z | 0 | 0 | 0 | %100 |
| 25 | M15 | X | -.665 | -.665 | 0 | %100 |
| 26 | M15 | Z | 0 | 0 | 0 | %100 |
| 27 | M16 | X | -.352 | -.352 | 0 | %100 |
| 28 | M16 | Z | 0 | 0 | 0 | %100 |
| 29 | M17 | X | -.665 | -.665 | 0 | %100 |
| 30 | M17 | Z | 0 | 0 | 0 | %100 |
| 31 | M18 | X | -.352 | -.352 | 0 | %100 |
| 32 | M18 | Z | 0 | 0 | 0 | %100 |
| 33 | M19 | X | -.665 | -.665 | 0 | %100 |
| 34 | M19 | Z | 0 | 0 | 0 | %100 |
| 35 | M20 | X | -.665 | -.665 | 0 | %100 |
| 36 | M20 | Z | 0 | 0 | 0 | %100 |
| 37 | M21 | X | -.665 | -.665 | 0 | %100 |
| 38 | M21 | Z | 0 | 0 | 0 | %100 |
| 39 | M22 | X | -.382 | -.382 | 0 | %100 |
| 40 | M22 | Z | 0 | 0 | 0 | %100 |
| 41 | M23 | X | -.382 | -.382 | 0 | %100 |
| 42 | M23 | Z | 0 | 0 | 0 | %100 |
| 43 | M24 | X | -.402 | -.402 | 0 | %100 |
| 44 | M24 | Z | 0 | 0 | 0 | %100 |
| 45 | M25 | X | -.665 | -.665 | 0 | %100 |
| 46 | M25 | Z | 0 | 0 | 0 | %100 |
| 47 | M26 | X | -.665 | -.665 | 0 | %100 |
| 48 | M26 | Z | 0 | 0 | 0 | %100 |
| 49 | M27 | X | -.352 | -.352 | 0 | %100 |
| 50 | M27 | Z | 0 | 0 | 0 | %100 |
| 51 | M28 | X | -.665 | -.665 | 0 | %100 |
| 52 | M28 | Z | 0 | 0 | 0 | %100 |
| 53 | M29 | X | -.352 | -.352 | 0 | %100 |
| 54 | M29 | Z | 0 | 0 | 0 | %100 |
| 55 | M30 | X | -.665 | -.665 | 0 | %100 |
| 56 | M30 | Z | 0 | 0 | 0 | %100 |
| 57 | M31 | X | -.665 | -.665 | 0 | %100 |
| 58 | M31 | Z | 0 | 0 | 0 | %100 |
| 59 | M32 | X | -.665 | -.665 | 0 | %100 |
| 60 | M32 | Z | 0 | 0 | 0 | %100 |



Company : Maser Consulting
 Designer :
 Job Number : Project No. 10115278
 Model Name : 469153-VZW_MT_LOT_SectorA_H

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 27 | M16 | X | -.252 | -.252 | 0 | %100 |
| 28 | M16 | Z | -.145 | -.145 | 0 | %100 |
| 29 | M17 | X | -.451 | -.451 | 0 | %100 |
| 30 | M17 | Z | -.26 | -.26 | 0 | %100 |
| 31 | M18 | X | -.252 | -.252 | 0 | %100 |
| 32 | M18 | Z | -.145 | -.145 | 0 | %100 |
| 33 | M19 | X | -.458 | -.458 | 0 | %100 |
| 34 | M19 | Z | -.264 | -.264 | 0 | %100 |
| 35 | M20 | X | -.451 | -.451 | 0 | %100 |
| 36 | M20 | Z | -.26 | -.26 | 0 | %100 |
| 37 | M21 | X | -.451 | -.451 | 0 | %100 |
| 38 | M21 | Z | -.26 | -.26 | 0 | %100 |
| 39 | M22 | X | -.331 | -.331 | 0 | %100 |
| 40 | M22 | Z | -.191 | -.191 | 0 | %100 |
| 41 | M23 | X | -.331 | -.331 | 0 | %100 |
| 42 | M23 | Z | -.191 | -.191 | 0 | %100 |
| 43 | M24 | X | -.348 | -.348 | 0 | %100 |
| 44 | M24 | Z | -.201 | -.201 | 0 | %100 |
| 45 | M25 | X | -.458 | -.458 | 0 | %100 |
| 46 | M25 | Z | -.264 | -.264 | 0 | %100 |
| 47 | M26 | X | -.451 | -.451 | 0 | %100 |
| 48 | M26 | Z | -.26 | -.26 | 0 | %100 |
| 49 | M27 | X | -.357 | -.357 | 0 | %100 |
| 50 | M27 | Z | -.206 | -.206 | 0 | %100 |
| 51 | M28 | X | -.451 | -.451 | 0 | %100 |
| 52 | M28 | Z | -.26 | -.26 | 0 | %100 |
| 53 | M29 | X | -.357 | -.357 | 0 | %100 |
| 54 | M29 | Z | -.206 | -.206 | 0 | %100 |
| 55 | M30 | X | -.458 | -.458 | 0 | %100 |
| 56 | M30 | Z | -.264 | -.264 | 0 | %100 |
| 57 | M31 | X | -.451 | -.451 | 0 | %100 |
| 58 | M31 | Z | -.26 | -.26 | 0 | %100 |
| 59 | M32 | X | -.451 | -.451 | 0 | %100 |
| 60 | M32 | Z | -.26 | -.26 | 0 | %100 |
| 61 | M33 | X | -.331 | -.331 | 0 | %100 |
| 62 | M33 | Z | -.191 | -.191 | 0 | %100 |
| 63 | M34 | X | -.331 | -.331 | 0 | %100 |
| 64 | M34 | Z | -.191 | -.191 | 0 | %100 |
| 65 | M35 | X | -.348 | -.348 | 0 | %100 |
| 66 | M35 | Z | -.201 | -.201 | 0 | %100 |
| 67 | M36 | X | -.458 | -.458 | 0 | %100 |
| 68 | M36 | Z | -.264 | -.264 | 0 | %100 |
| 69 | MP4A | X | -.456 | -.456 | 0 | %100 |
| 70 | MP4A | Z | -.263 | -.263 | 0 | %100 |
| 71 | MP3A | X | -.456 | -.456 | 0 | %100 |
| 72 | MP3A | Z | -.263 | -.263 | 0 | %100 |
| 73 | MP2A | X | -.456 | -.456 | 0 | %100 |
| 74 | MP2A | Z | -.263 | -.263 | 0 | %100 |
| 75 | MP1A | X | -.456 | -.456 | 0 | %100 |
| 76 | MP1A | Z | -.263 | -.263 | 0 | %100 |
| 77 | EQUIP | X | -.717 | -.717 | 0 | %100 |
| 78 | EQUIP | Z | -.414 | -.414 | 0 | %100 |



Company : Maser Consulting
 Designer :
 Job Number : Project No. 10115278
 Model Name : 469153-VZW_MT_LOT_SectorA_H

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 79 | M51 | X | -.717 | -.717 | 0 | %100 |
| 80 | M51 | Z | -.414 | -.414 | 0 | %100 |
| 81 | M55A | X | -.456 | -.456 | 0 | %100 |
| 82 | M55A | Z | -.263 | -.263 | 0 | %100 |

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in, %] | End Location[in, %] |
|----|--------------|-----------|---------------------------|--------------------------|-----------------------|---------------------|
| 1 | M1 | X | -.249 | -.249 | 0 | %100 |
| 2 | M1 | Z | -.432 | -.432 | 0 | %100 |
| 3 | M3 | X | -.249 | -.249 | 0 | %100 |
| 4 | M3 | Z | -.432 | -.432 | 0 | %100 |
| 5 | M5 | X | -.039 | -.039 | 0 | %100 |
| 6 | M5 | Z | -.067 | -.067 | 0 | %100 |
| 7 | M6 | X | -.003 | -.003 | 0 | %100 |
| 8 | M6 | Z | -.004 | -.004 | 0 | %100 |
| 9 | M7 | X | -.239 | -.239 | 0 | %100 |
| 10 | M7 | Z | -.414 | -.414 | 0 | %100 |
| 11 | M8 | X | -.034 | -.034 | 0 | %100 |
| 12 | M8 | Z | -.06 | -.06 | 0 | %100 |
| 13 | M9 | X | -.005 | -.005 | 0 | %100 |
| 14 | M9 | Z | -.008 | -.008 | 0 | %100 |
| 15 | M10 | X | -.239 | -.239 | 0 | %100 |
| 16 | M10 | Z | -.414 | -.414 | 0 | %100 |
| 17 | M11 | X | -.244 | -.244 | 0 | %100 |
| 18 | M11 | Z | -.423 | -.423 | 0 | %100 |
| 19 | M12 | X | -.016 | -.016 | 0 | %100 |
| 20 | M12 | Z | -.028 | -.028 | 0 | %100 |
| 21 | M13 | X | -.244 | -.244 | 0 | %100 |
| 22 | M13 | Z | -.423 | -.423 | 0 | %100 |
| 23 | M14 | X | -.016 | -.016 | 0 | %100 |
| 24 | M14 | Z | -.028 | -.028 | 0 | %100 |
| 25 | M15 | X | -.116 | -.116 | 0 | %100 |
| 26 | M15 | Z | -.201 | -.201 | 0 | %100 |
| 27 | M16 | X | -.145 | -.145 | 0 | %100 |
| 28 | M16 | Z | -.251 | -.251 | 0 | %100 |
| 29 | M17 | X | -.116 | -.116 | 0 | %100 |
| 30 | M17 | Z | -.201 | -.201 | 0 | %100 |
| 31 | M18 | X | -.145 | -.145 | 0 | %100 |
| 32 | M18 | Z | -.251 | -.251 | 0 | %100 |
| 33 | M19 | X | -.127 | -.127 | 0 | %100 |
| 34 | M19 | Z | -.221 | -.221 | 0 | %100 |
| 35 | M20 | X | -.116 | -.116 | 0 | %100 |
| 36 | M20 | Z | -.201 | -.201 | 0 | %100 |
| 37 | M21 | X | -.116 | -.116 | 0 | %100 |
| 38 | M21 | Z | -.201 | -.201 | 0 | %100 |
| 39 | M22 | X | -.191 | -.191 | 0 | %100 |
| 40 | M22 | Z | -.331 | -.331 | 0 | %100 |
| 41 | M23 | X | -.191 | -.191 | 0 | %100 |
| 42 | M23 | Z | -.331 | -.331 | 0 | %100 |
| 43 | M24 | X | -.201 | -.201 | 0 | %100 |
| 44 | M24 | Z | -.348 | -.348 | 0 | %100 |



Company : Maser Consulting
 Designer :
 Job Number : Project No. 10115278
 Model Name : 469153-VZW_MT_LOT_SectorA_H

