CENTERLINE

December 15, 2025

ATTN: Jen Flynn, Planning Board Secretary
ATTN: Members of the Planning Board
Town of Marlborough
21 Milton Turnpike
Suite 200
Milton, NY 12547

RE: American Tower Corp/T-Mobile Northeast LLC - Eligible Facilities Request to Co-locate Transmission Equipment on an Existing Wireless Tower Located at 366 Mt Zion Rd, Town of Marlborough, County of Ulster, State of New York

To Whom It May Concern:

On November 7, 2025, T-Mobile received an Email from the Town of Marlborough's Planning Board Secretary, which advised T-Mobile that the above-referenced application was incomplete and required additional documentation.

Attached to this cover letter is a Table of Contents the enclosed documents which are submitted as an addendum to, and are to be made a part of, our application for the above-referenced Eligible Facilities Request.

Also, as per your request, we've included 12 copies of this Supplemental Submission for the board members' review. If you have any further questions/concerns, please don't hesitate to reach out to me directly.

Respectfully Submitted,

Cullen Morgan
Site Acquisition Consultant
Centerline Communications, LLC
Email: cmorgan@clinellc.com
Mobile: (941)-549-7263

C/O CULLEN MORGAN
941-549-7263
CENTERLINE COMMUNICATIONS LLC
12579 SAGEWOOD DRIVE
VENICE FL 34293

6 LBS **1 OF 1**

DWT: 12,12,6

SHIP TO:
ATTN: JEN FLYNN, PB SECRETARY
845-795-6167 118
TOWN OF MARLBOROUGH
SUITE 200
21 MILTON TURNPIKE
MILTON NY 12547-5155

NY 124 9-01

UPS GROUND

TRACKING #: 1Z 9Y4 503 03 2314 2773

BILLING: P/P

Reference # 1: UP50577A-0002441081 // SUPPLEMENT

CS 25.0.11. MACNV50 51.0A 12/2025*

TM

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CONTENTS:

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ATTACHMENT 1

Town of Marlborough Planning Board Site Plan Application

Application #

Please refer to the Town of Marlborough Town Code Section 155-31 https://www.ecode360.com/8667578#8667578 to review all relevant local legislation with regards to Site Plan Review.

Please refer to Town of Marlborough Route 9W Corridor Building and Site Design Guidelines for New Commercial Construction and Rehabilitation of Existing Buildings.
[https://www.townofmarlboroughny.org/Search?searchPhrase=Route%209W%20Corridor%20Building%20and%20Site%20Design%20Guidelines]
Failure to accurately complete this application in its entirety may result in delays and additional review costs.

Date of Initial Submission and Latest Revision	Initial Submission: 11/7/2025 Current Revision: 11/14/2025
Name of Project	UP50577A American Tower/T-Mobile Colocation
Address of Project	366 Mt Zion Rd, Marlboro, NY 12542, USA
Tax Section, Block, and Lot Number	102.3-1-36.100
Zoning District	RAG1
Number of Acres	approx 2.79 acres
Square Footage of Each Building	N/A

Reason For Application:
Amendment to existing Site plan to permit Co-location of T-Mobile equipment as per the attached project narrative.

Description of Proposal 155-31 E (3) (a):
Please see the attached project narrative included with the original submission.

CONTACT INFORMATION	
Name of Property Owner	American Tower Corp (Cullen Morgan, Agent)
Address of Property Owner	c/o Cullen Morgan - Agent 12579 Sagewood Drive, Venice, FL 34293
Telephone Number of Property Owner:	941-549-7263
Email of Property Owner	cmorgan@clinellc.com
Name of Applicant	T-Mobile Northeast LLC (Cullen Morgan, Agent)`
Address of Applicant	c/o Cullen Morgan - Agent 12579 Sagewood Drive, Venice, FL 34293
Telephone Number of Applicant	941-549-7263
Email Address of Applicant	cmorgan@clinellc.com
Name of Surveyor	N/A
Address of Surveyor	N/A
Telephone Number of Surveyor	N/A
Email Address of Surveyor	N/A
Name of Engineer	A.T. Engineering Services PLLC
Address of Engineer	1 Fenton Main, Suite 300 Cary, NC 27511
Telephone Number of Engineer	919-468-0112
Email Address of Engineer	N/A
Name of Attorney	N/A
Address of Attorney	N/A
Telephone Number of Attorney	N/A
Email Address of Attorney	N/A
Name & Profession of Other Involved Personnel	Airian Eastman (additional Agent for TMO and ATC)
Address of Other Involved Personnel	48 W Academy Street, McGraw, NY 13101
Telephone Number of Other Involved Personnel	607-304-7209
Email of Other Involved Personnel	aeastman@clinellc.com

Town of Marlborough Planning Board
Legal Notices for Public Hearing

Procedure for Legal Notices:

1. The Town of Marlborough Planning Board will schedule Public Hearings during a regularly scheduled meeting after approval for the Public Hearing has been granted.

2. Applicants are required to obtain surrounding property owner names and addresses from the Ulster County Parcel viewer for 500 feet from the parcel. See https://ulstercountyny.gov/maps/parcel-viewer/.

3. Applicants are required to send a Public Notice Letter, obtained from the Town of Marlborough Planning Board Office, via Certified Mail to property owners no less than 10 days prior to Public Hearing.

4. The Town of Marlborough Planning Board Office will send notification to the Town's official newspaper.

5. All Certified Mail receipts, in addition to a copy of the Ulster County Parcel viewer's listing of names and addresses, must be submitted at the Public Hearing.

Any questions regarding procedures should be directed to The Town of Marlborough Planning Board Office.
Phone: 845-795-6167
Email: marlboroughplanning@marlboroughny.us

Disclaimer

The applicant is advised that the Town of Marlborough Town Code, which contains the Town's Zoning Regulations, is subject to amendment. Submission of an application to the Planning Board does not grant the applicant any right to continued review under the code's current standards and requirements. It is possible that the applicant will be required to meet changed standards or new code requirements made while the application is pending.

An approval by the Planning Board does not constitute permission, nor grant any right to connect to or use municipal services such as sewer or water. It is the applicant's responsibility to apply for and obtain Town of Marlborough and other agency approvals not within this Board's authority to grant.

AFTER FINAL APPROVAL IS GIVEN BY THE PLANNING BOARD, THE BUILDING DEPT. MUST BE CONTACTED FOR FURTHER GUIDANCE.

The Town of Marlborough Town Board sets forth the schedule of fees for applications to the Planning Board. The signing of this application indicates your acknowledgment of responsibility for payment of these fees to the Planning Board for review of this application including, but not limited to, fees for professional services (Planners/Consultants, Engineers, Attorneys,) public hearings and site inspections. Applicant's submissions and re-submissions that are not complete will not be considered by the Planning Board or placed upon its agenda unless all outstanding fees have been paid.

The undersigned applies for subdivision, site plan, or lot line approval as described above under the rules and procedures of the Town of Marlborough, New York as duly authorized by the Town Board of Marlborough, New York.

The undersigned also acknowledges receipt of the "Disclaimer" above.

Applicant's Name (Print): American Tower Corporation (Cullen Morgan, Agent)

Applicant's Signature: 

Date: 12/15/2025

Application will not be accepted if not signed and filled out completely*

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ATTACHMENT 2

Town of Marlborough Planning Board
Checklist For Site Plan Application

The following items shall be submitted for a Planning Board Site Plan Application to be considered complete. Site plans and Checklist shall be prepared by a licensed professional engineer, architect, land surveyor or landscape architect. Additional Town Codes apply to all site plans.
Please check each required item. Y for yes provided, N for not provided, or RW for Request Waiver. **Provide a written explanation for any requested waivers from the checklist.** After final approval is given by the Planning Board, the Building Department should be contacted for further guidance.

Y/N/RW	Required Items To Be Submitted
1 Y	Complete application with below information and submit 12 copies of completed application, maps and plans. Site plans SHALL be prepared by licensed professional (155-31 E) and shall refer to specific data sources.
2 Y	Completed Site Plan Application form (Pages 1 and 2) 155-31 E (1).
3 Y	Site Plan Application Checklist Complete (Automatic application rejection without checklist) pages 3 to 6.
4 RW	Ethics code Town of Marlborough Disclosure of Interest (where applicable) Pages 8-10
5 Y	Application Fee Paid (Separate check from Escrow Fee) see page 11.
6 Y	Initial Escrow Fee Paid (Separate check from Application Fee) see page 11, also 155-31 J.
7 Y	Disclaimer Forms Provided See Page 12.
8 Y	Letter of Agent Statement Page 13.
9 Y	A location map, at a scale of 2,000 feet to the inch or larger, showing the applicant's entire property and all easements and streets and existing structures within 500 feet of the applicant's property as well as the Tax Map and section on of USGS (United States Geological Survey) mapping. 155-31 E (2).
10 Y	Project Narrative. Complete Brief document 155-31 E (3) (a) A description of proposed project (bottom of page 1 of Site Plan Application) (b) A description of whether the site design includes the possibility for interconnections with adjoining sites and, if no such interconnection is provided, a thorough narrative as to why an interconnection is not feasible. (c) An analysis of how the project complies with the requirements contained within this Chapter 15 5, Zoning, is included. (d) Any waivers or variances needed have been identified. 155-31 F Waivers shall be discussed in the briefing document to be submitted by the applicant.
11 Y	Title of the drawing, including the name and address of the owner of record, applicant, and licensed professional(s) responsible for the preparation of such drawing, including seal and signature. 155-31 E(4)(a).

12	Y	Map of the site includes North arrow, scale, and date. 155-31 E (4) (b).
13	Y	Map of the site depicts boundaries of the property with surveyed dimensions. 155-31 E (4) (c).
14	Y	Names of all owners of record adjacent to the applicant's property are indicated. 155-31 E (4) (d).
15	Y	Existing school district (if applicable), zoning district, and overlay district boundaries (if applicable), within 500 feet of the site's perimeter is indicated. 155-31 E (4)(e).
16	Y	Map of the site depicts acreage of each distinct existing and proposed land use on the applicant's property, and the proposed density of each if residential uses are proposed. 155-31 E (4) (f).
17	Y	Grading and drainage plan showing existing and proposed contours with intervals of two feet extending 50 feet beyond the tract. If any portion of the parcel is within a one-hundred-year floodplain as determined by the Federal Emergency Management Agency (FEMA), the area will be shown and base flood elevations given. 155-31 E (4) (g).
18	N	Map of the site depicts location and boundaries of all existing natural land features on the property, including rock outcrops, isolated trees 12 inches or more in diameter at breast height (dbh) and all trees over 24 inches in dbh (whether isolated or in a forested area), existing vegetative and forest cover, orchards, hedgerows and other ornamental landscaping, stone walls, soil types and boundaries, active farmlands, visually prominent agricultural landscape features, such as fields, pastures, and meadows on knolls and hilltops, woodlands along roadways, property lines, and streams, steep slopes in excess of 15%, and water sources. Water sources include ponds, lakes, wetlands and watercourses, primary aquifers and primary aquifer recharge areas, floodplains, and drainage retention/detention areas. The plan shall show locally significant trees which include rare or unusual species, trees associated with historic events or persons, or trees that significantly contribute to a unique scenic viewshed. 155 E (4) (h).
19	Y	Location of all existing buildings, structures, signs, and agricultural lands, on adjacent property within 100 feet of the subject lot lines is shown. 155-31 E (4) (i).
20	Y	Map of the site depicts location, proposed use, height, and setback measurements of all existing and proposed buildings, structures and signs on the applicant's property, including floor plans, and plans for exterior elevations, at a scale of 1/4 inch equals one foot, showing the structure's mass and architectural features, and indicating the type and color of materials to be used. A table indicating square footage of building areas to be used for a particular use, such as retail operation, office use, warehousing, or other commercial activity; maximum number of employees; maximum seating capacity, where applicable; and number of parking spaces existing and required for the intended use. 155-31 E (4) (j).
21	N	Traffic flow patterns within the site, entrances and exits, the location of potential interconnections between the project site and adjoining sites, truck/commercial vehicle loading and service areas, curb cuts on the site and within 100 feet of the site, and all streets which are either proposed, mapped or built are indicated. 155-31 E (4) (k). The Town requires right-of-way of 25 feet from the center line of Town roads along the property frontage. See also 155-31 G (8).
22	N	Any cross-access easements, walkways, and bicycle path opportunities associated with the project are indicated. 155-31 E (4) (l).

23	N	The location, design (including size of spaces, and accessible parking information) and construction materials of all off-street parking areas (open and enclosed, if any), including the number of parking spaces required and to be provided is indicated. 155-31 E (4) (m) and 155-31 G (9) (c) Off-street parking spaces are a minimum of 162 square feet each. See 155-27 A (1) (a).
24	N	The location, design and construction materials of all present and proposed walkways, bicycle paths and bicycle parking, benches, ramps, outdoor storage or display areas, retaining and/or landscaping walls and fences is indicated. 155-31 E (4) (n).
25	N	A general and conceptual landscape plan showing proposed changes to existing natural land features. Trees to be saved shall be noted on site plans, and appropriate measures shall be outlined to protect the tree stock from damage during construction. 155-31 E (4) (o). Native species are encouraged. 155-31 G (17) (b).
26	N	Map of the site depicts the location, design and construction materials of all existing and proposed water supply system. 155-31 E (4) (p) [1].
27	N	Map of the site depicts the location, design and construction materials of all existing and proposed sewage disposal system. 155-31 E (4) (p) [2].
28	N	Map of the site depicts the location, design and construction materials of all existing and proposed telephone, cable and energy systems, including electric, oil, gas, solar, or other energy systems. 155-31 E (4) (p) [3].
29	N	Map of the site depicts the location, design and construction materials of all existing and proposed storm drainage system, including but not limited to existing and proposed drain lines, culverts, catch basins, headwalls, endwalls, manholes, and drainage swales. 155-31 E (4) (p) [4] Identify a distance off site to show drainage structures or a natural discharge location.
30	N	The location of fire and emergency access ways and zones, including the location of fire hydrants or of the nearest alternative water supply for fire emergencies are indicated. 155-31 E 4 (q) Discussed lock box provision with fire department (see Milton or Marlboro Fire District) except on single family detached residential dwellings See also 155-31 G (13).
31	N	The location, type, and screening details for solid waste disposal facilities and containers is indicated. 155-31 E (4) (r).
32	Y	The proposed location, height, orientation, type of illuminating device, bulb type and wattage, and photometric data of all outdoor lighting fixtures is indicated. 155-31 E (4) (s). See also 155-31 G (14)
33	N	The location, height, size, materials, design, and illumination of all present and proposed signs and other advertising or instructional devices are indicated. 155-31 E (4) (t) See also 155-28.
34	N	Estimates of noise generation at the source and property line are provided. 155-31 E (4) (u). See also 155-31 G (16).
35	N	Inventory and quantity of hazardous materials anticipated for on-site storage and/or use, if applicable, are provided. 155-31 E (4) (v).
36	Y	Plans for the disposal of construction and demolition, waste, whether on-site or at a New York State approved solid waste management facility are indicated. 155-31 E (4) (w).
37	N	A park or open space is being provided see 155-31 E (4) (x).
38	N	For projects involving more than one phase, a site plan showing each phase of the project is included. 155-31 E (4) (y)

39	N	Proposed days and hours of operation are indicated. 155-31 E (4) (z).
40	Y	A copy of the deed to the property as most recently filed and/or a copy of the executed contract of sale is included 155-31 E (4) (aa) [1].
41	N	A copy of each covenant, easement or deed restriction in effect or intended to cover all or part of the tract is included 155-31 E (4) (aa) [2].
42	N	Enforceable map notes of stormwater drainage, utility rights-of-way, etc., are indicated 155-31 E (4) (aa) [3].
43	Y	Identification, and submittal when available, of all necessary permits from federal, state, county or local agencies, approvals required from said agencies for the project's execution, and proof of special permit and/or variance approvals, if applicable, are included 155-31 E (4) (aa) [4].
44	N	Short-unlisted actions or full EAF Type one action, as required by the lead agency under the Environmental Conservation Law, is complete and included. See 155-31 E (4) (aa) [6] Environmental Assessment Form. Applicants must use NYSDEC* web based system EAF mapper Application. https://www.dec.ny.gov/permits/6191.html Make sure to unblock popups.
45	Y	Twelve (12) copies of all maps, plans, reports, and a PDF file of all documentation submitted. Plan sets must be submitted in collated packages. (155 E, 155-31 E (5)). (See section 75-6 B. (6) regarding plan stamp requirements of licensed professional).
46	N	Agricultural Data Statement (If applicable). See also 155-52 Setbacks and buffers from active agricultural lands.

The plat for the proposed Site Plan has been prepared in accordance with this checklist. A waiver request must be submitted by design professional for any items which are not provided.

By: _____

Licensed Professional

STATE OF NEW YORK
PATRICK PHILIP BARRY
100867
LICENSED PROFESSIONAL ENGINEER

_____

Stamp

12-11-25

Date

CENTERLINE

ATTACHMENT 3

60 2006 00019186

Ulster County
Nina Postupack
County Clerk
Kingston, NY 12401

Instrument Number: 2006- 00019186

As

Recorded On: August 01, 2006 — **D01 - Deed**

Parties: AMERICAN TOWER MANAGEMENT LLC
To
PARKER CHARLES W III

Billable Pages: 4

Recorded By: INFORMATION RETRIEVAL SERV

Num Of Pages: 4

Comment: MARLBOROUGH

**** Examined and Charged as Follows: ****

D01 - Deed	37.00	RP5217-75		75.00	Tax Affidavit TP 584		5.00
Recording Charge:	**117.00**						
	Amount	Consideration Amount	RS#/CS#				
Tax-Transfer	0.00	0.00	2	Basic	0.00		
						Special Additional	0.00
				Additional	0.00	Transfer	0.00
Tax Charge:	**0.00**						

**** THIS PAGE IS PART OF THE INSTRUMENT ****

I hereby certify that the within and foregoing was recorded in the Clerk's Office For: Ulster County,

File Information:

Document Number: 2006- 00019186
Receipt Number: 445794
Recorded Date/Time: August 01, 2006 09:15:43A
Book-Vol/Pg: Bk-D Vl-4293 Pg-306
Cashier / Station: s smat / Cashier Workstation 4

Record and Return To:

OLD REPUBLIC PACKAGED SERVICES
320 SPRINGSIDE DRIVE
SUITE 320
AKRON OH 44333

SEAL OF ULSTER COUNTY STATE OF NEW YORK 1683

Nina Postupack

Nina Postupack Ulster County Clerk

4
TM:
36

Prepared by ~~and return to~~:
American Tower Corp
10 Presidential Way
Woburn, MA 01801
Attn: Land Management (Site No.10330)

WHEN RECORDED PLEASE RETURN TO:
OLD REPUBLIC PACKAGED SERVICES
320 SPRINGSIDE DRIVE, SUITE 320
AKRON, OH 44333

Transfer Tax Due: $ ✓

Return to:
US Recordings, Inc.
2925 Country Drive Ste 201
St. Paul, MN 55117
0599345-02

NEW YORK
QUITCLAIM DEED

Site Name: Mount Zion Site Number: 10330

THIS INDENTURE is made this 16th day of January, 2006, between AMERICAN TOWER MANAGEMENT, LLC, successor in interest to American Tower Management, Inc., having as its address C/o American Tower Corporation, 116 Huntington Avenue, Boston, Massachusetts 02116 (hereinafter referred to as Grantor"), and CHARLES W.PARKER III & DEBBIE PARKER, husband and wife; and DILLON CHARLES PARKER, as tenants in common, having as their address 390 Mount Zion Road, Marlboro, NY, 12543, hereinafter referred to as "Grantee")(the words "Grantor" and "Grantee" to include their respective heirs, successors, legal representatives and assigns where the context permits or requires).

W I T N E S S E T H:

GRANTOR, for and in consideration of the sum of TEN AND NO/100 DOLLARS ($10.00) and other valuable consideration in hand paid at and before the sealing and delivery of these presents, the receipt, adequacy and sufficiency whereof are hereby acknowledged, does by these presents remise, release and quit-claim unto Grantee forever all of Grantor's right, title and interest in and to:

ALL THE TRACT(S) OR PARCEL(S) OF LAND being more particularly described on Exhibit "A" attached hereto and by this reference made a part hereof (hereinafter referred to as the "Property").

TO HAVE AND TO HOLD said Property unto Grantee forever, so that neither Grantor nor any entity or entities claiming under Grantor shall at any time, by any means or ways, have, claim, or demand any right, title, or interest in or to the Property or its appurtenances, or any rights thereof;

IN WITNESS WHEREOF, Grantor has signed and sealed this deed, the day and year first above written.

[Remainder of Page intentionally blank- Signatures next page]

Information Retrieval Serv.

CHECKED _____
ENTERED _____
MARK/OFF _____

GRANTOR:

AMERICAN TOWER MANAGEMENT, LLC, a
Delaware limited liability company
By: American Towers, Inc., its sole member

By: _____
Name: Jason D. Hirsch
Title: Director, Land Management

In the presence of:
Melanie Kiely
AND
NANCY ZHANG

Commonwealth of Massachusetts

County of Middlesex

On the 18th day of January in the year, 2006 before me, the undersigned, personally appeared Jason D. Hirsch, Director, Land Management for American Towers Management, LLC., personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, that by his/her signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument, and that such individual made such appearance before the undersigned in the City of Boston, Commonwealth of Massachusetts.

MELANIE K. KIELY
NOTARY PUBLIC
COMMONWEALTH of MASSACHUSETTS
MY COMMISSION EXPIRES
SEPTEMBER 8, 2011

Melanie Kiely
Notary Public
Print Name: MELANIE KIELY
My Commission Expires:
9/8/2011

(NOTARIAL SEAL)

EXHIBIT "A"

SITE NAME:
SITE NUMBER:

Description of the Property

The portion of 7.4885 acres of tax lot 36, Marlborough, a subdivision of Ulster County, New York, described as follows:

Commencing at the Southwest corner of existing tax lot 36, as shown on the official tax map for Ulster County(Section 102.003- block 1-lot 36), Said corner being in the existing gravel road bed of Mount Zion Road(public road); Running thence South 63 degrees 54 minutes 00 seconds East, 400.14 feet to the point or place of beginning;

Running thence from said point or place of beginning, and along the southerly boundary of existing tax lot 36, South 63 degrees 54 minutes 00 seconds East 1089.86 feet to the Southeast corner of existing tax lot 36; thence North 30 degrees 00 minutes 00 seconds East 300.00 feet to the Northeast corner of existing tax lot 36; thence North 63 degrees 54 minutes 00 seconds West along the northerly boundary of existing tax lot 36 (being parallel to the first described course) 1089.86 feet; thence running through the existing tax lot 36, South 30 degrees 00 minutes 00 seconds West 300.00 feet to the point or place of beginning; containing 326,200 square feet or 7.4885 acres more or less.

Including any and all rights of Grantor via existing Parker driveway in and to Mount Zion Road, also know as Mountain Road as the same may cross. Bound or be contiguous to the above described premises, together with any necessary rights of ingress and egress from any part or portion of the above described premises to said road.

Parcels within 500 Feet of Subject Parcel

Subject Parcel Tax Map #: 102.3-1-36.100

Subject Parcel Address: 366 Mt Zion Road, Marlboro, NY 12542

Tax Map #	Address	Owner Name(s)	Owner Mailing Address
102.3-1-28	0 Mt Zion Road	Cold Spring 240 LLC	1 Bretwood Drive Colts Neck, NJ 07722
102.3-1-33	340-346 Mt Zion Road	David Blasher 1Jerome Haferd	340-346 Mt Zion Road Marlboro, NY 12543
102.3-1-29	355 Mt Zion Road	Joseph Martino Genevive Martino	355 Mt Zion Road Marlboro, NY 12542
102.3-1-34	360 Mt Zion Road	Robert Torres Pamela Clarke Torres	PO Box 312 Milton, NY 12547
102.3-1-37.100	390 Mt Zion Road	Cold Spring 240 LLC	1 Bretwood Drive Colts Neck, NJ 07722

ALL INFORMATION SOURCED FROM ULSTER COUNTY ASSESSOR'S ONLINE PARCEL SEARCH

CENTERLINE

ATTACHMENT 4

AMERICAN TOWER®
CORPORATION

LETTER OF AUTHORIZATION FOR PERMITTING

Licensee Name: T-MOBILE NORTHEAST LLC d/b/a & T-MOBILE
@ ATC Site Name: MOUNT ZION NY ATC Site #: 10330 Project # 14912089
Site Address: 366 Mount Zion Rd New York, New York 12542-5020
Site Coordinates: 41.64093333, -74.02088888
Site Acquisition Vendor (Applicant Representative): CENTERLINE COMMUNICATIONS LLC

I, Regan Buckley, Vice President, Property Management for American Tower*, owner/operator of the tower facility located at the address identified above (the "Tower Facility"), do hereby authorize T-MOBILE, CENTERLINE COMMUNICATIONS LLC and their successor(s), assign(s), and/or agent(s), (collectively, the "Licensee") to act as American Tower's non-exclusive agent for the sole purpose of filing and consummating any land-use, building, or electrical permit application(s) as may be required by the applicable permitting authorities for T-MOBILE NORTHEAST LLC d/b/a & T-MOBILE's telecommunications' installation on the Tower Facility.

I understand that these applications may be approved with conditions. The above authorization is limited to the acceptance by Licensee only of conditions related to Licensee's installation and any such conditions of approval or modifications will be Licensee's sole responsibility.

Signature:

Print Name: Regan Buckley
Vice President, Property Management
American Tower*

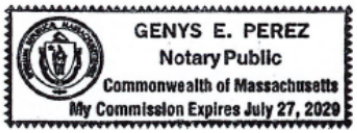
NOTARY BLOCK

Commonwealth of MASSACHUSETTS
County of Middlesex

This instrument was acknowledged before me by Regan Buckley, Vice President, Property Management for American Tower*, personally known to me (or proved to me based on satisfactory evidence of identification) to be the person whose name is signed on the preceding or attached document and acknowledged to me that they signed it voluntarily for its stated purpose.

WITNESS my hand and official seal, this 8th day of August 2025

Notary Seal



Notary Public 
Genys E. Perez
My Commission Expires: July 27, 2029

* American Tower is defined as American Tower Corporation and any of its affiliates or subsidiaries.

July 3, 2025

ATTN: Planning Board
ATTN: Building Department
Town of Marlborough
21 Milton Turnpike
Suite 200
Milton, NY 12547

RE: **T-Mobile Application for Special Use Permit for a Broadcast and Communication Tower**
Site Address: 366 Mount Zion Rd, Marlboro, NY 12542
Parcel #/Tax Map #: 102.3-1-36.100
T-Mobile Site: UP50577A

To Whom It May Concern:

T-Mobile Northeast, LLC ("T-Mobile") hereby authorizes Centerline Communications, LLC to act on T-Mobile's behalf in applying for all necessary permits for the above-mentioned project.

Thank you for your help in this matter. If you should have any questions, please contact Cullen Morgan at (941)-549-7263.

Regards,

DocuSigned by:
Robert Phalen
F861E39C681D4B3...

Robert Phalen
Project Manager
T-Mobile Northeast, LLC

July 3, 2025

ATTN: Planning Board
ATTN: Building Department
Town of Marlborough
21 Milton Turnpike
Suite 200
Milton, NY 12547

RE: **T-Mobile Application for Special Use Permit for a Broadcast and Communication Tower**
Site Address: 366 Mount Zion Rd, Marlborough, NY 12542
Parcel #/Tax Map #: 102.3-1-36.100
T-Mobile Site: UP50577A

Applicant:	T-Mobile Northeast, LLC
Property Owner:	American Tower Corporation
Property Address:	366 Mount Zion Road, Marlborough, NY 12542
Assessor's Info:	102.3-1-36.100

To Whom It May Concern:

I am familiar with the above-mentioned application and hereby attest that the information included is accurate and complete. I declare that the above-statement is true and accurate to the best of my knowledge.

Sincerely,

DocuSigned by:
Robert Phalen
F861E39C681D4B3...

Robert Phalen
Project Manager
T-Mobile Northeast, LLC

CENTERLINE

ATTACHMENT 5

Ethics Code

TOWN OF MARLBOROUGH NOTICE OF DISCLOSURE OF INTEREST

In accordance with the Town of Marlborough Code of Ethics, Article 13-3 (E) and Public Officers Law § 209, the following disclosure notice ("notice") must be completed and signed by any individual, including any officer or employee of the Town of Marlborough, who has an application, petition or request submitted for a variance, amendment, change of zoning, approval of a plat, special use permit, site plan, subdivision, exemption from a plat or official map, license or permit, pursuant to the provisions of the zoning and planning regulations of the Town of Marlborough before any Town of Marlborough Board, Agency or Department ("decision-making authority"), in which a Town officer or employee has an interest in the subject of the application. The purpose of the disclosure notice is to identify and disclose any potential or actual conflict of interest for the Town employee or officer, which may compromise his/her ability to make decisions solely in the public interest. Please refer to the Town of Marlborough Code of Ethics for further information.

Under the Town of Marlborough Code of Ethics an interest is defined as: a participation, connection or involvement of any sort whether direct or indirect, pecuniary or non-pecuniary, personal or professional, which may result in a benefit. For the purposes of the Town of Marlborough Code of Ethics, the "interests" of a Town officer or employee shall be deemed to include the "interest" of:

A. An immediate family member. Immediate family member is defined as: grandparents, parents, spouse, significant other, children, grandchildren, brother, sister, dependent, or any household member of a Town officer, Town Board member or employee.

B. Any person other than a bank, trust company or other lending institution with whom he/she has a substantial debtor-creditor or other financial relationship.

C. Any person by whom he/she is employed or of which he/she is an officer, director or member having a controlling interest in any business or enterprise in which the Town employee or officer holds stock or has any other profit-bearing or beneficial relationship.

D. An officer or employee shall also be deemed to have an interest in a matter if he/she or any person described in A through C above is a party to an agreement, expressed or implied, with any applicant before any Board of the Town, whereby he/she may receive any payment or other benefit whether or not for services rendered, dependent or contingent upon the favorable approval of any such application, petition or request by any Town body.

This notice must be completed and included with the application, petition or request to the appropriate Town of Marlborough Board, Agency or Department.

I, Cullen Morgan, Agent for American Tower, residing at 12579 Sagewood Drive, Venice, FL, make the following statements about interests in the real property which is the subject of this

application, petition or request for an Amended Site Plan,

before the Planning Board of The Town of Marlborough.

PART I: Except as otherwise set forth in Part II below:

A. <u>Individuals with an interest in the property</u>.

1. No individual, having an ownership interest in or has an interest in a contract to purchase the subject property is an officer or employee of the Town of Marlborough, Ulster County, New York.
2. No person having an ownership interest in or has an interest in a contract to purchase the subject property is a relative of any individual who is an officer or employee of the Town of Marlborough, Ulster County, New York.

B. <u>Corporations or other entities with an interest in the property.</u>

1. No officer, director, partner, or employee of any corporation, partnership, company, trust, association, or other legal entity, which has an ownership interest in or has an interest in a contract to purchase the subject property is an officer or employee of the Town of Marlborough, Ulster County, New York.
2. No officer, director, partner, or employee of any corporation, partnership, company, trust, association, or other legal entity which has an ownership interest in or has an interest in a contract to purchase the subject property is a relative of any individual who is an officer or employee of the Town of Marlborough, Ulster County, New York.

C. <u>Stockholder or controlling interest</u>

1. No person who has a legal or beneficial ownership or control stock of a corporate applicant or is a member of a partnership or association with the applicant for the subject property is an officer or employee of the Town of Marlborough, Ulster County, New York.
2. No person who has a legal or beneficial ownership or control stock of a corporate applicant or is a member of a partnership or association with the applicant for the subject property is a relative of any individual who is an officer or employee of the Town of Marlborough, Ulster County, New York.

D. <u>Party to an agreement with the applicant</u>

1. No person is a party to an agreement with an applicant, express or implied, or may receive any payment or other benefit, whether or not for services rendered, dependent or contingent upon the favorable approval of such application; petition or request for the subject property is an officer or employee of the Town of Marlborough, Ulster County, New York.
2. No person is a party to an agreement with an applicant, express or implied, or may receive any payment or other benefit, whether or not for services rendered, dependent, or contingent upon the favorable approval of such application, petition or request for the subject property is an immediate family member of any individual who is an officer or employee of the Town of Marlborough, Ulster County, New York.

PART II: If any of the statements under A through D above is <u>not</u> true, please explain and set forth the name and the relationship to the applicant and subject property of any Town employee or officer involved:

N/A

PART III: This completed notice is to be submitted to the Board, Agency or Department that is authorized to review and render a decision on the application, petition or request. Further, the submittal must be made prior to any review of the application, petition or request. This notice shall be made part of that decision-making authority's official record, disclosing the exact nature of the conflict in detail. If there is an actual or potential conflict, the Town officer or employee shall abstain from voting or otherwise acting on the application, petition or request so as to avoid an actual conflict.

ANY QUESTIONS REGARDING THIS DISCLOSURE NOTICE OR THE CODE OF ETHICS ARE TO BE DIRECTED TO THE TOWN SUPERVISOR AT (845) 795-6167.

PLEASE TAKE NOTICE.....A KNOWINGLY FALSE STATEMENT IS PUNISHABLE UNDER <u>N.Y. GEN. MUN. LAW ' 809</u> AS A MISDEMEANOR.