Nov 15, 2021
 4:59 PM
 Checked By: _____

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

| | Member Label | Direction | Start Magnitude[lb/ft,... | End Magnitude[lb/ft,F... | Start Location[in,%] | End Location[in,%] |
|----|--------------|-----------|---------------------------|--------------------------|----------------------|--------------------|
| 45 | M25 | X | -.127 | -.127 | 0 | %100 |
| 46 | M25 | Z | -.221 | -.221 | 0 | %100 |
| 47 | M26 | X | -.116 | -.116 | 0 | %100 |
| 48 | M26 | Z | -.201 | -.201 | 0 | %100 |
| 49 | M27 | X | -.206 | -.206 | 0 | %100 |
| 50 | M27 | Z | -.356 | -.356 | 0 | %100 |
| 51 | M28 | X | -.116 | -.116 | 0 | %100 |
| 52 | M28 | Z | -.201 | -.201 | 0 | %100 |
| 53 | M29 | X | -.206 | -.206 | 0 | %100 |
| 54 | M29 | Z | -.356 | -.356 | 0 | %100 |
| 55 | M30 | X | -.127 | -.127 | 0 | %100 |
| 56 | M30 | Z | -.221 | -.221 | 0 | %100 |
| 57 | M31 | X | -.116 | -.116 | 0 | %100 |
| 58 | M31 | Z | -.201 | -.201 | 0 | %100 |
| 59 | M32 | X | -.116 | -.116 | 0 | %100 |
| 60 | M32 | Z | -.201 | -.201 | 0 | %100 |
| 61 | M33 | X | -.191 | -.191 | 0 | %100 |
| 62 | M33 | Z | -.331 | -.331 | 0 | %100 |
| 63 | M34 | X | -.191 | -.191 | 0 | %100 |
| 64 | M34 | Z | -.331 | -.331 | 0 | %100 |
| 65 | M35 | X | -.201 | -.201 | 0 | %100 |
| 66 | M35 | Z | -.348 | -.348 | 0 | %100 |
| 67 | M36 | X | -.127 | -.127 | 0 | %100 |
| 68 | M36 | Z | -.221 | -.221 | 0 | %100 |
| 69 | MP4A | X | -.263 | -.263 | 0 | %100 |
| 70 | MP4A | Z | -.456 | -.456 | 0 | %100 |
| 71 | MP3A | X | -.263 | -.263 | 0 | %100 |
| 72 | MP3A | Z | -.456 | -.456 | 0 | %100 |
| 73 | MP2A | X | -.263 | -.263 | 0 | %100 |
| 74 | MP2A | Z | -.456 | -.456 | 0 | %100 |
| 75 | MP1A | X | -.263 | -.263 | 0 | %100 |
| 76 | MP1A | Z | -.456 | -.456 | 0 | %100 |
| 77 | EQUIP | X | -.414 | -.414 | 0 | %100 |
| 78 | EQUIP | Z | -.717 | -.717 | 0 | %100 |
| 79 | M51 | X | -.414 | -.414 | 0 | %100 |
| 80 | M51 | Z | -.717 | -.717 | 0 | %100 |
| 81 | M55A | X | -.197 | -.197 | 0 | %100 |
| 82 | M55A | Z | -.341 | -.341 | 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] | | Y [lb] | | Z [lb] | | MX [k-ft] | | MY [k-ft] | | MZ [k-ft] | | |
|-------|-----|--------|-----------|--------|----------|--------|----------|-----------|-------|-----------|----|-----------|-------|----|
| | | max | LC | min | LC | max | LC | max | LC | max | LC | max | LC | |
| 1 | N4 | max | 1568.348 | 46 | 1724.94 | 16 | 295.414 | 1 | -.213 | 11 | 0 | 51 | .148 | 28 |
| | | min | -1634.451 | 28 | 729.688 | 10 | -4248.7 | 19 | -.504 | 16 | 0 | 1 | -.103 | 46 |
| 3 | N65 | max | 1556.315 | 32 | 1445.648 | 22 | 4162.553 | 24 | -.193 | 1 | 0 | 51 | .078 | 28 |
| | | min | -1491.235 | 38 | 616.162 | 4 | 277.578 | 6 | -.442 | 19 | 0 | 1 | -.144 | 46 |

Envelope Joint Reactions (Continued)

| Joint | X [lb] | LC | Y [lb] | LC | Z [lb] | LC | MX [k-ft] | LC | MY [k-ft] | LC | MZ [k-ft] | LC | | |
|-------|---------|-----|-----------|----|----------|----|-----------|----|-----------|----|-----------|----|---|----|
| 5 | N71 | max | 654.601 | 10 | 29.323 | 22 | 1113.054 | 4 | 0 | 51 | 0 | 51 | 0 | 51 |
| 6 | | min | -652.537 | 4 | 10.11 | 4 | -1111.314 | 10 | 0 | 1 | 0 | 1 | 0 | 1 |
| 7 | Totals: | max | 2058.181 | 10 | 3183.434 | 17 | 2950.536 | 1 | | | | | | |
| 8 | | min | -2058.181 | 4 | 1429.389 | 11 | -2950.543 | 7 | | | | | | |

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

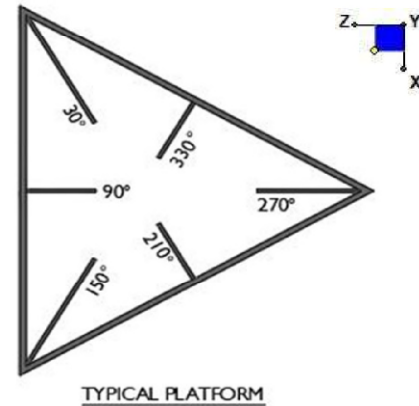
| Member | Shape | Code C... | Loc[in] | LC | Shear ... | Loc[in] | Dir | LC | phi*Pnc [lb] | phi*Pnt [lb] | phi*Mn y-... | phi*Mn z-... | Cb | Eqn | |
|--------|-------|---------------|---------|--------|-----------|---------|--------|----|--------------|--------------|--------------|--------------|-------|------|--------|
| 1 | M1 | L4X3X6 | .000 | 3.375 | 20 | .000 | 3.375 | z | 24 | 80199.017 | 80676 | 2.686 | 7.063 | 1... | H2-1 |
| 2 | M3 | L4X3X6 | .000 | 2.883 | 20 | .000 | 2.883 | z | 24 | 80199.017 | 80676 | 2.686 | 7.063 | 1... | H2-1 |
| 3 | M5 | PL3/8X3_HR... | .657 | 0 | 47 | .157 | 3 | y | 46 | 34985.705 | 36450 | .284 | 2.279 | 1... | H1-1b |
| 4 | M6 | PL3/8X3_HR... | .763 | 0 | 27 | .202 | 3 | y | 28 | 34985.705 | 36450 | .284 | 2.279 | 1... | H1-1b |
| 5 | M7 | PIPE 2.5 | .475 | 142.5 | 6 | .129 | 142.5 | | 4 | 10110.272 | 50715 | 3.596 | 3.596 | 1... | H1-1b |
| 6 | M8 | PL3/8X3_HR... | .609 | 0 | 23 | .242 | 2.718 | y | 46 | 35243.369 | 36450 | .284 | 2.279 | 1... | H1-1b |
| 7 | M9 | PL3/8X3_HR... | .685 | 0 | 28 | .122 | 3.426 | y | 10 | 34551.762 | 36450 | .284 | 2.279 | 1... | H1-1b |
| 8 | M10 | PIPE 2.5 | .375 | 142.5 | 12 | .172 | 142.5 | | 4 | 10110.272 | 50715 | 3.596 | 3.596 | 2... | H1-1b |
| 9 | M11 | PIPE 2.0 | .353 | 71.25 | 7 | .109 | 64.57 | | 46 | 21054.34 | 32130 | 1.872 | 1.872 | 2... | H1-1b |
| 10 | M12 | PIPE 2.0 | .429 | 71.25 | 7 | .128 | 0 | | 28 | 21054.34 | 32130 | 1.872 | 1.872 | 2... | H1-1b |
| 11 | M13 | PIPE 2.0 | .327 | 6.68 | 46 | .123 | 64.57 | | 47 | 21054.34 | 32130 | 1.872 | 1.872 | 2... | H1-1b |
| 12 | M14 | PIPE 2.0 | .361 | 71.25 | 12 | .135 | 64.57 | | 26 | 21054.34 | 32130 | 1.872 | 1.872 | 1... | H1-1b |
| 13 | M15 | PL3/8X3_HR... | .058 | 0 | 27 | .055 | 0 | y | 28 | 36078.278 | 36450 | .284 | 2.279 | 1... | H1-1b |
| 14 | M16 | 1.5 w 0.06 th | .328 | 24.587 | 15 | .045 | 0 | | 3 | 5200.823 | 8550.171 | .327 | .327 | 1... | H1-1a |
| 15 | M17 | PL3/8X3_HR... | .080 | 0 | 48 | .038 | 0 | y | 4 | 36078.278 | 36450 | .284 | 2.279 | 1... | H1-1b |
| 16 | M18 | 1.5 w 0.06 th | .268 | 24.587 | 27 | .081 | 0 | | 6 | 5200.823 | 8550.171 | .327 | .327 | 1... | H1-1a |
| 17 | M19 | PL3/8X3_HR... | .081 | 0 | 5 | .088 | 0 | y | 10 | 30936.41 | 36450 | .284 | 2.279 | 1... | H1-1b |
| 18 | M20 | PL3/8X3_HR... | .027 | 1.5 | 49 | .055 | 1.5 | y | 28 | 36078.278 | 36450 | .284 | 2.279 | 1 | H1-1b |
| 19 | M21 | PL3/8X3_HR... | .094 | 1.5 | 6 | .038 | 1.5 | y | 4 | 36078.278 | 36450 | .284 | 2.279 | 1... | H1-1b |
| 20 | M22 | 1.5 w 0.06 th | .143 | 38 | 28 | .042 | 0 | | 4 | 6432.166 | 8550.171 | .327 | .327 | 1... | H1-1b* |
| 21 | M23 | 1.5 w 0.06 th | .286 | 0 | 26 | .032 | 38 | | 4 | 6432.166 | 8550.171 | .327 | .327 | 1... | H1-1a |
| 22 | M24 | PIPE 2.0 | .033 | 0 | 29 | .013 | 0 | | 10 | 29957.096 | 32130 | 1.872 | 1.872 | 1... | H1-1b* |
| 23 | M25 | PL3/8X3_HR... | .072 | 6 | 12 | .088 | 6 | y | 10 | 30936.41 | 36450 | .284 | 2.279 | 1... | H1-1b |
| 24 | M26 | PL3/8X3_HR... | .054 | 0 | 5 | .064 | 0 | y | 4 | 36078.278 | 36450 | .284 | 2.279 | 1... | H1-1b |
| 25 | M27 | 1.5 w 0.06 th | .296 | 24.587 | 47 | .040 | 0 | | 4 | 5200.823 | 8550.171 | .327 | .327 | 1... | H1-1a |
| 26 | M28 | PL3/8X3_HR... | .052 | 1.5 | 46 | .049 | 0 | y | 4 | 36078.278 | 36450 | .284 | 2.279 | 1... | H1-1b* |
| 27 | M29 | 1.5 w 0.06 th | .259 | 24.587 | 47 | .053 | 0 | | 1 | 5200.823 | 8550.171 | .327 | .327 | 1... | H1-1a |
| 28 | M30 | PL3/8X3_HR... | .048 | 0 | 10 | .044 | 0 | y | 5 | 30936.41 | 36450 | .284 | 2.279 | 1... | H1-1b |
| 29 | M31 | PL3/8X3_HR... | .038 | 1.5 | 46 | .064 | 1.5 | y | 4 | 36078.278 | 36450 | .284 | 2.279 | 1... | H1-1b |
| 30 | M32 | PL3/8X3_HR... | .052 | 1.5 | 46 | .049 | 1.5 | y | 4 | 36078.278 | 36450 | .284 | 2.279 | 1... | H1-1b* |
| 31 | M33 | 1.5 w 0.06 th | .159 | 38 | 46 | .051 | 0 | | 4 | 6432.166 | 8550.171 | .327 | .327 | 1... | H1-1b* |
| 32 | M34 | 1.5 w 0.06 th | .300 | 0 | 47 | .039 | 38 | | 4 | 6432.166 | 8550.171 | .327 | .327 | 1... | H1-1a |
| 33 | M35 | PIPE 2.0 | .029 | 0 | 45 | .007 | 0 | | 5 | 29957.096 | 32130 | 1.872 | 1.872 | 1... | H1-1b* |
| 34 | M36 | PL3/8X3_HR... | .041 | 6 | 39 | .044 | 6 | y | 5 | 30936.41 | 36450 | .284 | 2.279 | 1... | H1-1b |
| 35 | MP4A | PIPE 2.0 | .404 | 15 | 45 | .141 | 55.5 | | 6 | 20866.733 | 32130 | 1.872 | 1.872 | 1... | H1-1b |
| 36 | MP3A | PIPE 2.0 | .224 | 55.5 | 4 | .067 | 55.5 | | 4 | 20866.733 | 32130 | 1.872 | 1.872 | 1... | H1-1b |
| 37 | MP2A | PIPE 2.0 | .354 | 55.5 | 4 | .085 | 41.25 | | 4 | 20866.733 | 32130 | 1.872 | 1.872 | 1... | H1-1b |
| 38 | MP1A | PIPE 2.0 | .453 | 15 | 29 | .184 | 55.5 | | 8 | 20866.733 | 32130 | 1.872 | 1.872 | 1... | H1-1b |
| 39 | M55A | PIPE 2.0 | .063 | 73.858 | 4 | .003 | 73.858 | | 23 | 20401.184 | 32130 | 1.872 | 1.872 | 1... | H1-1b* |



I. Mount-to-Tower Connection Check

RISA Model Data

| Nodes (labeled per RISA) | Orientation (per graphic of typical platform) |
|-----------------------------|--|
| N4 | 90 |
| N65 | 90 |
| | |
| | |
| | |
| | |
| | |
| | |



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):

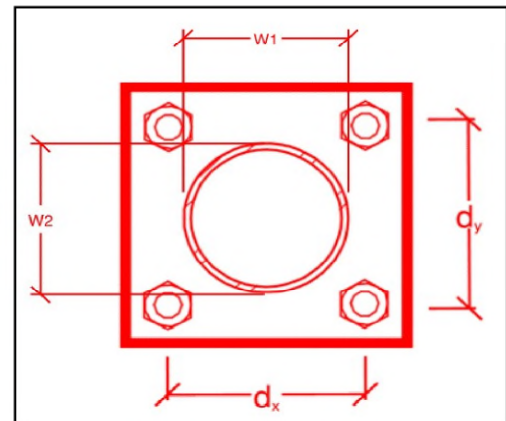
Tensile Strength / bolt (kips):

Shear Strength / bolt (kips):

Tensile Capacity Overall:

Shear Capacity Overall:

| |
|---------------|
| yes |
| 2 |
| 6.5 |
| 2 |
| U-Bolt |
| 0.5 |
| 10.3 |
| 2.6 |
| 16.3 |
| 9.8 |
| 31.4%* |
| 13.2% |



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

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Mount Modification

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

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

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

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

Base Requirements:

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

Photo Requirements:

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

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

Material Certification:

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

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

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

OR

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

Antenna & equipment placement and Geometry Confirmation:

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

OR

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

Comments:

| |
|--|
| |
|--|

Certifying Individual:

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

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

Yes No

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

Issue:

| |
|--|
| contractor shall inspect climbing facilities and ensure that the safety climb is in good condition. Contractor shall install safety climb wire rope guide in locations where the wire rope is rubbing against mount to tower attachments. Contractor shall provide photos of safety climb wire rope guide installation |
|--|

Response:

| |
|--|
| |
|--|

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

Yes No

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

Yes No

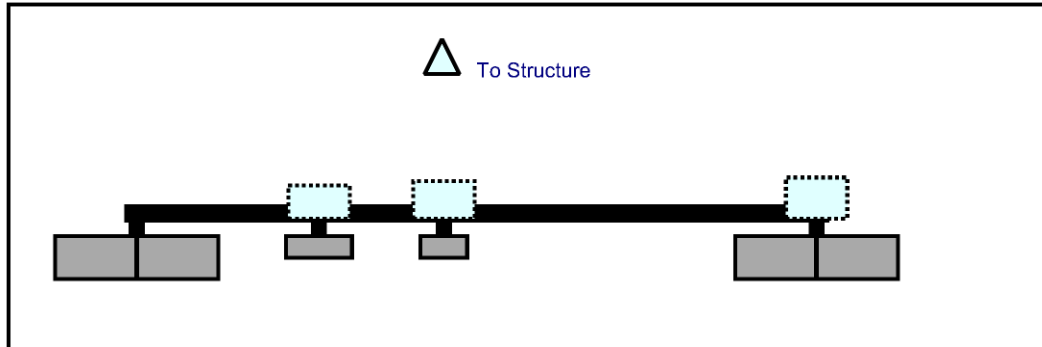
Contractor to certify the condition of the safety climb and verify no obstructions when leaving the site:

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

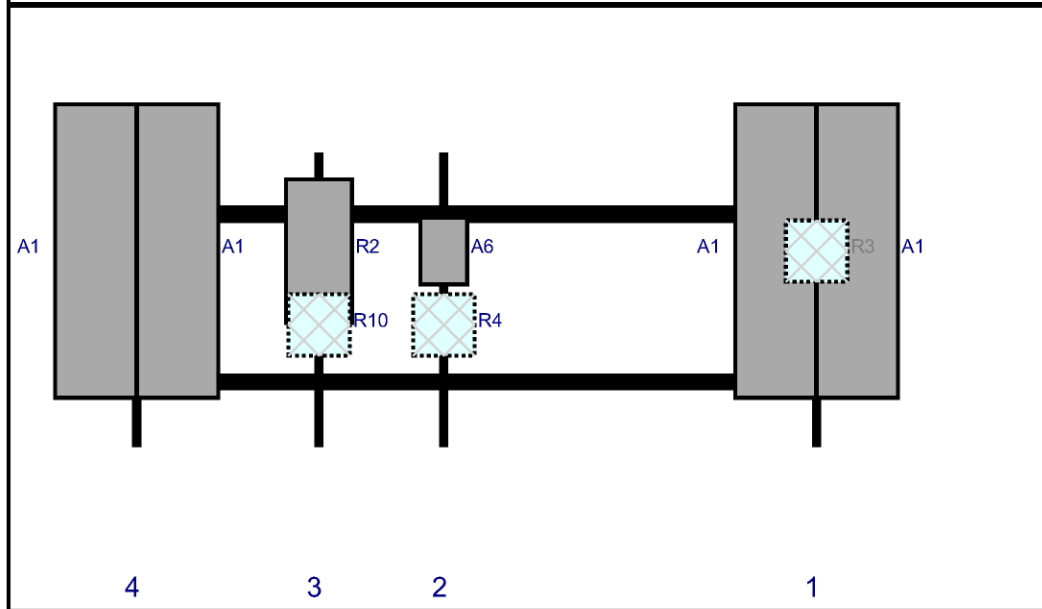
Comments:

| |
|--|
| |
|--|

Plan View

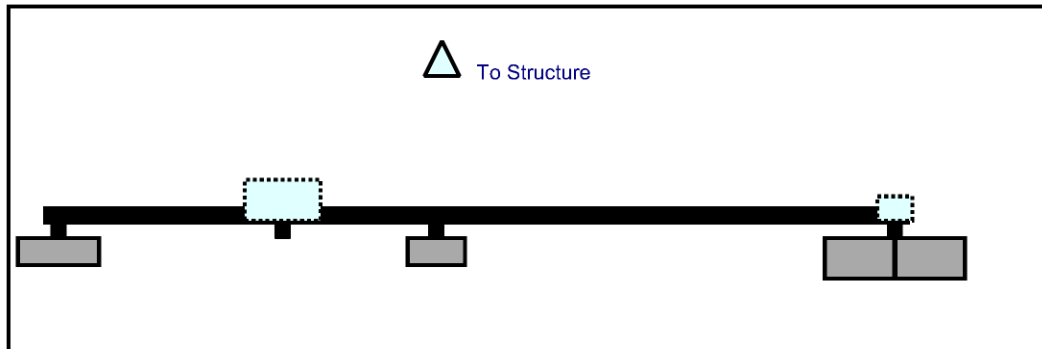


Front View
Looking at Structure

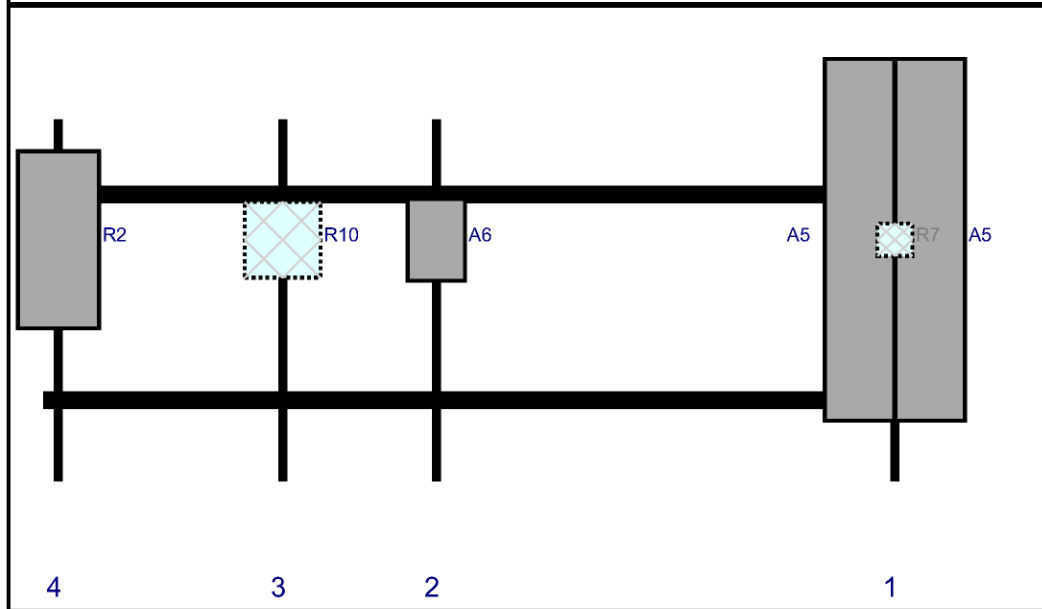


| Ref# | Model | Height (in) | Width (in) | H Dist Frm L. | Pipe # | Pipe Pos V | Ant Pos | C. Ant Frm T. | Ant H Off | Status | Validation |
|------|-------------------------------|-------------|------------|---------------|--------|------------|---------|---------------|-----------|----------|------------|
| A1 | MX06FRO640-02 | 72 | 19.8 | 169 | 1 | a | Front | 24 | -10 | Added | |
| A1 | MX06FRO640-02 | 72 | 19.8 | 169 | 1 | b | Front | 24 | 10 | Added | |
| R3 | RF4439d-25A | 15 | 15 | 169 | 1 | a | Behind | 24 | 0 | Added | |
| A6 | CBRS RRH + Clip-on Ant | 16.2 | 11.4 | 78 | 2 | a | Front | 24 | 0 | Retained | 10/19/2021 |
| R4 | RF4440d-13A | 15 | 15 | 78 | 2 | a | Behind | 42 | 0 | Added | |
| R2 | MT6407-77A | 35.1 | 16.1 | 47.5 | 3 | a | Front | 24 | 0 | Added | |
| R10 | B5/B13 RRH-BR04C (RFV01U-D2A) | 15 | 15 | 47.5 | 3 | a | Behind | 42 | 0 | Retained | 10/19/2021 |
| A1 | MX06FRO640-02 | 72 | 19.8 | 3 | 4 | a | Front | 24 | -10 | Added | |
| A1 | MX06FRO640-02 | 72 | 19.8 | 3 | 4 | b | Front | 24 | 10 | Added | |

Plan View

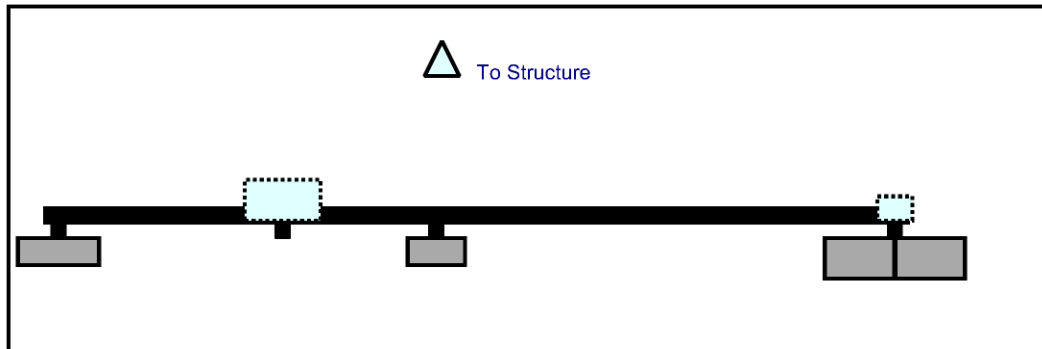


Front View
Looking at Structure

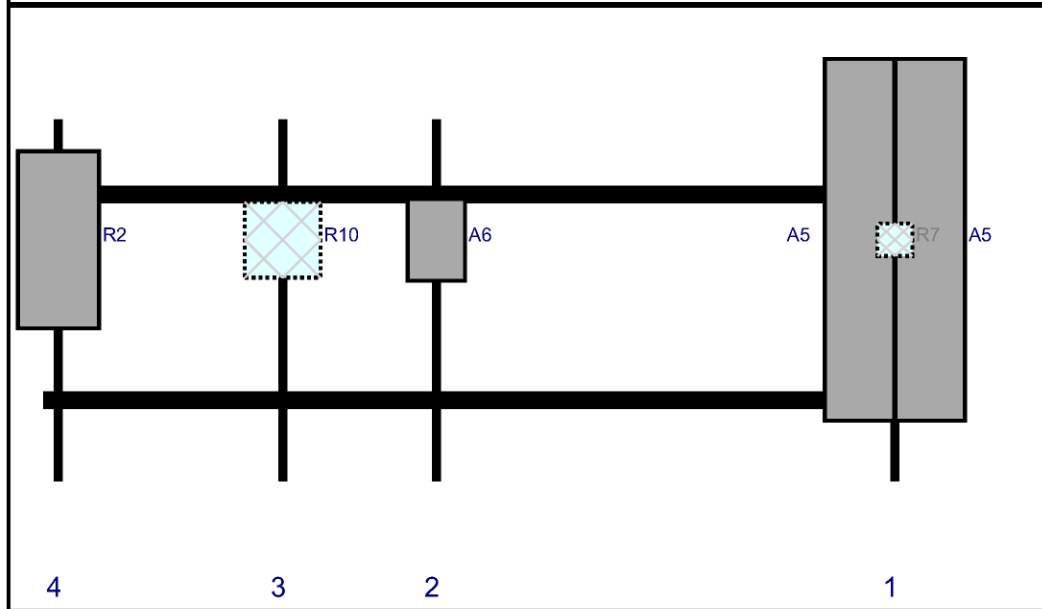


| Ref# | Model | Height (in) | Width (in) | H Dist Frm L. | Pipe # | Pipe Pos V | Ant Pos | C. Ant Frm T. | Ant H Off | Status | Validation |
|------|-------------------------------|-------------|------------|---------------|--------|------------|---------|---------------|-----------|----------|------------|
| A5 | JAHH-65B-R3B | 72 | 13.8 | 169 | 1 | a | Front | 24 | -7 | Retained | 10/19/2021 |
| A5 | JAHH-65B-R3B | 72 | 13.8 | 169 | 1 | b | Front | 24 | 7 | Retained | 10/19/2021 |
| R7 | CBC78T-DS-43 | 6.4 | 6.9 | 169 | 1 | a | Behind | 24 | 0 | Retained | 10/19/2021 |
| A6 | CBRS RRH + Clip-on Ant | 16.2 | 11.4 | 78 | 2 | a | Front | 24 | 0 | Retained | 10/19/2021 |
| R10 | B5/B13 RRH-BR04C (RFV01U-D2A) | 15 | 15 | 47.5 | 3 | a | Behind | 24 | 0 | Retained | 10/19/2021 |
| R2 | MT6407-77A | 35.1 | 16.1 | 3 | 4 | a | Front | 24 | 0 | Added | |

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 |
|------|-------------------------------|-------------|------------|---------------|--------|------------|---------|---------------|-----------|----------|------------|
| A5 | JAHH-65B-R3B | 72 | 13.8 | 169 | 1 | a | Front | 24 | -7 | Retained | 10/19/2021 |
| A5 | JAHH-65B-R3B | 72 | 13.8 | 169 | 1 | b | Front | 24 | 7 | Retained | 10/19/2021 |
| R7 | CBC78T-DS-43 | 6.4 | 6.9 | 169 | 1 | a | Behind | 24 | 0 | Retained | 10/19/2021 |
| A6 | CBRS RRH + Clip-on Ant | 16.2 | 11.4 | 78 | 2 | a | Front | 24 | 0 | Retained | 10/19/2021 |
| R10 | B5/B13 RRH-BR04C (RFV01U-D2A) | 15 | 15 | 47.5 | 3 | a | Behind | 24 | 0 | Retained | 10/19/2021 |
| R2 | MT6407-77A | 35.1 | 16.1 | 3 | 4 | a | Front | 24 | 0 | Added | |

Maser Consulting Connecticut

Subject TIA-222-H Usage

Site Information

| | |
|---------------|---|
| Site ID: | 469153-VZW / WESTPORT CT |
| Site Name: | WESTPORT CT |
| Carrier Name: | Verizon Wireless |
| Address: | 880 Post Rd. East Unit 1 Westport, Connecticut 06880 Fairfield County |
| Latitude: | 41.137475° |
| Longitude: | -73.334364° |

Structure Information

| | |
|-------------|-----------------------|
| Tower Type: | 180-Ft Self Support |
| Mount Type: | 15.00-Ft Sector Frame |

FUZE ID # 16242132

To Whom It May Concern,

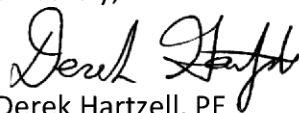
We respectfully submit the above referenced Antenna Mount Structural Analysis report in conformance with ANSI/TIA-222-H, Structural Standard for Antenna Supporting Structures and Antennas and Small Wind Turbine Support Structures.

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. 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



MOUNT MODIFICATION DRAWINGS
EXISTING 15.00' SECTOR FRAME

TOWER OWNER: CSP CORPORATION
TOWER OWNER SITE NUMBER: N/A

CARRIER SITE NAME: WESTPORT CT
CARRIER SITE NUMBER: 469153
FUZE ID: 16242132

880 POST RD. EAST UNIT 1
WESTPORT, CT 06880
FAIRFIELD COUNTY

LATITUDE: 41.137475° N
LONGITUDE: 73.334364° W

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FOR STATE OF VERMONT, NUMBER 10001
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PROJECT AS SHOWN 317772DA

| NO. | REV. | DATE | DESCRIPTION | BY | CHK |
|-----|------|------|-------------|----|-----|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

David DeLuca

SHEET INDEX

| SHEET | DESCRIPTION |
|--------|--------------------------|
| ST-1 | TITLE SHEET |
| 880M-1 | BILL OF MATERIALS |
| SCN-1 | GENERAL NOTES |
| SCF-1 | CLIMBING FACILITY DETAIL |
| SS-1 | MODIFICATION DETAILS |
| SS-2 | MOUNT PHOTOS |
| | SPECIFICATION SHEETS |

PROJECT INFORMATION

| | |
|-----------------------|---------------------------------------|
| APPLICANT/LESSEE | VERIZON WIRELESS |
| COMPANY: | VERIZON WIRELESS |
| CLIENT REPRESENTATIVE | |
| COMPANY: | VERIZON WIRELESS |
| PROJECT MANAGER | |
| CONTACT: | PETER ALBARNO |
| PHONE: | 856-797-0412 |
| E-MAIL: | PETER.ALBARNO@COLLIERSENGINEERING.COM |

| | |
|-----------------------------|--------------------------|
| CONTRACTOR PMI REQUIREMENTS | |
| PHILLOCATION | HTTPS://PHILVZWSMART.COM |
| SMART TOOL PROJECT # | 10115278 |
| NZW LOCATION CODE (RLC) | 469153 |
| ANALYSIS DATE | 11/16/2021 |