Signed: _____ Date: 12/15/2025

ACKNOWLEDGMENT

~~State of New York~~, STATE OF FLORIDA
~~County of:~~ COUNTY OF SARASOTA

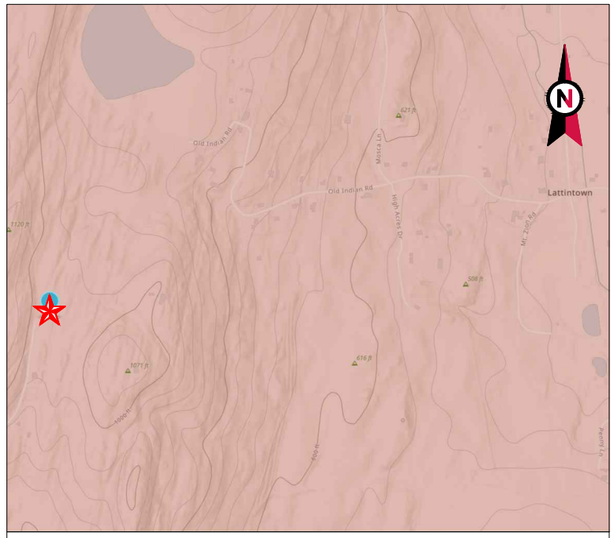
On 12/15/2025, before me personally appeared Cullen Morgan, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is/are subscribed to this instrument and acknowledged to me that [he/she/they] executed the same in [his/her/their] capacity(ies), and that by [his/her/their] signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Notary Kaitlyn Gorley

Notary Public State of Florida
Kaitlyn Gorley
My Commission HH 668204
Expires 4/22/2029

CENTERLINE

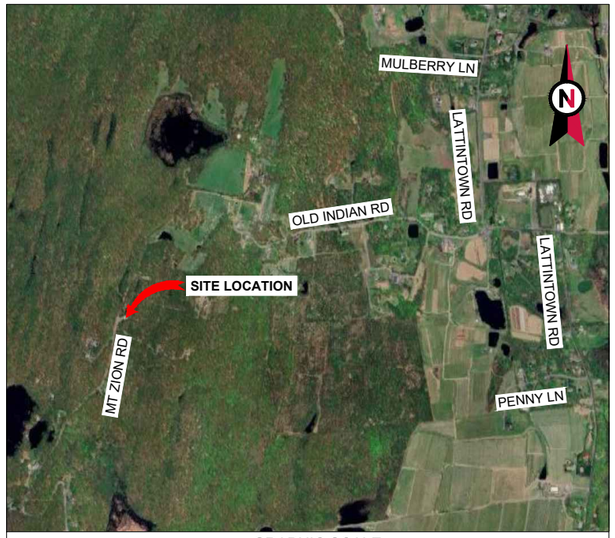
ATTACHMENT 6



VICINITY/USGS MAP

AMERICAN TOWER®

ATC SITE NAME: MOUNT ZION NY
ATC SITE NUMBER: 10330
T-MOBILE SITE NAME: MT ZION
T-MOBILE SITE NUMBER: UP50577A
SITE ADDRESS: 366 MOUNT ZION RD
MARLBORO, NY 12542
SITE CLASS: GUYED



GRAPHIC SCALE
2000 0 1000 2000
(IN FEET)
1 UNIT = 2000 FEET

LOCATION MAP

T-MOBILE COVERAGE STRATEGY COLLOCATION PLAN
4SEC-67E998E 6160 (LRP) CONFIGURATION

COMPLIANCE CODE

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNMENT AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

INTERNATIONAL BUILDING CODE (IBC 2018)
NATIONAL ELECTRICAL CODE (NFPA 70, NEC 2017 W/ AMND)
2020 MECHANICAL CODE OF NEW YORK STATE (IMC 2018 W/ AMND)
2020 PLUMBING CODE OF NEW YORK STATE (IPC 2018 W/ AMND)
2020 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE (IECC 2018 W/ AMND)
2020 FIRE CODE OF NEW YORK STATE (IFC 2018 W/ AMND)
2020 EXISTING BUILDING CODE OF NEW YORK STATE (IEBC 2018 W/ AMND)
2020 BUILDING CODE OF NEW YORK STATE
2020 RESIDENTIAL CODE OF NEW YORK STATE (IRC 2018 W/ AMND)
2020 FUEL GAS CODE OF NEW YORK STATE (IFGC 2018 W/ AMND)
2020 PROPERTY MAINTENANCE CODE OF NEW YORK STATE (IPMC 2018 W/ AMND)

UTILITY COMPANIES

POWER COMPANY: CH ENERGY GROUP
PHONE: (845) 452-2700

TELEPHONE COMPANY: VERIZON
PHONE: (845) 890-7711

811 Know what's below. Call before you dig.

PROJECT SUMMARY

SITE ADDRESS:

366 MOUNT ZION RD
MARLBORO, NY 12542
COUNTY: ULSTER

GEOGRAPHIC COORDINATES:

LATITUDE: 41.64093333
41° 38' 27.36" N
LONGITUDE: -74.02088888
74° 1' 15.2" W
GROUND ELEVATION: 983' AMSL

PROJECT TEAM

TOWER OWNER:

AMERICAN TOWER
10 PRESIDENTIAL WAY
WOBURN, MA 01801

APPLICANT:

T-MOBILE
103 MONARCH DRIVE
LIVERPOOL, NY 13088

ENGINEER:

A.T. ENGINEERING SERVICES, PLLC
1 FENTON MAIN, STE 300
CARY, NC 27511

PROPERTY OWNER:

AMERICAN TOWER
116 HUNTINGTON AVE
BOSTON, MA 02116

PROJECT DESCRIPTION

THE PROPOSED PROJECT INCLUDES INSTALLING EQUIPMENT CABINETS ON A PROPOSED CONCRETE PAD INSIDE A 8' X 11' GROUND SPACE WITHIN THE EXISTING COMPOUND, AND INSTALLING NEW EQUIPMENT AND MOUNTS ON THE EXISTING TOWER.

TOWER SCOPE:
INSTALL (3) SECTOR FRAME(s), (4) ANTENNA(s), (8) RRU(s), AND (3) 2.00" HYBRID TRUNK 6/24 4AWG 80M CABLE(s)

GROUND SCOPE:
INSTALL (1) CONCRETE PAD, (1) ICE BRIDGE, (1) GPS ANTENNA, (1) H-FRAME, (1) METER, (1) PPC, (1) LED WORK LIGHT, (1) CIENA, (1) ENCLOSURE 6160 CABINET, AND (1) B160 BATTERY CABINET

PROJECT NOTES

1. THE FACILITY IS UNMANNED.
2. A TECHNICIAN WILL VISIT THE SITE APPROXIMATELY ONCE A MONTH FOR ROUTINE INSPECTION AND MAINTENANCE.
3. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT LAND DISTURBANCE OR EFFECT OF STORM WATER DRAINAGE.
4. NO SANITARY SEWER, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED.
5. HANDICAP ACCESS IS NOT REQUIRED.
6. THE PROJECT DEPICTED IN THESE PLANS QUALIFIES AS AN ELIGIBLE FACILITIES REQUEST ENTITLED TO EXPEDITED REVIEW UNDER 47 U.S.C. § 1455(A) AS A MODIFICATION OF AN EXISTING WIRELESS TOWER THAT INVOLVES THE COLLOCATION, REMOVAL, AND/OR REPLACEMENT OF TRANSMISSION EQUIPMENT THAT IS NOT A SUBSTANTIAL CHANGE UNDER CFR § 1.61000 (B)(7).

PROJECT LOCATION DIRECTIONS

FROM CORTLAND, TAKE INTERSTATE 81 NORTH TO HIGHWAY 20 EAST. TAKE CALAHAN ROAD TO MOUNT ZION ROAD. SITE WILL BE ON MOUNT ZION ROAD.

SHEET INDEX

SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:
G-001	TITLE SHEET	2	12/04/25	TJC
G-002	GENERAL NOTES	0	06/17/25	AP
-	EXISTING PROPERTY PLAN			
C-001	OVERALL SITE PLAN	2	12/04/25	TJC
C-100	DEMOLITION PLAN	2	12/04/25	TJC
C-101	DETAILED SITE PLAN	2	12/04/25	TJC
C-102	DETAILED EQUIPMENT PLAN	2	12/04/25	TJC
C-201	TOWER ELEVATION	0	06/17/25	AP
C-401	ANTENNA INFORMATION & SCHEDULE	0	06/17/25	AP
C-501	MOUNT DETAILS	0	06/17/25	AP
C-502	CONSTRUCTION DETAILS	0	06/17/25	AP
C-503	CONSTRUCTION DETAILS	0	06/17/25	AP
E-101	GROUNDING PLAN AND NOTES	0	06/17/25	AP
E-501	GROUNDING DETAILS	0	06/17/25	AP
E-601	PANEL SCHEDULE & ONE-LINE DIAGRAM	0	06/17/25	AP
	SUPPLEMENTAL SHEETS (11 PAGES)			

AMERICAN TOWER®
A.T. ENGINEERING SERVICES, PLLC
1 FENTON MAIN
SUITE 300
CARY, NC 27511
PHONE: (919) 468-0112
#0012746

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	AP	06/17/25
1	JX COMMENTS	AAP	11/24/25
2	JURISCITIONAL CHECKLIST	TJC	12/04/25

ATC SITE NUMBER:
10330
ATC SITE NAME:
MOUNT ZION NY
T-MOBILE SITE NAME:
MT ZION
SITE ADDRESS:
366 MOUNT ZION RD
MARLBORO, NY 12542

SEAL:

T-Mobile

ATC PROJ. #:	14912089_D2
CUST. ID:	MT ZION
CUST. #:	UP50577A

TITLE SHEET

SHEET NUMBER:	REVISION:
G-001	2

GENERAL CONSTRUCTION NOTES:

1. OWNER FURNISHED MATERIALS, T-MOBILE "THE COMPANY" WILL PROVIDE AND THE CONTRACTOR WILL INSTALL
   - A. BTS EQUIPMENT FRAME (PLATFORM) AND ICEBRIDGE SHELTER (GROUND BUILD/CO-LOCATE ONLY)
   - B. AC/TELCO INTERFACE BOX (PPC)
   - C. ICE BRIDGE (CABLE TRAY WITH COVER) (GROUND BUILD/CO-LOCATE ONLY, GC TO FURNISH AND INSTALL FOR ROOFTOP INSTALLATION)
   - D. TOWERS, MONOPOLES
   - E. TOWER LIGHTING
   - F. GENERATORS & LIQUID PROPANE TANK
   - G. ANTENNA STANDARD BRACKETS, FRAMES AND PIPES FOR MOUNTING
   - H. ANTENNAS (INSTALLED BY OTHERS)
   - I. TRANSMISSION LINE
   - J. TRANSMISSION LINE JUMPERS
   - K. TRANSMISSION LINE CONNECTORS WITH WEATHERPROOFING KITS
   - L. TRANSMISSION LINE GROUND KITS
   - M. HANGERS
   - N. HOISTING GRIPS
   - O. BTS EQUIPMENT
2. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL OTHER MATERIALS FOR THE COMPLETE INSTALLATION OF THE SITE INCLUDING, BUT NOT LIMITED TO, SUCH MATERIALS AS FENCING, STRUCTURAL STEEL SUPPORTING SUB-FRAME FOR PLATFORM, ROOFING LABOR AND MATERIALS, GROUNDING RINGS, GROUNDING WIRES, COPPER-CLAD OR XIT CHEMICAL GROUND ROD(S), BUSS BARS, TRANSFORMERS AND DISCONNECT SWITCHES WHERE APPLICABLE, TEMPORARY ELECTRICAL POWER, CONDUIT, LANDSCAPING COMPOUND STONE, CRANES, CORE DRILLING, SLEEPERS AND RUBBER MATTING, REBAR, CONCRETE CAISSONS, PADS AND/OR AUGER MOUNTS, MISCELLANEOUS FASTENERS, CABLE TRAYS, NON-STANDARD ANTENNA FRAMES AND ALL OTHER MATERIAL AND LABOR REQUIRED TO COMPLETE THE JOB ACCORDING TO THE DRAWINGS AND SPECIFICATIONS. IT IS THE POSITION OF T-MOBILE TO APPLY FOR PERMITTING AND CONTRACTOR RESPONSIBLE FOR PICKUP AND PAYMENT OF REQUIRED PERMITS.
3. ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING ANSI/EIA/TIA-222, AND COMPLY WITH ATC CONSTRUCTION SPECIFICATIONS.
4. CONTRACTOR SHALL CONTACT LOCAL 811 FOR IDENTIFICATION OF UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED INSPECTIONS.
6. ALL DIMENSIONS TO, OF, AND ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, AND SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
7. DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.
8. DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
9. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
10. CONTRACTOR SHALL BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR BOLTS, ETC.
11. CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK.
12. INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE T-MOBILE REP PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE T-MOBILE REP PRIOR TO PROCEEDING.
13. EACH CONTRACTOR SHALL COOPERATE WITH THE T-MOBILE REP, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
14. CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE T-MOBILE CONSTRUCTION MANAGER.
15. ALL CABLE/CONDUIT ENTRY/EXIT PORTS SHALL BE WEATHERPROOFED DURING INSTALLATION USING A SILICONE SEALANT.
16. WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET, CONTRACTOR SHALL NOTIFY THE T-MOBILE REP AND ENGINEER OF RECORD IMMEDIATELY.
17. CONTRACTOR SHALL ENSURE ALL SUBCONTRACTORS ARE PROVIDED WITH A COMPLETE AND CURRENT SET OF DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
18. CONTRACTOR SHALL REMOVE ALL RUBBISH AND DEBRIS FROM THE SITE AT THE END OF EACH DAY.
19. CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH AMERICAN TOWER CORPORATION (ATC) AND TAKE PRECAUTIONS TO MINIMIZE IMPACT AND DISRUPTION OF OTHER OCCUPANTS OF THE FACILITY.
20. CONTRACTOR SHALL FURNISH T-MOBILE AND AMERICAN TOWER CORPORATION (ATC) WITH A PDF MARKED UP AS-BUILT SET OF DRAWINGS UPON COMPLETION OF WORK.
21. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH T-MOBILE REP TO DETERMINE WHAT, IF ANY, ITEMS WILL BE PROVIDED. ALL ITEMS NOT PROVIDED SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. CONTRACTOR WILL INSTALL ALL ITEMS PROVIDED.
22. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH T-MOBILE REP TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY CONTRACTOR. ALL REQUIRED PERMITS NOT OBTAINED BY T-MOBILE MUST BE OBTAINED, AND PAID FOR, BY THE CONTRACTOR.
23. CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH T-MOBILE SPECIFICATIONS AND REQUIREMENTS.
24. CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO T-MOBILE FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
25. ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND LOCATED ACCORDING TO T-MOBILE SPECIFICATIONS, AND AS SHOWN IN THESE PLANS.
26. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
27. CONTRACTOR SHALL NOTIFY T-MOBILE REP A MINIMUM OF 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING ANY UNDERGROUND UTILITIES, FOUNDATIONS OR SEALING ANY WALL, FLOOR OR ROOF PENETRATIONS FOR ENGINEERING REVIEW AND APPROVAL.
28. WHEN THE PROJECT SCOPE REQUIRES THE USE OF THE SAFETY CLIMB, THE GENERAL CONTRACTOR SHALL ENSURE THE SAFETY CLIMB IS FREE OF OBSTRUCTIONS, NOT RUBBING ON OR TRAPPED BY ANY INSTALLED CUSTOMER EQUIPMENT, IS VISUALLY TAUT, MEETS MANUFACTURER INSTALLATION SPECIFICATIONS, AND IS FIRMLY SECURED AT ALL CABLE GUIDE LOCATIONS UPON PROJECT COMPLETION.
29. COMPLETION OF PROJECT SHALL NOT OBSTRUCT, TRAP, LOOSEN, OR OTHERWISE CAUSE FAILURE TO MEET MANUFACTURER INSTALLATION REQUIREMENTS FOR THE SAFETY CLIMB.
30. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY INCLUDING COMPLIANCE WITH ALL APPLICABLE OSHA STANDARDS AND RECOMMENDATIONS AND SHALL PROVIDE ALL NECESSARY SAFETY DEVICES INCLUDING PPE AND PPM AND CONSTRUCTION DEVICES SUCH AS WELDING AND FIRE PREVENTION, TEMPORARY SHORING, SCAFFOLDING, TRENCH BOXES/SLOPING, BARRIERS, ETC.
31. THE CONTRACTOR SHALL PROTECT AT HIS OWN EXPENSE, ALL EXISTING FACILITIES AND SUCH OF HIS NEW WORK LIABLE TO INJURY DURING THE CONSTRUCTION PERIOD. ANY DAMAGE CAUSED BY NEGLECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, OR BY THE ELEMENTS DUE TO NEGLECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, EITHER TO THE EXISTING WORK, OR TO HIS WORK OR THE WORK OF ANY OTHER CONTRACTOR, SHALL BE REPAIRED AT HIS EXPENSE TO THE OWNER'S SATISFACTION.
32. ALL WORK SHALL BE INSTALLED IN A FIRST CLASS, NEAT AND WORKMANLIKE MANNER BY MECHANICS SKILLED IN THE TRADE INVOLVED. THE QUALITY OF WORKMANSHIP SHALL BE SUBJECT TO THE APPROVAL OF THE T-MOBILE REP. ANY WORK FOUND BY THE T-MOBILE REP TO BE OF INFERIOR QUALITY AND/OR WORKMANSHIP SHALL BE REPLACED AND/OR REWORKED AT CONTRACTOR EXPENSE UNTIL APPROVAL IS OBTAINED.
33. IN ORDER TO ESTABLISH STANDARDS OF QUALITY AND PERFORMANCE, ALL TYPES OF MATERIALS LISTED HEREINAFTER BY MANUFACTURER'S NAMES AND/OR MANUFACTURER'S CATALOG NUMBER SHALL BE PROVIDED BY THESE MANUFACTURERS AS SPECIFIED.
34. T-MOBILE FURNISHED EQUIPMENT SHALL BE PICKED-UP AT THE T-MOBILE WAREHOUSE, NO LATER THAN 48HR AFTER BEING NOTIFIED INSURED, STORED, UNCRATE, PROTECTED AND INSTALLED BY THE CONTRACTOR WITH ALL APPURTENANCES REQUIRED TO PLACE THE EQUIPMENT IN OPERATION, READY FOR USE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE EQUIPMENT AFTER PICKING IT UP.
35. T-MOBILE OR HIS ARCHITECT/ENGINEER RESERVES THE RIGHT TO REJECT ANY EQUIPMENT OR MATERIALS WHICH, IN HIS OWN OPINION ARE NOT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS, EITHER BEFORE OR AFTER INSTALLATION AND THE EQUIPMENT SHALL BE REPLACED WITH EQUIPMENT CONFORMING TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS BY THE CONTRACTOR AT NO COST TO T-MOBILE OR THEIR ARCHITECT/ENGINEER.

STRUCTURAL STEEL NOTES:

1. STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION OF THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS."
2. STRUCTURAL STEEL ROLLED SHAPES, PLATES AND BARS SHALL CONFORM TO THE FOLLOWING ASTM DESIGNATIONS:
   - A. ASTM A-572, GRADE 50 - ALL W SHAPES, UNLESS NOTED OR A992 OTHERWISE
   - B. ASTM A-36 - ALL OTHER ROLLED SHAPES, PLATES AND BARS UNLESS NOTED OTHERWISE.
   - C. ASTM A-500, GRADE B - HSS SECTION (SQUARE, RECTANGULAR, AND ROUND)
   - D. ASTM A-325, TYPE SC OR N - ALL BOLTS FOR CONNECTING STRUCTURAL MEMBERS
   - E. ASTM F-1554 07 - ALL ANCHOR BOLTS, UNLESS NOTED OTHERWISE
3. ALL EXPOSED STRUCTURAL STEEL MEMBERS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION PER ASTM A123. EXPOSED STEEL HARDWARE AND ANCHOR BOLTS SHALL BE GALVANIZED PER ASTM A153 OR B695.
4. ALL FIELD CUT SURFACES, FIELD DRILLED HOLES AND GROUND SURFACES WHERE EXISTING PAINT OR GALVANIZATION REMOVAL WAS REQUIRED SHALL BE REPAIRED WITH (2) BRUSHED COATS OF ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.
5. DO NOT DRILL HOLES THROUGH STRUCTURAL STEEL MEMBERS EXCEPT AS SHOWN AND DETAILED ON STRUCTURAL DRAWINGS.
6. CONNECTIONS:
   - A. ALL WELDING TO BE PERFORMED BY AWS CERTIFIED WELDERS AND CONDUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AWS WELDING CODE D1.1.
   - B. ALL WELDS SHALL BE INSPECTED VISUALLY. 25% OF WELDS SHALL BE INSPECTED WITH DYE PENETRANT OR MAGNETIC PARTICLE TO MEET THE ACCEPTANCE CRITERIA OF AWS D1.1. REPAIR ALL WELDS AS NECESSARY.
   - C. INSPECTION SHALL BE PERFORMED BY AN AWS CERTIFIED WELD INSPECTOR.
   - D. IT IS THE CONTRACTORS RESPONSIBILITY TO PROVIDE BURNING/WELDING PERMITS AS REQUIRED BY LOCAL GOVERNING AUTHORITY AND IF REQUIRED SHALL HAVE FIRE DEPARTMENT DETAIL FOR ANY WELDING ACTIVITY.
   - E. ALL ELECTRODES TO BE LOW HYDROGEN, MATCHING FILLER METAL, PER AWS D1.1, UNLESS NOTED OTHERWISE.
   - F. MINIMUM WELD SIZE TO BE 0.1875 INCH FILLET WELDS, UNLESS NOTED OTHERWISE.
   - G. PRIOR TO FIELD WELDING GALVANIZING MATERIAL, CONTRACTOR SHALL GRIND OFF GALVANIZING ½" BEYOND ALL FIELD WELD SURFACES. AFTER WELD AND WELD INSPECTION IS COMPLETE, REPAIR ALL GROUND AND WELDED SURFACES WITH ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURERS RECOMMENDATIONS.
   - H. THE CONTRACTOR SHALL PROVIDE ADEQUATE SHORING AND/OR BRACING WHERE REQUIRED DURING CONSTRUCTION UNTIL ALL CONNECTIONS ARE COMPLETE.
   - I. ANY FIELD CHANGES OR SUBSTITUTIONS SHALL HAVE PRIOR APPROVAL FROM THE ENGINEER, AND T-MOBILE PROJECT MANAGER IN WRITING

SPECIAL CONSTRUCTION ANTENNA INSTALLATION NOTES:

1. WORK INCLUDED:
   - A. ANTENNA AND COAXIAL CABLES ARE FURNISHED BY T-MOBILE UNDER A SEPARATE CONTRACT. THE CONTRACTOR SHALL ASSIST ANTENNA INSTALLATION CONTRACTOR IN TERMS OF COORDINATION AND SITE ACCESS. ERECTION SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF PERSONNEL
   - B. INSTALL ANTENNAS AS INDICATED ON DRAWINGS AND T-MOBILE SPECIFICATIONS.
   - C. INSTALL GALVANIZED STEEL ANTENNA MOUNTS AS INDICATED ON DRAWINGS.
   - D. INSTALL FURNISHED GALVANIZED STEEL OR ALUMINUM WAVEGUIDE AND PROVIDE PRINTOUT OF THAT TEST.
   - E. CONTRACTOR SHALL PROVIDE FOUR (4) SETS OF SWEEP TESTS USING ANRITZU-PACKARD 8713B RF SCALAR NETWORK ANALYZER. SUBMIT FREQUENCY DOMAIN REFLECTOMETER(FDR) TESTS RESULTS TO THE PROJECT MANAGER. SWEEP TESTS SHALL BE AS PER ATTACHED RFS "MINIMUM FIELD TESTING RECOMMENDED FOR ANTENNA AND HELIAX COAXIAL CABLE SYSTEMS" DATED 10/5/93. TESTING SHALL BE PERFORMED BY AN INDEPENDENT TESTING SERVICE AND BE BOUND AND SUBMITTED WITHIN ONE WEEK OF WORK COMPLETION.
   - F. INSTALL COAXIAL CABLES AND TERMINATING BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. WEATHERPROOF ALL CONNECTIONS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL CABLE THREE (3) FEET IN EXCESS OF ENTRY PORT LOCATION UNLESS OTHERWISE STATED.
   - G. ANTENNA AND COAXIAL CABLE GROUNDING:
2. ALL EXTERIOR #6 GREEN GROUND WIRE "DAISY CHAIN" CONNECTIONS ARE TO BE WEATHER SEALED WITH RFS CONNECTORS/SPLICE WEATHERPROOFING KIT #221213 OR EQUAL.
3. ALL COAXIAL CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL CABLE (NOT WITHIN BENDS).

CONCRETE AND REINFORCING STEEL NOTES:

1. DESIGN AND CONSTRUCTION OF ALL CONCRETE ELEMENTS SHALL CONFORM TO THE LATEST EDITIONS OF ALL APPLICABLE CODES INCLUDING: ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS", ACI 117 "SPECIFICATIONS FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS", AND ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE."
2. MIX DESIGN SHALL BE APPROVED BY T-MOBILE REP PRIOR TO PLACING CONCRETE.
3. CONCRETE SHALL BE NORMAL WEIGHT, 6 % AIR ENTRAINED (+/- 1.5%) WITH A SLUMP RANGE OF 3-6" AND HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4500 PSI UNLESS OTHERWISE NOTED.
4. THE FOLLOWING MATERIALS SHALL BE USED:

PORTLAND CEMENT:	ASTM C150, TYPE 2
REINFORCEMENT:	ASTM A185, PLAIN STEEL WELDED WIRE FABRIC
REINFORCEMENT BARS:	ASTM A615, GRADE 60, DEFORMED
NORMAL WEIGHT AGGREGATE:	ASTM C33
WATER:	ASTM C 94/C 94M
WELDED WIRE FABRIC:	ASTM A185
ADMIXTURES:	
-WATER-REDUCING AGENT:	ASTM C 494/C 494M, TYPE A
-AIR-ENTERING AGENT:	ASTM C 260/C 260M
-SUPERPLASTICIZER:	ASTM C494, TYPE F OR TYPE G
-RETARDING:	ASTM C 494/C 494M, TYPE B

5. MINIMUM CONCRETE COVER FOR REINFORCING STEEL SHALL BE NO LESS THAN 3".
6. A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE IN ACCORDANCE WITH ACI 301 SECTION 4.2.4, UNLESS NOTED OTHERWISE.
7. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL, OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR APPROVAL FROM AN ATC ENGINEER WHEN DRILLING HOLES IN CONCRETE.
8. ADMIXTURES SHALL CONFORM TO THE APPROPRIATE ASTM STANDARD AS REFERENCED IN "METHOD 1" OF ACI 301.
9. DO NOT WELD OR TACK WELD REINFORCING STEEL.
10. ALL DOWELS, ANCHOR BOLTS, EMBEDDED STEEL, ELECTRICAL CONDUITS, PIPE SLEEVES, GROUNDS AND ALL OTHER EMBEDDED ITEMS AND FORMED DETAILS SHALL BE IN PLACE BEFORE START OF CONCRETE PLACEMENT.
11. REINFORCEMENT SHALL BE COLD BENT WHENEVER BENDING IS REQUIRED.
12. DO NOT PLACE CONCRETE IN WATER, ICE, OR ON FROZEN GROUND.
13. FOR COLD-WEATHER (ACI 306) AND HOT-WEATHER (ACI 301M) CONCRETE PLACEMENT, CONFORM TO APPLICABLE ACI CODES AND RECOMMENDATIONS. IN EITHER CASE, MATERIALS CONTAINING CHLORIDE, CALCIUM, SALTS, ETC. SHALL NOT BE USED. PROTECT FRESH CONCRETE FROM WEATHER FOR 7 DAYS, MINIMUM.
14. ALL CONCRETE SHALL HAVE A "SMOOTH FORM FINISH."
15. SPLICING OF REINFORCEMENT IS PERMITTED ONLY AT LOCATIONS SHOWN IN THE CONTRACT DRAWINGS OR AS ACCEPTED BY THE ENGINEER. UNLESS OTHERWISE SHOWN OR NOTED REINFORCING STEEL SHALL BE SPLICED TO DEVELOP ITS FULL TENSILE CAPACITY (CLASS A) IN ACCORDANCE WITH ACI 318.
16. DETAILING OF REINFORCING STEEL SHALL CONFORM TO "ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" (ACI 315).
17. ALL SLAB CONSTRUCTION SHALL BE CAST MONOLITHICALLY WITHOUT HORIZONTAL CONSTRUCTION JOINTS, UNLESS SHOWN IN THE CONTRACT DRAWINGS.
18. LOCATION OF ALL CONSTRUCTION JOINTS ARE SUBJECT TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, CONFORMANCE WITH ACI 318, AND ACCEPTANCE OF THE ENGINEER. DRAWINGS SHOWING LOCATION OF DETAILS OF THE PROPOSED CONSTRUCTION JOINTS SHALL BE SUBMITTED WITH REINFORCING STEEL PLACEMENT DRAWINGS.
19. SPLICES OF WWF, AT ALL SPLICED EDGES, SHALL BE SUCH THAT THE OVERLAP MEASURED BETWEEN OUTERMOST CROSS WIRES OF EACH FABRIC SHEET IS NOT LESS THAN THE SPACING OF THE CROSS WIRE PLUS 2 INCHES, NOR LESS THAN 6".
20. BAR SUPPORTS SHALL BE ALL-GALVANIZED METAL WITH PLASTIC TIPS.
21. ALL REINFORCEMENT SHALL BE SECURELY TIED IN PLACE TO PREVENT DISPLACEMENT BY CONSTRUCTION TRAFFIC OR CONCRETE. TIE WIRE SHALL BE OF SUFFICIENT STRENGTH FOR INTENDED PURPOSE, BUT NOT LESS THAN NO. 18 GAUGE.
22. SLAB ON GROUND: COMPACT STRUCTURAL FILL TO 95% DENSITY AND THEN PLACE 6" GRAVEL BENEATH SLAB.

ELECTRICAL NOTES:

1. ELECTRICAL WORK SHALL BE PERFORMED BY ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL ENSURE THAT ALL WORK COMPLIES WITH ALL APPLICABLE LOCAL AND STATE CODES AND NATIONAL ELECTRICAL CODE.
2. ALL SUGGESTED ELECTRICAL ELEMENTS (SUCH AS BREAKER SIZES, WIRE SIZES, CONDUITS SIZES) ARE FOR ZONING PURPOSES ONLY. IT IS THE RESPONSIBILITY TO OF THE ELECTRICAL CONTRACTOR TO CONFIRM COMPLIANCE WITH LOCAL ELECTRICAL CODES AND PASS ALL APPLICABLE AND NECESSARY INSPECTIONS. IN SOME EVENTS, IT MAY BE NECESSARY TO PERFORM AN ELECTRICAL LOAD STUDY TO VERIFY THE CAPACITY OF THE EXISTING SERVICE. THIS IS NOT THE RESPONSIBILITY OF ATC. IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
3. CONTRACTOR SHALL FIELD LOCATE ALL BELOW GRADE GROUNDING CABLES AND UTILITY LINES PRIOR TO CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR RELOCATION OF ALL UTILITIES AND GROUNDING LINES THAT MAY BECOME DISTURBED OR CONFLICTING IN THE COURSE OF CONSTRUCTION.

ALL DISCREPANCIES FROM WHAT IS SHOWN ON THESE CONSTRUCTION DRAWINGS SHALL BE COMMUNICATED TO ATC ENGINEERING IMMEDIATELY FOR CORRECTION OR RE-DESIGN. FAILURE TO COMMUNICATE DIRECTLY WITH ATC ENGINEERING OR ANY CHANGES FROM THE DESIGN CONDUCTED WITHOUT PRIOR APPROVAL FROM ATC ENGINEERING SHALL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

AMERICAN TOWER®
A.T. ENGINEERING SERVICES, PLLC
1 FENTON MAIN
SUITE 300
CARY, NC 27511
PHONE: (919) 468-0112
#0012746

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	AP	06/17/25

ATC SITE NUMBER:
10330
ATC SITE NAME:
MOUNT ZION NY
T-MOBILE SITE NAME:
MT ZION
SITE ADDRESS:
366 MOUNT ZION RD
MARLBORO, NY 12542

SEAL:

T-Mobile

ATC PROJ. #:	14912089_D2
CUST. ID:	MT ZION
CUST. #:	UP50577A

GENERAL NOTES

SHEET NUMBER:	REVISION:
G-002	0

WELSH ENGINEERING & LAND SURVEYING, P.C.
343 MANVILLE ROAD
PLEASANTVILLE, N.Y. 10570 (914) 773-1701

NOTES

1. FIELD WORK WAS CONDUCTED JULY, 2005 BY WELSH ENGINEERING & LAND SURVEYING, P.C..
2. ULSTER COUNTY TAX MAP DESIGNATION: SECTION 102.003, BLOCK 1, LOTS 36 & 37.
3. BEARINGS AND NORTH ARROW ARE BASED UPON DEED FOR LOT 36 FILED WITH THE ULSTER COUNTY CLERK IN LIBER 3091 PAGE 1.
4. PROPERTY LINES ARE BASED UPON CLIENT PROVIDED SURVEY AND DEEDS FILED WITH THE ULSTER COUNTY CLERK.
5. ALL EASEMENTS MAY NOT BE SHOWN AND THIS SURVEY IS SUBJECT TO ANY STATE OF FACTS A FULL AND CURRENT TITLE REPORT MAY REVEAL.
4. UNDERGROUND UTILITIES ARE NOT SHOWN. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL CALL "CALL BEFORE YOU DIG" AT (800) 962-7962 AND HAVE ALL UTILITY LOCATIONS MARKED ON THE GROUND.
5. THE EXISTING GRAVEL ROAD IS THE PHYSICAL LOCATION OF MT. ZION ROAD.

DEDICATION

ALL THAT CERTAIN PLOT, PIECE, OR PARCEL OF LAND SITUATE, LYING AND BEING IN THE TOWN OF MARLBOROUGH, COUNTY OF ULSTER AND STATE OF NEW YORK, BEING BOUNDED AND DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF EXISTING TAX LOT 36, AS SHOWN ON THE OFFICIAL TAX MAP FOR ULSTER COUNTY (SECTION 102.003-BLOCK 1-LOT 36), SAID CORNER BEING IN THE EXISTING GRAVEL ROAD BED OF MOUNT ZION ROAD (PUBLIC ROAD); RUNNING THENCE SOUTH 63 DEGREES 54 MINUTES 00 SECONDS EAST, 400.14 FEET TO THE POINT OR PLACE OF BEGINNING;

RUNNING THENCE FROM SAID POINT OR PLACE OF BEGINNING, AND ALONG THE SOUTHERLY BOUNDARY OF EXISTING TAX LOT 36, SOUTH 63 DEGREES 54 MINUTES 00 SECONDS EAST 1089.86 FEET TO THE SOUTHEAST CORNER OF EXISTING TAX LOT 36; THENCE NORTH 30 DEGREES 00 MINUTES 00 SECONDS EAST 300.00 FEET TO THE NORTHEAST CORNER OF EXISTING TAX LOT 36; THENCE NORTH 63 DEGREES 54 MINUTES 00 SECONDS WEST ALONG THE NORTHERLY BOUNDARY OF EXISTING TAX LOT 36 (BEING PARALLEL TO THE FIRST DESCRIBED COURSE) 1089.86 FEET; THENCE RUNNING THROUGH THE EXISTING TAX LOT 36, SOUTH 30 DEGREES 00 MINUTES 00 SECONDS WEST 300.00 FEET TO THE POINT OR PLACE OF BEGINNING; CONTAINING 326,200 SQUARE FEET OR 7.4885 ACRES MORE OR LESS.

INCLUDING ANY AND ALL RIGHTS OF GRANTOR IN AND TO MT. ZION ROAD, ALSO KNOWN AS MOUNTAIN ROAD AS THE SAME MAY CROSS. BOUND OR BE CONTIGUOUS TO THE ABOVE DESCRIBED PREMISES, TOGETHER WITH ANY NECESSARY RIGHTS OF INGRESS AND EGRESS FROM ANY PART OR PORTION OF THE ABOVE DESCRIBED PREMISES TO SAID ROAD.

ACQUISITION

ALL THAT CERTAIN PLOT, PIECE, OR PARCEL OF LAND SITUATE, LYING AND BEING IN THE TOWN OF MARLBOROUGH, COUNTY OF ULSTER AND STATE OF NEW YORK, BEING BOUNDED AND DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF EXISTING TAX LOT 36, AS SHOWN ON THE OFFICIAL TAX MAP FOR ULSTER COUNTY (SECTION 102.003-BLOCK 1-LOT 36), SAID CORNER BEING IN THE EXISTING GRAVEL ROAD BED OF MOUNT ZION ROAD (PUBLIC ROAD); RUNNING THENCE ALONG THE WESTERLY BOUNDARY OF EXISTING TAX LOT 36 AND ACROSS AND THROUGH THE EXISTING GRAVEL ROAD KNOWN AS MOUNT ZION ROAD (PUBLIC ROAD), NORTH 30 DEGREES 00 MINUTES 00 SECONDS EAST 300.00 FEET TO THE NORTHWEST CORNER OF EXISTING TAX LOT 36; THENCE EASTERLY AND ALONG THE NORTHERLY BOUNDARY OF EXISTING TAX LOT 36 AND ACROSS THE EXISTING GRAVEL ROAD KNOWN AS MOUNT ZION ROAD (PUBLIC ROAD) SOUTH 63 DEGREES 54 MINUTES 00 SECONDS EAST 34.61 FEET TO THE POINT OR PLACE OF BEGINNING;

RUNNING THENCE FROM SAID POINT OR PLACE OF BEGINNING, AND THROUGH LAND NOW OR FORMERLY OF PARKER THE FOLLOWING THREE (3) COURSES AND DISTANCES:

1. NORTH 30 DEGREES 00 MINUTES 00 SECONDS EAST 40.00 FEET;
2. SOUTH 63 DEGREES 54 MINUTES 00 SECONDS EAST 51.90 FEET;
3. SOUTH 30 DEGREES 00 MINUTES 00 SECONDS WEST 40.00 FEET TO THE NORTHERLY BOUNDARY OF EXISTING TAX LOT 36;

THENCE RUNNING WESTERLY AND ALONG THE NORTHERLY BOUNDARY OF EXISTING TAX LOT 36, NORTH 63 DEGREES 54 MINUTES 00 SECONDS WEST 51.90 FEET TO THE POINT OR PLACE OF BEGINNING; CONTAINING 2,071 SQUARE FEET OR 0.0475 ACRES MORE OR LESS.

INCLUDING ANY AND ALL RIGHTS OF GRANTOR IN AND TO MT. ZION ROAD, ALSO KNOWN AS MOUNTAIN ROAD AS THE SAME MAY CROSS. BOUND OR BE CONTIGUOUS TO THE ABOVE DESCRIBED PREMISES, TOGETHER WITH ANY NECESSARY RIGHTS OF INGRESS AND EGRESS FROM ANY PART OR PORTION OF THE ABOVE DESCRIBED PREMISES TO SAID ROAD.

NEW TAX LOT 36

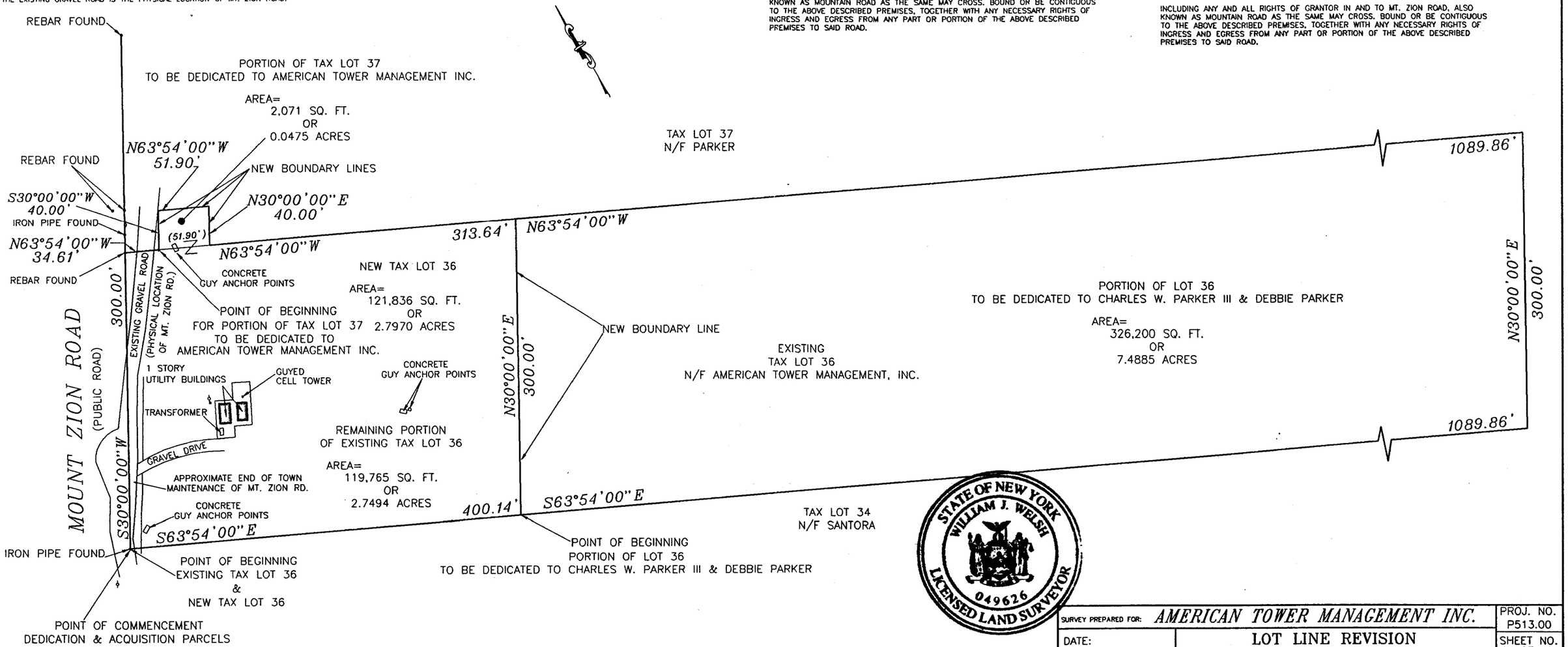
ALL THAT CERTAIN PLOT, PIECE, OR PARCEL OF LAND SITUATE, LYING AND BEING IN THE TOWN OF MARLBOROUGH, COUNTY OF ULSTER AND STATE OF NEW YORK, BEING BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF EXISTING TAX LOT 36, AS SHOWN ON THE OFFICIAL TAX MAP FOR ULSTER COUNTY (SECTION 102.003-BLOCK 1-LOT 36), SAID CORNER BEING IN THE EXISTING GRAVEL ROAD BED OF MOUNT ZION ROAD (PUBLIC ROAD); RUNNING THENCE EASTERLY AND ALONG THE SOUTHERLY BOUNDARY OF EXISTING TAX LOT 36, SOUTH 63 DEGREES 54 MINUTES 00 SECONDS EAST 400.14 FEET; THENCE RUNNING THROUGH EXISTING TAX LOT 36, NORTH 30 DEGREES 00 MINUTES 00 SECONDS EAST 300.00 FEET TO THE NORTHERLY BOUNDARY OF EXISTING TAX LOT 36; THENCE RUNNING WESTERLY AND ALONG THE NORTHERLY BOUNDARY OF EXISTING TAX LOT 36 NORTH 63 DEGREES 54 MINUTES 00 SECONDS WEST 313.64 FEET; THENCE RUNNING THROUGH LAND NOW OR FORMERLY OF PARKER THE FOLLOWING THREE (3) COURSES AND DISTANCES:

1. NORTH 30 DEGREES 00 MINUTES 00 SECONDS EAST 40.00 FEET;
2. NORTH 63 DEGREES 54 MINUTES 00 SECONDS WEST 51.90 FEET;
3. SOUTH 30 DEGREES 00 MINUTES 00 SECONDS WEST 40.00 FEET TO THE NORTHERLY BOUNDARY OF THE EXISTING TAX LOT 36;

THENCE RUNNING WESTERLY AND ALONG THE NORTHERLY BOUNDARY OF THE EXISTING TAX LOT 36 AND ACROSS THE EXISTING GRAVEL ROAD KNOWN AS MOUNT ZION ROAD (PUBLIC ROAD), NORTH 63 DEGREES 54 MINUTES 00 SECONDS WEST 34.61 TO THE NORTHWEST CORNER OF EXISTING TAX LOT 36; THENCE RUNNING SOUTHERLY AND ALONG THE WESTERLY BOUNDARY OF EXISTING TAX LOT 36 AND ACROSS AND THROUGH THE EXISTING GRAVEL ROAD KNOWN AS MOUNT ZION ROAD (PUBLIC ROAD), SOUTH 30 DEGREES 00 MINUTES 00 SECONDS WEST 300.00 FEET TO THE POINT OR PLACE OF BEGINNING; CONTAINING 121,836 SQUARE FEET OR 2.7970 ACRES MORE OR LESS.

INCLUDING ANY AND ALL RIGHTS OF GRANTOR IN AND TO MT. ZION ROAD, ALSO KNOWN AS MOUNTAIN ROAD AS THE SAME MAY CROSS. BOUND OR BE CONTIGUOUS TO THE ABOVE DESCRIBED PREMISES, TOGETHER WITH ANY NECESSARY RIGHTS OF INGRESS AND EGRESS FROM ANY PART OR PORTION OF THE ABOVE DESCRIBED PREMISES TO SAID ROAD.



STATE OF NEW YORK
WILLIAM J. WELSH
049626
LICENSED LAND SURVEYOR

Unauthorized alteration or addition to this survey is a violation of section 7209, subdivision 2, of the New York State Education Law. Copies of this survey map not bearing the land surveyor's inked or embossed seal shall not be considered to be a valid copy.

100 0 100 200 300 400 500
GRAPHIC SCALE
SCALE: 1" = 100'

William J. Welsh DATE: Aug. 31, '05
WILLIAM J. WELSH N.Y. STATE LAND SURVEYOR LIC. # 49626

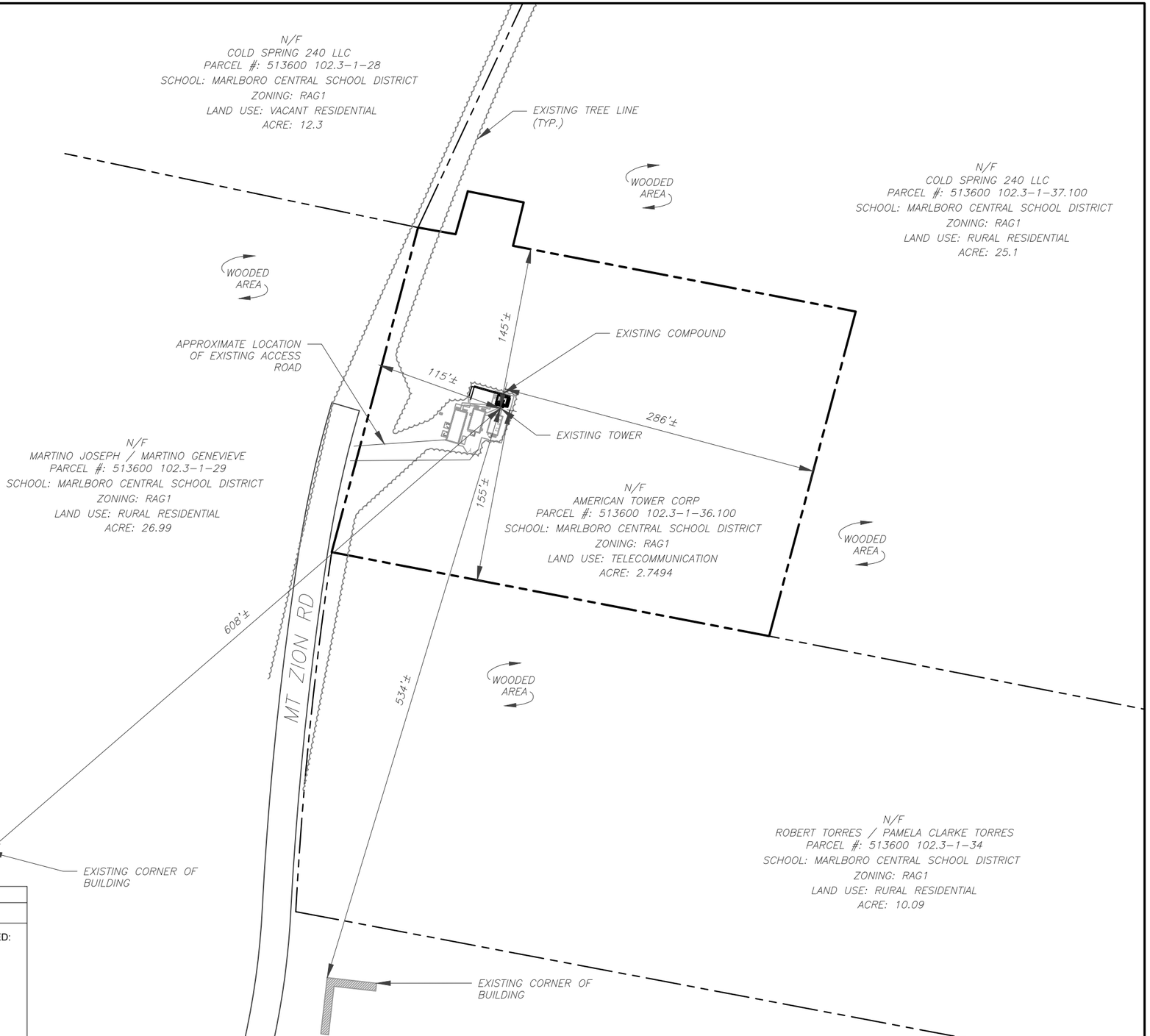
SURVEY PREPARED FOR: *AMERICAN TOWER MANAGEMENT INC.*

DATE: AUGUST 30, 2005	LOT LINE REVISION
DRAWN BY: J.H.	SECTION 102.003 BLOCK 1
CHK BY: W.J.W.	LOTS 36 & 37
SCALE: 1"= 100'	MOUNT ZION, TOWN OF MARLBOROUGH, ULSTER COUNTY, STATE OF NEW YORK

PROJ. NO.	P513.00
SHEET NO.	1 OF 1
JOB #	P513.01
CAD FILE:	P51301F.DWG

NOTES:

1. BOUNDARY LINES OBTAINED FROM DATATREE ONLINE GIS AND SURVEY COMPLETED BY WELSH ENGINEERING AND LAND SURVEYING DATED 08/30/2005.
2. THIS SITE IS NOT INTERCONNECTED WITH OTHER SITES. IT IS A STANDALONE STRUCTURE THAT PROVIDES CELL PHONE SERVICE TO THE SURROUNDING AREA.
3. THIS SITE IS LOCATED WITHIN A FLOOD ZONE X PER FIRM PANEL 36122C0770E DATED 09/25/2009
4. THIS SITE IS IN USE GROUP "U" AND IS THEREFORE UNMANNED. THE PROPERTY DOES NOT REQUIRE PERSONNEL TO BE STATIONED ANYWHERE ON SITE EXCEPT FOR CONSTRUCTION.
5. PARKING DURING CONSTRUCTION SHALL BE LIMITED TO THE EXISTING ACCESS ROAD WITHIN AMERICAN TOWER PROPERTY.
6. THIS IS A MINOR INSTALLATION WITHIN A PRE-EXISTING IMPERVIOUS AREA WITHIN AMERICAN TOWER'S COMPOUND. THERE WILL BE NO IMPACT TO NATURAL LAND FEATURES, ROAD WAYS, ACCESS WAYS OF ANY KIND, OR DRAINAGE CHANNELS.
7. ALL WASTE CREATED DURING CONSTRUCTION SHALL BE DISPOSED OF AT AN APPROVED NEW YORK STATE SOLID WASTE MANAGEMENT FACILITY



LEGEND

- EXISTING PROPERTY LINE
- EXISTING ADJACENT PROPERTY LINE
- EXISTING LEASE AREA
- EXISTING EASEMENT
- EXISTING WOOD FENCE
- EXISTING WIRE FENCE
- EXISTING METAL FENCE
- EXISTING GUARD RAIL
- EXISTING CHAINLINK FENCE
- EXISTING ROAD (DIRT)
- EXISTING ROAD (STONE)
- EXISTING ROAD (PAVED)

PARCEL SETBACK INFORMATION			
DISTRICT: MARLBOROUGH			
	REQUIRED (MINIMUM):	EXISTING:	PROPOSED:
MAX HEIGHT:	15'±	265'±	265'± *
MIN FRONT YARD SETBACK:	50'±	115'±	115'± *
MIN SIDE YARD SETBACK (ONE SIDE):	35'±	155'±	155'± *
MIN SIDE YARD SETBACK (BOTH SIDES):	80'±	300'±	300'± *
MIN REAR YARD SETBACK:	75'±	267'±	267'± *
* NO CHANGE TO EXISTING			

NOTE:
EXISTING VEGETATION, COUNT, SPACING AND SPECIES SHOWN IS AN APPROXIMATION AND HAS NOT BEEN FIELD VERIFIED.

1 OVERALL SITE PLAN

GRAPHIC SCALE

100 0 50 100

(IN FEET)
1 UNIT = 100 FEET

AMERICAN TOWER®
A.T. ENGINEERING SERVICES, PLLC
1 FENTON MAIN
SUITE 300
CARY, NC 27511
PHONE: (919) 468-0112
#0012746

REV.	DESCRIPTION	BY	DATE
1	JX COMMENTS	AAP	11/24/25
2	JURISCITIONAL CHECKLIST	TJC	12/04/25

ATC SITE NUMBER:
10330

ATC SITE NAME:
MOUNT ZION NY

T-MOBILE SITE NAME:
MT ZION

SITE ADDRESS:
366 MOUNT ZION RD
MARLBORO, NY 12542

SEAL:

T-Mobile

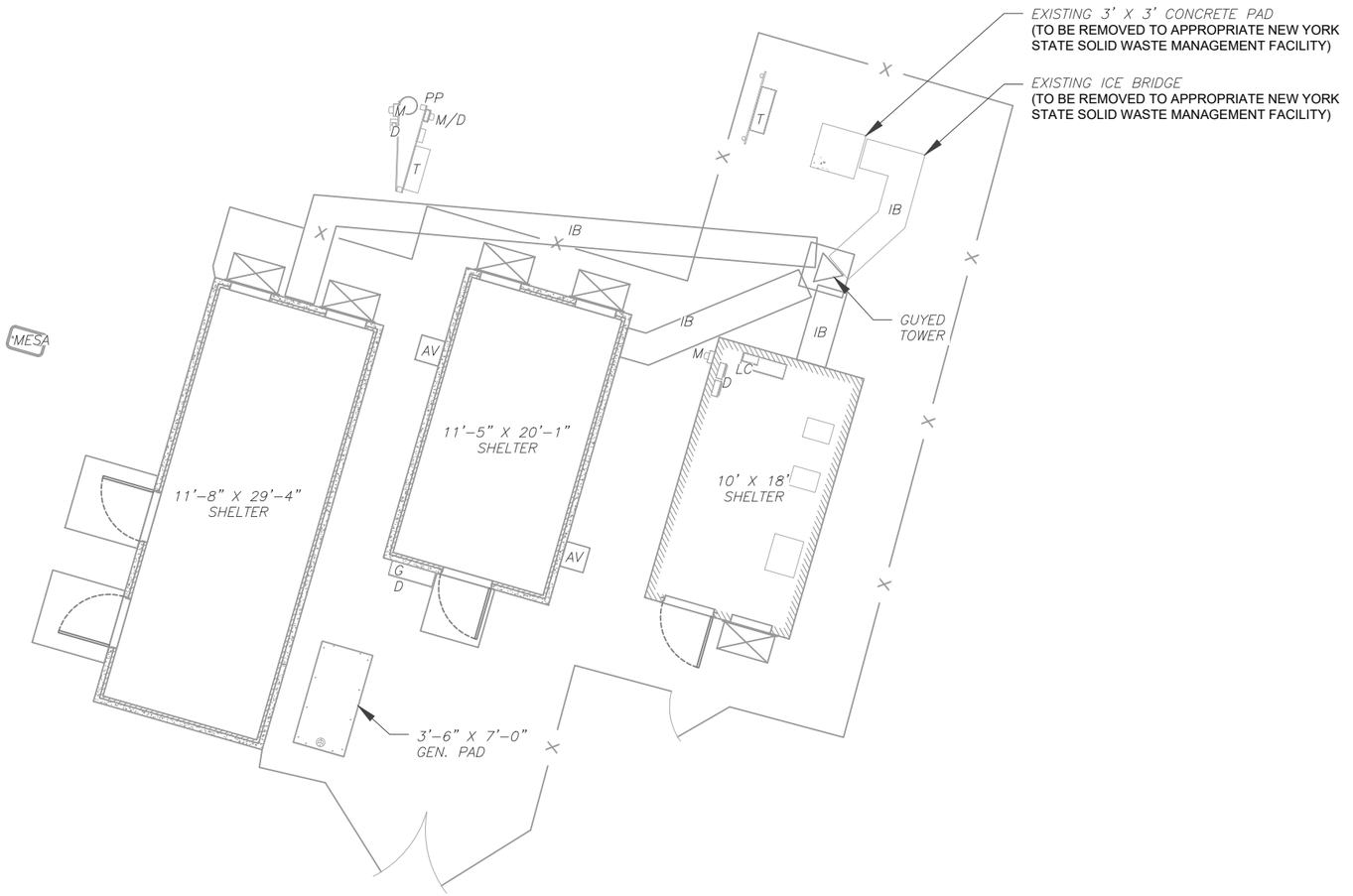
ATC PROJ. #:	14912089_D2
CUST. ID:	MT ZION
CUST. #:	UP50577A

OVERALL SITE PLAN

SHEET NUMBER:	REVISION:
C-001	2

LEGEND

⊗	GROUNDING TEST WELL
ATS	AUTOMATIC TRANSFER SWITCH
B	BOLLARD
CSC	CELL SITE CABINET
D	DISCONNECT
E	ELECTRICAL
F	FIBER
GEN	GENERATOR
G	GENERATOR RECEPTACLE
HH, V	HAND HOLE, VAULT
IB	ICE BRIDGE
K	KENTROX BOX
LC	LIGHTING CONTROL
M	METER
PB	PULL BOX
PP	POWER POLE
T	TELCO
TRN	TRANSFORMER
———	CHAINLINK FENCE



1 DEMOLITION PLAN

GRAPHIC SCALE

10 0 5 10

(IN FEET)
1 UNIT = 10 FEET

N

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PHONE: (919) 468-0112
#0012746

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	AP	06/17/25
2	JURISCITIONAL CHECKLIST	TJC	12/04/25

ATC SITE NUMBER:
10330

ATC SITE NAME:
MOUNT ZION NY

T-MOBILE SITE NAME:
MT ZION

SITE ADDRESS:
366 MOUNT ZION RD
MARLBORO, NY 12542

SEAL:

T-Mobile

ATC PROJ. #:	14912089_D2
CUST. ID:	MT ZION
CUST. #:	UP50577A

DEMOLITION PLAN

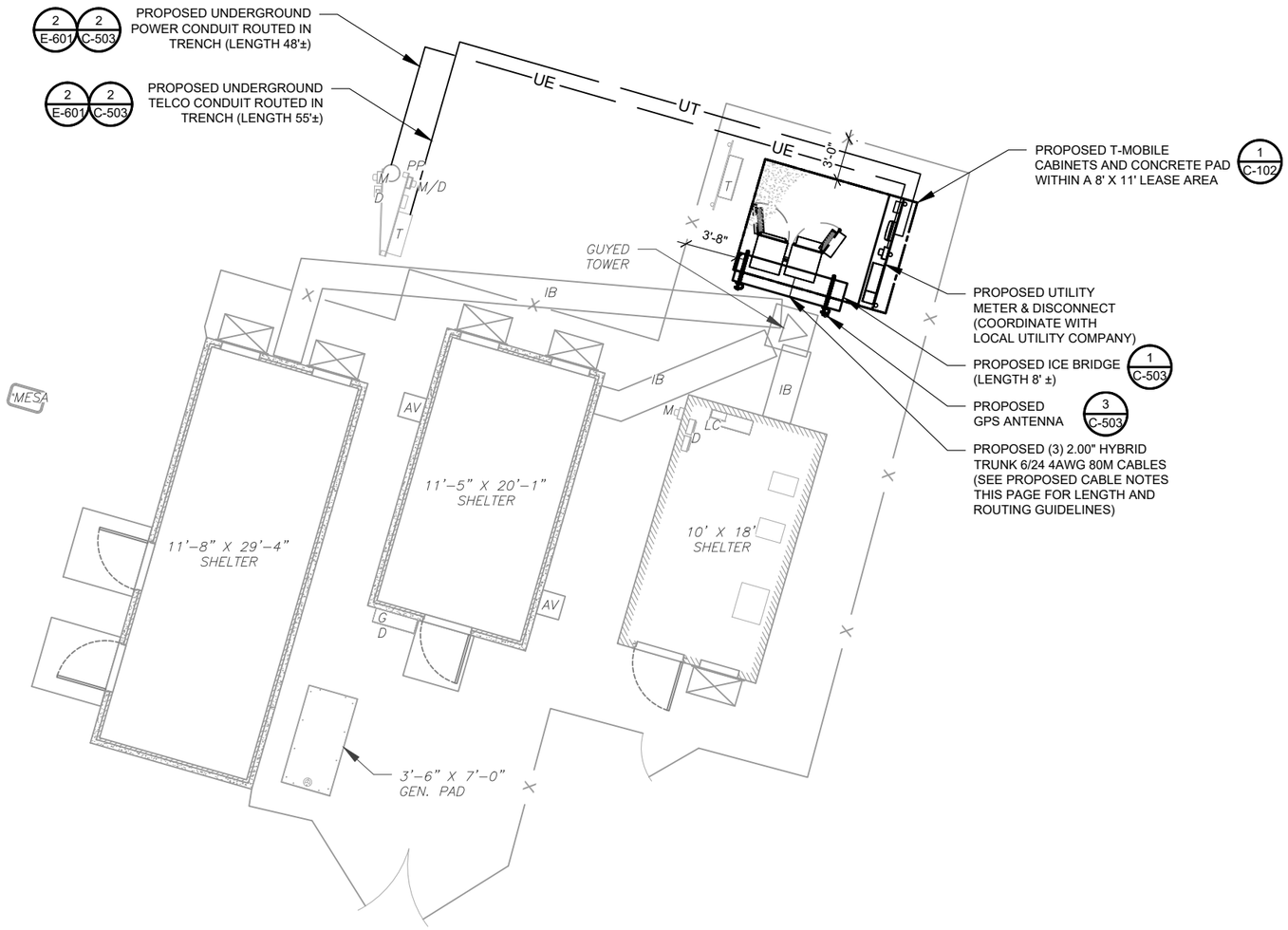
SHEET NUMBER:	REVISION:
C-100	2

SITE PLAN NOTES:

1. THIS SITE PLAN REPRESENTS THE BEST PRESENT KNOWLEDGE AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION AND VERIFY ALL EXISTING CONDITIONS RELATED TO THE SCOPE OF WORK FOR THIS PROJECT.

2. ICE BRIDGE, CABLE LADDER, COAX PORT, AND COAX CABLE ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL CONFIRM THE EXACT LOCATION OF ALL PROPOSED AND EXISTING EQUIPMENT AND STRUCTURES DEPICTED ON THIS PLAN. BEFORE UTILIZING EXISTING CABLE SUPPORTS, COAX PORTS, INSTALLING NEW PORTS OR ANY OTHER EQUIPMENT, CONTRACTOR SHALL VERIFY ALL ASPECTS OF THE COMPONENTS MEET THE ATC SPECIFICATIONS.

3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE T-MOBILE REPRESENTATIVE AND LOCAL UTILITY COMPANY FOR THE INSTALLATION OF CONDUITS, CONDUCTORS, BREAKERS, DISCONNECTS, OR ANY OTHER EQUIPMENT REQUIRED FOR ELECTRICAL SERVICE. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH LATEST EDITION OF THE STATE AND NATIONAL CODES, ORDINANCES AND REGULATIONS APPLICABLE TO THIS PROJECT.



LEGEND

⊗	GROUNDING TEST WELL
ATS	AUTOMATIC TRANSFER SWITCH
B	BOLLARD
CSC	CELL SITE CABINET
D	DISCONNECT
E	ELECTRICAL
F	FIBER
GEN	GENERATOR
G	GENERATOR RECEPTACLE
HH, V	HAND HOLE, VAULT
IB	ICE BRIDGE
K	KENTROX BOX
LC	LIGHTING CONTROL
M	METER
PB	PULL BOX
PP	POWER POLE
T	TELCO
TRN	TRANSFORMER
———	CHAINLINK FENCE

PROPOSED CABLE NOTES:

1. ESTIMATED LENGTH OF PROPOSED CABLE IS **250'**. ESTIMATED LENGTH OF CABLE WAS PROVIDED BY CUSTOMER OR CALCULATED BY ADDING THE RAD CENTER AND THE DISTANCE FROM THE SHELTER ENTRY PLATE TO THE TOWER (ALONG THE ICE BRIDGE) AND A SAFETY FACTOR MEASUREMENT OF 15% (OF THE TWO PREVIOUS VALUES), CDS DEFER TO GREATEST CABLE LENGTH.
2. ROUTE PROPOSED CABLES ALONG SAME PATH AS EXISTING CABLES AND IN ACCORDANCE WITH STRUCTURAL ANALYSIS. WHERE POSSIBLE UTILIZE EXISTING CABLE SUPPORT STRUCTURES AS PROVIDED FOR CARRIER TO ADEQUATELY SECURE CABLES, USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER. OTHERWISE, ATTACH CABLES TO HORIZONTAL OR DIAGONAL TOWER MEMBERS USING PROPOSED STAINLESS STEEL ADAPTERS (DO NOT ATTACH TO TOWER LEG).

1 DETAILED SITE PLAN

GRAPHIC SCALE

10 0 5 10

(IN FEET)
1 UNIT = 10 FEET

N

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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	AP	06/17/25
2	JURISCITIONAL CHECKLIST	TJC	12/04/25

ATC SITE NUMBER:
10330

ATC SITE NAME:
MOUNT ZION NY

T-MOBILE SITE NAME:
MT ZION

SITE ADDRESS:
366 MOUNT ZION RD
MARLBORO, NY 12542

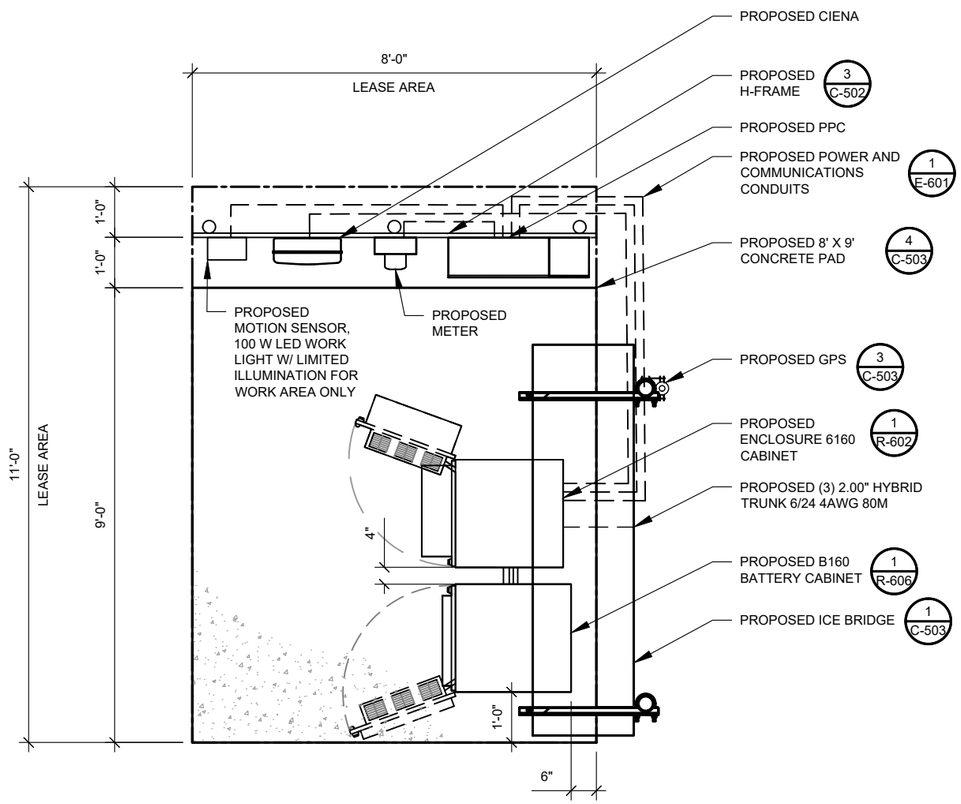
SEAL:

T-Mobile

ATC PROJ. #:	14912089_D2
CUST. ID:	MT ZION
CUST. #:	UP50577A

DETAILED SITE PLAN

SHEET NUMBER:	REVISION:
C-101	2



1 PROPOSED GROUND EQUIPMENT LAYOUT

GRAPHIC SCALE

3 0 1.5' 3

(IN FEET)
1 UNIT = 3 FEET

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A.T. ENGINEERING SERVICES, PLLC
1 FENTON MAIN
SUITE 300
CARY, NC 27511
PHONE: (919) 468-0112
#0012746

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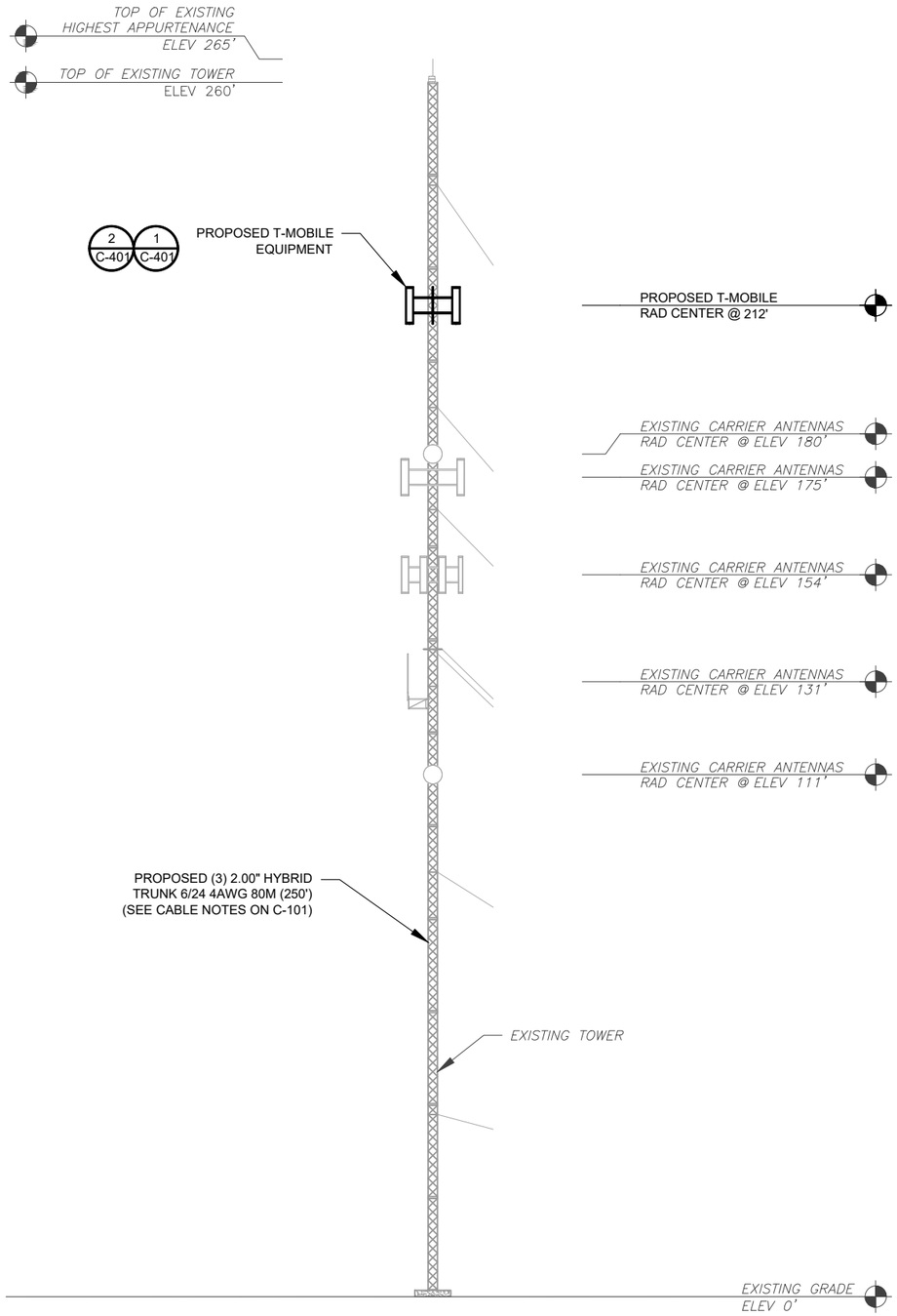
DETAILED EQUIPMENT PLAN

SHEET NUMBER:	REVISION:
C-102	2

PER MOUNT ANALYSIS COMPLETED BY ATC, DATED 01/02/25, THE PROPOSED MOUNT CAN ADEQUATELY SUPPORT THE PROPOSED LOADING.