DESIGN CRITERIA

| | |
|--|--|
| WIND LOADS | |
| BASIC WIND SPEED (3 SECOND GUST), V = 118 MPH | |
| EXPOSURE CATEGORY B | |
| TOPOGRAPHIC CATEGORY 1 | |
| MEAN BASE ELEVATION (MSL) = 63.37 | |
| ICE LOADS | |
| ICE WIND SPEED (3 SECOND GUST), V = 50 MPH | |
| ICE THICKNESS = 1.00 IN | |
| SEISMIC LOADS | |
| SEISMIC DESIGN CATEGORY B | |
| SHORT TERM PEAK GROUND MOTION, S _g = 0.28 | |
| LONG TERM PEAK GROUND MOTION, S _g = 0.08 | |

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NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

BILL OF MATERIALS

SECTION 1 - VZWSMART KITS

| QUANTITY | MANUFACTURER | PART NUMBER | DESCRIPTION | NOTES | UNIT WEIGHT (LBS.) | WEIGHT (LBS.) |
|----------|--------------|---------------|-------------------|--|--------------------|---------------|
| 1 | | VZWSMART-SKI | TIE BACK ASSEMBLY | CONNECT OTHER END TO ADJACENT TOWER LEG. PROPOSED TIE BACK SHALL EXTEND NO MORE THAN 12" BEYOND THE TOWER LEG. CONTRACTOR SHALL TRIM AS REQUIRED AND PROTECT CUT END WITH TWO COATS OF ZINCA GR ZINC COTE. | 84 | 84 |
| 6 | | VZWSMART-HSKI | CROSSOVER PLATE | | | |
| | VZWSMART | | | | | |

SECTION 2 - OTHER REQUIRED PARTS

| QUANTITY | MANUFACTURER | PART NUMBER | DESCRIPTION | NOTES | UNIT WEIGHT (LBS.) | WEIGHT (LBS.) | |
|----------|--------------|-------------|-------------|-------|--------------------|---------------|----|
| | | | | | | | |
| | | | | | | TOTAL | 84 |



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| | | | |
|----------|--------|----------|------|
| AS SHOWN | SYMBOL | QUANTITY | UNIT |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |



WESTPORT CT 06480
WESTPORT CT 06480
FAIRFIELD COUNTY

SITE NAME:
WESTPORT CT
06480

880 POST RD. EAST UNIT 1
WESTPORT CT 06480
FAIRFIELD COUNTY

Colliers Engineering & Design

BILL OF MATERIALS

SBOM-1

VZWSMART KITS - APPROVED VENDORS

| |
|--|
| COMSCOPE |
| CONTACT: SALVADOR ANGUIANO (817) 304-7492 EMAIL: SALVADOR.ANGUIANO@COMSCOPE.COM WEBSITE: WWW.COMSCOPE.COM |
| METROSITE FABRICATORS, LLC |
| CONTACT: KENT RAMEY (706) 335-7045 (O), (706) 982-9788 (M) PHONE: (706) 335-7045 (O), (706) 982-9788 (M) EMAIL: KENT@METROSITELLC.COM WEBSITE: METROSITEFABRICATORS.COM |
| PERFECTVISION |
| CONTACT: WIRELESS SALES (941) 887-6723 PHONE: (941) 887-6723 EMAIL: WWW.PERFECT-VISION.COM WEBSITE: WIRELESSALES@PERFECT-VISION.COM |
| SABRE INDUSTRIES, INC. |
| CONTACT: ANGIE WELCH (866) 428-0397 PHONE: (866) 428-0397 EMAIL: AKWELCH@SABREINDUSTRIES.COM WEBSITE: WWW.SABREITSOLUTIONS.COM |
| SITE PRO 1 |
| CONTACT: PAULA BOSWELL (971) 236-9843 PHONE: (971) 236-9843 EMAIL: PAULA.BOSWELL@VALMONT.COM WEBSITE: WWW.SITERO1.COM |

- NOTES:**
- THE MANUFACTURERS LISTED ARE THE APPROVED VENDORS FOR THE VZW MOUNT KITS. EACH MANUFACTURER WILL BE AWARE OF WHICH KITS HAVE BEEN THROUGH THE VZW APPROVAL PROCESS AND THEY ARE IN TURN APPROVED TO SELL. PLEASE NOTE THAT THE MATERIAL UTILIZED ON THE MOUNT MODIFICATIONS WILL BE REVIEWED AS A PART OF THE DESKTOP PMI COMPLETED BY THE SMART TOOL VENDOR. IT WILL BE REQUIRED THAT THE VZW KITS SPECIFIED ARE UTILIZED IN THE MODIFICATIONS.
 - ALL MATERIALS REQUIRED FOR THE DESIGNED MODIFICATIONS BUT NOT LISTED IN THIS SHEET ARE ASSUMED TO BE PROVIDED BY THE CONTRACTOR.

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

PROJECT NOTES

- SEE MODIFICATION NOTES
- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, LAWS AND REGULATIONS OF ALL MUNICIPALITIES, UTILITY COMPANIES OR OTHER PUBLIC GOVERNING AUTHORITIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS THAT MAY BE REQUIRED BY ANY FEDERAL STATE, COUNTY OR MUNICIPAL AUTHORITIES.
- THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER, IN WRITING, OF ANY CONFLICTS, ERRORS OR OMISSIONS PRIOR TO THE SUBMISSION OF BIDS OR PERFORMANCE OF WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES AND STRUCTURES ON THE PROJECT. THE CONTRACTOR SHALL REPAIR ANY DAMAGE AS A RESULT OF THE CONSTRUCTION OF THE FACILITY AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
- THE SCOPE OF WORK FOR THIS PROJECT SHALL INCLUDE PROVIDING ALL MATERIALS, EQUIPMENT AND LABOR REQUIRED TO COMPLETE THIS PROJECT. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES AND THE MANUFACTURER'S RECOMMENDATIONS.
- THE CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO SUBMITTING THE BID TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND CONSTRUCTION DRAWINGS.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS OF THE PROJECT. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES AND STRUCTURES SHOWN ON THESE DRAWINGS. DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
- SINCE THE CELL SITE MAY BE ACTIVE, ALL SAFETY PRECAUTIONS MUST BE OBSERVED. EQUIPMENT SHOULD BE SHUT DOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL PROTECTIVE EQUIPMENT (PPE) SHOULD BE WORN TO ALERT OF ANY POTENTIALLY DANGEROUS EXPOSURE LEVELS.
- NO NOISE, SMOKE, DUST OR ODOOR WILL RESULT FROM THIS FACILITY AS TO CAUSE A NUISANCE.
- THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION (NO HANDICAP ACCESS IS REQUIRED).

GENERAL NOTES

- THESE MODIFICATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE TELECOMMUNICATIONS INDUSTRY STANDARD TIA-223-H MATERIALS AND SERVICES PROVIDED BY THE CONTRACTOR SHALL CONFORM TO THE ABOVE MENTIONED CODES.
- CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT DAMAGE TO EXISTING UTILITIES AND STRUCTURES AS A RESULT OF THE CONTRACTOR'S WORK OR FROM OTHER CAUSES. DAMAGE TO EXISTING UTILITIES AND STRUCTURES DUE TO OTHER CAUSES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS BEFORE BEGINNING WORK. ORDERING MATERIAL AND PREPARING OF SHOP DRAWINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACT DOCUMENTS SHALL BE SUBJECT TO THE CONTRACTOR'S ATTENTION OF THE ENGINEER. IF THE CONTRACTOR DISCOVERS ANY EXISTING CONDITIONS THAT ARE NOT REPRESENTED ON THESE DRAWINGS, OR ANY CONDITIONS THAT WOULD INTERFERE WITH THE INSTALLATION OF THE MODIFICATION, NOTIFY THE ENGINEER IMMEDIATELY.
- IT IS ASSUMED THAT ANY STRUCTURAL MODIFICATION WORK SPECIFIED ON THESE DRAWINGS SHALL BE PERFORMED BY A QUALIFIED WORKER WITH TOWER CONSTRUCTION EXPERIENCE.
- THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION METHODS, MEANS, TECHNIQUES, SEQUENCES, AND PROCEDURES.
- ALL CONSTRUCTION MEANS AND METHODS, INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF THE FACILITY. THE CONTRACTOR SHALL MEET ALL TIA-223 (LATEST EDITION), OSHA, AND GENERAL INDUSTRY STANDARDS. ALL RIGGING PLANS SHALL BE APPROVED BY THE GENERAL ENGINEER FOR CLASS IV CONSTRUCTION.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR INITIATING, MAINTAINING, AND COMPLETING ALL MODIFICATION PROGRAMS IN ACCORDANCE WITH ALL APPLICABLE SAFETY CODES.
- WORK SHALL ONLY BE PERFORMED DURING CALM, DRY DAYS WITH WINDS LESS THAN 30 MPH. THE STRUCTURES SHOWN ON THE DRAWINGS IS STRUCTURALLY SOUND ONLY IN THE COMPLETED FORM. THE

- CONTRACTOR SHALL BE RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE STRUCTURE DURING ERECTION. CONTRACTOR SHALL PROVIDE ALL NECESSARY BRACING AND SHORING TO MAINTAIN THE STRUCTURE AS REQUIRED TO RESIST ALL FORCES THAT MAY OCCUR DURING HANDLING AND ERECTION UNTIL THE STRUCTURE IS FULLY COMPLETED. TEMPORARY SUPPORTS, BRACING AND OTHER STRUCTURAL SYSTEMS SHALL BE DESIGNED AND CONSTRUCTED TO MAINTAIN THE STRUCTURE'S PROPERITY AFTER THEIR USE.
- ALL INSTALLATIONS PERFORMED ON THE STRUCTURE SHALL BE COMPLETED IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE STANDARD FOR INSTALLATION, ALTERATION AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS, ANSI/TIA-322.
- CONTRACTOR SHALL SECURE SITE BACK TO EXISTING CONDITION UNDER SUPERVISION OF OWNER. ALL FENCE, STONE, GEOPRAC, GROUNDING, AND OTHER ITEMS SHALL BE REINSTALLED TO ORIGINAL CONDITION. APPROVAL REQUIRED TO ACHIEVE OWNER APPROVAL POSITIVE DAMAGE AWAY FROM TOWER SITE SHALL BE MAINTAINED.
- CONNECTIONS BETWEEN ITEMS SUPPORTED BY THE STRUCTURE AND THE STRUCTURE NOT SPECIFICALLY DETAILED IN THE CONTRACT DOCUMENTS SHALL BE DESIGNED, COORDINATED AND INSPECTED BY A PROFESSIONAL ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL SIGNED AND SEALED CALCULATIONS DURING SHOP DRAWING REVIEW.
- DO NOT SCALE DRAWINGS.
- DO NOT USE THESE DRAWINGS FOR ANY OTHER SITE.
- ALL MATERIAL UTILIZED FOR THIS PROJECT MUST BE NEW AND FREE OF ANY DEFECTS. MATERIALS SHALL BE STORED AND PROTECTED TO PREVENT ALTERED SIZE AND/OR STRENGTHS. MUST BE APPROVED BY THE OWNER AND ENGINEER IN WRITING.
- THE MOUNT UNDER NO CIRCUMSTANCES SHOULD BE USED AS A TIE OFF POINT.