1 TOWER ELEVATION
SCALE: N.T.S.

ALL ELEVATIONS REFLECT ABOVE GROUND LEVEL (A.G.L.)

TOWER NOTE:

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM WITH THE PROJECT MANAGER THAT THEY HAVE THE MOST RECENT VERSION OF THE STRUCTURAL ANALYSIS BEFORE COMMENCING WORK. EXISTING AND PROPOSED TOWER APPURTENANCES, MOUNTS, AND ANTENNAS ARE SHOWN BASED ON THE STRUCTURAL ANALYSIS.
2. WHERE APPLICABLE, ALL NEW ANTENNAS, EQUIPMENT, MOUNTS, CABLING, ETC. SHALL BE PAINTED/SOCKED TO MATCH EXISTING EQUIPMENT IN ACCORDANCE WITH FAA, JURISDICTION, AND/OR OTHER LOCAL REQUIREMENTS.
3. ROUTE PROPOSED CABLES ALONG SAME PATH AS EXISTING CABLES AND IN ACCORDANCE WITH STRUCTURAL ANALYSIS. WHERE POSSIBLE UTILIZE EXISTING CABLE SUPPORT STRUCTURES AS PROVIDED FOR CARRIER TO ADEQUATELY SECURE CABLES, USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER. OTHERWISE, ATTACH CABLES TO HORIZONTAL OR DIAGONAL TOWER MEMBERS USING PROPOSED STAINLESS STEEL ADAPTERS (DO NOT ATTACH TO TOWER LEG).
4. TOWER ELEVATION DEPICTION MAY NOT REFLECT ALL EQUIPMENT INCLUDED IN STRUCTURAL ANALYSIS. REFER TO STRUCTURAL ANALYSIS FOR FULL TOWER LOADING.

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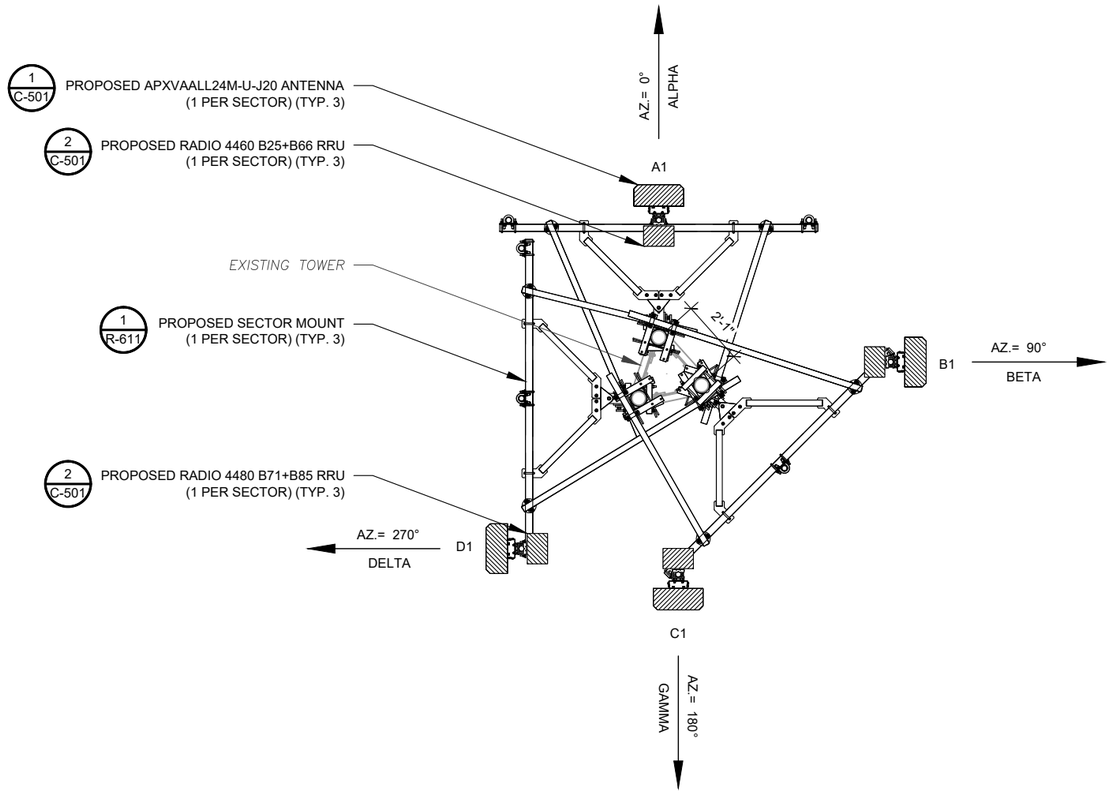
TOWER ELEVATION

SHEET NUMBER:	REVISION:
C-201	0

PER MOUNT ANALYSIS COMPLETED BY ATC, DATED 01/02/25, THE PROPOSED MOUNT CAN ADEQUATELY SUPPORT THE PROPOSED LOADING.



1 FINAL ANTENNA PLAN

SCALE: N.T.S.

FINAL ANTENNA/ COAX SCHEDULE						
SECTOR	ANT.	MODEL #	RAD CENTER	AZIMUTH	ADDITIONAL TOWER MOUNTED EQUIPMENT	CABLE DESCRIPTION
ALPHA	A1	APXVAALL24M-U-J20	212'	0°	RADIO 4460 B25+B66 RADIO 4480 B71+B85	(3) 2.00" HYBRID TRUNK 6/24 4AWG 80M (250')
BETA	B1	APXVAALL24M-U-J20		90°	RADIO 4460 B25+B66 RADIO 4480 B71+B85	
GAMMA	C1	APXVAALL24M-U-J20		180°	RADIO 4460 B25+B66 RADIO 4480 B71+B85	
DELTA	D1	APXVAALL24M-U-J20		270°	RADIO 4460 B25+B66 RADIO 4480 B71+B85	

1. GC TO VERIFY THE FINAL RFDS MATCHES THE FINAL CONSTRUCTION DRAWINGS. GC TO NOTIFY ATC PM OF ANY DISCREPANCY PRIOR TO INSTALLING THE EQUIPMENT.
2. GC TO CAP ALL UNUSED PORTS.
3. GC TO CONFIRM SPACING OF PROPOSED EQUIP DOES NOT CAUSE TOWER CONFLICTS NOR IMPEDE TOWER CLIMBING PEGS.

2 ANTENNA SCHEDULE

RF JUMPER LENGTH
MONOPOLE = 15'± GUYED / SELF SUPPORT = FACE WIDTH + 15'
REFER TO FINAL RFDS FOR TYPE AND QUANTITY

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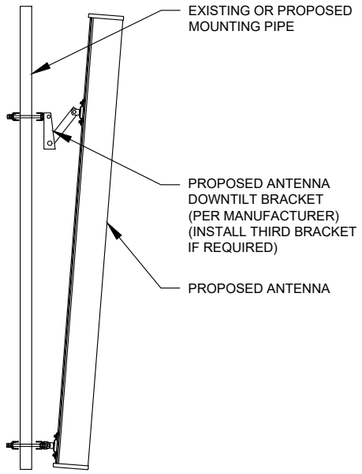
ANTENNA INFORMATION & SCHEDULE

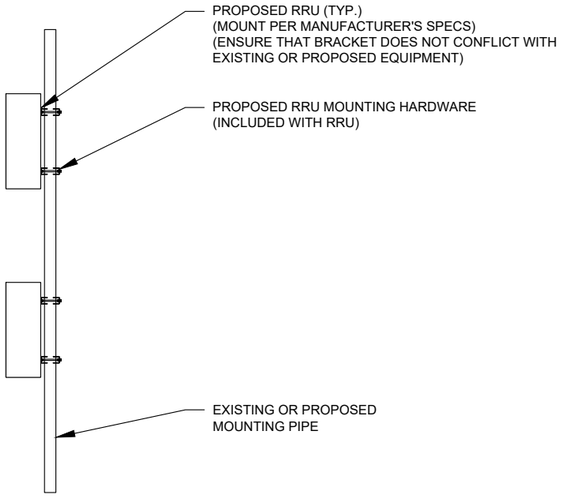
SHEET NUMBER:	REVISION:
C-401	0

EXISTING/PROPOSED MOUNTS AND/OR MOUNT MODIFICATIONS NOT SHOWN FOR CLARITY. REFER TO ANTENNA PLANS, MOUNT ANALYSES AND/OR MOUNT MODIFICATION DOCUMENTS FOR ADDITIONAL DETAIL.



1 PROPOSED ANTENNA MOUNTING DETAIL - TYPICAL

SCALE: N.T.S.



2 PROPOSED RRU MOUNTING DETAIL - TYPICAL

SCALE: N.T.S.

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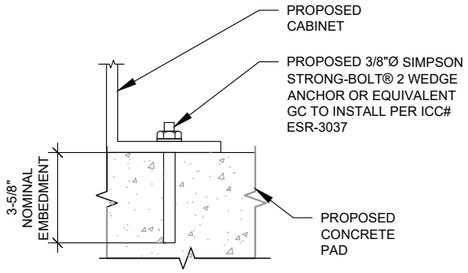
MOUNT DETAILS

SHEET NUMBER:	REVISION:
C-501	0

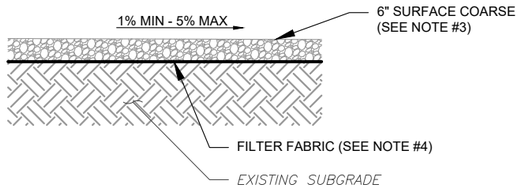


NOTE:

INSTALL SIMPSON STRONG-TIE® STRONG-BOLT® 2 WEDGE ANCHOR(S) STRICTLY PER INSTALLATION INSTRUCTIONS INCLUDED WITH PRODUCT OR FOUND ONLINE AT WWW.STRONGTIE.COM. PROPER INSTALLATION IS CRITICAL FOR FULL PERFORMANCE.

1 CABINET ATTACHMENT DETAIL

SCALE: N.T.S.

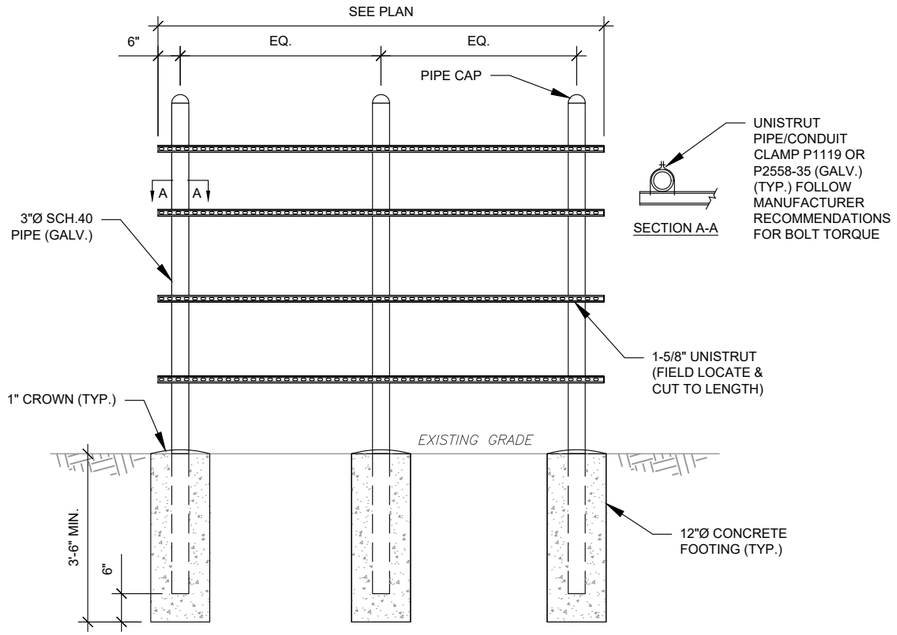


NOTES:

1. CONTRACTOR TO CONTACT ALL UTILITIES FOR LOCATION OF UNDERGROUND SERVICES. SERVICE LOCATIONS TO BE CONFIRMED PRIOR TO CONSTRUCTION.
2. REMOVE ALL UNSUITABLE OR DELETERIOUS MATERIAL AS REQUIRED. COMPACT UNDERLYING SOIL TO 90% OF MAXIMUM DENSITY. REPLACE REMOVED SOIL WITH 8" LIFTS OF GRANULAR "B" MATERIAL TO A DEPTH OF 4" BELOW PROPOSED GRADE. COMPACT TO MINIMUM 95% OF MAXIMUM DRY DENSITY ALL COMPACTION SHALL BE IN ACCORDANCE WITH THE MOST RECENT IBC. REVIEW WITH PROJECT MANAGER AND GEOTECT PRIOR TO CONSTRUCTION.
3. SURFACE COARSE OF GRANULAR "A" MATERIAL SHALL CONSIST OF EVENLY GRADED MIXTURE OF CRUSHED STONE OR GRAVEL, WITH 100% PASSING THROUGH 3/4" SIEVE AND NOT MORE THAN 5% PASSING THROUGH #4 SIEVE.
4. PROVIDE GEOTEXTILE FABRIC UNDER WASHED CHIPPED STONE COMPOUND UNLESS NOTED OTHERWISE. WOVEN GEOTEXTILE:US FABRICS: US 230 OR APPROVED EQUIVALENT. CONTRACTOR MAY SUBMIT DESIGN ALTERNATIVE AS OUTLINED IN THE AMERICAN TOWER MASTER SPECIFICATIONS.

2 COMPOUND CROSS SECTION

SCALE: N.T.S.



H-FRAME NOTES:

1. IF IT IS NECESSARY TO EXTEND THE H-FRAME, AN ADDITIONAL POST WILL ALWAYS BE REQUIRED.
2. PROPOSED UNISTRUTS TO BE FIELD CUT AND SHOULD NOT EXTEND MORE THAN 6 INCHES BEYOND THE LAST POST.
3. SPRAY ENDS OF UNISTRUT WITH COLD GALVANIZING SPRAY PAINT, ALLOW TO DRY, THEN COVER WITH RUBBER PROTECTIVE CAPS FOR SAFETY.
4. UNISTRUT TO BE CUT FLUSH WITH NO SHARP OR JAGGED EDGES.
5. ALL PROPOSED HARDWARE TO BE MOUNTED PER MANUFACTURERS SPECS.

3 TYPICAL H-FRAME DETAIL

SCALE: N.T.S.

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SEAL:

T-Mobile

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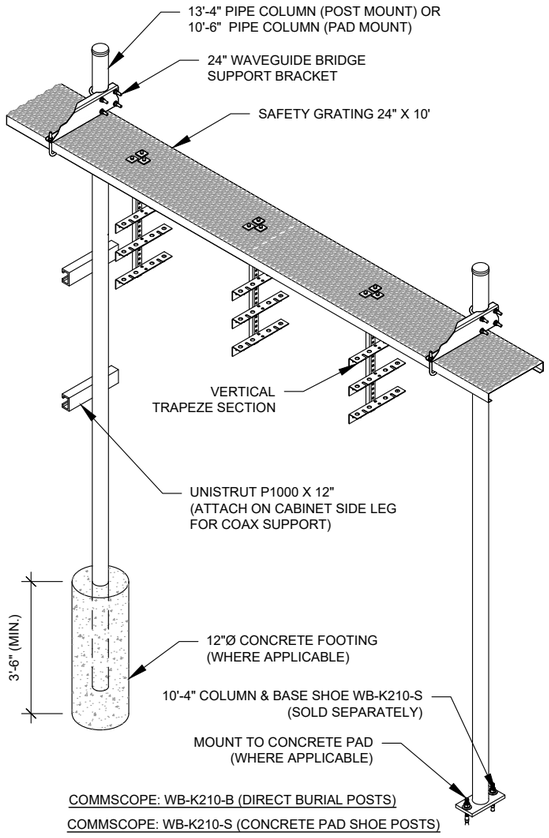
CONSTRUCTION DETAILS

SHEET NUMBER:	REVISION:
C-502	0



COMMSCOPE: WB-K210-B (DIRECT BURIAL POSTS)

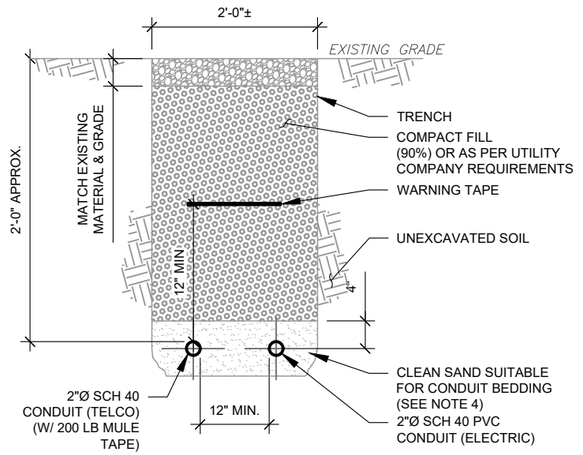
COMMSCOPE: WB-K210-S (CONCRETE PAD SHOE POSTS)

CONSTRUCTION NOTE:

1. INSTALL ICE BRIDGE TO ALLOW 7 FEET CLEARANCE ABOVE GRADE TO LOWEST APPURTENANCE.
2. INSTALL PER MANUFACTURES SPECIFICATION.

1 WAVEGUIDE BRIDGE KIT

SCALE: N.T.S.

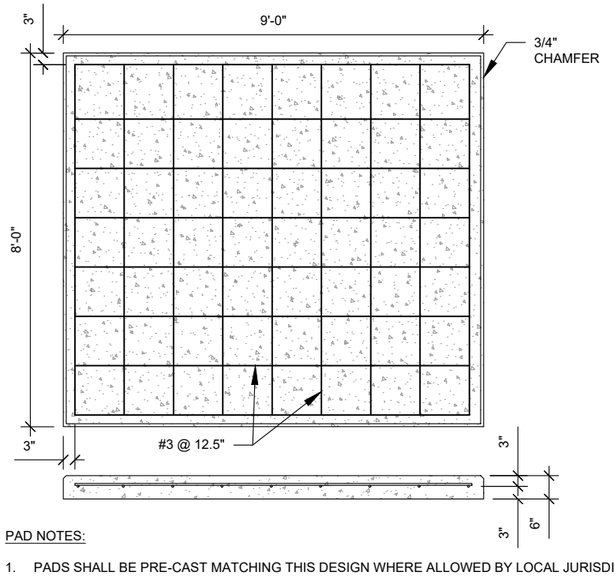


TRENCH NOTES:

1. IF FREE OF ORGANIC OR OTHER DELETERIOUS MATERIAL, EXCAVATED MATERIAL MAY BE USED FOR BACKFILL.
2. IF NOT, PROVIDE CLEAN, COMPACTIBLE MATERIAL. COMPACT IN 8" LIFTS. REMOVE ANY LARGE ROCKS PRIOR TO BACKFILLING. CONTRACTOR TO VERIFY LOCATION OF EXISTING U/G UTILITIES PRIOR TO DIGGING.
3. IF CURRENT AS-BUILT DRAWINGS ARE NOT AVAILABLE CONTRACTOR SHALL HAND DIG U/G TRENCHING.
4. CONCRETE ENCASE CONDUIT WHEN TRENCHING UNDER SITE ACCESS ROAD.

2 TELCO AND POWER CONDUIT JOINT TRENCH

SCALE: N.T.S.

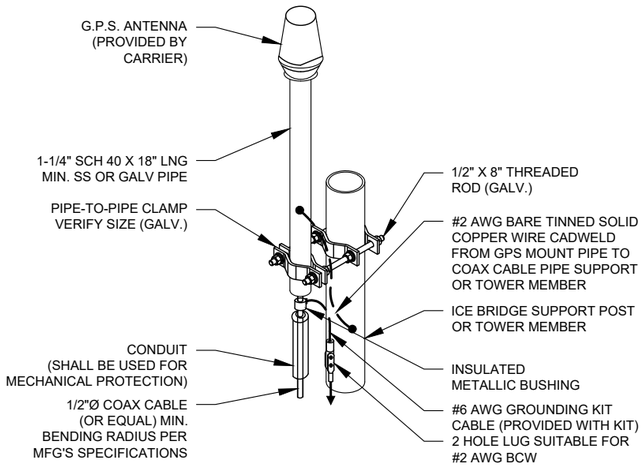


PAD NOTES:

1. PADS SHALL BE PRE-CAST MATCHING THIS DESIGN WHERE ALLOWED BY LOCAL JURISDICTION.
2. REFER TO CONCRETE & REINFORCED STEEL NOTES ON SHEET G-002 & ATC SPEC 033000 FOR CAST-IN-PLACE PADS.

4 REINFORCED PAD LAYOUT

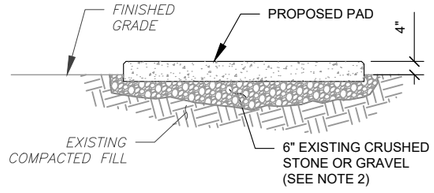
SCALE: N.T.S.



NOTE:
1. GPS SHALL BE PLACED WITH CLEAR SIGHT LINE TO THE SOUTHERN SKY.
2. CONTRACTOR TO SUPPLY COAX FOR GPS UNIT.

3 GPS ANTENNA ATTACHMENT DETAIL

SCALE: N.T.S.



PAD NOTES:

1. SUBGRADE AND FILL SHALL CONSIST OF CLEAN SOIL. DELETRIOUS MATERIAL AND ORGANICS SHALL BE REMOVED.
2. MECHANICALLY COMPACT FOOTPRINT OF PAD PLUS 2' PERIMETER.
3. USE GALVANIZED HILTI EXPANSION ANCHORS OR, APPROVED EQUAL, FOR EQUIPMENT ANCHORAGE.
4. FOR SIZE AND LOCATION OF ANCHORS AND OTHER REQUIREMENT, SEE EQUIPMENT VENDOR DRAWINGS.

5 GRAVEL PREPARATION

SCALE: N.T.S.

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T-Mobile

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CUST. ID:	MT ZION
CUST. #:	UP50577A

CONSTRUCTION DETAILS

SHEET NUMBER:	REVISION:
C-503	0

GROUNDING NOTES:

1. ALL EQUIPMENT ENCLOSURES, DEVICES AND CONDUITS SHALL BE GROUNDED TO CONFORM WITH THE LATEST REQUIREMENTS OF THE NEC BY THE INSTALLATION OF A SEPARATE, GREEN, INSULATED GROUND CONDUCTOR FOR ALL FEEDER AND BRANCH CIRCUITS. GROUND CONDUCTORS SHALL BE OF THE SIZE INDICATED ON THE DRAWINGS. GROUND CONDUCTORS SHALL BE CONTINUOUS IN LENGTH AND SHALL BE BONDED TO EACH ENCLOSURE THEY PASS THROUGH. CONDUIT SHALL NOT BE USED AS A GROUNDING CONDUCTOR.

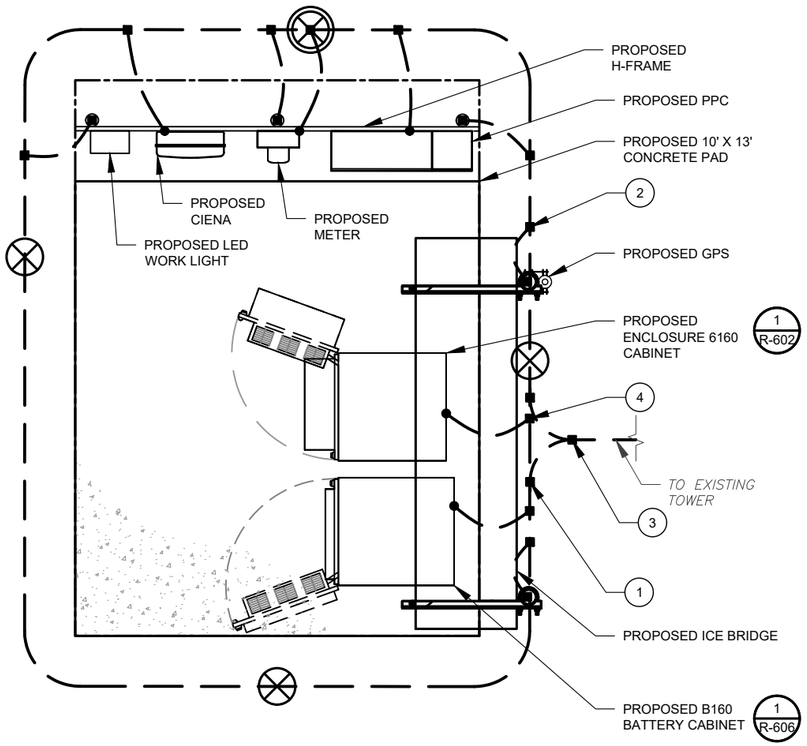
2. GROUNDING CONDUCTORS SHALL:
   - A. BE #2 AWG SOLID BARE TINNED COPPER (SBTC) FOR ALL GROUNDING SYSTEM WIRE UNLESS OTHERWISE NOTED, OR OTHERWISE REQUIRED BY CODE.
   - B. BE MINIMUM 12" BEND RADIUS. KEEP NUMBER OF BENDS TO A MINIMUM.
   - C. AVOID LONG BONDING CONNECTION RUNS. MAKE DIRECT AS POSSIBLE.
   - D. NOT HAVE ANY U-SHAPED RUNS.
   - E. BE IN NON-METALLIC CONDUIT ONLY, IF IN CONDUIT.
   - F. BE PLACED THROUGH NON-METALLIC SLEEVES IN FLOORS, WALLS, CEILINGS, ETC.
   - G. PROTECTED IN NON-METALLIC CONDUIT WHERE EXPOSED ABOVE GRADE.

2. INSTALL ALL GROUNDING RINGS AND RADIALS WITH CONDUCTIVE CEMENT, SANKOSHA AS DISTRIBUTED BY ELECTRIC MOTION COMPANY, INC., WINSTED, CT 06098, OR AS SPECIFICALLY INDICATED. INSTALL PER MANUFACTURER'S SPECIFICATIONS.

3. GROUND RINGS SHALL BE:
   - A. MINIMUM 30" BELOW GRADE, OR BELOW FROST LINE WHICHEVER IS DEEPER.
   - B. MINIMUM 2' FROM FOUNDATIONS, FOOTINGS, OTHER GROUNDING SYSTEMS AND ALL CONDUCTIVE OBJECTS.
   - C. WITH MINIMUM 12" BEND RADII.
   - D. WITH ALL CONNECTIONS IN CONTACT WITH EARTH, BONDED BY EXOTHERMIC WELDING.
   - E. BONDED TO A SINGLE POINT GROUND (SPG) WITH A SINGLE WIRE AS INDICATED ON DRAWINGS.

4. GROUND RODS SHALL BE:
   - A. MINIMUM 5/8" DIAMETER.
   - B. MINIMUM 10' LONG.
   - C. COPPER-CLAD GALVANIZED STEEL OR STAINLESS STEEL.
   - D. PLACED IN UNDISTURBED SOIL AND BELOW THE FROST LINE.
   - E. INSTALLED WITH MINIMUM SEPARATION DISTANCE OF TWICE THE DEPTH OF THE ROD(S), OR AS INDICATED ON DRAWINGS.
   - F. MINIMUM TWO (2) RODS ON THE TOWER RING OR ONE (1) PER LEG WHICHEVER IS LARGER, MINIMUM FOUR (4) RODS ON EVERY EQUIPMENT BUILDING RING WITH ONE AT EACH CORNER OR AS INDICATED, MINIMUM ONE (1) ROD FOR POWER SERVICE GROUNDING ELECTRODE, AND MINIMUM ONE (1) ROD AT END OF EACH RADIAL.

5. CONDUCTIVE OBJECTS, SUCH AS FENCES, SHALL BE BONDED TO THE GROUNDING SYSTEM IF WITHIN 20' OF THE TOWER GROUNDING SYSTEM, OR 5' OF ANY OTHER GROUNDED COMPONENT.



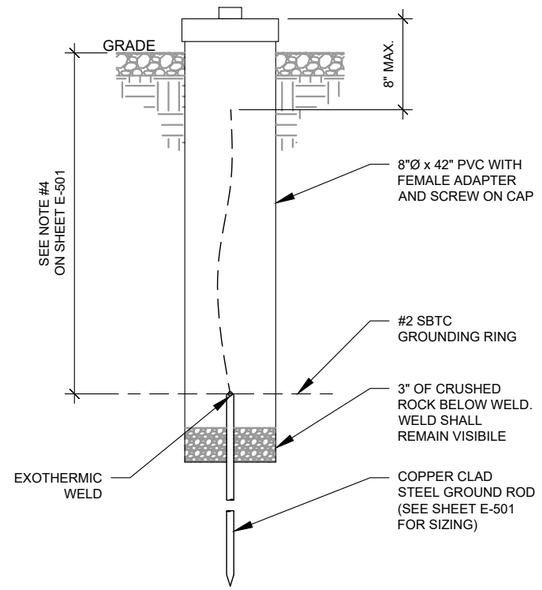
1 DETAILED GROUNDING PLAN
SCALE: N.T.S.

GROUNDING PLAN LEGEND:

- EXISTING GROUND WIRE
- GROUND WIRE
- EXOTHERMIC WELD
- MECHANICAL WELD
- 5/8"Ø X 10' COPPER GROUND ROD
- TEST WELL

GROUNDING KEYED NOTES:

1. BOND TO TOWER GROUND RING
2. #2 AWG BOND FROM VERTICAL H-FRAME AND ICE BRIDGE POST TO EXTERNAL GROUND RING (TYP. EVERY POST).
3. #2 AWG SBTC BOND FROM TOWER GROUND RING TO EQUIPMENT.
4. EQUIPMENT BOND TO GROUND RING (TYP.)



2 TEST WELL DETAIL
SCALE: N.T.S.

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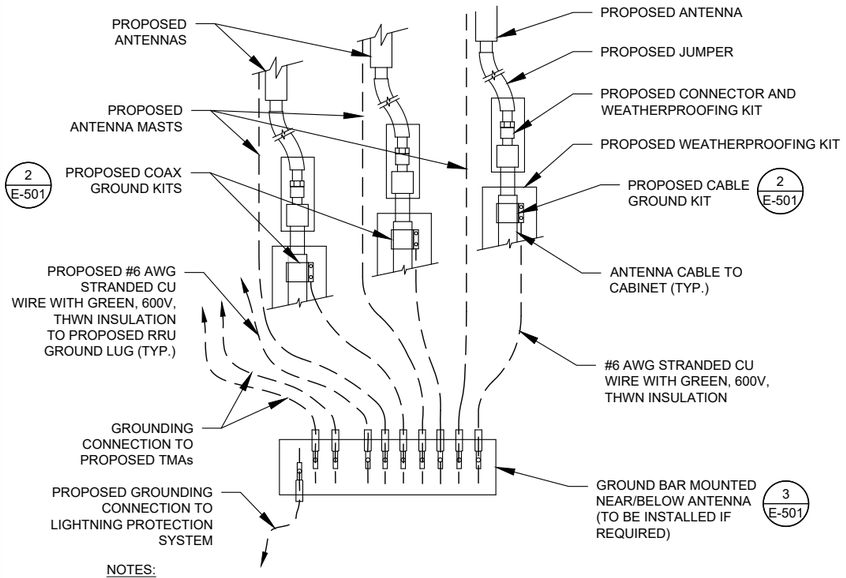
GROUNDING PLAN AND NOTES

SHEET NUMBER:	REVISION:
E-101	0

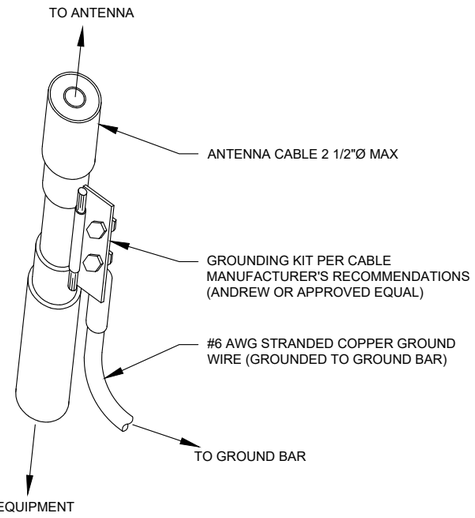


NOTES:

1. THIS DETAIL IS INTENDED TO SHOW THE GENERAL GROUNDING REQUIREMENTS. SLIGHT ADJUSTMENTS MAY BE REQUIRED BASED ON EXISTING SITE CONDITIONS. THE CONTRACTOR SHALL MAKE FIELD ADJUSTMENTS AS NEEDED AND INFORM THE CONSTRUCTION MANAGER OF ANY CONFLICTS.
2. SITE GROUNDING SHALL COMPLY WITH T-MOBILE GROUNDING STANDARDS, LATEST EDITION, AND COMPLY WITH T-MOBILE GROUNDING CHECKLIST, LATEST VERSION. WHEN NATIONAL AND LOCAL GROUNDING CODES ARE MORE STRINGENT THEY SHALL GOVERN.

1 TYPICAL ANTENNA GROUNDING DIAGRAM

SCALE: N.T.S.

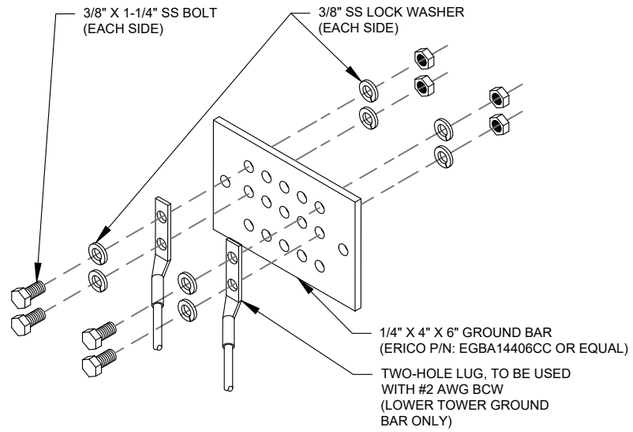


GROUND KIT NOTES:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
2. CONTRACTOR SHALL PROVIDE WEATHERPROOFING KIT (ANDREW PART NUMBER 221213) AND INSTALL/TAPE PER MANUFACTURER'S SPECIFICATIONS.

2 CABLE GROUND KIT CONNECTION DETAIL

SCALE: N.T.S.

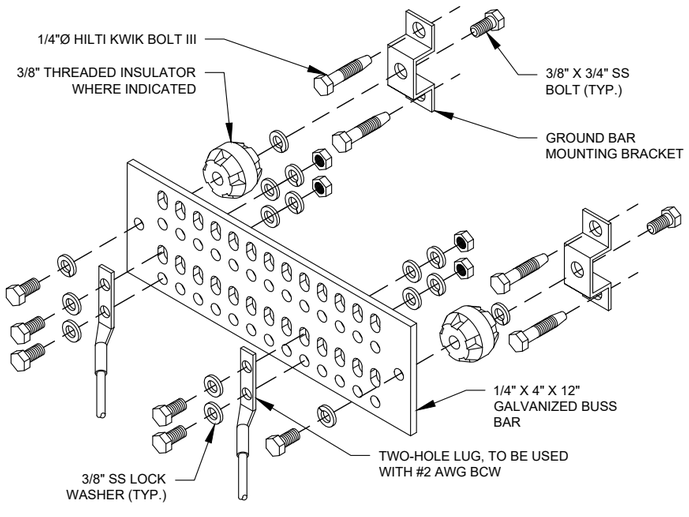


GROUND BAR NOTES:

1. GROUND BAR KITS COME WITH ALL HARDWARE, NUTS, BOLTS, WASHERS, ETC. EXCEPT THE STRUCTURAL MOUNTING MEMBER(S).
2. GROUND BAR TO BE BONDED DIRECTLY TO TOWER.

3 TOWER GROUND BAR DETAIL

SCALE: N.T.S.

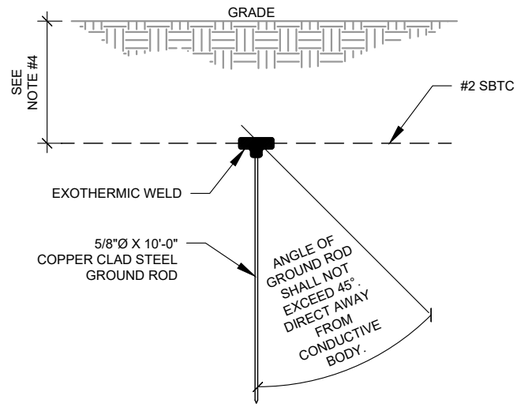


GROUND BAR NOTES

1. GROUND KITS COME WITH ALL HARDWARE, NUTS, BOLTS, WASHERS, ETC. EXCEPT THE STRUCTURAL MOUNTING MEMBER(S).
2. GROUND BAR SHALL BE BOLTED TO STRUCTURAL MEMBER OR ANCHORED TO CONCRETE SLAB W/ HILTI KWIK BOLT III.

4 MAIN GROUND BAR DETAIL

SCALE: N.T.S.

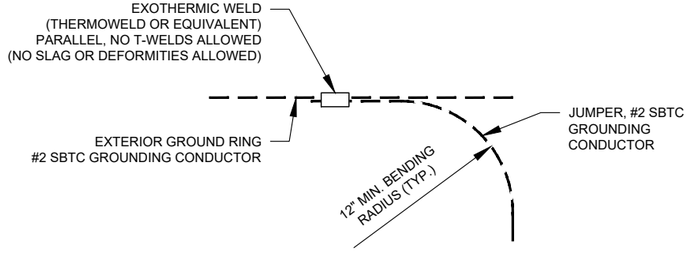


NOTES:

1. SEPARATION DIMENSION TO BE VERIFIED WITH LOCAL UTILITY COMPANY REQUIREMENTS.
2. COORDINATE UTILITY, LOCATE BEFORE DIGGING.
3. CONDUIT TRENCHING DEPTHS AT 36" OR 6" BELOW FROST LINE, WHICHEVER IS GREATER.
4. ALL RING AND RADIAL DEPTHS AT 30" OR 6" BELOW FROST LINE, WHICHEVER IS GREATER.

5 GROUND ROD DETAIL

SCALE: N.T.S.



6 TIE CONNECTION DETAIL

SCALE: N.T.S.

AMERICAN TOWER®
A.T. ENGINEERING SERVICES, PLLC
1 FENTON MAIN
SUITE 300
CARY, NC 27511
PHONE: (919) 468-0112
#0012746

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	AP	06/17/25

ATC SITE NUMBER:
10330
ATC SITE NAME:
MOUNT ZION NY
T-MOBILE SITE NAME:
MT ZION
SITE ADDRESS:
366 MOUNT ZION RD
MARLBORO, NY 12542

SEAL:

T-Mobile

ATC PROJ. #:	14912089_D2
CUST. ID:	MT ZION
CUST. #:	UP50577A

GROUNDING DETAILS

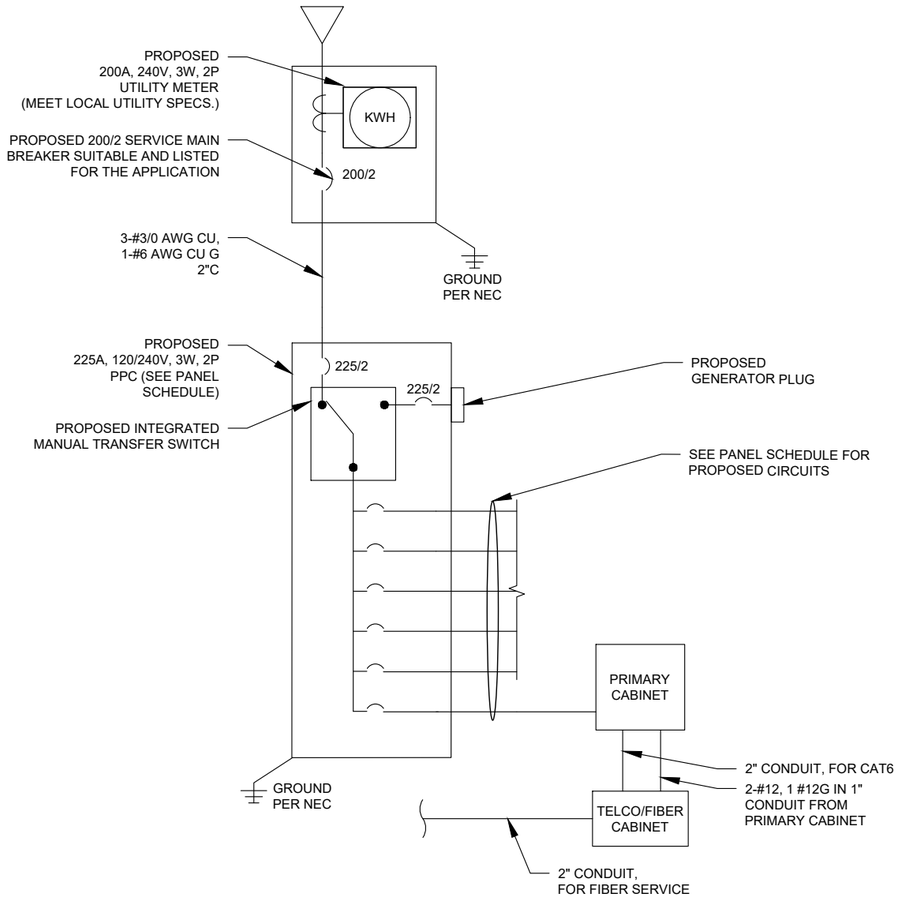
SHEET NUMBER:	REVISION:
E-501	0

PANEL DESIGNATION:	TMO	TYPE:	LIGHTING & APPLIANCE	SYSTEM:	120/240V, 1Ø, 3W, 24 CKT	LOCATION:	TMO LEASE EQUIPMENT AREA
		MOUNTING:	SURFACE	MAIN BREAKER (MB):	200A		
		ENCLOSURE:	NEMA 3R	MAIN BUS RATING:	200A	PANEL NOTES:	PROPOSED
				MIN. A.I.C. RATING:	N/A		

CONNECTED LOAD (kVA)		BRIEF DESCRIPTION	FEEDER OR BRANCH CIRCUIT					POLE NO.	CIRC NOTES		CIRC NOTES	POLE NO.	FEEDER OR BRANCH CIRCUIT					BRIEF DESCRIPTION	CONNECTED LOAD (kVA)	
			BREAKER		CIRCUIT								CIRCUIT			BREAKER				
A	B		AMPS	POLES	WIRE	GND	COND.						COND.	GND	WIRE	POLES	AMPS		A	B
0.01		SURGE	60	2	3-#6	#10	1"	1				2	1/2"	#12	2-#12	1	20	GFI	0.18	
	0.01							3				4	1/2"	#12	2-#12	1	20	LIGHT		0.50
7.50		ENCLOSURE 6160 v2	200	2	2-#3/0	#6	2"	5				6	1/2"	#12	2-#12	1	20	AAV GFI	0.15	
	7.50							7				8								0.00
0.00								9				10							0.00	
	0.00							11				12								0.00
0.00								13				14							0.00	
	0.00							15				16								0.00
0.00								17				18							0.00	
	0.00							19				20								0.00
0.00								21				22							0.00	
	0.00							23				24								0.00
7.5	7.5								A	B	TOTAL								0.3	0.5
									7.8	8.0	15.9	CONNECTED LOAD (kVA)								
									7.8	8.0	15.9	DEMAND LOAD (kVA)						*DERATING FACTOR (80%)*		
																		DEMANDLOAD SIZING:	*83 AMPS*	

1 PANEL SCHEDULE

NOTE:
1. ALL EQUIPMENTS' SHORT-CIRCUIT CURRENT RATING SHALL EXCEED AVAILABLE FAULT CURRENT PER UTILITY
2. CONTRACTOR TO INSTALL HANDHOLES AT EVERY 3RD 90° TURN



2 ONE-LINE DIAGRAM

STANDARD CONDUIT USE TABLE			
CONDUIT TYPE	USE CASE	LOCATION	USE CASE EXAMPLE
RMC (METALLIC)	AC, DC COMM	ABOVE GROUND	ABOVE GROUND PPC TO SSC
PVC	AC POWER	UNDERGROUND	UNDERGROUND PPC TO SSC OR BACKHAUL TRANSPORT HUB TO SSC
LFMC	AC, DC, COMM	MAX 6' PER CONDUIT RUN, ABOVE GROUND ONLY	TIGHT LOCATIONS BETWEEN HUB AND CONDUIT BUT NOT TO BE USED WHERE IT CAN BE STEPPED ON
EMT	INDOOR AC, DC COMM	INDOOR NOT EXPOSED TO THE OUTDOOR ENVIRONMENT (MUST BE DRY)	CIRCUIT PANEL TO JUNCTION BOX
LFNC	GROUND WIRE	CONCEALING AND PROTECTING BTCW RISERS ONLY	GROUND RING TO MGB OR SSC

EXCEPTION CONDUIT USE TABLE			
CONDUIT TYPE	USE CASE	LOCATION	USE CASE EXAMPLE
EMT (NOT PREFERRED)	OUTDOOR DC, COMM	OUTDOOR WHEN USED WITH WATERTIGHT HUBS ONLY	BETWEEN EQUIPMENT AND BATTERY CABINET OR EQUIPMENT TO EQUIPMENT CABINETS FOR INTER CABINET CONNECTION
RMC NONMETALLIC (ALUMINUM)	OUTDOOR/INDOOR PER NEC GUIDLINES	ABOVE GROUND	MAT BE USED AS A LOWER COST ALTERNATIVE TO METALLIC RMC, MUST MEET OR EXCEED FEDERAL SPEC: WW-C-540C, UL-6A, ANSI C80.5, NEC 344.10 (A) ALLOWS THE USE OF EITHER ALUMINUM OR GALVANIZED FITTINGS

3 CONDUIT USE TABLES

AMERICAN TOWER®
A.T. ENGINEERING SERVICES, PLLC
1 FENTON MAIN
SUITE 300
CARY, NC 27511
PHONE: (919) 468-0112
#0012746

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	AP	06/17/25

ATC SITE NUMBER:
10330
ATC SITE NAME:
MOUNT ZION NY
T-MOBILE SITE NAME:
MT ZION
SITE ADDRESS:
366 MOUNT ZION RD
MARLBORO, NY 12542

SEAL:

T-Mobile

ATC PROJ. #:	14912089_D2
CUST. ID:	MT ZION
CUST. #:	UP50577A

PANEL SCHEDULE & ONE-LINE DIAGRAM

SHEET NUMBER:	REVISION:
E-601	0

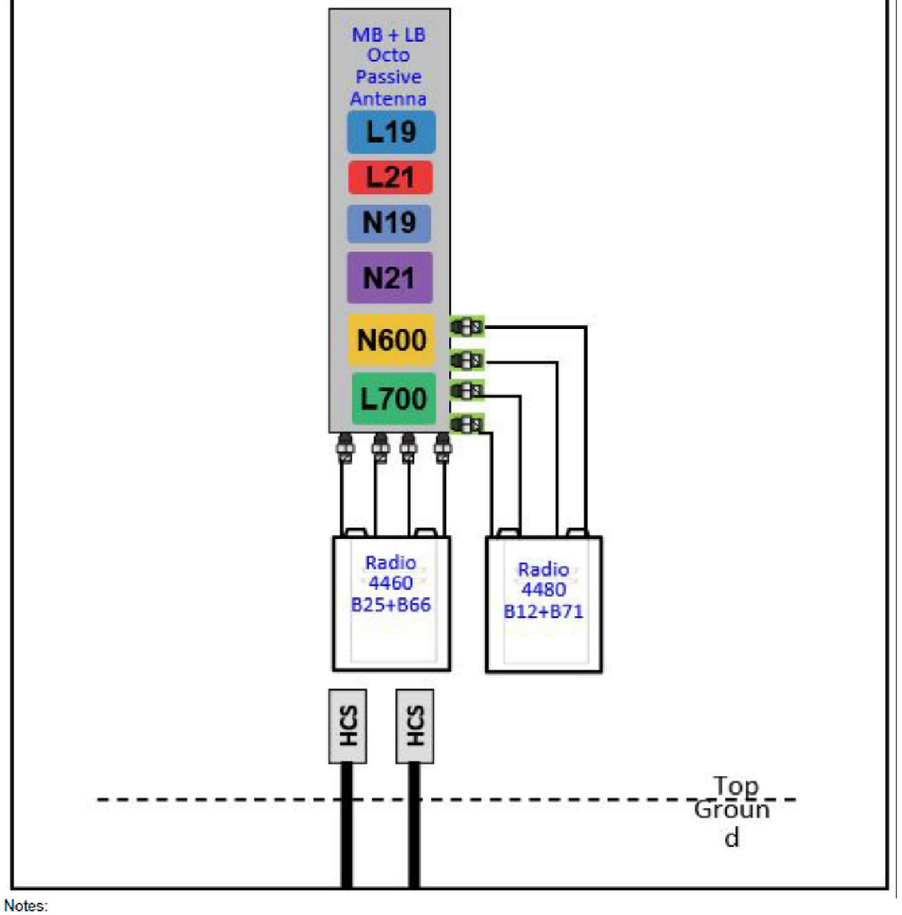
Proposed RAN Equipment		
Template: 4Sec-67E998E 6160 (LRP)		
Enclosure	1	2
Enclosure Type	Enclosure 6160_v2 AC	B160
Baseband	RP 6651: N1900, N2100 (RESTRICTED), L1900, L2100 RP 6651: N600, L600 (RESTRICTED), L700	
Transport System	CSR IXRe V2 (Gen2)	
Hybrid Cable System	Hybrid Trunk 6/24 4AWG 80m (x3)	

RAN Scope of Work:

Add (1) 6160 and (1) B160 cabinets
Add (2) RP 6651 Basebands
Add (1) IXRe Router
Add (3) 6x24 80M HCS

1 CABINET CONFIGURATION

Final Config: 4SEC -67E998E 1OP



Notes:

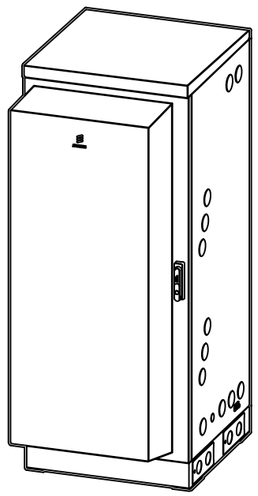
2 ANTENNA CONFIGURATION

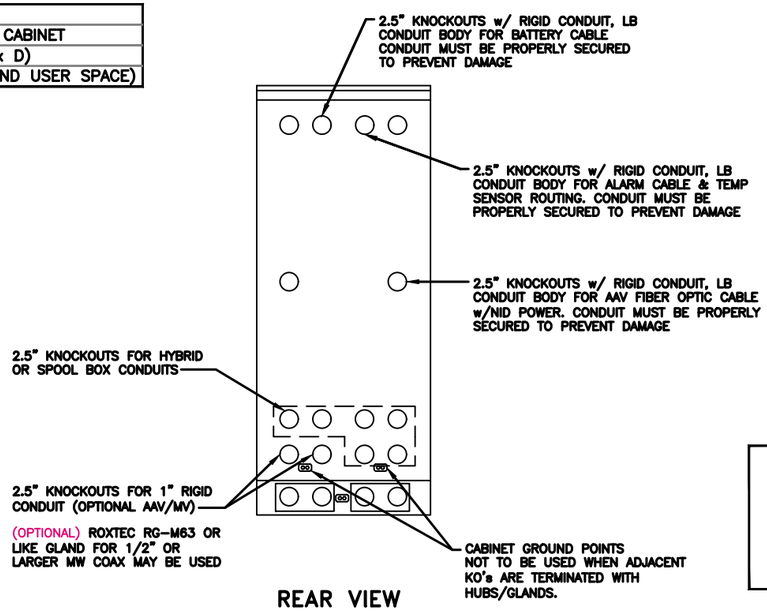
NOTE: THIS SHEET CREATED BY OTHERS AND PROVIDED BY REQUEST OF CUSTOMER WITHOUT EDIT.

SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-601	0

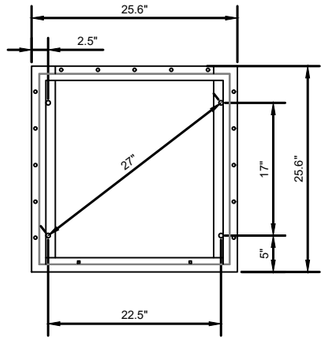
MANUFACTURER:	ERICSSON
MODEL:	UT_E6160_AC_V2 – SITE SUPPORT CABINET
DIMENSIONS:	63" x 25.6" x 33.46" (H x W x D)
WEIGHT:	434.31 LBS (EMPTY POWER RACK AND USER SPACE)





REAR VIEW

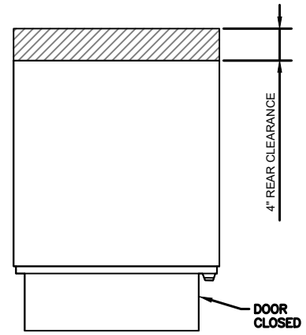
NOTE:
- CORRECT KNOCKOUT TOOL REQUIRED FOR PUNCHING KNOCKOUTS. DO NOT DRILL THROUGH KNOCKOUTS
- CONDUIT MUST BE PROPERLY SECURED TO PREVENT DAMAGE TO CABINETS AND OR CABLING

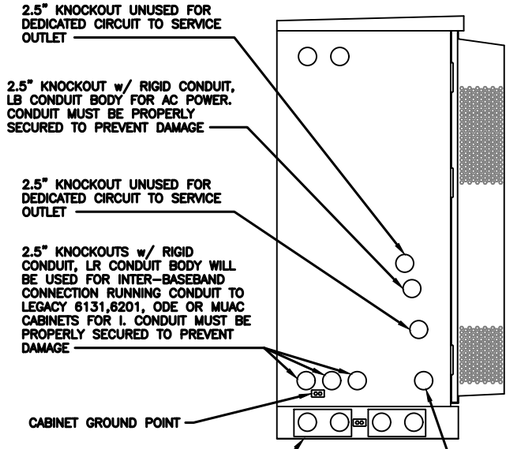


BOLT DOWN PATTERN

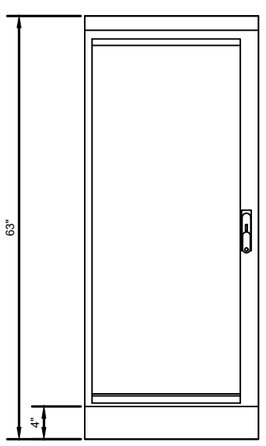
GROUNDING NOTE:

"CABINET GROUNDING TO USE A SINGLE, #2 BTCW CONDUCTOR, W/ 2-HOLE, 1" C-C, LONG BARREL, WINDOW LUG, IN 3/4" LFNC TO GROUND RING. PLINTH GROUNDING IS NOT REQUIRED."

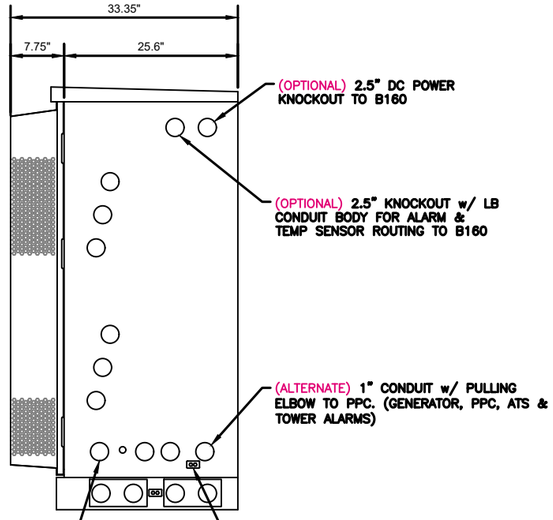




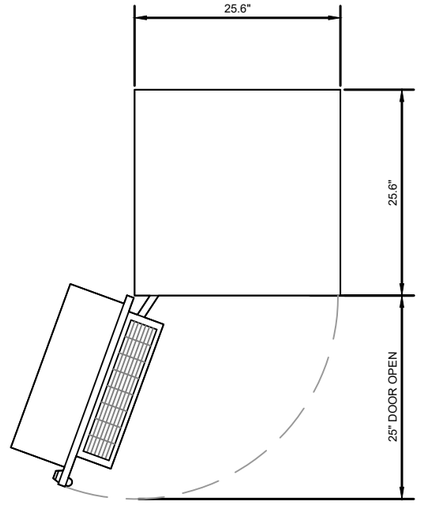
LEFT VIEW



FRONT VIEW



RIGHT VIEW



PLAN VIEW

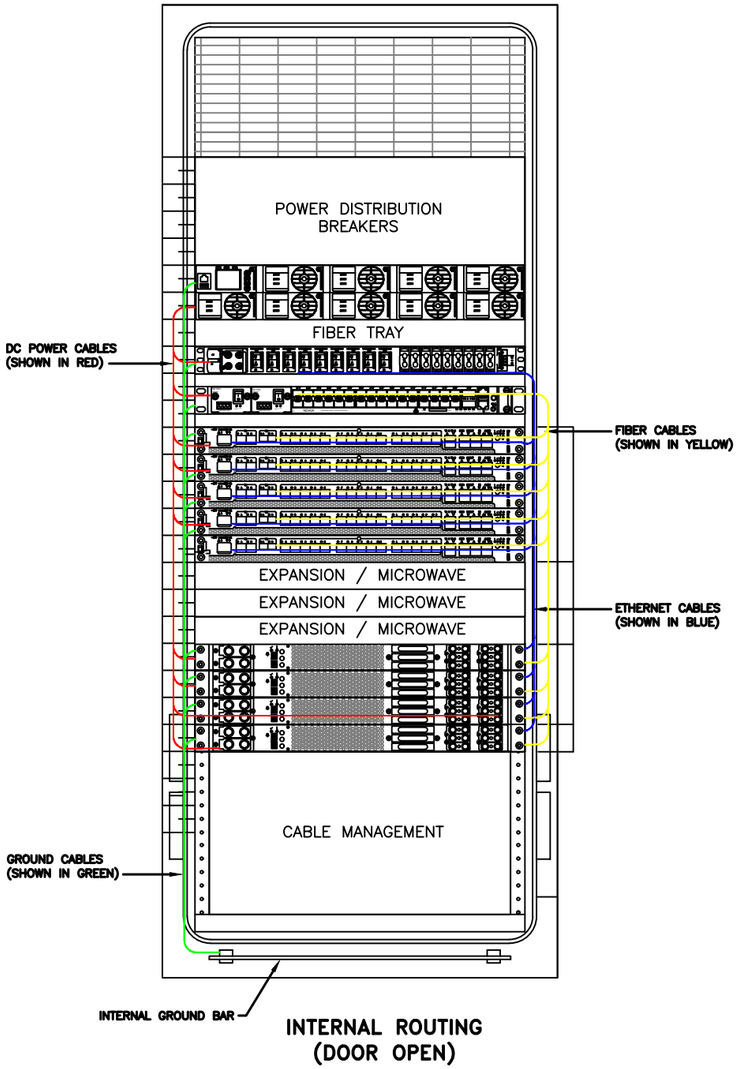
1 ERICSSON 6160_AC_V2 SITE SUPPORT CABINET

SCALE: N.T.S.

NOTE: THIS SHEET WAS CREATED BY OTHERS AND PROVIDED AT THE REQUEST OF THE CUSTOMER WITHOUT EDIT.

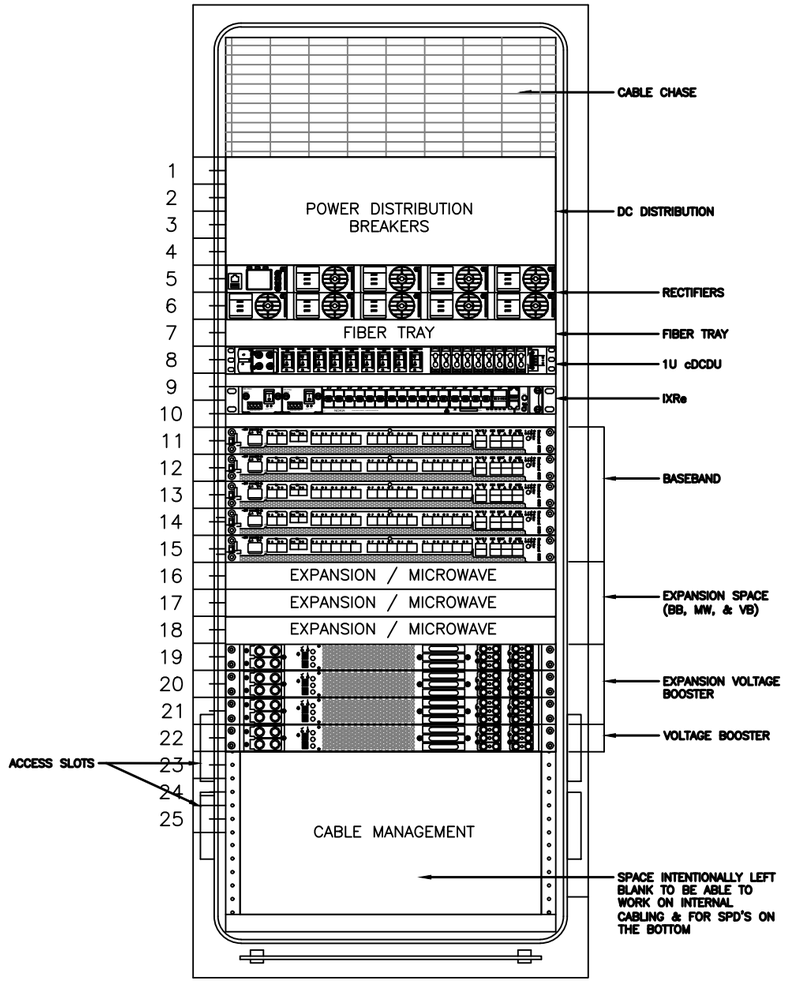
SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-602	0



INTERNAL ROUTING
(DOOR OPEN)

RACK ASSIGNMENTS	
RU SLOTS	DESCRIPTION
1	POWER DISTRIBUTION BREAKERS
2	
3	
4	
5	RECTIFIER SHELF
6	
7	FIBER TRAY
8	cDCDU
9	BACKHAUL ROUTER
10	
11	1ST BASEBAND
12	2ND BASEBAND
13	3RD BASEBAND
14	4TH BASEBAND
15	5TH BASEBAND
16	EXPANSION – MICROWAVE
17	
18	
19	EXPANSION / PSU
20	
21	
22	VOLTAGE BOOSTER
23	OPEN SPACE FOR SPD ACCESS
24	
25	



FRONT VIEW
(DOOR OPEN)

1 ERICSSON 6160_AC_V2 SITE SUPPORT CABINET

SCALE: N.T.S.

NOTE: THIS SHEET WAS CREATED BY OTHERS AND PROVIDED AT THE REQUEST OF THE CUSTOMER WITHOUT EDIT.

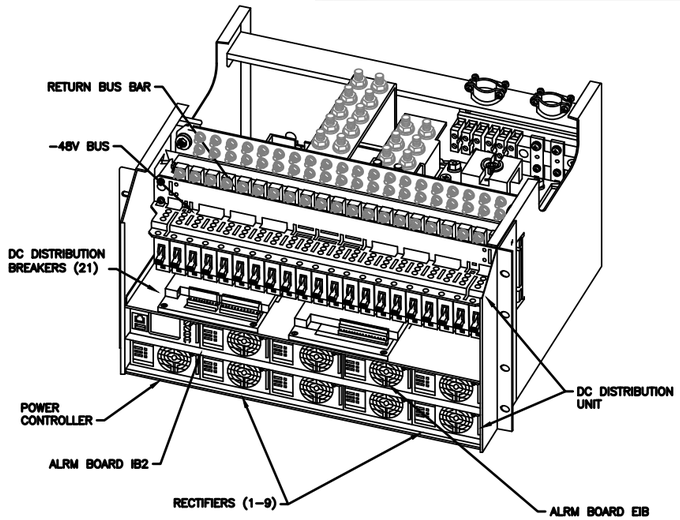
SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-603	0

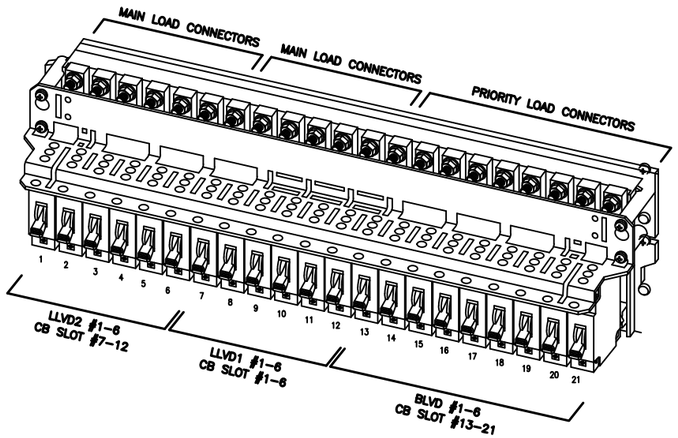
NOTE:
THIS IS FOR REFERENCE ONLY, CHECK FOR SPECIFIC DETAIL IN T–MOBILE CABINET SPECIFIC INSTALLATION GUIDES

CB SLOT	CKT#		3 Sector B12/71-Radio 4449 B25/66-Radio 4415 B25-Radio 4424 B41-Air 6449 or 6419	3 Sector B12/71-Radio 4480 B25/66-Radio 4460 B41-Air 6419 or Radio 88635		4 Sector B12/71-Radio 4480 B25/66-Radio 4460 B41-Air 6419 or Radio 88635		6 Sector B12/71-Radio 4480 B25/66-Radio 4460 B41-Air 6419 or Radio 8863 **(Excalibur Only)**		
1		1	IXRe PS-2*	-		IXRe PS-2*		B25/66 DC-2α	OR	IXRe PS-2*
2		2	B25 DC-2 α	-		-		B25/66 DC-1ε		Voltage Booster-7 B25/66 DC 1ε, B25/66 DC-2α and ε
3	LVD1 47.0V	3	B25 DC-2 β	-		B41δ	Voltage Booster-6 B41 δ B12/71 δ	B25/66 DC-2ε		
4		4	B25 DC-2 γ	B41α	-	B41α		B41α	OR	-
5		5	Voltage Booster-4 B41α, β and γ	B41β	Voltage Booster-4 B41α, β and γ	B41β	Voltage Booster-4 B41α, β and γ	B41β		Voltage Booster-4 B41α, β and γ
6		6		B41γ		B41γ		B41γ		
7		1	B12/71DC-1α	B12/71α	Voltage Booster-3 B12/71α, β and γ	B12/71α	Voltage Booster-3 B12/71α, β and γ	B12/71α	OR	Voltage Booster-3 B12/71α, β and γ
8		2	B12/71DC-1β	B12/71β		B12/71β		B12/71β		
9	LVD2 45.1V	3	B12/71DC-1γ	B12/71γ	-	B12/71γ	-	B12/71γ		-
10		4	B12/71DC-2α	-		B71/12δ	-	B25/66 DC-1δ		-
11		5	B12/71DC-2β	-		B25/66 DC-1δ	Voltage Booster-5 B25/66 DC-1 δ B25/66 DC-2 δ	B25/66 DC-2δ	OR	Voltage Booster-5 B25/66 DC-1δ and ε B25/66 DC-2δ
12		6	B12/71DC-2γ	-		B25/66 DC-2δ		B25/66 DC-1ε		
13		1	IXRe PS-1	IXRe PS-1		IXRe PS-1		IXRe PS-1		
14		2	B25/66α	B25/66 DC-1α	Voltage Booster-1 B25/66 DC-1α and β B25/66 DC-2α	B25/66 DC-1α	Voltage Booster-1 B25/66 DC-1α and β B25/66 DC-2α	B25/66 DC-1α	OR	Voltage Booster-1 B25/66 DC-1α and β B25/66 DC-2α
15		3	B25/66β	B25/66 DC-2α		B25/66 DC-2α		B25/66 DC-2α		
16		4	B25/66γ	B25/66 DC-1β	-	B25/66 DC-1β	-	B25/66 DC-1β		-
17	BLVD 43.2V	5	B25 DC-1α	B25/66 DC-2β	-	B25/66 DC-2β	-	B25/66 DC-2β		-
18		6	B25 DC-1β	B25/66 DC-1γ	Voltage Booster-2 B25/66 DC-1γ B25/66 DC-2β and γ	B25/66 DC-1γ	Voltage Booster-2 B25/66 DC-1γ B25/66 DC-2β and γ	B25/66 DC-1γ		Voltage Booster-2 B25/66 DC-1γ B25/66 DC-2β and γ
19		7	B25 DC-1γ	B25/66 DC-2γ		B25/66 DC-2γ		B25/66 DC-2γ		
20		8	DCDU (RP/BBs, AAV, & MW)	DCDU (RP/BBs, IXRe PS-2, AAV, & MW)		DCDU (RP/BBs, IXRe PS-2, AAV, & MW)		DCDU (RP/BBs, IXRe PS-2, AAV, & MW)		
21		9	Primary AAV	Primary AAV		Primary AAV		Primary AAV		

See Breaker Tables for breaker sizes.
α = Alpha, β = Beta, γ = Gamma, δ = Delta, ε = Epsilon, ζ = Zeta



POWER SUBRACK



DC DISTRIBUTION

1 ERICSSON 6160 ELECTRICAL DETAILS

SCALE: N.T.S.