STRUCTURAL STEEL

- DESIGN, DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING PUBLICATIONS EXCEPT AS SPECIFICALLY INDICATED IN THE CONTRACT DOCUMENTS.
 - AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) MANUAL OF STEEL CONSTRUCTION (15TH EDITION)
 - SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS
 - ASC CODE OF STANDARD PRACTICE
- STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING UNLESS OTHERWISE SHOWN:
 - CHANNELS, ANGLES, PLATES, ETC. ASTM A36 (GR 36)
 - STEEL PIPE ASTM A53 (GR 35)
 - BOLTS ASTM A325
 - NUTS ASTM A563
 - LOCKING STRUCTURAL GRADE LOCK WASHERS
- ALL SUBSTITUTIONS PROPOSED BY THE CONTRACTOR SHALL BE APPROVED IN WRITING BY THE ENGINEER. CONTRACTOR SHALL PROVIDE DOCUMENTATION TO ENGINEER FOR VERIFYING THE SUBSTITUTE IS SUITABLE FOR USE AND MEETS ORIGINAL DESIGN CRITERIA. DIFFERENCES BETWEEN ORIGINAL DESIGN AND SUBSTITUTE SHALL BE NOTED. ESTIMATES OF COSTS AND COSTS TO THE SUBSTITUTION (INCLUDING REDISIGN COSTS AND COSTS TO SUB-CONTRACTORS) SHALL BE PROVIDED TO THE ENGINEER. CONTRACTOR SHALL PROVIDE ADDITIONAL DOCUMENTATION AND/OR SPECIFICATIONS TO THE ENGINEER AS REQUESTED.
- PROVIDE STRUCTURAL STEEL SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
 - SUBMIT SHOP DRAWINGS TO PETER.ALBANO@COLLIERSENGINEERING.COM
 - PROVIDE MASER CONSULTING CONNECTICUT PROJECT # AND MASER CONSULTING CONNECTICUT PROJECT ENGINEER PROJECT # AND MASER BODY OF THE EMAIL.
- DRILL NO HOLES IN ANY NEW OR EXISTING STRUCTURAL STEEL MEMBERS UNLESS SPECIFICALLY NOTED ON STRUCTURAL DRAWINGS WITHOUT THE APPROVAL OF THE ENGINEER.
- GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
- ALL NEW STEEL SHALL BE HOT DIPPED GALVANIZED FOR FULL WEATHER PROTECTION. EXISTING STEEL CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
- CONTRACTOR SHALL PROTECT CUT ENDS OF ALL FIELD-CUT STEEL WITH TWO (2) COATS OF COLD GALVANIZING (ZINGA OR ZINC COTE).
- ALL BOLT ASSEMBLIES FOR STRUCTURAL MEMBERS REPRESENTED IN THIS DRAWING REQUIRE LOCKING DEVICES TO BE INSTALLED IN ACCORDANCE WITH TIA-223-H SECTION 4.9.2 REQUIREMENTS.
- WHERE CONNECTIONS ARE NOT FULLY DETAILED ON THESE DRAWINGS, FABRICATOR SHALL DESIGN CONNECTIONS TO RESIST LOADS AND FORCES WHERE SHOWN ON DRAWINGS AND AS OUTLINED IN SPECIFICATIONS.
- FOR MEMBERS BEING REPLACED, PROVIDE NEW BOLTS AND MATCH EXISTING SIZE AND GRADE TO MEET AISC REQUIREMENTS FOR TIGHTENING BOLT.

- ALL EXISTING PAINTED/GALVANIZED SURFACES DAMAGED DURING REPAIR SHALL BE REPAIRED TO MATCH THE EXISTING FINISH (IF APPLICABLE), AND CLEAN, REPAIRED BY COLD GALVANIZING (ZINGA OR ZINC COTE), AND REPAINTED TO MATCH THE EXISTING FINISH (IF APPLICABLE).
- ALL HOLES IN STEEL MEMBERS SHALL BE SIZED 1/16" LARGER THAN THE BOLT DIAMETER. STANDARD HOLES SHALL BE USED UNLESS NOTED OTHERWISE.
- ALL WELDING SHALL BE DONE IN ACCORDANCE WITH AWS D1.0 (LATEST EDITION). THIS SHALL INCLUDE A CERTIFIED WELD INSPECTOR (CWI) FOR ACCEPTANCE OR REJECTION OF ALL WELDING OPERATIONS, PRE DURING, AND POST INSTALLATION, USING THE ACCEPTANCE CRITERIA OF AWS D1.1.
- CONTRACTOR IS RESPONSIBLE FOR COMMISSIONING A THIRD PARTY INSPECTION FIRM TO CONDUCT A PASSING CWI BEFORE THE START OF THE ERECTION OR THE UPON COMPLETION OF THE PROJECT.
- THE CERTIFIED WELD INSPECTOR SHALL INDICATE, IN A WRITTEN CMI REPORT, THAT ALL WELDING OPERATIONS PRE DURING AND POST INSTALLATION WERE CONDUCTED IN ACCORDANCE WITH AWS D1.1 WITH PHOTOGRAPHS AND DOCUMENTATION SUPPORTING THE ACCEPTANCE OR REJECTION OF THE WELDING OPERATIONS. ALL PHOTOGRAPHS, DOCUMENTATION AND PHOTOS SHALL BE SUBMITTED DURING THE PMI.
- IN CASES WHERE A WELD IS REQUIRED BETWEEN TWO MEMBERS IN WHICH THERE IS A GAP IN BETWEEN, THE WELD IS TO BE BUILT UP SUCH THAT THE SIZE OF WELD ON THE MEMBER IS EQUAL TO THAT SHOWN IN THE DRAWINGS.
- OXY FUEL GAS WELDING OR BRAZING IS STRICTLY PROHIBITED. SPECIFICALLY, NO TORCH CUTTING IS PERMITTED ON SITE. ALL HOLES SHALL BE CUT WITH A CHAMFER.
- CONTRACTOR SHALL EXERCISE CAUTION WHEN WELDING A GALVANIZED SURFACE.
- CONTRACTOR SHALL HAVE A FIRE PROTECTION PLAN IN PLACE THAT MEETS ALL LOCAL, STATE AND FEDERAL REQUIREMENTS FOR ALL LOCAL JURISDICTIONAL REQUIREMENTS.

WELDING NOTES

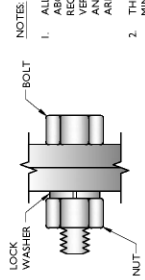
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- CONTRACTOR SHALL HAVE A FIRE PROTECTION PLAN IN PLACE THAT MEETS ALL LOCAL, STATE AND FEDERAL REQUIREMENTS FOR ALL LOCAL JURISDICTIONAL REQUIREMENTS.

BOLT SCHEDULE (IN.)

| BOLT DIAMETER | STANDARD HOLE | SHORT SLOT | MIN. EDGE DISTANCE | SPACING |
|---------------|---------------|----------------|--------------------|---------|
| 1/2 | 9/16 | 9/16 x 1 1/16 | 7/8 | 1 1/2 |
| 5/8 | 1 1/16 | 1 1/16 x 7/8 | 1 1/8 | 1 7/8 |
| 3/4 | 1 3/16 | 1 3/16 x 1 | 1 1/4 | 2 1/4 |
| 7/8 | 1 5/16 | 1 5/16 x 1 1/8 | 1 1/2 | 2 5/8 |
| 1 | 1 1/16 | 1 1/16 x 5/16 | 1 3/4 | 3 |

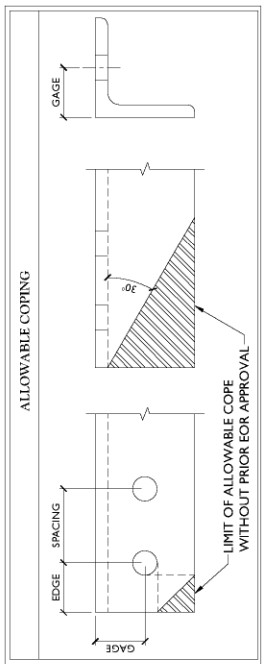
WORKABLE GAGES (IN.)

| LEG | GAGE |
|-------|-------|
| 4 | 2 1/2 |
| 3 1/2 | 2 |
| 3 | 1 3/4 |
| 2 1/2 | 1 3/8 |
| 2 | 1 1/8 |



TYP. BOLT ASSEMBLY

- NOTES:**
- ALL DIMENSIONS REPRESENTED IN THE ABOVE TABLES ARE AISC MINIMUM REQUIREMENTS. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ENGINEER IF DISTANCES ARE LESS THAN THOSE PROVIDED.
 - THE DIMENSIONS PROVIDED ARE MINIMUM REQUIREMENTS. ACTUAL DIMENSIONS MAY VARY WITHIN THE AISC MINIMUM REQUIREMENTS.
 - SHORT SLOT HOLES SHALL ONLY BE USED WHEN DEPICTED IN THE DRAWINGS.
 - MATCH EXISTING GAGES WHICH APPLICABLE UNLESS MINIMUM GAGE DISTANCES ARE COMPROMISED.



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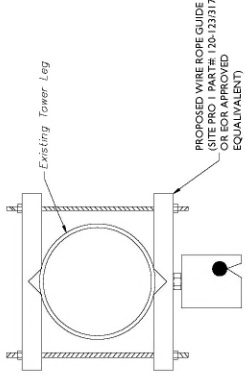
CONNECTICUT PROFESSIONAL ENGINEER
PETER ALBANO
REGISTERED PROFESSIONAL ENGINEER
STATE OF CONNECTICUT
LICENSE NO. 123456789