NOTE: THIS SHEET WAS CREATED BY OTHERS AND PROVIDED AT THE REQUEST OF THE CUSTOMER WITHOUT EDIT.

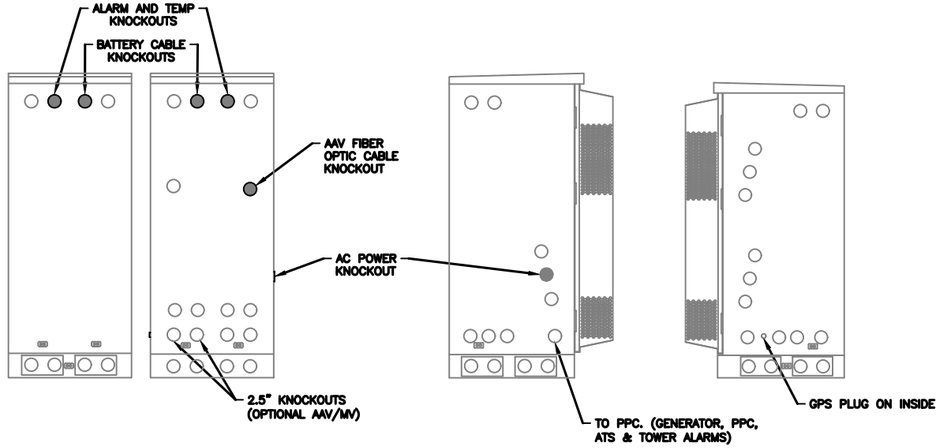
SUPPLEMENTAL

SHEET NUMBER: R-604

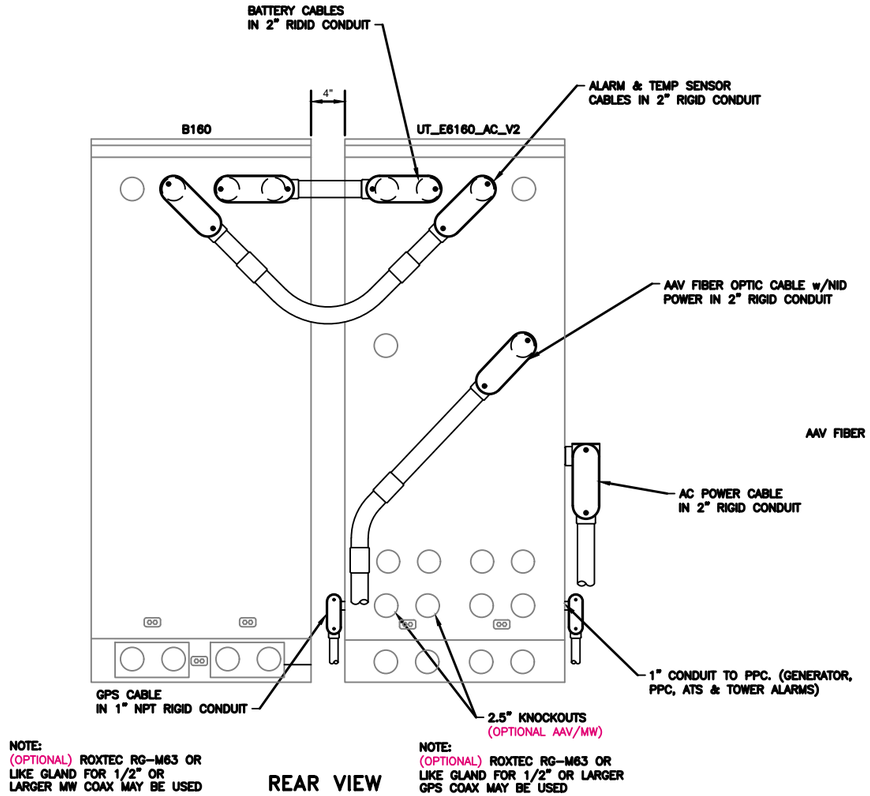
REVISION: 0

NOTE:

1. ALL CONDUIT AND FITTING ENTRANCES INTO CABINETS AND ENCLOSURES MUST UTILIZE MYERS OR EQUIVALENT HUBS TO PREVENT WATER ENTRY/SEEPAGE INTO CABINETS AND ENCLOSURES.
2. (LIQUIDFLEX) FLEXIBLE METALLIC CONDUIT (LFMC) & ASSOCIATED FITTINGS CAN BE USED AS NEEDED BUT ONLY FOR TIGHT CONDUIT BENDS AND RUNS SUBJECT TO UL AND NEC LIMITATIONS. 6' MAX PER CONDUIT RUN.
3. "DOOR HEX HOOD CLEARANCE MUST BE CONSIDERED WHEN INSTALLING AC POWER CONDUIT BODY TO MYERS HUB BY KEEPING THE CONDUIT BODY AS CLOSE TO THE CABINET AS POSSIBLE.
4. PULLING ELBOWS MAY BE USED IN LIEU OF A CONDUIT BODIES WHEN CLEARANCE IS LIMITED.
5. ALL EXTERNAL ALARM CONDUITS ARE TOO TERMINATE AT THE PPC WITH A SINGLE 1" ALARM CONDUIT TO THE UT_E6160_AC_V2.



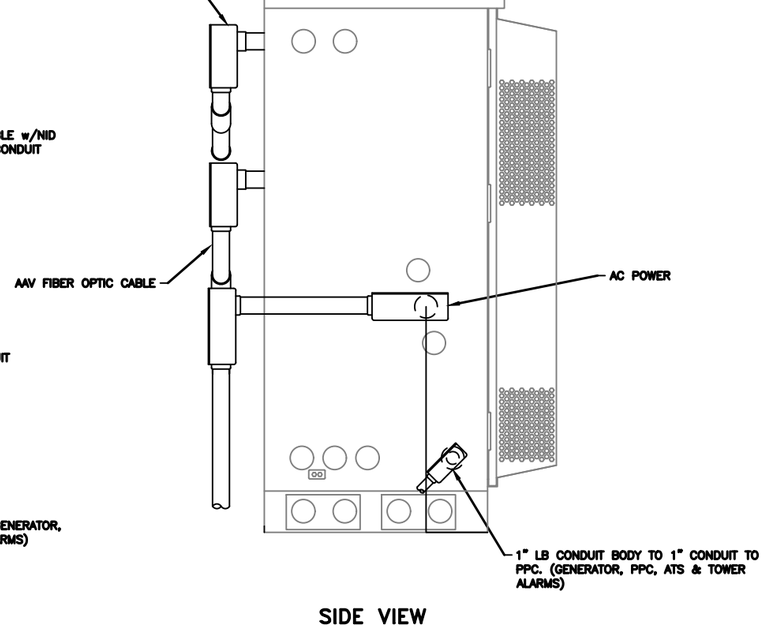
CONDUIT LOCATIONS



NOTE:
(OPTIONAL) ROXTEC RG-M63 OR LIKE GLAND FOR 1/2" OR LARGER MW COAX MAY BE USED

REAR VIEW

NOTE:
(OPTIONAL) ROXTEC RG-M63 OR LIKE GLAND FOR 1/2" OR LARGER GPS COAX MAY BE USED



SIDE VIEW

1 ERICSSON 6160/B160 CONDUIT ROUTING DETAILS

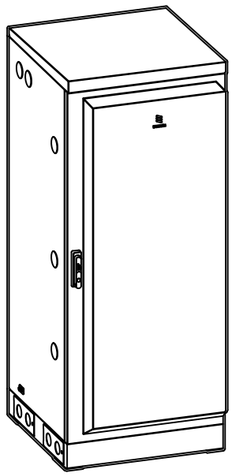
SCALE: N.T.S.

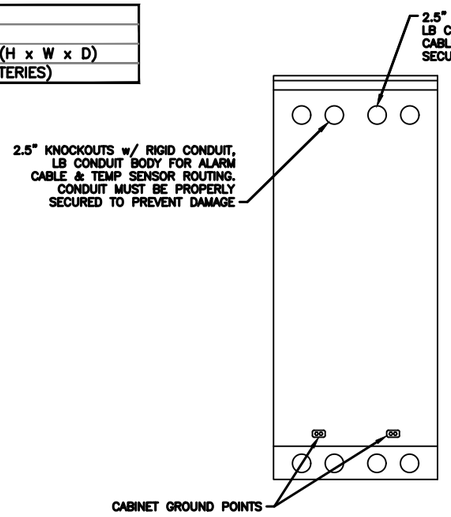
NOTE: THIS SHEET WAS CREATED BY OTHERS AND PROVIDED AT THE REQUEST OF THE CUSTOMER WITHOUT EDIT.

SUPPLEMENTAL

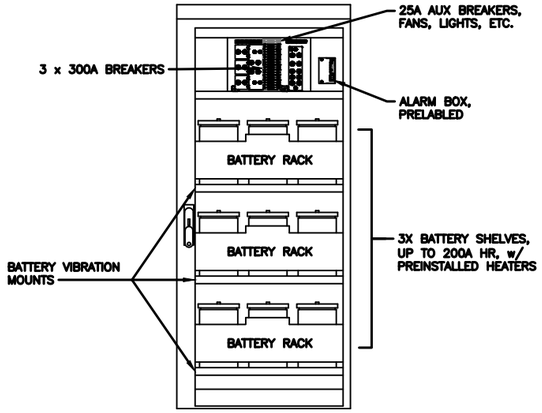
SHEET NUMBER:	REVISION:
R-605	0

MANUFACTURER:	ERICSSON
MODEL:	B160 BATTERY CABINET
DIMENSIONS:	63" x 25.6" x 29.5" (H x W x D)
WEIGHT:	295 LBS (WITHOUT BATTERIES)





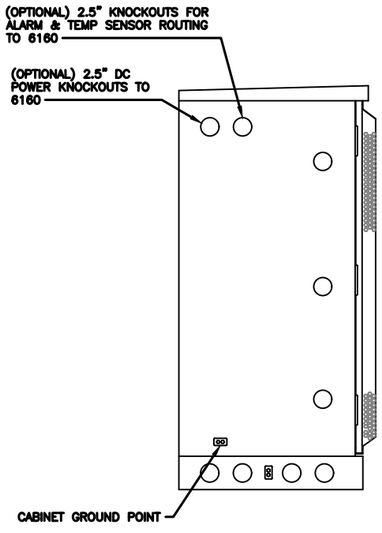
REAR VIEW



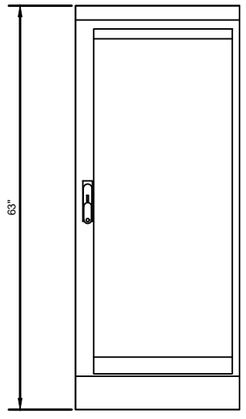
FRONT VIEW
(DOOR OPEN)

GROUNDING NOTE:

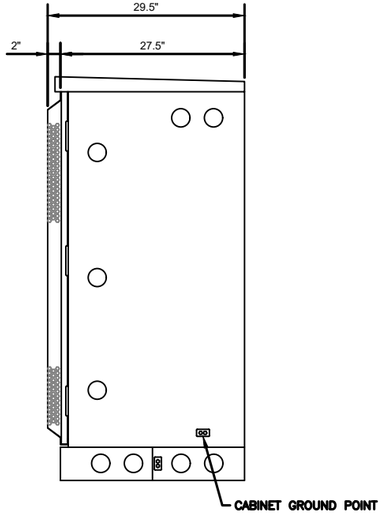
"CABINET GROUNDING TO USE A SINGLE, #2 BTCW CONDUCTOR, W/ 2-HOLE, 1" C-C, LONG BARREL, WINDOW LUG, IN 3/4" LFNC TO GROUND RING. PLINTH GROUNDING IS NOT REQUIRED."



LEFT VIEW

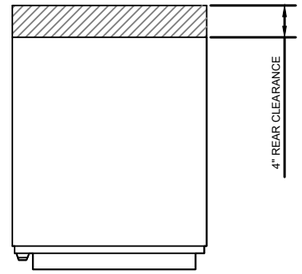


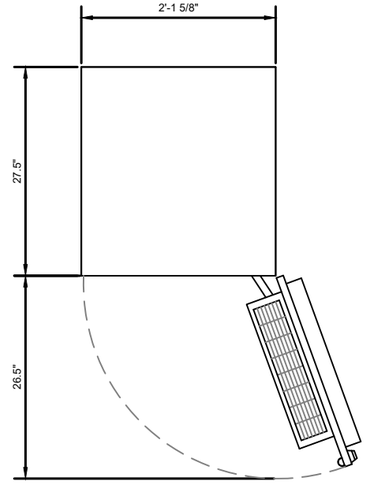
FRONT VIEW



RIGHT VIEW

NOTE:
- CORRECT KNOCKOUT TOOL REQUIRED FOR PUNCHING KNOCKOUTS. DO NOT DRILL THROUGH KNOCKOUTS
- CONDUIT MUST BE PROPERLY SECURED TO PREVENT DAMAGE TO CABINETS AND OR CABLING





PLAN VIEW

B160 ERICSSON SITE SUPPORT BATTERY CABINET

1 ERICSSON B160 BATTERY CABINET SPECIFICATIONS

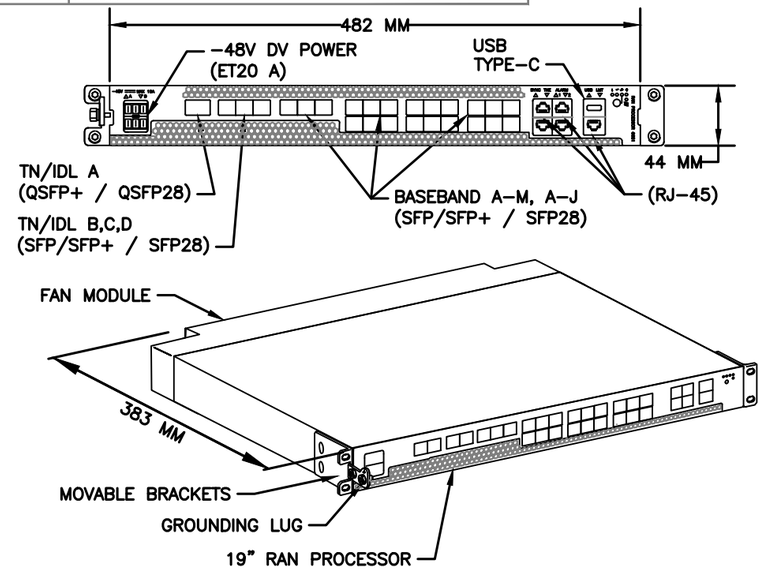
SCALE: N.T.S.

NOTE: THIS SHEET WAS CREATED BY OTHERS AND PROVIDED AT THE REQUEST OF THE CUSTOMER WITHOUT EDIT.

SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-606	0

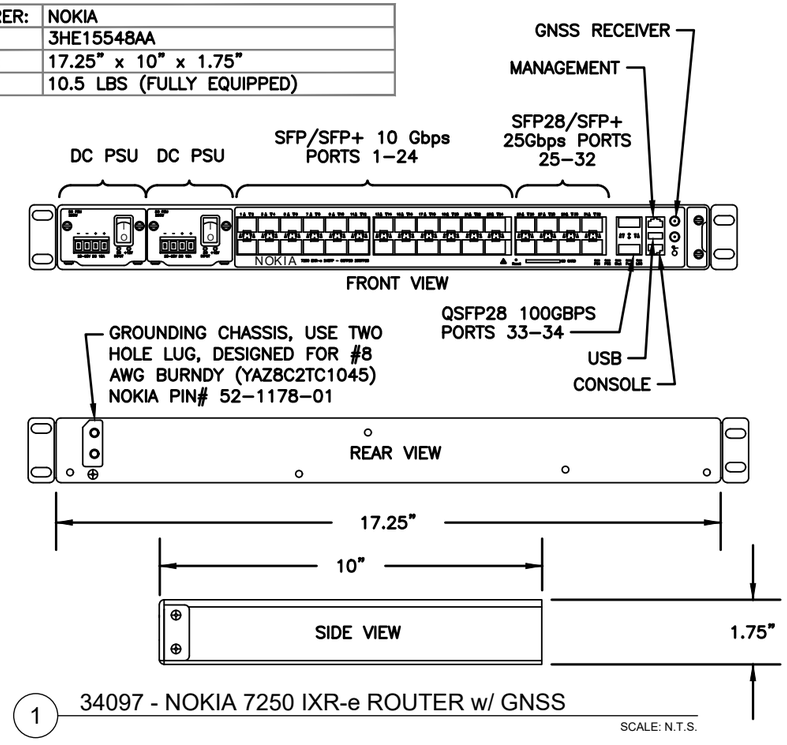
MANUFACTURER:	ERICSSON
MODEL:	6672 RAN PROCESSOR (KDU1370114/11)
DIMENSIONS:	44 MM X 482 MM X 383 MM (H" X W" X D")
WEIGHT:	8 KG



1 34916 - ERICSSON 6672 RAN PROCESSOR

SCALE: N.T.S.

MANUFACTURER:	NOKIA
MODEL:	3HE15548AA
DIMENSIONS:	17.25" x 10" x 1.75"
WEIGHT:	10.5 LBS (FULLY EQUIPPED)



1 34097 - NOKIA 7250 IXR-e ROUTER w/ GNSS

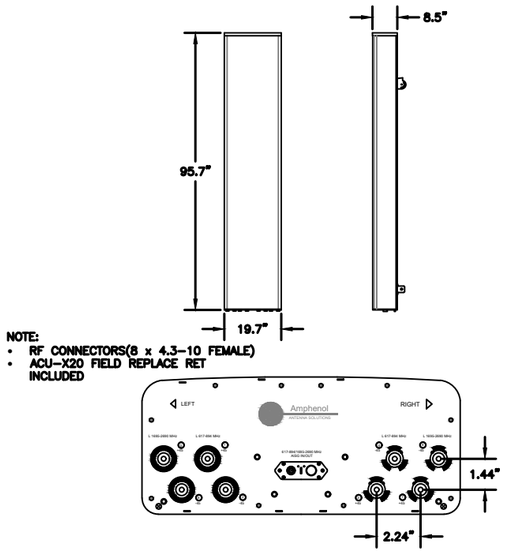
SCALE: N.T.S.

NOTE: THIS SHEET CREATED BY OTHERS AND PROVIDED BY REQUEST OF CUSTOMER WITHOUT EDIT.

SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-607	0

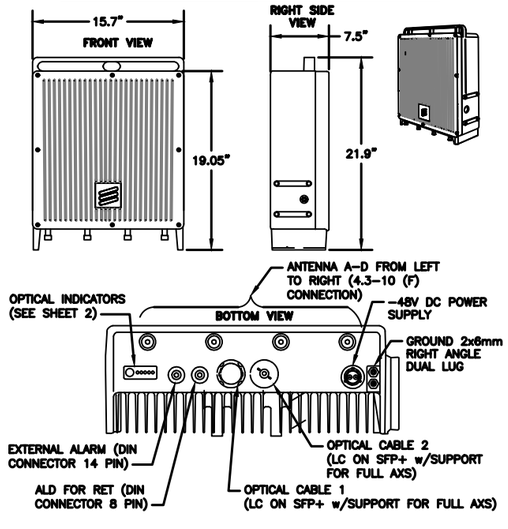
MANUFACTURER:	AMPHENOL
MODEL:	APXVAALL24M-U-J20
DIMENSIONS:	95.7" x 19.7" x 8.5" (H x W x D)
WEIGHT:	86 LB
BAND:	MID BAND (5-8 PORT)
MOUNTING KIT:	APM40-5E BEAM TILT KIT & APM40-E10T (19.4 LBS) INCLUDED



1 34877 - RFS APXVAALL24M-U-J20

SCALE: N.T.S.

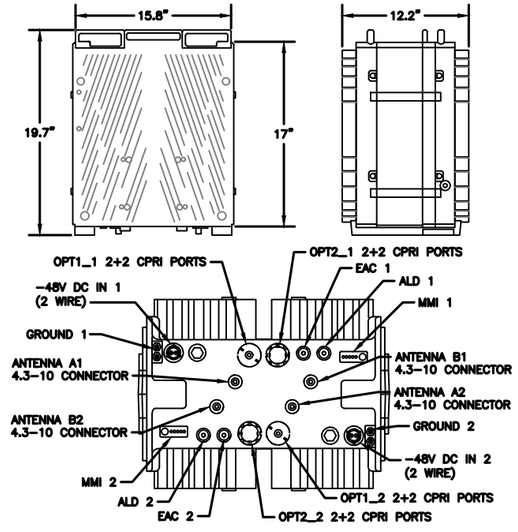
MANUFACTURER:	ERICSSON
MODEL:	4480 RADIO (KRC 161 922/1)
DIMENSIONS:	21.9" x 15.7" x 7.5" (H x W x D)
MODEL BAND:	B71, B85 FOR NR AND LTE
WEIGHT:	81 LBS
BRACKET WEIGHT:	3.75 LBS (MULTI ERS #109 1973/2)



2 34372 - ERICSSON 4480 RADIO

SCALE: N.T.S.

MANUFACTURER:	ERICSSON
MODEL:	4460 RADIO B2/25 B66 (KRC 161 912/3)
DIMENSIONS:	19.7" x 15.8" x 12.2" (H" x W" x D")
WEIGHT:	109 LBS
BRACKET WEIGHT:	4.8 LBS (ERS HEAVY #SXK1255993/1)



3 34373 - ERICSSON 4460 RADIO B2/25 B66

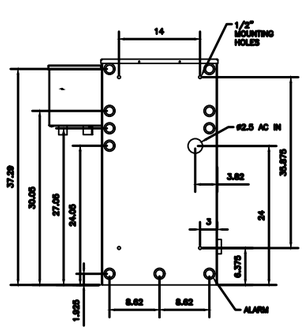
SCALE: N.T.S.

NOTE: THIS SHEET CREATED BY OTHERS AND PROVIDED BY REQUEST OF CUSTOMER WITHOUT EDIT.

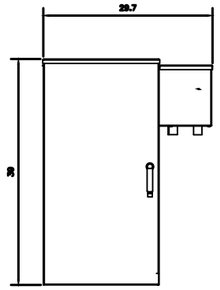
SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-608	0

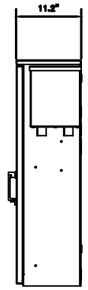
MANUFACTURER:	DELTA
MODEL:	4910163600 225AMP MINI PPC CAMLOCK w/ALARM
DIMENSIONS:	29.7" x 39" x 11.2" (W x H x D)
WEIGHT:	71 LBS



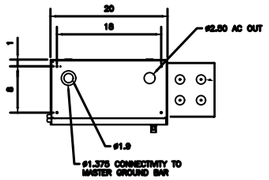
BACK VIEW



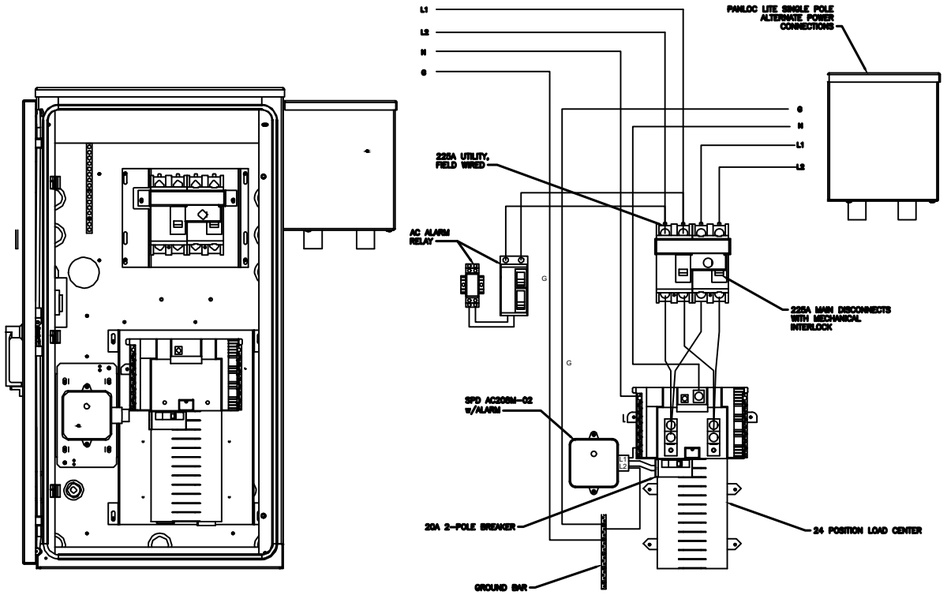
FRONT VIEW



RIGHT SIDE VIEW



BOTTOM VIEW

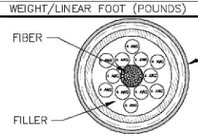


FRONT FACE DOOR OPEN

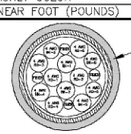
1 34293 - DELTA 225AMP MINI PPC HR CAMLOCK w/ALARMS

SCALE: N.T.S.

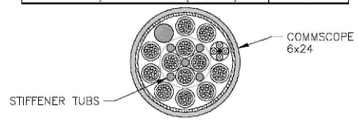
PARAMETER	VALUE
NOMINAL DIAMETER (INCHES)	2
CROSS-SECTION AREA (SQUARE INCHES)	3.13
JACKET COLOR	BLACK
WEIGHT/LINEAR FOOT (POUNDS)	2.55



PARAMETER	VALUE
NOMINAL DIAMETER (INCHES)	1.79
CROSS-SECTION AREA (SQUARE INCHES)	2.52
JACKET COLOR	BLACK
WEIGHT/LINEAR FOOT (POUNDS)	2.65



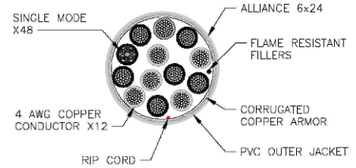
PARAMETER	VALUE
NOMINAL DIAMETER (INCHES)	1.76
CROSS-SECTION AREA (SQUARE INCHES)	2.43
JACKET COLOR	BLACK
WEIGHT/LINEAR FOOT (POUNDS)	2.29



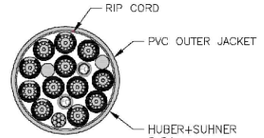
(6x24) HYBRID TRUNK CROSS SECTION 1

8.5" x 11" SCALE N.T.S. | 11" x 17" SCALE N.T.S.

PARAMETER	VALUE
NOMINAL DIAMETER (INCHES)	1.8
CROSS-SECTION AREA (SQUARE INCHES)	2.54
JACKET COLOR	BLACK
WEIGHT/LINEAR FOOT (POUNDS)	2.48



PARAMETER	VALUE
NOMINAL DIAMETER (INCHES)	1.62
CROSS-SECTION AREA (SQUARE INCHES)	2.04
JACKET COLOR	BLACK
WEIGHT/LINEAR FOOT (POUNDS)	2.39



(6x24) HYBRID TRUNK CROSS SECTION 2

8.5" x 11" SCALE N.T.S. | 11" x 17" SCALE N.T.S.

Cable Vendor	Cable Type	Nominal OD (in.)	C.S. Area (sq. in.)	Weight (lbs./ft)	enTop Breakout	MAX ENTITLEMENT	
HCS 2.0	6 AWG 25' to 225' cable lengths				HCS Pendant (Breakout) Dimension (in.)		
Alliance	6x24 6AWG	1.46	1.67	1.61	16.36 x 9.30 x 5.79 (sq./in 152.15)	Nominal OD (in.)	1.55
CommScope	6x24 6AWG	1.55	1.89	1.71	19.37 x 10.83 x 5.12 (sq./in 235.07)	C.S. Area (sq./in.)	1.89
NWS	6x24 6AWG	1.48	1.72	1.61	15.95 x 10.20 x 3.21 (sq./in 162.69)	Weight (lbs./ft)	1.71
Amphenol	6x24 6AWG	1.46	1.67	1.65	19.37 x 10.83 x 5.12 (sq./in 209.78)	Pendant (sq/in)	235.07
	4 AWG 250' to 450' cable lengths						
Alliance	6x24 4AWG	1.8	2.54	2.48	16.36 x 9.30 x 5.79 (sq./in 152.15)	Nominal OD (in.)	1.8
CommScope	6x24 4AWG	1.76	2.43	2.4	19.37 x 10.83 x 5.12 (sq./in 235.07)	C.S. Area (sq./in.)	2.54
NWS	6x24 4AWG	1.79	2.52	2.65	15.95 x 10.20 x 3.21 (sq./in 162.69)	Weight (lbs./ft)	2.65
Amphenol	6x24 4AWG	1.71	2.3	2.55	19.37 x 10.83 x 5.12 (sq./in 209.78)	Pendant (sq/in)	235.07
6x24					6x24 Canister Breakout - OD x Length (in.)		
Alliance	6x24 4AWG	1.8	2.54	2.48	3.11 x 9.45 (c.s. Area 7.60)	Nominal OD (in.)	2
CommScope	6x24 4AWG	1.76	2.43	2.29	2.68 x 9.81 (c.s. Area 5.64)	C.S. Area (sq./in.)	3.13
H&S	6x24 4AWG	1.62	2.04	2.39	3.82 x 9.26 (c.s. Area 11.46)	Weight (lbs./ft)	2.65
NWS	6x24 4AWG	1.79	2.52	2.65	2.99 x 8.82 (c.s. Area 7.02)	Canister (sq/in)	11.46
RFS	6x24 4AWG	2	3.13	2.55	2.88 x 9.72 (c.s. Area 6.51)		

(6x24) HYBRID TRUNK ENTITLEMENT INFORMATION 3

8.5" x 11" SCALE N.T.S. | 11" x 17" SCALE N.T.S.

2 HYBRID TRUNK INFORMATION (6X24)

SCALE: N.T.S.

NOTE: THIS SHEET CREATED BY OTHERS AND PROVIDED BY REQUEST OF CUSTOMER WITHOUT EDIT.

SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-609	0

Antenna Mount Analysis Report

Mount Type	:	**10.5 ft Sector**
ATC Asset Name	:	**MOUNT ZION NY**
ATC Asset Number	:	**10330**
Engineering Number	:	**14912089_C8_01**
Mount Elevation	:	**212.0 ft**
Carrier	:	**T-Mobile**
Carrier Site Name	:	**Mt Zion**
Carrier Site Number	:	**UP50577A**
Site Location	:	**366 Mount Zion Rd** **Marlboro, NY 12542-5020** **41.640933, -74.020889**
County	:	**Ulster**
Date	:	**December 23, 2024**
Max Usage	:	**91%**
Result	:	**Contingent Pass**

Prepared By:
Yagmur Topcuoglugil Isik, P.E.
TEP # 59023.1042194

Reviewed By:

Michael Berger
Digitally signed by Michael Berger
Date: 2025.01.02 16:11:13 -05'00'

Introduction

The purpose of this report is to summarize results of the antenna mount analysis performed for T-Mobile at 212.0 ft.

Supporting Documents

Spec. Sheet	Spec Sheet for Site Pro VFA10-HD
RFDS	RFDS dated November 5, 2024
Site Specific Study	ICE Study dated, August 23, 2019

Analysis

This antenna mount was analyzed using RISA-3D v22 analysis software.

Basic Wind Speed:	113 mph (3-Second Gust)
Basic Wind Speed w/ Ice:	68 mph (3-Second Gust) w/ 0.5 in. radial ice thickness
Codes:	ANSI/TIA-222-I
Risk Category:	II
Exposure Category:	B
Topographic Procedure:	Method 2
Topographic Feature:	Hill
Crest Height:	217 ft
Crest Length:	2360 ft
Spectral Response:	Ss = 0.21, S_1 = 0.048
Site Class:	D - Stiff Soil
Live Loads:	Lm = 500 lbs*, Lv = 250 lbs*

***Live Load(s) reduction is confirmed to either not govern or not be applicable**
****Wind pressures have been determined per the site-specific climatic study in accordance with ASCE 7-22 Section 26.5.3, IBC Section 1609.3, and TIA-222-I Section 2.6.6.2.2.**
*****Ice and concurrent wind pressures have been determined per the site-specific climatic study in accordance with ASCE 7-22 Section 10.1.1, IBC Section 1614, and TIA-222-I Section 2.6.4.1.**

Conclusion

Based on the analysis results, the antenna mount meets the requirements per the applicable codes listed above. The mount can support the equipment as described in this report.

- Analysis is based on new Site Pro VFA10-HD-NPNH Sector Mounts.
- Install (9) SitePro P30120 2.9" O.D. x 10'-0" Mount Pipes to accommodate the proposed antenna installation. Utilize Site Pro FCX45-U Crossover Kits.

If you have any questions or require additional information, please reach out to your American Tower contact. If you do not have an American Tower contact and have an Engineering question, please contact MountAnalysis@americantower.com. Please include the American Tower site name, site number, and engineering number in the subject line for any questions.

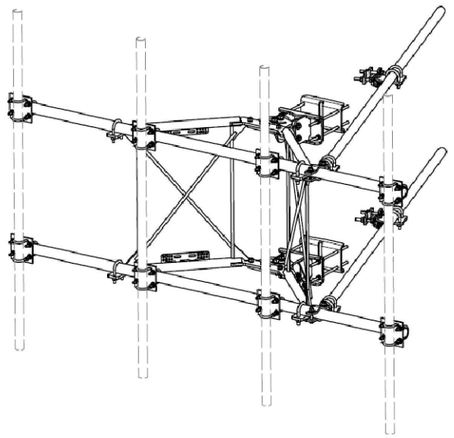
ATC Tower Services, LLC - 1 Fenton Main Street, Suite 300 - Cary, NC 27511 - 919.468.0112 Office - 919.466.5414 Fax - www.americantower.com

1 MOUNT ANALYSIS

NOTE: THIS SHEET WAS CREATED BY OTHERS AND PROVIDED AT THE REQUEST OF THE CUSTOMER WITHOUT EDIT. PLEASE REFERENCE THE MOUNT ANALYSIS REPORT FOR COMPLETE MOUNT ANALYSIS CALCULATIONS AND DETAILS. SUPPLEMENTAL PAGES INCLUDED IN THE CONSTRUCTION DRAWINGS ARE FOR REFERENCE ONLY. GENERAL CONTRACTOR IS TO VERYIFY THEY HAVE THE MOST RECENT MOUNT ANALYSIS PRIOR TO CONTRUCTION.

SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-610	0



PARTS LIST

ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	2	X-VFAW	SUPPORT ARM		71.41	142.81
2	1	X-HDCAMTBW	CLAMP WELDMENT FOR BCAM-HD		33.86	33.86
3	1	X-MHTPHD	MULTI-HOLE TAPER PLATE WELDMENT		36.24	36.24
4	2	X-VFAPL4	VFA-HD PIVOT PLATE	12 in	15.88	31.77
5	2	X-LCBP4	BENT BACKING PLATE	13 in	19.00	38.01
6	1	X-HDCAMSS	ANGLE ADJUSTMENT WELDMENT FOR BCAM-HD		16.39	16.39
7	4	X-SPTB	SLIDING PIPE TIE BACK PLATE	5 1/2 in	5.87	23.49
8	1	X-HDCAMSP	POSITIONING PLATE WELDMENT FOR BCAM-HD		2.58	2.58
9	4	X-TBCA	TIE BACK CLIP ANGLE		2.01	8.02
10	8	SCX2	CROSSOVER PLATE	7 in	4.80	38.37
11	4	MCP	CLAMP HALF 1/2" THICK, 11-5/8" LONG	12 1/16 in	3.59	14.37
12	8	DCP	1/2" THICK, 5-3/4" CNTER TO CENTER CLAMP HALF	8 1/8 in	2.36	18.90
13	2	P2126	2-3/8" X 126" (2" SCH. 40) GALVANIZED PIPE	126 in	40.75	81.50
14	2	P30126	2-7/8" O.D. X 126" SCH. 40 PIPE	126 in	64.63	129.25
15	4	A94212	3/4" x 2-1/2" UNC HEX BOLT (A325)	2 1/2 in	0.48	1.92
16	4	G34FW	3/4" HDG USS FLATWASHER		0.06	0.24
17	4	G34LW	3/4" HDG LOCKWASHER		0.04	0.17
18	4	G34NUT	3/4" HDG HEAVY 2H HEX NUT		0.21	0.85
19	8	GS8R-18	5/8" x 18" THREADED ROD (HDG.)	18 in	0.40	3.19
20	4	GS8R-12	5/8" x 12" THREADED ROD (HDG.)		1.05	4.18
21	4	GS8R-8	5/8" x 8" THREADED ROD (HDG.)		0.70	2.79
22	4	X-UBS300	5/8" X 3" X 5-1/4" X 2-1/2" U-BOLT (HDG.)		1.16	4.60
23	8	X-UBS258	5/8" X 2-5/8" X 4-1/2" X 2" U-BOLT (HDG.)		1.00	8.00
24	2	G6807	5/8" x 7" HDG HEX BOLT GR5 FULL THREAD	7 in	0.70	1.41
25	1	G6806	5/8" x 6" HDG HEX BOLT GR5 FULL THREAD	6 in	0.62	0.62
26	8	G6804	5/8" x 4" HDG HEX BOLT GR5		0.44	3.55
27	4	G6802	5/8" x 2" HDG HEX BOLT GR5		0.27	1.08
28	8	A582114	5/8" x 2-1/4" HDG A325 HEX BOLT	2 1/4 in	0.31	2.50
29	25	G58FW	5/8" HDG USS FLATWASHER	1/8 in	0.07	1.76
30	66	G58LW	5/8" HDG LOCKWASHER		0.03	1.72
31	71	G58NUT	5/8" HDG HEAVY 2H HEX NUT		0.13	9.22
32	32	X-UB1306	1/2" X 3" X 6" X 2" GALV U-BOLT		0.74	23.64
33	16	X-UB1212	1/2" X 2" X 3" X 1-1/4" U-BOLT (HDG.)		0.60	9.56
34	64	G12FW	1/2" HDG USS FLATWASHER	3/32 in	0.03	2.18
35	64	G12LW	1/2" HDG LOCKWASHER	1/8 in	0.01	0.89
36	64	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	4.58
					TOTAL WT. #	713.44

REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE
D	UPDATED BCAM VERSION 1 TO BCAM VERSION 2		CEK	6/29/2018
C	UPDATED PIN LEG CONNECTION TO BCAM CONNECTION		CEK	12/14/2017
B	CHANGED TIE-BACK BACK CONNECTION		CEK	7/28/2017
A	CHANGED TIE-BACK FRONT CONNECTION		CEK	2/2/2017

REVISION HISTORY

TOLERANCE NOTES

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

PROPRIETARY NOTE:
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DESCRIPTION: 10' 6" HEAVY DUTY V-FRAME ASSEMBLY WITH TWO STIFF ARMS

SITE PRO 1 — A Valmont Company

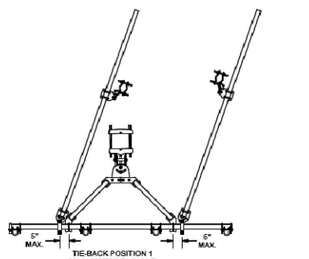
Engineering Support Team: 1-888-753-7446

Locations: New York, NY; Atlanta, GA; Los Angeles, CA; Plymouth, IN; Salem, OR; Dallas, TX

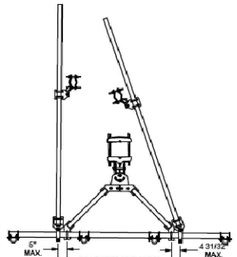
CPD NO.	DRAWN BY		ENG. APPROVAL	PART NO.	
	CEK	1/25/2017		VFA10-HD	
CLASS	SUB	DRAWING USAGE	CHECKED BY	DWG. NO.	
81	02	CUSTOMER	BMC 12/14/2017	VFA10-HD	

SHEET 1 OF 5

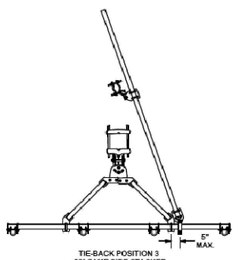
TIE-BACK POSITIONS



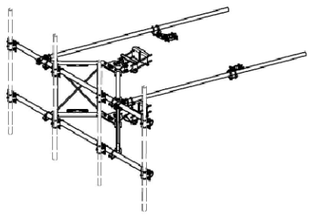
TIE-BACK POSITION 1
-20° / +20° TOP PARALLEL

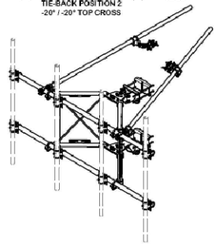


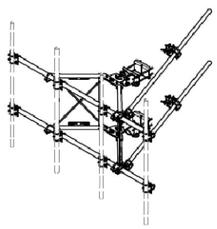
TIE-BACK POSITION 2
-20° / -20° TOP CROSS



TIE-BACK POSITION 3
-20° SAME SIDE STACKED







REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE
D	UPDATED BCAM VERSION 1 TO BCAM VERSION 2		CEK	6/29/2018
C	UPDATED PIN LEG CONNECTION TO BCAM CONNECTION		CEK	12/14/2017
B	CHANGED TIE-BACK BACK CONNECTION		CEK	7/28/2017
A	CHANGED TIE-BACK FRONT CONNECTION		CEK	2/2/2017

REVISION HISTORY

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Locations: New York, NY; Atlanta, GA; Los Angeles, CA; Plymouth, IN; Salem, OR; Dallas, TX

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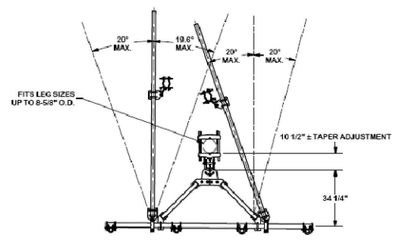
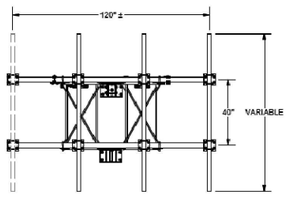
81	02	CUSTOMER	BMC 12/14/2017	VFA10-HD	

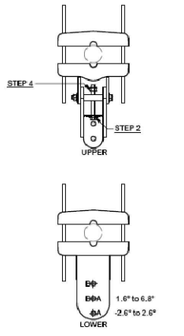
SHEET 2 OF 5

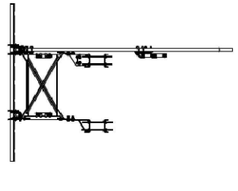




ANGLE CALIBRATING PROCEDURE:

1. MEASURE TOWER TAPER AND PICK LOWER BRACKET HOLE:
   - HOLE A = -2.6° TO 2.6°
   - HOLE B = 1.6° TO 6.8°
2. USE CALIBRATING BOLT TO ADJUST FRAME TO DESIRED TAPER
3. TORQUE LOCKING BOLTS TO 100 ft.-lbs.
4. ADVANCE LOCKING NUT TO POSITIONING PLATE, THEN TIGHTEN.





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SHEET 3 OF 5

1 MOUNT SPECIFICATIONS

NOTE: THIS SHEET CREATED BY OTHERS AND PROVIDED BY REQUEST OF CUSTOMER WITHOUT EDIT.

SUPPLEMENTAL

SHEET NUMBER: R-611

REVISION: 0

CENTERLINE

ATTACHMENT 7

CENTERLINE

October 23, 2025

ATTN: Tom Corcoran, CEO
ATTN: Members of the Planning Board
Town of Marlborough
21 Milton Turnpike
Suite 200
Milton, NY 12547

RE: American Tower Corp/T-Mobile Northeast LLC - Eligible Facilities Request to Co-locate Transmission Equipment on an Existing Wireless Tower Located at 366 Mt Zion Rd, Town of Marlborough, County of Ulster, State of New York

To Whom It May Concern:

Centerline Communications LLC, on behalf of American Tower Corp and T-Mobile Northeast, LLC, ("Applicant") is submitting the attached application to add, remove, modify, or replace Transmission Equipment (the "Request") at the Tower located at **366 Mt. Zion Road** in the **Town of Marlborough ("Town").** Attached to this cover letter, please find a table of contents listing all exhibits including supporting documents that are attached to, and made a part of, this Eligible Facilities Request.

A. T-Mobile's Proposed Project is an Eligible Facilities Request that Must Be Granted

This Request is covered by Section 6409 of the Spectrum Act (47 U.S.C. Sect. 1455(a)),[1] which provides that state and local governments "may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station." In this case, the enclosed Request involves a proposal to co-locate T-Mobile Equipment on the existing tower. The existing Tower is a structure that is 260-feet-tall guyed Tower which presently contains wireless facilities.

The Federal Communications Commissions ("FCC") determined that any modification to an existing telecommunications Tower that meets the following criteria does not substantially change the physical dimensions of the existing Tower (47 C.F.R. § 1.6100(b)(7)), and therefore is an Eligible Facilities Request that must be granted under Section 6409. The proposed project satisfies those criteria because it:

[1] See also 47 C.F.R. § 1.6100 (the FCC's 6409 implementing regulations).

12579 Sagewood Drive
Venice, FL 34293
941-549-7263

1) Will not increase the height of the Tower by more than ten percent (10%) or twenty (20) feet, whichever is greater;

   Details: The proposed project will not increase the height of the tower.

2) Does not protrude from the edge of the Tower by more than twenty (20) feet;

   Details: The proposed project will not involve equipment that will protrude from the edge of the tower by more than twenty (20) feet.

3) The proposed project does not defeat any existing concealment elements at the site. To be considered a "concealment element," the element must have been a part of the facility at either:

   (1) the time of original approval; or

   (2) at the last modification of the tower if such modification occurred prior to the February 22, 2012 or outside the 6409(a) process (whichever is later).

   A "concealment elements" is something that makes a wireless facility appear to be something "fundamentally different than a wireless facility," it does not include "any attribute that minimizes the visual impact of a facility, such as a specific location on a rooftop site or placement behind a tree line or fence."[2] Moreover, a modification can increase the size of the concealment features, so long as they: (i) do not increase by more than the criteria in (1) and (2) above, and (ii) would continue to make "the structure appear not to be a wireless Facility." If so, then the modification would not defeat concealment.

   Details: The existing site does not have any existing concealment elements, so this criterion is satisfied.

4) Does not entail any excavation more than 30 feet outside the current site area;

   Details: The proposed project will not involve excavations outside the current site area or less than 30 feet outside the current site area.

5) Does not involve the installation of more than the standard number of equipment cabinets for the technology involved, not to exceed four.

[2] *Implementation of State and Local Governments' Obligation to Approve Certain Wireless Facility Modification Requests Under Section 6409(a) of the Spectrum Act of 2012*, FCC 20-75, Declaratory Ruling and Notice of Proposed Rulemaking, ¶ 35 (June 10, 2020). ("5G Upgrade Order").

Details: The proposed project will involve the installation of three (3) new cabinets.

6) The proposed project complies with all prior conditions of approval for the existing site, except for any non-compliance that is due to an increase in height, increase in width, addition of equipment cabinets, or new excavation that does not exceed the thresholds above. These conditions may relate to aesthetics or minimizing the visual impact of the wireless facility. To be enforced, there must be express evidence of specific conditions of approval and continued compliance with such conditions.

Response: Not Applicable.

Finally, all of the equipment being installed as part of this Request qualifies as Transmission Equipment under the FCC's rules at 47 C.F.R. § 1.6100(b)(8). Based on the foregoing, the Request qualifies for expedited processing under the Spectrum Act.

B. The 60 day Shot Clock Applies to All Necessary Permits or Authorizations to Necessary for T-Mobile to Proceed with the Request

Under Section 6409 "a State or local government may not deny, and shall approve, any eligible facilities request… within 60 days of the filing of a complete application."[3] As the FCC's explained, that time period covers "all qualifying applications" and all necessary permits and authorizations.[4] Where a jurisdiction requires an applicant to obtain clearance from separate departments and/or to obtain numerous permits, the FCC explained that the applicant starts **the 60 day shot clock when: 1) it takes the "first procedural step" that the jurisdiction requires, even if there are multiple potential "first steps" with various municipal committees or departments**, and **2) the applicant provides written documentation demonstrating that the applicable eligible facilities request criteria are satisfied.**[5] Here, the 60-day shot clock starts with the filing of the enclosed application.

C. Notice of Expedited Permit Processing and Deemed Granted Remedy

Under federal law, any Eligible Facilities Request is deemed granted 60 days after a complete application is filed. Thus, if 60 days pass after the submission of this Request and

[3] *Id.* ¶ 39 (June 10, 2020). 47 U.S.C. § 1455(a)(1).
[4] *Town of Portland v. U.S.*, 2020 U.S. App. Lexis 25553 **48-49 (9th Cir. Aug. 12, 2020).
[5] *5G Upgrade Order*, ¶¶ 15-16 (June 10, 2020). The FCC also explained that its ruling provided "considerable flexibility" to structure their procedures for review of Eligible Facilities Requests, "but prevent localities from 'impos[ing] lengthy and onerous processes not justified by the limited scope of review contemplated' by Section 6409(a)." *Id.* ¶ 17.

the Town has not acted to grant or deny the Request, it will be deemed granted.[6] At that time, the applicant may advise the Town that the application has been deemed granted.

If the Town wishes to contest whether Request has been deemed granted, the burden is on the Town to file a lawsuit in a court of competent jurisdiction within 30 days after receipt of a written communication notifying it that the Request has been deemed granted. Here, it is clear that the deemed granted remedy applies to all of the Town's requirements.

T-Mobile is committed to working cooperatively with you to process this request in a timely and efficient manner. Please do not hesitate to contact me if you have questions at (941)-549-7263.

Respectfully Submitted,

Cullen Morgan
Site Acquisition Consultant
Centerline Communications, LLC
Email: cmorgan@clinellc.com
Mobile: (941)-549-7263

[6] Under the FCC's rules, the jurisdiction has 30 days to advise the applicant of the completeness of its application. The rules also provide for the tolling of the shot clock under certain situations.

CENTERLINE

CONTENTS:

CENTERLINE

EXHIBIT 1

TOWN OF MARLBOROUGH

" Heart Of the Hudson Valley Fruit Section"
MILTON, ULSTER COUNTY, NEW YORK 12547
DEPARTMENT OF BUILDINGS

TEL NO. (845) 795-5100 Ext. # 7 - FAX NO. (845) 795-6171

THOMAS CORCORAN JR.
BUILDING INSPECTOR
CODE ENFORCER
FIRE INSPECTOR

Application for Wireless Communication

(To Include DAS and Small Cell Nodes)

Building Permit # _____

(This application must be completely filled out and submitted with a $ 300.00 Fee)

Wireless Carrier : T-Mobile Northeast LLC **Application Date** 09/24/2025

Project Name : UP50577A T-Mobile NSD

Project Address : 366 Mt Zion Rd, Marlboro, NY 12542, USA

Email : cmorgan@clinellc.com

Parcel Number : Section 102.3 **Block** 1 **Lot** 36.100

Is the Project Located in The Public Right-of-Way ? ☐**Yes** ☐**No**

Zoning District _____

☐**Minor Facility (Node)** ☑**Modification** ☐**Removal** ☐**Replacement** ☐**Repair**

Project Description : Colocation of T-Mobile Equipment on Existing Tower owned by American Tower Corp. See attached for full narrative.

Application submittal may require a appointment / application with the Planning Board

Separate Applications and fees will be required for multiple facilities and locations

APPLICANT INFORMATION

Applicant (Main Contact) T-Mobile Northeast LLC (Tenant) (c/o Cullen Morgan, Agent)

City, State, Zip: 12579 Sagewood Drive, Venice, FL 34293

Phone : 941-549-7263 **Email :** cmorgan@clinellc.com

Property Owner : American Tower Corp (c/o Cullen Morgan, Agent)

City, State, Zip: 12579 Sagewood Drive, Venice, FL 34293

Phone : 941-549-7263 **Email :** cmorgan@clinellc.com

Wireless Carrier Contact : Cullen Morgan, Centerline Commmunications (Agent to TMO & ATC)

City, State, Zip: 12579 Sagewood Drive, Venice, FL 34293

Phone : 941-549-7263 **Email :** cmorgan@clinellc.com

Additional Contact: Airian Eastman, Centerline Communications
Phone: (607)-304-7209
Email: aeastman@clinellc.com

ADDITIONAL SUBMITTAL REQUIREMENTS

Description of proposed use including type of installation, number of antennas, height, type of screening proposed (if any) and other relevant information.

Photo Simulations of the proposed wireless communication installation, including the existing setting, site location(s) , elevations and any other relevant information.

Project plans to include plot plan, any proposed grading and/or trenching, set back area, elevation drawn to scale to accurately delineate the proposed project and equipment details for new and existing equipment associated with the communication facility.

Work permits to include any Local, State or Federal permits required to either erect, replace or repair any equipment associated with the communication facility. Facilities located within the public right-of-way require the applicant to obtain a separate permit from the agency having jurisdiction.

STANDARD PROJECT CONDITIONS

All wireless communication facilities which are erected, located, or modified within the town shall comply with both Chapter 152 and Chapter 153 of the Town of Marlborough Municipal Code

Regardless of any permit that may be granted in accordance with Chapter 152 and/or Chapter 153 the facility shall be installed and at all times maintained in compliance with the requirements of the Building Code.

Any lease of Town-owned property for the purpose of erecting a wireless communication facility shall require a negotiated lease agreement and/or such license, franchise, or other specified right granted by the Town in accordance with the Town Municipal Code.

All Telecommunication equipment and other components of the wireless communications facility shall not bear any signs or advertising devices other than certifications, warnings or other required seal or required signage.

The wireless communications facility shall be maintained to provide a high-quality appearance at all times

No wireless communication facility or accessory equipment installed or operated as part of the wireless communications facility shall interfere with any Town emergency transmission, signal or form of communication.

The applicant and project shall comply with requirements of all Federal, State, County and local agencies as are applicable to this project.

The applicant or its successors in interest shall indemnify, protect, defend and hold harmless, the Town, its elected officials, officers, employees, and agents from and against any and all claims, actions, causes of actions, proceedings, suits, damages, judgements, liens, levies, cost, and expenses of whatever nature arising out of or in any way related to this project.

HEIGHT REQUIREMENTS

Public highway rights of way where the facilities are situated on existing or new utility poles shall not exceed 50 feet in height.

Town of Marlborough rights of ways or any other municipal corporation within the Town of Marlborough where the facilities are situated on existing or new utility poles shall not exceed 35 feet in height.

Signature  Date 09/24/2025

Wireless Carrier : T-Mobile Northeast LLC & American Tower Corp

Wireless Carrier Contact : Cullen Morgan, Agent for American Tower & T-Mobile

City, State, Zip: 12579 Sagewood Drive, Venice, FL 34293

Phone : 941-549-7263 **Email :** cmorgan@clinellc.com

Parcel Number : Section 102.3 **Block** 1 **Lot** 36.100

ESTIMATED COST $75,000.00

BELOW IS FOR BUILDING DEPARTMENTS USE ONLY

TYPE OF INSPECTION :

(☐) 1. SITE INSPECTION -

(☐) 2. FINAL ELECTRIC -

(☐) 3. FINAL -

INSPECTOR'S COMMENTS

_____

_____

_____

_____

INSPECTORS'S SIGNATURE _____ **DATE** _____

CENTERLINE

EXHIBIT 2

July 3, 2025

ATTN: Planning Board
ATTN: Building Department
Town of Marlborough
21 Milton Turnpike
Suite 200
Milton, NY 12547

RE: **T-Mobile Application for Special Use Permit for a Broadcast and Communication Tower**
Site Address: 366 Mount Zion Rd, Marlboro, NY 12542
Parcel #/Tax Map #: 102.3-1-36.100
T-Mobile Site: UP50577A

To Whom It May Concern:

T-Mobile Northeast, LLC ("T-Mobile") hereby authorizes Centerline Communications, LLC to act on T-Mobile's behalf in applying for all necessary permits for the above-mentioned project.

Thank you for your help in this matter. If you should have any questions, please contact Cullen Morgan at (941)-549-7263.

Regards,

DocuSigned by:
Robert Phalen
F861E39C681D4B3...

Robert Phalen
Project Manager
T-Mobile Northeast, LLC

July 3, 2025

ATTN: Planning Board
ATTN: Building Department
Town of Marlborough
21 Milton Turnpike
Suite 200
Milton, NY 12547

RE: **T-Mobile Application for Special Use Permit for a Broadcast and Communication Tower**
Site Address: 366 Mount Zion Rd, Marlborough, NY 12542
Parcel #/Tax Map #: 102.3-1-36.100
T-Mobile Site: UP50577A

Applicant:	T-Mobile Northeast, LLC
Property Owner:	American Tower Corporation
Property Address:	366 Mount Zion Road, Marlborough, NY 12542
Assessor's Info:	102.3-1-36.100

To Whom It May Concern:

I am familiar with the above-mentioned application and hereby attest that the information included is accurate and complete. I declare that the above-statement is true and accurate to the best of my knowledge.

Sincerely,

DocuSigned by:
Robert Phalen
F861E39C681D4B3...

Robert Phalen
Project Manager
T-Mobile Northeast, LLC

STATEMENT OF COMPLIANCE

Applicant: T-Mobile Northeast LLC
Applicant Site #: UP50577A
Tower Address: 366 Mount Zion Rd, Marlborough, NY 12542

Applicant hereby confirms the following statements to be true:

(1) Applicant's proposed wireless telecommunications facilities shall be maintained in a safe manner, and in compliance with all conditions of the special use permit, without exception, unless specifically granted relief by the Town in writing, as well as all applicable and permissible local codes, local laws, and regulations, including any and all applicable Town, state and federal laws, rules, and regulations.

(2) The construction of the wireless telecommunications facilities is legally permissible, including, but not limited to, the fact that the applicant is authorized to do business in the state of New York.

Applicant: T-Mobile

Name: Robert Phalen

Signature: DocuSigned by: Robert Phalen F861E39C681D4B3...

Date: 7/8/2025

CENTERLINE

EXHIBIT 3

UP50577A/1218
24.140117.NL

SCHEDULE
LICENSE OF SPACE

This Schedule is executed and delivered pursuant to that certain Amended and Restated Master Tower Space License Agreement between American Tower and T-Mobile dated September 14, 2020, (as amended, the "***Restated MLA***") and that certain 2020 Site License Modification Agreement dated September 14, 2020 (as amended, the "***2020 SLMA***"). All terms and conditions of the Restated MLA and the 2020 SLMA are incorporated herein by reference and made a part hereof for all purposes.

This Schedule shall be deemed a "New License"

Upon the execution by T-Mobile and American Tower, T-Mobile hereby licenses a portion of the Communication Tower described below for the installation and operation of its Equipment described herein in accordance with the terms and conditions of the Restated MLA and 2020 SLMA and those set forth below:

T-Mobile Information:

T-Mobile's Name:	T-Mobile Northeast LLC, a Delaware limited liability company
Notice Address:	T-Mobile USA, Inc. 12920 S.E. 38th Street Bellevue, WA 98006 Attn: Lease Compliance Site No. UP50577A
Contact Name:	NOC
Contact Number:	877-611-5868
Fax Number:	N/A (if not provided)
Real Estate Site Acquisition contact:	N/A (if not provided)
Construction contact:	N/A (if not provided)

American Tower Information:

Notice Address:	American Tower Management, LLC, a Delaware limited liability company c/o American Tower Corporation 10 Presidential Way Woburn, MA 01801
Contact Name:	Contracts Manager
Contact Number:	(781) 926-4500
Fax Number:	(781) 926-4555
Construction contact	TBD
Remittance Address:	American Tower Corporation 29637 Network Place Chicago, IL 60673-1296

Tower Information:

American Tower Site Name:	MOUNT ZION NY
American Tower Site Number:	10330
American Tower Contract Number	
Coordinates:	Lat: 41-38-27.36 N; Lon: 74-1-15.20 W
T-Mobile Site Name:	Mt Zion
T-Mobile Site Number:	UP50577A

License Fees and Term:

License Commencement Date: shall be the earlier of (i) the issue date of the NTP by American Tower or (ii) June 13, 2025 as set forth in Section 4.2 of the Restated MLA ("***License Commencement Date***").

License Fee: The License Fee attributable to this New License is included in the Monthly Aggregate Payment as set forth in the 2020 SLMA. Following December 31, 2030, the License Fee shall be as determined by completion of the 2020 SLMA Rent Reset.

Term: The Primary Term shall begin on the License Commencement Date set forth above and shall expire on April 30, 2035. Refer to Section 4.2 of the Restated MLA for the renewal periods and Section 8 of the 2020 SLMA for the Annual Escalator.

T-Mobile Equipment Information:

T-Mobile's Equipment under this Schedule shall be as set forth in Section 6 and Section 7 of the 2020 SLMA. Frequencies and channels and the identification of T-Mobile Equipment at the Communications Tower are described in Exhibit A (incorporated herein by reference and made a part hereof), subject to the actual installation at the Communications Tower as a part this Schedule. The precise frequency information shall be provided for informational purposes only; T-Mobile has the frequency rights set forth in the Restated MLA and the 2020 SLMA.

Site Drawings pursuant to Appendix VI of the Restated MLA, including the location of T-Mobile's Equipment within American Tower's building or shelter (if applicable) shall be attached hereto as Exhibit B.

[SIGNATURES ON FOLLOWING PAGE.]

Agreed to and Accepted by:
AMERICAN TOWER:
American Tower Management, LLC, a Delaware limited liability company

DocuSigned by:

By: Leah Barton
Name: Leah Barton
Title: Senior Counsel, US Tower
Date: January 6, 2025

Agreed to and Accepted by:
T-MOBILE:
T-Mobile Northeast LLC, a Delaware limited liability company

DocuSigned by:

By: Hans Fiedler
Name: Hans Fiedler
Title: Director
Date: January 6, 2025

The offer of license expressed in any this Schedule as offered to T-Mobile shall automatically expire and become void if not accepted and executed by T-Mobile and such acceptance received by American Tower within fifteen (15) Business Days from the date of American Tower's signature first above written and American Tower has sent the Site Information via U.S. Mail or American Tower online platform to T-Mobile's Real Estate/Site Acquisition contact specified in the Application form for the Applicable Tower space.

This Schedule does not constitute Licensed Space until completed and executed by both Parties in accordance with Section 3 of the Restated MLA.

T-Mobile Legal Approver

DocuSigned by:
ESC-L
0AAB61F87D4647F...

ESC-L

Licensee Signatory LeveL Required

TMO Signatory Level: 06

January 3, 2025

EXHIBIT A
List of Permitted Equipment

Exhibit A

Customer Name:	ATC Asset Name:	ATC Asset #:
T-MOBILE	MOUNT ZION NY	10330
	Customer Site Name: Mt Zion	**Customer Site #:** UP50577A

GROUND SPACE REQUIREMENTS

Total Lease Area Sq.Ft: 88.00	**Primary Contiguous Lease Area**	**L:** 11.00'	**W:** 8.00'	**H:**		**Sq.Ft:**	88.00
	Concrete Pad	11.00'	8.00'	N/A			88.00
	Generator AREA	9.00'	4.00'	N/A			36.00
	Outside Primary Lease Area	N/A	N/A	N/A		**Sq.Ft:**	N/A

BACKUP POWER REQUIREMENTS

Generator: Stand Alone | **Fuel Tank Size (gal):** 229.0 | **Fuel Type:** Diesel | **Fuel Tank Setback (radius):** N/A

UTILITY REQUIREMENTS

Power Provided By: Utility Company Direct

Telco/Interconnect: N/A

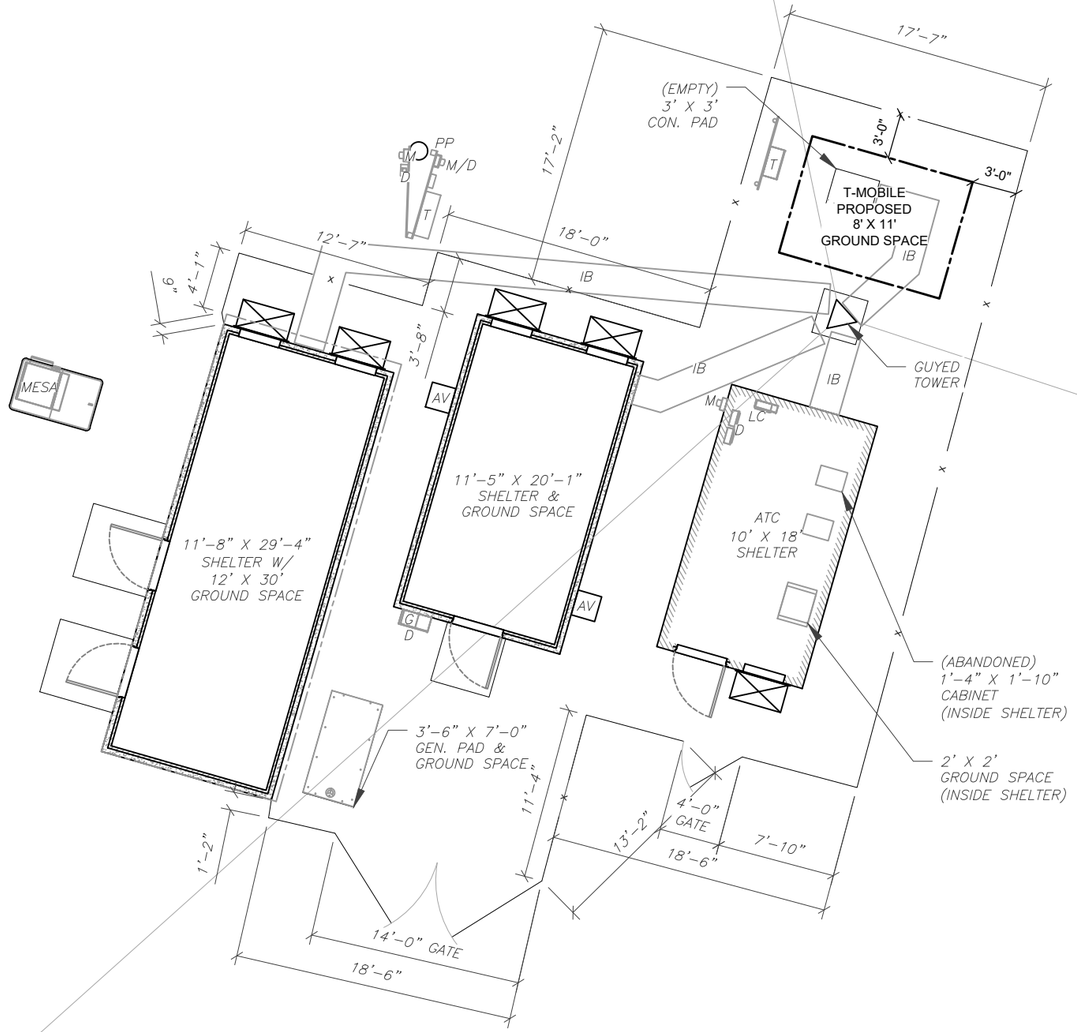
TRANSMITTER & RECEIVER SPECIFICATIONS

Type: N/A | **Quantity:** N/A | **TX Power (watts):** N/A | **ERP Power (watts):** N/A

EQUIPMENT SPECIFICATIONS

Type	PANEL	RRU/RRH	RRU/RRH	N/A	N/A	N/A
Manufacturer	Amphenol Antel	Ericsson	Ericsson	N/A	N/A	N/A
Model #	APXVAALL24M-U-J20	Radio 4480 B71+B85	Radio 4460 B25+B66	N/A	N/A	N/A
Dimensions HxWxD	95.7" x 19.7" x 8.5"	21.8" x 15.4" x 7.5"	19.6" x 15.7" x 12.1"	N/A	N/A	N/A
Weight (lbs.)	86.0	93.0	109.0	N/A	N/A	N/A
Location	Tower	Tower	Tower	N/A	N/A	N/A
RAD Center AGL	212.0'	212.0'	212.0'	N/A	N/A	N/A
Tip Height	216.0'	212.9'	212.8'	N/A	N/A	N/A
Base Height	208.0'	211.1'	211.2'	N/A	N/A	N/A
Mount Type	Sector Frame	Sector Frame	Sector Frame	N/A	N/A	N/A
Quantity	4	4	4	N/A	N/A	N/A
Azimuths/Dir. of Radiation	0/90/180/270	0/90/180/270	0/90/180/270	N/A	N/A	N/A
Quant. Per Azimuth/Sector	1/1/1/1	1/1/1/1	1/1/1/1	N/A	N/A	N/A
TX/RX Frequency Units	MHz	N/A	N/A	N/A	N/A	N/A
TX Frequency	668-688,728-734,1930-1945,2135-2155	N/A	N/A	N/A	N/A	N/A
RX Frequency	622-647,698-704,1850-1865,1735-1755	N/A	N/A	N/A	N/A	N/A
Using Unlicensed Frequencies?	No	No	No	N/A	N/A	N/A
Antenna Gain	N/A	0	N/A	N/A	N/A	N/A
Total # of Lines	N/A	3	N/A	N/A	N/A	N/A
Individual Line Configuration	N/A	Qty: 3 Type: Fiber/Hybrid Diameter: 2.00" (50.8 mm) Hybrid Azimuth/Sector: 1/1/1/0	N/A	N/A	N/A	N/A
Conduit Configuration	N/A	N/A	N/A	N/A	N/A	N/A

EXHIBIT B
Site Drawing/Structural
(if any)



GRAPHIC SCALE

10 0 5 10

(IN FEET)
1 UNIT = 10 FEET

AMERICAN TOWER®
A.T. ENGINEERING SERVICE, PLLC
1 FENTON MAIN STREET
SUITE 300
CARY, NC 27511
PHONE: (919) 466-0112

ATC SITE NUMBER:

10330

ATC SITE NAME:

MOUNT ZION NY
NEW YORK

LEGEND

⊗	GROUNDING TEST WELL
AV	AIR VENT
ATS	AUTOMATIC TRANSFER SWITCH
B	BOLLARD
C	CABINET
CS	COAX SHROUD
CSC	CELL SITE CABINET
D	DISCONNECT
E	ELECTRICAL
F	FIBER
GEN	GENERATOR
G	GENERATOR RECEPTACLE
HH, V	HANDHOLE, VAULT
HFC	HYDROGEN FUEL CELL
HSM	HYDROGEN STORAGE MATERIAL
IB	ICE BRIDGE
K	KENTROX BOX
LC	LIGHTING CONTROL
LPG	LIQUID PROPANE GAS
M	METER
MTS	MANUAL TRANSFER SWITCH
OHW	OVERHEAD WIRE
P	POWER
PP	POWER POLE
T	TELCO
TRN	TRANSFORMER
— — —	BUFFER (PROPERTY LINE)
— · — · —	GROUND SPACE (LEASE AREA)
— — — —	EASEMENT