SITE NAME:
WESTPORT CT
Z69153
880 POST RD. EAST UNIT 1
WESTPORT CT 06880
FAIRFIELD COUNTY

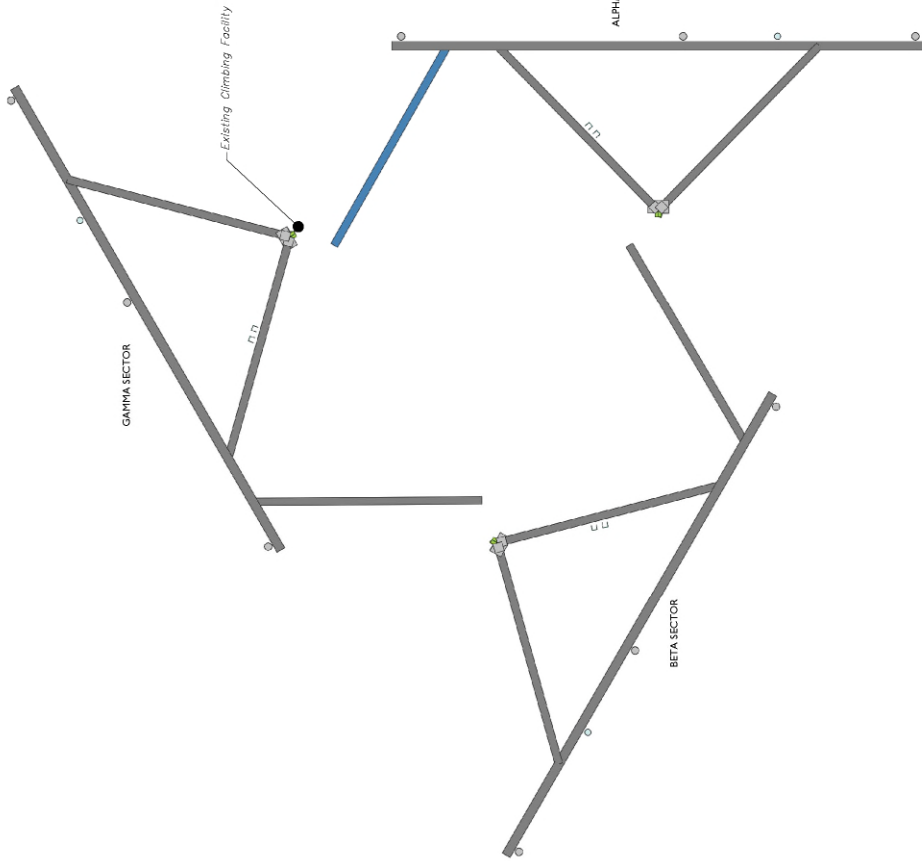
Colliers Engineering & Design
PETER ALBANO
REGISTERED PROFESSIONAL ENGINEER
STATE OF CONNECTICUT
LICENSE NO. 123456789

MODIFICATION NOTES
SGN-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



2 PROPOSED WIRE ROPE GUIDE ATTACHMENT - PLAN VIEW
 SCALE: N.T.S.



1 CLIMBING FACILITY LOCATION
 SCALE: N.T.S.

STRUCTURAL NOTES:

- PER THE MOUNT MAPPING COMPLETED BY STRUCTURAL COMPONENTS ON 10/19/2021, THE SAFETY CLIMB AND CLIMBING FACILITIES UP TO THE VERIZON MOUNT ELEVATION (159'-0") ARE IN GOOD CONDITION. MASER DOES NOT WARRANT THIS INFORMATION.
- INSTALL SHALL NOT CAUSE HARM TO THE STRUCTURE, CLIMBING FACILITY, SAFETY CLIMB, OR ANY SYSTEM INSTALLED ON THE STRUCTURE. TIMELY NOTICE AND DOCUMENTATION SHALL BE PROVIDED BY CONTRACTORS TO THE BOR (OF STRUCTURAL DESIGN) IF AN OBSTRUCTION WAS REQUIRED TO MEET THE RF SYSTEM DESIGN REQUIREMENTS AND PERFORMANCES.



Existing Safety Climb
 Existing Climbing Facility

CLIMBING FACILITY PHOTO

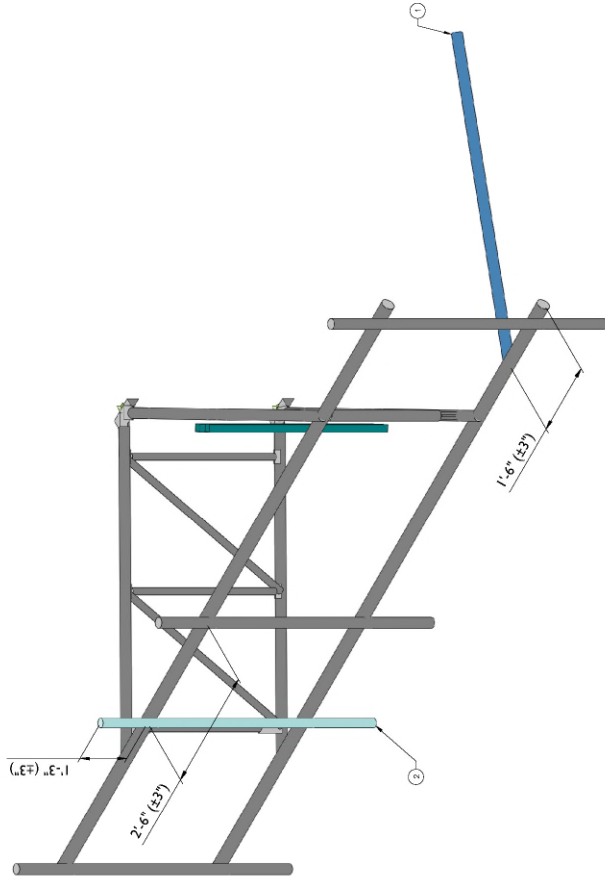
LEGEND:

- PROPOSED
- RELOCATED
- EXISTING

MOUNT MODIFICATION SCHEDULE

| NO. | ELEVATION | QUANTITY | DESCRIPTION | NOTES |
|-----|-----------|----------|--|---|
| 1 | | 1 | PROPOSED TIEBACK ASSEMBLY (PART #: VZWSMART-SFK 1) | CONNECT NEW TIE BACK TO EXISTING BOTTOM FACE HORIZONTAL. CONNECT OTHER END TO ADJACENT TOWER LEG. PROPOSED TIE-BACK SHALL EXTEND NO MORE THAN 12" BEYOND THE TOWER LEG. CONTRACTOR SHALL TRIM AS REQUIRED AND PROTECT CUT END WITH TWO COATS OF ZINGA OR ZINC COTE. (ALPHA SECTOR ONLY) |
| 2 | 159'-0" | 3 | RELOCATED MOUNT PIPE | CONNECT RELOCATED MOUNT PIPE IN POSITION 3 TO EXISTING FACE HORIZONTALS WITH CROSSOVER PLATES (PART #: VZWSMART-MSK 1) AT EACH CONNECTION. |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

NOTES:
 MOUNT MEMBERS NOT SHOWN FOR CLARITY U.N.O.
 REMOVE EXISTING TIE BACK AND ASSOCIATED CONNECTIONS (ALPHA SECTOR ONLY).



PROPOSED ISOMETRIC VIEW (ALPHA SECTOR SHOWN, SIM BETA AND GAMMA SECTORS)
 SCALE: N.T.S.

1

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 www.colliersengineering.com

Doing business as **Colliers Engineering & Design**



811
 Call before you dig
 For states go to www.811.org

| | |
|----------------|----------|
| PROJECT NUMBER | 9177722A |
| DATE | |
| REV | |
| DATE | |
| DESCRIPTION | |
| BY | |
| CHECKED | |
| DATE | |
| DATE | |

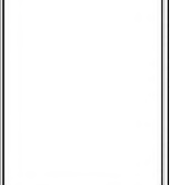
Devi Shaha
 PROFESSIONAL ENGINEER
 LICENSE NO. 15450
 STATE OF CONNECTICUT

SITE NAME:
 WESTPORT CT
 769153
 880 POST RD. EAST UNIT 1
 WESTPORT CT 06880
 FAIRFIELD COUNTY

MODIFICATION DETAILS

SS-1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



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 Dig Safe
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 www.811.org

PROJECT: WESTPORT TOWER
 DATE: 10/19/2024

| NO. | AS SHOWN | REVISION | DATE |
|-----|----------|----------|------|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
| 10 | | | |

David Shiffa

REGISTERED PROFESSIONAL ENGINEER
 STATE OF CONNECTICUT
 LICENSE NO. 12345
 EXPIRES 12/31/2025

UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE IN FEET AND INCHES.
 UNLESS THEY ARE ACTING UNDER THE DIRECTION
 OF THE REGISTERED PROFESSIONAL ENGINEER,
 ENGINEER IN CHARGE OF THE PROJECT.

SITE NAME:
 WESTPORT CT
 769153
 880 POST RD. EAST UNIT 1
 WESTPORT CT 06890
 FAIRFIELD COUNTY

Colliers
 Engineering
& Design
 10000 Old Coleridge Road, Suite 100
 Westport, CT 06890
 Phone: 203.261.1100
 Fax: 203.261.1101
 Email: info@colliersengineering.com

PROJECT:
 SHEET:
 MOUNT PHOTOS
 SS-2



MOUNT PHOTO 2



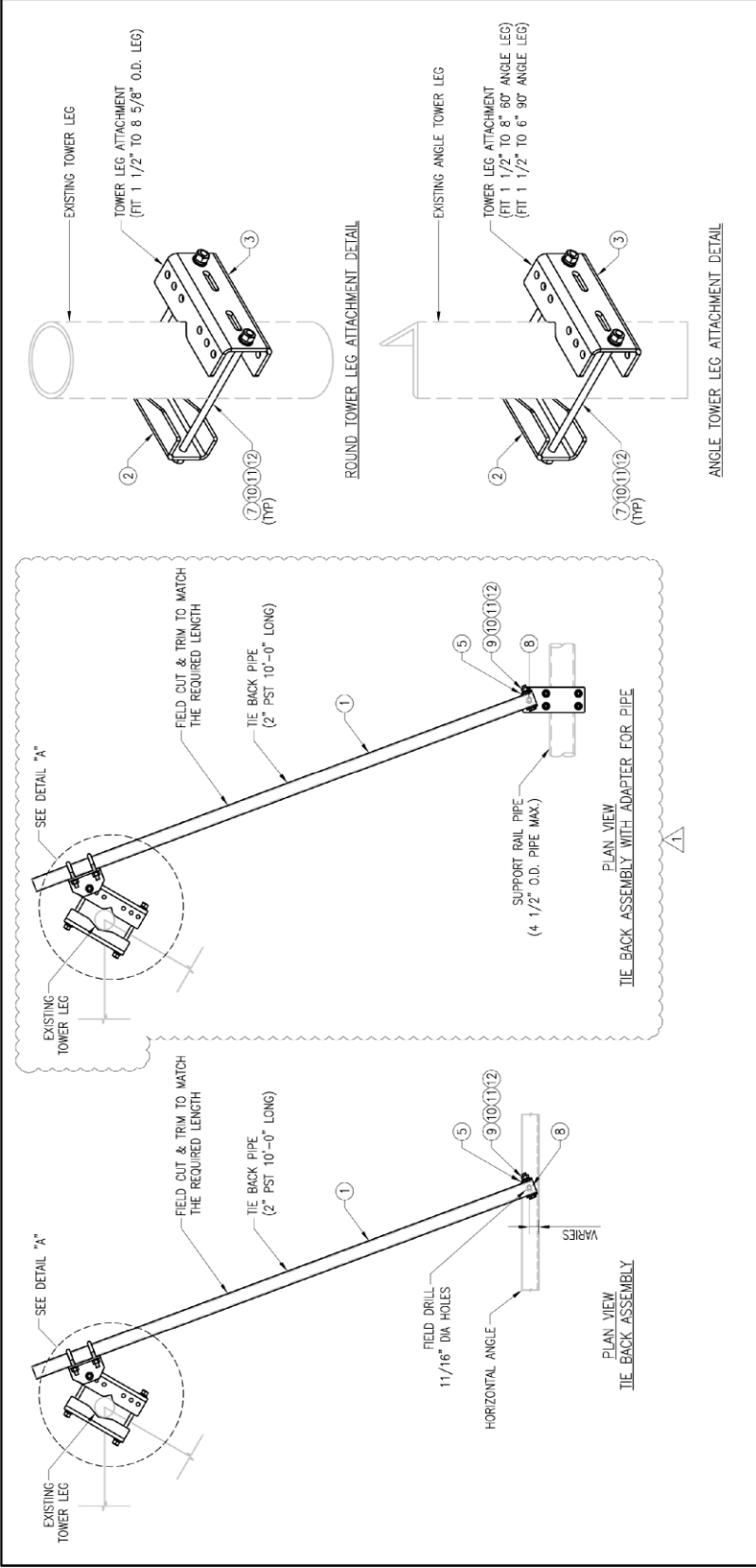
MOUNT PHOTO 4



MOUNT PHOTO 1

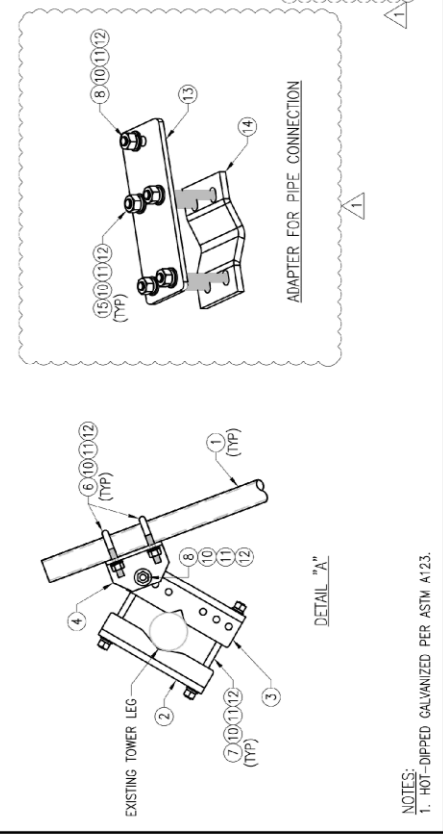


MOUNT PHOTO 3



VZWSMART-SFK1 (TIE BACK ASSEMBLY)

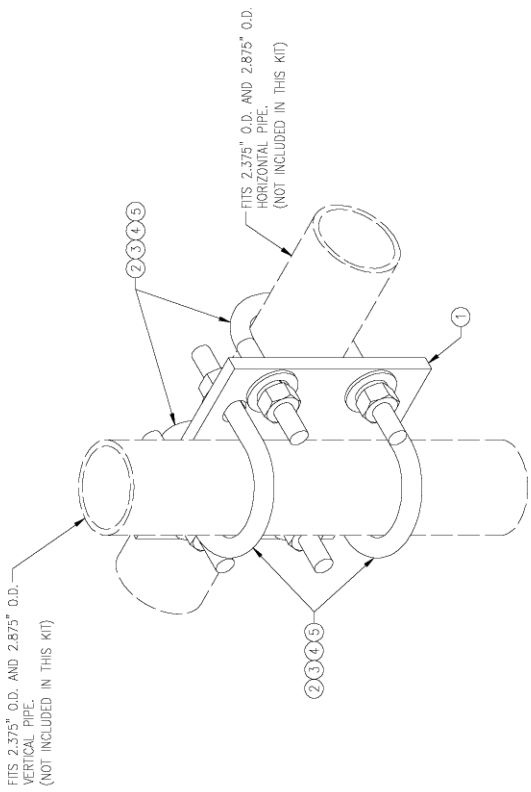
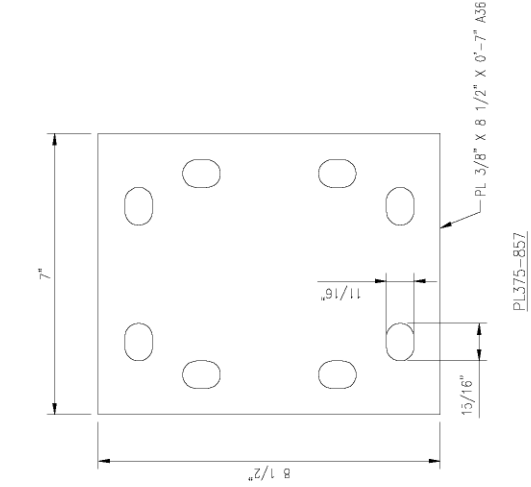
| ITEM NO. | QTY. | PART NO. | DESCRIPTION | SHEET # | WT | |
|----------|------|------------------|---|---------|---------------|----|
| 1 | 1 | PST2375-10 | 2" PST (2.375" O.D. X 0.154" THK) X 10'-0" A53 GR-B 35KSI | SFK1-F1 | 38 | |
| 2 | 1 | BP25-12 | PL 3/8" X 8 1/4" X 1"-C" A36 BENT PLATE | SFK1-F2 | 11 | |
| 3 | 1 | BP11125-12 | PL 3/8" X 11 1/8" X 1"-0" A36 BENT PLATE | SFK1-F3 | 14 | |
| 4 | 1 | BP6-6375 | PL 3/8" X 6" X 9 3/8" A36 BENT PLATE | SFK1-F4 | 6 | |
| 5 | 1 | BP2-875 | PL 1/2" X 2" X 8 3/4" A36 BENT PLATE | SFK1-F4 | 1 | |
| 6 | 2 | MS02-625-300-500 | RH-ROU.T 5/8" X 3" W. X 5" LL. A36 (CH FOLLOV.) | RBC-1 | 2 | |
| 7 | 2 | --- | THREADED ROD 5/8" DIA. X 1'-6" F1554-36 HDG | --- | 0 | |
| 8 | 2 | --- | BOLT 5/8" X 2" A325 | --- | 0 | |
| 9 | 1 | --- | ROU.T 5/8" X 4 1/4" A325 | --- | 0 | |
| 10 | 15 | TW-625 | 5/8" HDG USS FLAT WASHER | --- | 1 | |
| 11 | 15 | LW-625 | 5/8" HDG LOCK WASHER | --- | 0 | |
| 12 | 15 | NUT-625 | 5/8" HDG HEX NUT | --- | 2 | |
| 13 | 1 | PL375-4511 | PL 3/8" X 4 1/2" X 11" A36 | SFK1-F1 | 4 | |
| 14 | 1 | V-CLAMP | PL 1/2" X 4 1/4" X 5/8" A36 BEND PLATE | SFK1-F5 | 5 | |
| 15 | 4 | --- | ROU.T 5/8" X 6" FULL THROU SAE GR 5 | --- | 0 | |
| | | | | | GALVANIZED WT | 84 |



NOTES:
 1. HOT-DIPPED GALVANIZED PER ASTM A123.

| | |
|------------------|-----------------|
| DRWN BY: H.R. | CHECKED BY: HMA |
| REV. DESCRIPTION | BY DATE |
| △ FIRST ISSUE | H.R. 05/08/20 |
| △ | |
| △ | |
| △ | |
| △ | |

| | |
|-----------------|--------|
| SHEET TITLE | |
| VZWSMART-MSK1 | |
| CROSSOVER PLATE | |
| SHEET NUMBER: | REV #: |
| VZWSMART-MSK1 | 0 |



VZWSMART-MSK1 (CROSSOVER PLATE)

| ITEM NO. | QTY. | PART NO. | DESCRIPTION | SHEET # | WT |
|----------|------|------------------|--|---------------|----|
| 1 | 1 | PL375-857 | PL 3/8" X 8 1/2" X 0'-7" A36 | MSK1-F1 | 6 |
| 2 | 4 | MS02-625-300-500 | RJ-BOLT 5/8" X 3" I.W. X 5" I.L. A36 (OR EQUIV.) | RBC-1 | 5 |
| 3 | 8 | FW-625 | 5/8" HDG USS FLAT WASHER | --- | 1 |
| 4 | 8 | LW-625 | 5/8" HDG LOCK WASHER | --- | 0 |
| 5 | 8 | NUJ-625 | 5/8" HDG HEX NUT | --- | 1 |
| | | | | CALVANIZED WT | 14 |

NOTES:
 1. HOT-DIPPED GALVANIZED PER ASTM A123.

ATTACHMENT 5





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POST RD E

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Location POST RD E

Mblu F09 / / 063/000 /

Acct# 29409

Owner CONNECTICUT STATE OF

Assessment \$689,500

Appraisal \$985,000

PID 100302

Building Count 1

Current Value

| Appraisal | | | |
|----------------|--------------|------|-----------|
| Valuation Year | Improvements | Land | Total |
| 2020 | \$985,000 | \$0 | \$985,000 |
| Assessment | | | |
| Valuation Year | Improvements | Land | Total |
| 2020 | \$689,500 | \$0 | \$689,500 |

Owner of Record

Owner CONNECTICUT STATE OF
Co-Owner CELL TOWER/WALGREENS
Address 30 TRINITY ST
HARTFORD, CT 06106


Sale Price \$0
Certificate
Book & Page 0000/0000
Sale Date 10/01/2005


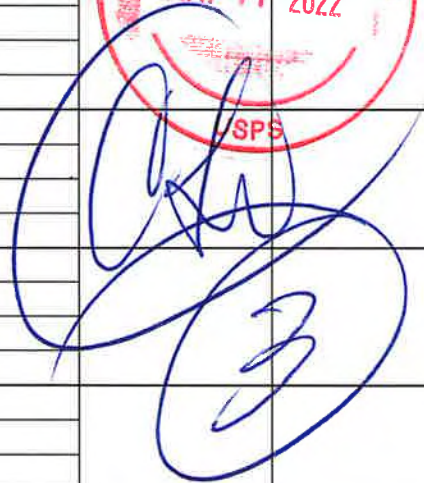
Ownership History

ATTACHMENT 6



WESTPORT
Certificate of Mailing — Firm

| | | | |
|--|--|--|---|
| Name and Address of Sender Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103 | TOTAL NO. of Pieces Listed by Sender 3 | TOTAL NO. of Pieces Received at Post Office™ 3 | Affix Stamp Here <i>Postmark with Date of Receipt.</i> neopost SM 05/17/2022 US POSTAGE \$002.99⁰  ZIP 06103 041L12203937 |
| | Postmaster, per (name of receiving employee) | | |

| USPS® Tracking Number Firm-specific Identifier | Address (Name, Street, City, State, and ZIP Code™) | Postage | Fee | Special Handling | Parcel Airlift |
|---|--|--|-----|------------------|----------------|
| 1. | Jennifer Tooker, First Selectwoman Town of Westport 110 Myrtle Avenue Greenwich, CT 06880 |   | | | |
| 2. | Mary Young, Planning and Zoning Director Town of Westport 110 Myrtle Avenue Greenwich, CT 06880 | | | | |
| 3. | Department of Public Safety Connecticut State Police c/o Brian Benito P.O. Box 2794 Middletown, CT 06457 | | | | |
| 4. | | | | | |
| 5. | | | | | |
| 6. | | | | | |