DRAWN BY:	J.SIMMONS
DATE DRAWN:	12/02/24
CUSTOMER:	T-MOBILE
ATC PROJECT NO.:	14912089
ATC ASSET NO.:	10330

SITE PLAN LAYOUT

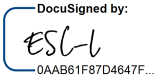
SHEET NUMBER:	AUDITED BY
SITE-1	ON

Certificate Of Completion

Envelope Id: 0FBA1500-5706-4232-BA33-BDF62EA1A836
Status: Completed
Subject: T-MOBILE@MOUNT ZION NY10330 / Customer # UP50577A / Mt Zion (14912089)
Project Number: 14912089
Source Envelope:
Document Pages: 7
Signatures: 3
Envelope Originator:
Certificate Pages: 6
Initials: 0
ATC Executables
AutoNav: Enabled
116 Huntington Ave # 1100
EnvelopeId Stamping: Enabled
Boston, MA 02116-5749
Time Zone: (UTC-05:00) Eastern Time (US & Canada)
atc.executables@americantower.com
IP Address: 172.56.196.157

Record Tracking

Status: Original
12/13/2024 12:21:20 PM
Holder: ATC Executables
atc.executables@americantower.com
Location: DocuSign

Signer Events	Signature	Timestamp
Michelle Hisert Michelle.Hisert@t-mobile.com Sr. Project Manager Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Accepted: 1/2/2025 8:45:35 AM ID: 72ff5129-319a-470c-9711-59bb24254dd1	**Completed** Using IP Address: 172.76.95.64	Sent: 1/2/2025 8:45:07 AM Viewed: 1/2/2025 8:45:35 AM Signed: 1/2/2025 8:45:42 AM
Robert Phalen Robert.Phalen1@T-Mobile.com Site Development Manager T-Mobile Usa, Inc Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Accepted: 4/25/2018 11:47:08 AM ID: f7afa27f-0172-4746-8d66-4e9060112abd	**Completed** Using IP Address: 172.56.7.236	Sent: 1/2/2025 8:45:44 AM Viewed: 1/2/2025 8:51:20 AM Signed: 1/2/2025 8:51:32 AM
Peter Berie Peter.Berie@T-Mobile.com Development Mngr Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Accepted: 1/2/2025 10:20:43 AM ID: 6e178256-f38b-4cfd-a5ef-97bdde8829da	**Completed** Using IP Address: 67.249.55.162	Sent: 1/2/2025 8:51:35 AM Viewed: 1/2/2025 10:20:43 AM Signed: 1/2/2025 10:20:47 AM
ESC-L feedback@esc-l.com ESC-L Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Accepted: 1/3/2025 9:47:57 AM ID: a73d26b3-5691-4aea-aa82-19331b4b6f1c	DocuSigned by:  0AAB61F87D4647F... Signature Adoption: Pre-selected Style Using IP Address: 208.127.55.210	Sent: 1/2/2025 10:20:49 AM Viewed: 1/2/2025 11:08:13 AM Signed: 1/3/2025 9:51:30 AM

Signer Events	Signature	Timestamp
Hans Fiedler Hans.Fiedler@T-Mobile.com Director Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Accepted: 1/6/2025 10:12:31 AM ID: af40098d-9df6-4166-b7e9-70834efe805b	DocuSigned by: Hans Fiedler DCF81D2FE15E46A... Signature Adoption: Pre-selected Style Using IP Address: 172.59.9.192	Sent: 1/3/2025 9:51:32 AM Viewed: 1/6/2025 10:12:31 AM Signed: 1/6/2025 10:12:47 AM
Paralegal legal.administration@americantower.com Legal Coordinator Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Accepted: 1/6/2025 2:45:54 PM ID: 283846b8-9abf-4f9a-9f2a-9d677e5b49f4	**Completed** Using IP Address: 76.119.224.222	Sent: 1/6/2025 10:12:49 AM Viewed: 1/6/2025 2:45:54 PM Signed: 1/6/2025 2:46:05 PM
Leah Barton leah.barton@americantower.com Senior Counsel, US Tower American Tower Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Accepted: 4/6/2021 10:39:09 AM ID: 9c88f428-ea04-440f-a086-28833bd5f487	DocuSigned by: Leah Barton 7463239C997C421... Signature Adoption: Pre-selected Style Using IP Address: 73.123.171.185	Sent: 1/6/2025 2:46:07 PM Viewed: 1/6/2025 4:13:49 PM Signed: 1/6/2025 4:13:54 PM

In Person Signer Events	Signature	Timestamp

Editor Delivery Events	Status	Timestamp

Agent Delivery Events	Status	Timestamp
Michelle Hisert michelle.hisert@t-mobile.com Sr. Project Manager Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Accepted: 1/2/2025 8:41:54 AM ID: e323472a-e884-47c7-925d-386c5bc983f1	VIEWED Using IP Address: 45.53.18.157	Sent: 12/13/2024 12:22:20 PM Viewed: 12/13/2024 2:54:55 PM Completed: 1/2/2025 8:45:06 AM

Intermediary Delivery Events	Status	Timestamp

Certified Delivery Events	Status	Timestamp

Carbon Copy Events	Status	Timestamp
T-Mobile Lease Compliance LeaseFileRequest@T-Mobile.com T-Mobile Usa, Inc Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Accepted: 3/6/2019 11:23:12 AM ID: d875b840-fb3e-4711-bfa8-94ad8a5cdfda	COPIED	Sent: 1/6/2025 4:13:56 PM

Carbon Copy Events	Status	Timestamp
ESC-L Feedback@esc-l.com ESC-L Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Accepted: 1/6/2025 6:23:49 AM ID: 9325af6c-87e8-4455-9aab-51847211de29	COPIED	Sent: 1/6/2025 4:13:57 PM

Witness Events	Signature	Timestamp

Notary Events	Signature	Timestamp

Envelope Summary Events	Status	Timestamps
Envelope Sent	Hashed/Encrypted	12/13/2024 12:22:20 PM
Envelope Updated	Security Checked	1/2/2025 8:45:06 AM
Envelope Updated	Security Checked	1/2/2025 8:45:06 AM
Envelope Updated	Security Checked	1/2/2025 8:45:06 AM
Envelope Updated	Security Checked	1/2/2025 8:45:06 AM
Envelope Updated	Security Checked	1/2/2025 8:45:06 AM
Envelope Updated	Security Checked	1/2/2025 8:45:06 AM
Envelope Updated	Security Checked	1/2/2025 8:45:06 AM
Envelope Updated	Security Checked	1/2/2025 8:45:06 AM
Envelope Updated	Security Checked	1/2/2025 8:45:06 AM
Envelope Updated	Security Checked	1/2/2025 8:45:06 AM
Certified Delivered	Security Checked	1/6/2025 4:13:49 PM
Signing Complete	Security Checked	1/6/2025 4:13:54 PM
Completed	Security Checked	1/6/2025 4:13:57 PM

Payment Events	Status	Timestamps

Electronic Record and Signature Disclosure

ELECTRONIC RECORD AND SIGNATURE DISCLOSURE

From time to time, American Towers LLC (we, us or Company) may be required by law to provide to you certain written notices or disclosures. Described below are the terms and conditions for providing to you such notices and disclosures electronically through your DocuSign, Inc. (DocuSign) Express user account. Please read the information below carefully and thoroughly, and if you can access this information electronically to your satisfaction and agree to these terms and conditions, please confirm your agreement by clicking the 'I agree' button at the bottom of this document.

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Withdrawing your consent

If you decide to receive notices and disclosures from us electronically, you may at any time change your mind and tell us that thereafter you want to receive required notices and disclosures only in paper format. How you must inform us of your decision to receive future notices and disclosure in paper format and withdraw your consent to receive notices and disclosures electronically is described below.

Consequences of changing your mind

If you elect to receive required notices and disclosures only in paper format, it will slow the speed at which we can complete certain steps in transactions with you and delivering services to you because we will need first to send the required notices or disclosures to you in paper format, and then wait until we receive back from you your acknowledgment of your receipt of such paper notices or disclosures. To indicate to us that you are changing your mind, you must withdraw your consent using the DocuSign 'Withdraw Consent' form on the signing page of your DocuSign account. This will indicate to us that you have withdrawn your consent to receive required notices and disclosures electronically from us and you will no longer be able to use your DocuSign Express user account to receive required notices and consents electronically from us or to sign electronically documents from us.

All notices and disclosures will be sent to you electronically

Unless you tell us otherwise in accordance with the procedures described herein, we will provide electronically to you through your DocuSign user account all required notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to you during the course of our relationship with you. To reduce the chance of you inadvertently not receiving any notice or disclosure, we prefer to provide all of the required notices and disclosures to you by the same method and to the same address that you have given us. Thus, you can receive all the disclosures and notices electronically or in paper format through the paper mail delivery system. If you do not agree with this process, please let us know as described below. Please also see the paragraph immediately above that describes the consequences of your electing not to receive delivery of the notices and disclosures electronically from us.

How to contact American Towers LLC:
You may contact us to let us know of your changes as to how we may contact you electronically, to request paper copies of certain information from us, and to withdraw your prior consent to receive notices and disclosures electronically as follows:
To contact us by email send messages to: Legal.administration@americantower.com

To advise American Towers LLC of your new e-mail address
To let us know of a change in your e-mail address where we should send notices and disclosures electronically to you, you must send an email message to us at Legal.administration@americantower.com and in the body of such request you must state: your previous e-mail address, your new e-mail address. We do not require any other information from you to change your email address..
In addition, you must notify DocuSign, Inc to arrange for your new email address to be reflected in your DocuSign account by following the process for changing e-mail in DocuSign.

To request paper copies from American Towers LLC
To request delivery from us of paper copies of the notices and disclosures previously provided by us to you electronically, you must send us an e-mail to Legal.administration@americantower.com and in the body of such request you must state your e-mail address, full name, US Postal address, and telephone number. We will bill you for any fees at that time, if any.

To withdraw your consent with American Towers LLC
To inform us that you no longer want to receive future notices and disclosures in electronic format you may:

i. decline to sign a document from within your DocuSign account, and on the subsequent page, select the check-box indicating you wish to withdraw your consent, or you may;
ii. send us an e-mail to Legal.administration@americantower.com and in the body of such request you must state your e-mail, full name, IS Postal Address, telephone number, and account number. We do not need any other information from you to withdraw consent..
The consequences of your withdrawing consent for online documents will be that transactions may take a longer time to process..

Required hardware and software

Operating Systems:	Windows2000? or WindowsXP?
Browsers (for SENDERS):	Internet Explorer 6.0? or above
Browsers (for SIGNERS):	Internet Explorer 6.0?, Mozilla FireFox 1.0, NetScape 7.2 (or above)
Email:	Access to a valid email account
Screen Resolution:	800 x 600 minimum
Enabled Security Settings:	•Allow per session cookies •Users accessing the internet behind a Proxy Server must enable HTTP 1.1 settings via proxy connection

** These minimum requirements are subject to change. If these requirements change, we will provide you with an email message at the email address we have on file for you at that time

providing you with the revised hardware and software requirements, at which time you will have the right to withdraw your consent.

Acknowledging your access and consent to receive materials electronically

To confirm to us that you can access this information electronically, which will be similar to other electronic notices and disclosures that we will provide to you, please verify that you were able to read this electronic disclosure and that you also were able to print on paper or electronically save this page for your future reference and access or that you were able to e-mail this disclosure and consent to an address where you will be able to print on paper or save it for your future reference and access. Further, if you consent to receiving notices and disclosures exclusively in electronic format on the terms and conditions described above, please let us know by clicking the 'I agree' button below.

By checking the 'I Agree' box, I confirm that:

- I can access and read this Electronic CONSENT TO ELECTRONIC RECEIPT OF ELECTRONIC RECORD AND SIGNATURE DISCLOSURES document; and

- I can print on paper the disclosure or save or send the disclosure to a place where I can print it, for future reference and access; and

- Until or unless I notify American Towers LLC as described above, I consent to receive from exclusively through electronic means all notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to me by American Towers LLC during the course of my relationship with you.

CENTERLINE

EXHIBIT 4

UP50577A – T-Mobile/American Tower – Project Narrative

I. Summary of Existing Conditions

The existing telecommunications facility owned/operated by American Tower (the "Base Station") is located at 366 Mt Zion Road (Assessor Tax Map # 102.3-1-36.100) in the Town of Marlborough, County of Ulster, State of New York. There are carrier equipment arrays installed on a 260-foot-tall Guyed Tower, along with ground mounted equipment installed adjacent to the base of the tower within an existing fenced-compound.

II. Summary of Proposed Modification (the "Project")

T-Mobile's proposed colocation will include both tower-mounted equipment, to be installed at a Centerline-Height of 212', and Ground-Mounted Equipment to be installed on a proposed 10' x 13' Concrete pad adjacent to the base of the tower within the existing fenced compound. Tower-mounted equipment to be installed will include (4) antennas, (8) RRUs, and (3) Hybrid cables on the tower at the afore-mentioned centerline height. Ground-mounted equipment will include the installation of the afore-mentioned proposed 10' x 13' concrete pad, (2) Equipment Cabinets, and (1) H-Frame.

The final overall T-Mobile equipment after the colocation will include (4) Antennas, (8) RRUs, (3) Hybrid Cables, (2) Cabinets, and (1) H-Frame.

III. Eligible Facilities Requests and Applicability of TRA Section 6409

Section 6409 of the Middle Class Tax Relief and Job Creation Act of 2012 (Attachment 2), states that a local government "may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station." The Base Station clearly qualifies as a 'base station' as that term is used in Section 6409 and defined in the FCC's Public Notice as it consists of antennas, coaxial cables, a regular power supply, and associated equipment.

Further, an "eligible facilities request" ("EFR") means "any request for modification of an existing wireless tower or base station that involves (A) collocation of new transmission equipment; (B) removal of transmission equipment; or (C) replacement of transmission equipment." The Project involves the 'collocation of new' transmission equipment that will not increase the height of the 'Base Station' nor the dimensions of the existing equipment compound and therefore qualifies as an EFR under the TRA.

T-Mobile's planned Colocation will not substantially change the physical dimensions of the Existing Facility for the reasons stated above, and therefore the proposed equipment upgrades will not involve changes that are "visually discernible". Accordingly, for the reasons stated above, TRA Section 6409 applies to the Project, and the information provided by T-Mobile in furtherance of the EFR necessitates that the Town approve the EFR.

ELIGIBLE FACILITIES REQUEST CERTIFICATION
FOR NON-SUBSTANTIAL CHANGES TO A WIRELESS TOWER/BASE STATION
NOT LOCATED WITHIN A PUBLIC RIGHT OF WAY

1) Location of the Wireless Facility:

Facility Address: 366 MOUNT ZION ROAD

City: MARLBORO State: NY Zip Code: 12542

County: ULSTER, NY Municipality: TOWN OF MARLBOROUGH, NY

2) The height (measured in feet above ground level) of the existing Facility as originally approved, including any modifications approved prior to February 22, 2012: 260 feet

3) Height (measured in feet above ground level) at which the modifications to the Transmission Equipment will occur on the Facility: 212 feet

4) Height (measured in feet above ground level) of the existing Facility after the modifications to the Transmission Equipment are installed: 260 feet

5) Effect of modifications of Transmission Equipment on Facility height:

A) Will the modifications in Transmission Equipment (addition, removal, or replacement of Transmission Equipment) result in increasing the height above ground level of the Existing Facility?

☐ Yes ☑ No

B) Will the modifications in Transmission Equipment result in increasing the height above groundlevel of the existing Facility by more than:

i. 10% of the height of the existing Facility, as originally approved, including any modificationsapproved prior to February 22, 2012; or

ii. Twenty (20) feet above the height of the existing Facility, as originally approved, including anymodifications approved prior to February 22, 2012, whichever height increase is greater?

☐ Yes ☑ No

6) Will the modifications in Transmission Equipment (measured at the height above ground level where the Transmission Equipment will be attached to the Facility) result in any Transmission Equipment protruding horizontally from the edge of Facility by more than twenty (20) feet or by morethan the existing width of the Facility at that height, whichever of these dimensions is greater?

☐ Yes ☑ No

(CONTINUED ON NEXT PAGE)

7) Will the proposed changes in Transmission Equipment involve excavation or placement of new equipment more than thirty (30) feet outside the existing Facility site (not including any access or utility easements)?

☐ Yes ☑ No

8) Will the proposed modification in Transmission Equipment involve installation of more than the standard number of new equipment cabinets for the technology involved, but not to exceed four (4)?

☐ Yes ☑ No

9) Will the proposed modification in Transmission Equipment defeat the existing concealment elements of the Facility?

☐ Yes ☑ No

10) Prior Conditions of Approval

A) Will the proposed modification in Transmission Equipment comply with conditions of approval imposed on the Facility prior to February 22, 2012?

☐ Yes ☑ No

B) If the answer to 10(A) is "No," is the non-compliance due solely to any of the conditions addressed in questions 5-9 above?

☑ Yes ☐ No ☐ N/A

If the answer to either question 5A or 5B is "No", and the answers to questions 6-9 are "No", and the answer to either 10A or B is "Yes" then the proposed modifications do not substantially change the physical dimensions of the existing Facility. Please provide a brief explanation, if necessary, to clarify any answer.

Explanatory Comments (If Needed):

Question No. N/A

Comment: _____
_____
_____

Signature:  **Date:** 09/24/2025

Cullen Morgan, Site Acquisition Consultant

Name & Title: Centerline Communications LLC (Agent to American Tower Corp & T-Mobile Northeast LLC)

CENTERLINE

EXHIBIT 5

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1is accurate and complete.

A. Project and Applicant/Sponsor Information.

Name of Action or Project: MT ZION / UP50577A		
Project Location (describe, and attach a general location map): 366 Mount Zion Road, Marlboro, New York 12542		
Brief Description of Proposed Action (include purpose or need): T-Mobile proposes to modify an existing guyed tower telecommunications facility. Specifically, T-Mobile proposes to collocate antennas at a centerline height of 212 feet on the existing 265-foot guyed tower. Additionally, T-Mobile proposes to install equipment cabinets within a 8-foot by 11-foot lease area at the base of the tower. Power and telco will be routed from existing meters and disconnects to the proposed lease area.		
Name of Applicant/Sponsor: T-Mobile USA c/o Centerline Communications, LLC	Telephone: E-Mail: cmorgan@clinellc.com	
Address: 750 West Center Street, Suite 301		
City/PO: West Bridgewater	State: MA	Zip Code: 02379
Project Contact (if not same as sponsor; give name and title/role): Cullen Morgan, Centerline Communications	Telephone: 941-549-7263 E-Mail: cmorgan@clinellc.copm	
Address: 12579 Sagewood Drive		
City/PO: Venice	State: FL	Zip Code: 34293
Property Owner (if not same as sponsor): American Towers LLC	Telephone: E-Mail:	
Address: 10 Presidential Way		
City/PO: Woburn	State: MA	Zip Code: 01801

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)

Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Counsel, Town Board, ☐Yes ☐No or Village Board of Trustees		
b. City, Town or Village ☐Yes ☐No Planning Board or Commission		
c. City, Town or ☐Yes ☐No Village Zoning Board of Appeals		
d. Other local agencies ☐Yes ☐No		
e. County agencies ☐Yes ☐No		
f. Regional agencies ☐Yes ☐No		
g. State agencies ☐Yes ☐No		
h. Federal agencies ☐Yes ☐No		

i. Coastal Resources.

i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? ☑Yes ☐No

ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? ☐Yes ☑No

iii. Is the project site within a Coastal Erosion Hazard Area? ☐Yes ☑No

C. Planning and Zoning

C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? ☐Yes ☑No

- **If Yes,** complete sections C, F and G.
- **If No,** proceed to question C.2 and complete all remaining sections and questions in Part 1

C.2. Adopted land use plans.

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? ☑Yes ☐No

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? ☑Yes ☐No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) ☑Yes ☐No

If Yes, identify the plan(s):

Hudson River Valley Greenway

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? ☐Yes ☑No

If Yes, identify the plan(s):

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☑ Yes ☐ No
If Yes, what is the zoning classification(s) including any applicable overlay district?
RAG-1 Rural Agricultural District

b. Is the use permitted or allowed by a special or conditional use permit? ☑ Yes ☐ No

c. Is a zoning change requested as part of the proposed action? ☐ Yes ☑ No
If Yes,
i. What is the proposed new zoning for the site? _____

C.4. Existing community services.

a. In what school district is the project site located? Marlboro Central School District

b. What police or other public protection forces serve the project site?
Milton Police Department

c. Which fire protection and emergency medical services serve the project site?
Milton Fire District

d. What parks serve the project site?
Hemlock Ridge Multiple Use Area (1 mile southwest)

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? Commercial / Public utility

b. a. Total acreage of the site of the proposed action? <1 acres
b. Total acreage to be physically disturbed? <1 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? <1 acres

c. Is the proposed action an expansion of an existing project or use? ☐ Yes ☑ No
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % _____ Units: _____

d. Is the proposed action a subdivision, or does it include a subdivision? ☐ Yes ☑ No
If Yes,
i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)
ii. Is a cluster/conservation layout proposed? ☐ Yes ☐ No
iii. Number of lots proposed? _____
iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will the proposed action be constructed in multiple phases? ☐ Yes ☑ No
i. If No, anticipated period of construction: +/- 3 months
ii. If Yes:
- Total number of phases anticipated _____
- Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
- Anticipated completion date of final phase _____ month _____year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

f. Does the project include new residential uses? ☐Yes ☑No

If Yes, show numbers of units proposed.

	One Family	Two Family	Three Family	Multiple Family (four or more)
Initial Phase	_____	_____	_____	_____
At completion of all phases	_____	_____	_____	_____

g. Does the proposed action include new non-residential construction (including expansions)? ☐Yes ☑No

If Yes,

i. Total number of structures _____

ii. Dimensions (in feet) of largest proposed structure: _____height; _____width; and _____ length

iii. Approximate extent of building space to be heated or cooled: _____ square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? ☐Yes ☑No

If Yes,

i. Purpose of the impoundment: _____

ii. If a water impoundment, the principal source of the water: ☐ Ground water ☐ Surface water streams ☐Other specify:

_____

iii. If other than water, identify the type of impounded/contained liquids and their source.

_____

iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres

v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length

vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete):

_____

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite) ☐Yes ☑No

If Yes:

i .What is the purpose of the excavation or dredging? _____

ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?

- Volume (specify tons or cubic yards): _____
- Over what duration of time? _____

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.

_____

_____

i*v.* Will there be onsite dewatering or processing of excavated materials? ☐Yes ☐No

If yes, describe. _____

_____

v. What is the total area to be dredged or excavated? _____acres

vi. What is the maximum area to be worked at any one time? _____ acres

vii. What would be the maximum depth of excavation or dredging? _____ feet

viii. Will the excavation require blasting? ☐Yes ☐No

ix. Summarize site reclamation goals and plan: _____

_____

_____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? ☐Yes ☑No

If Yes:

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____

_____

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

_____

_____

_____

_____

iii. Will the proposed action cause or result in disturbance to bottom sediments? ☐Yes ☐No

If Yes, describe: _____

iv. Will the proposed action cause or result in the destruction or removal of aquatic vegetation? ☐Yes ☐No

If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____

_____

- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

_____

c. Will the proposed action use, or create a new demand for water? ☐Yes ☑No

If Yes:

i. Total anticipated water usage/demand per day: _____ gallons/day

ii. Will the proposed action obtain water from an existing public water supply? ☐Yes ☐No

If Yes:

- Name of district or service area: _____
- Does the existing public water supply have capacity to serve the proposal? ☐Yes ☐No
- Is the project site in the existing district? ☐Yes ☐No
- Is expansion of the district needed? ☐Yes ☐No
- Do existing lines serve the project site? ☐Yes ☐No

iii. Will line extension within an existing district be necessary to supply the project? ☐Yes ☐No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____

_____

- Source(s) of supply for the district: _____

iv. Is a new water supply district or service area proposed to be formed to serve the project site? ☐Yes ☐No

If, Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____

_____

vi. If water supply will be from wells (public or private), what is the maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? ☐Yes ☑No

If Yes:

i. Total anticipated liquid waste generation per day: _____ gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): _____

_____

_____

iii. Will the proposed action use any existing public wastewater treatment facilities? ☐Yes ☐No

If Yes:

- Name of wastewater treatment plant to be used: _____
- Name of district: _____
- Does the existing wastewater treatment plant have capacity to serve the project? ☐Yes ☐No
- Is the project site in the existing district? ☐Yes ☐No
- Is expansion of the district needed? ☐Yes ☐No

- Do existing sewer lines serve the project site? ☐Yes ☐No
- Will a line extension within an existing district be necessary to serve the project? ☐Yes ☐No

  If Yes:
  - Describe extensions or capacity expansions proposed to serve this project: _____

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? ☐Yes ☐No

If Yes:
- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- What is the receiving water for the wastewater discharge? _____

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans):

_____

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? ☐Yes ☑No

If Yes:

i. How much impervious surface will the project create in relation to total size of project parcel?

_____ Square feet or _____ acres (impervious surface)

_____ Square feet or _____ acres (parcel size)

ii. Describe types of new point sources. _____

iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

_____

- If to surface waters, identify receiving water bodies or wetlands: _____
- Will stormwater runoff flow to adjacent properties? ☐Yes ☐No

iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? ☐Yes ☐No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? ☑Yes ☐No

If Yes, identify:

i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

Temporary construction vehicles

ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

_____

iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

_____

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? ☐Yes ☑No

If Yes:

i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) ☐Yes ☐No

ii. In addition to emissions as calculated in the application, the project will generate:
- _____Tons/year (short tons) of Carbon Dioxide (CO_2)
- _____Tons/year (short tons) of Nitrous Oxide (N_2O)
- _____Tons/year (short tons) of Perfluorocarbons (PFCs)
- _____Tons/year (short tons) of Sulfur Hexafluoride (SF_6)
- _____Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs)
- _____Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? ☐Yes ☑No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

_____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? ☐Yes ☑No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):

_____

_____

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? ☐Yes ☑No

If Yes:

i. When is the peak traffic expected (Check all that apply): ☐ Morning ☐ Evening ☐Weekend ☐ Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): _____

_____

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

iv. Does the proposed action include any shared use parking? ☐Yes ☐No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe:

_____

vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? ☐Yes ☐No

vii Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? ☐Yes ☐No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? ☐Yes ☐No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? ☑Yes ☐No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____

Minimal increase for telecommunications equipment

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other):

Via local grid

iii. Will the proposed action require a new, or an upgrade, to an existing substation? ☐Yes ☑No

l. Hours of operation. Answer all items which apply.

i. During Construction:

- Monday - Friday: Normal business hours
- Saturday: _____
- Sunday: _____
- Holidays: _____

ii. During Operations:

- Monday - Friday: Unmanned facility operates 24/7
- Saturday: Unmanned facility operates 24/7
- Sunday: Unmanned facility operates 24/7
- Holidays: Unmanned facility operates 24/7

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? ☐ Yes ☑ No

If yes:

i. Provide details including sources, time of day and duration:

_____

_____

ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? ☐ Yes ☐ No

Describe: _____

_____

n. Will the proposed action have outdoor lighting? ☐ Yes ☑ No

If yes:

i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:

_____

_____

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? ☐ Yes ☐ No

Describe: _____

_____

o. Does the proposed action have the potential to produce odors for more than one hour per day? ☐ Yes ☑ No

If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____

_____

_____

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? ☐ Yes ☑ No

If Yes:

i. Product(s) to be stored _____

ii. Volume(s) _____ per unit time _____ (e.g., month, year)

iii. Generally, describe the proposed storage facilities:_____

_____

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? ☐ Yes ☑ No

If Yes:

i. Describe proposed treatment(s):

_____

_____

_____

_____

ii. Will the proposed action use Integrated Pest Management Practices? ☐ Yes ☐ No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? ☐ Yes ☑ No

If Yes:

i. Describe any solid waste(s) to be generated during construction or operation of the facility:

- Construction: _____ tons per _____ (unit of time)
- Operation : _____ tons per _____ (unit of time)

ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

- Construction: _____

  _____
- Operation: _____

  _____

iii. Proposed disposal methods/facilities for solid waste generated on-site:

- Construction: _____

  _____
- Operation: _____

  _____

s. Does the proposed action include construction or modification of a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____

ii. Anticipated rate of disposal/processing:

- _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
- _____ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: _____ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

iii. Specify amount to be handled or generated _____ tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? ☐ Yes ☐ No

If Yes: provide name and location of facility: _____

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

☐ Urban ☐ Industrial ☐ Commercial ☑ Residential (suburban) ☑ Rural (non-farm)
☑ Forest ☑ Agriculture ☐ Aquatic ☑ Other (specify): Telecommunications tower facility

ii. If mix of uses, generally describe:

The surrounding area consists of single-family homes, small farms, and undeveloped woodland

b. Land uses and covertypes on the project site.

Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	<1	<1	0
• Forested	0	0	0
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	0	0	0
• Agricultural (includes active orchards, field, greenhouse etc.)	0	0	0
• Surface water features (lakes, ponds, streams, rivers, etc.)	0	0	0
• Wetlands (freshwater or tidal)	0	0	0
• Non-vegetated (bare rock, earth or fill)	0	0	0
• Other Describe: Telecommunications tower facility	<1	<1	0

c. Is the project site presently used by members of the community for public recreation? ☐ Yes ☑ No

i. If Yes: explain: _____

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? ☐ Yes ☑ No

If Yes,

i. Identify Facilities:

_____

_____

e. Does the project site contain an existing dam? ☐ Yes ☑ No

If Yes:

i. Dimensions of the dam and impoundment:

- Dam height: _____ feet
- Dam length: _____ feet
- Surface area: _____ acres
- Volume impounded: _____ gallons OR acre-feet

ii. Dam's existing hazard classification: _____

iii. Provide date and summarize results of last inspection:

_____

_____

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Has the facility been formally closed? ☐ Yes ☐ No

- If yes, cite sources/documentation: _____

ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:

_____

_____

iii. Describe any development constraints due to the prior solid waste activities: _____

_____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

_____

_____

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? ☐ Yes ☑ No

If Yes:

i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: ☐ Yes ☐ No

☐ Yes – Spills Incidents database Provide DEC ID number(s): _____

☐ Yes – Environmental Site Remediation database Provide DEC ID number(s): _____

☐ Neither database

ii. If site has been subject of RCRA corrective activities, describe control measures:_____

_____

_____

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? ☐ Yes ☑ No

If yes, provide DEC ID number(s): _____

iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):

_____

_____

v. Is the project site subject to an institutional control limiting property uses? ☐ Yes ☐ No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? ☐ Yes ☐ No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? >6 feet

b. Are there bedrock outcroppings on the project site? ☐ Yes ☑ No
If Yes, what proportion of the site is comprised of bedrock outcroppings? _____%

c. Predominant soil type(s) present on project site:
Bath-Nassau-Rock outcrop complex 100 %
_____ _____%
_____ _____%

d. What is the average depth to the water table on the project site? Average: >6 feet

e. Drainage status of project site soils:
☐ Well Drained: _____% of site
☐ Moderately Well Drained: _____% of site
☐ Poorly Drained _____% of site

f. Approximate proportion of proposed action site with slopes:
☐ 0-10%: _____% of site
☐ 10-15%: _____% of site
☐ 15% or greater: _____% of site

g. Are there any unique geologic features on the project site? ☐ Yes ☑ No
If Yes, describe: _____

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? ☐ Yes ☑ No

ii. Do any wetlands or other waterbodies adjoin the project site? ☑ Yes ☐ No

If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? ☑ Yes ☐ No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name _____ Classification _____
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name Freshwater Forested/Shrub Wetland Approximate Size 0.9 acre
- Wetland No. (if regulated by DEC) _____

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? ☐ Yes ☑ No

If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? ☐ Yes ☑ No

j. Is the project site in the 100-year Floodplain? ☐ Yes ☑ No

k. Is the project site in the 500-year Floodplain? ☐ Yes ☑ No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? ☐ Yes ☑ No
If Yes:

i. Name of aquifer: _____

m. Identify the predominant wildlife species that occupy or use the project site: The project site is previously cleared and developed land, and is improved with an existing telecom facility. As such, no suitable habitat is present and the proposed installation is anticipated to have 'no effect' on listed species.

n. Does the project site contain a designated significant natural community? ☐ Yes ☑ No

If Yes:

i. Describe the habitat/community (composition, function, and basis for designation): _____

ii. Source(s) of description or evaluation: _____

iii. Extent of community/habitat:

- Currently: _____ acres
- Following completion of project as proposed: _____ acres
- Gain or loss (indicate + or -): _____ acres

o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? ☐ Yes ☑ No

If Yes:

i. Species and listing (endangered or threatened): _____

p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? ☐ Yes ☑ No

If Yes:

i. Species and listing: _____

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? ☐ Yes ☑ No

If yes, give a brief description of how the proposed action may affect that use: _____

E.3. Designated Public Resources On or Near Project Site

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? ☐ Yes ☑ No

If Yes, provide county plus district name/number: _____

b. Are agricultural lands consisting of highly productive soils present? ☐ Yes ☑ No

i. If Yes: acreage(s) on project site? _____

ii. Source(s) of soil rating(s): _____

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? ☐ Yes ☑ No

If Yes:

i. Nature of the natural landmark: ☐ Biological Community ☐ Geological Feature

ii. Provide brief description of landmark, including values behind designation and approximate size/extent: _____

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? ☐ Yes ☑ No

If Yes:

i. CEA name: _____

ii. Basis for designation: _____

iii. Designating agency and date: _____

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? ☐ Yes ☑ No

If Yes:

i. Nature of historic/archaeological resource: ☐ Archaeological Site ☐ Historic Building or District

ii. Name: _____

iii. Brief description of attributes on which listing is based:

_____

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? ☐ Yes ☑ No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? ☐ Yes ☑ No

If Yes:

i. Describe possible resource(s): _____

ii. Basis for identification: _____

h. Is the project site within fives miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? ☑ Yes ☐ No

If Yes:

i. Identify resource: Hudson River (3.5mi), Franny Reese Preserve State Park (5mi)

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): Scenic river, state park

iii. Distance between project and resource: 3.5-5 miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? ☐ Yes ☑ No

If Yes:

i. Identify the name of the river and its designation: _____

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? ☐ Yes ☐ No

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name Centerline Communications LLC Date July 23, 2025

Signature Hannah Blitch Title Consultant for Applicant

PRINT FORM

EAF Mapper Summary Report

Thursday, July 10, 2025 4:56 PM

Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources to confirm data provided by the Mapper or to obtain data not provided by the Mapper.

B.i.i [Coastal or Waterfront Area]	Yes
B.i.ii [Local Waterfront Revitalization Area]	No
C.2.b. [Special Planning District]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	No
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.h.ii [Surface Water Features]	Yes - Digital mapping information on local, New York State, and federal wetlands and waterbodies is known to be incomplete. Refer to the EAF Workbook.
E.2.h.iii [Surface Water Features]	Yes - Digital mapping information on local, New York State, and federal wetlands and waterbodies is known to be incomplete. Refer to the EAF Workbook.
E.2.h.v [Impaired Water Bodies]	No
E.2.i. [Floodway]	No
E.2.j. [100 Year Floodplain]	No
E.2.k. [500 Year Floodplain]	No
E.2.l. [Aquifers]	No
E.2.n. [Natural Communities]	No

E.2.o. [Endangered or Threatened Species]	No
E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.3.f. [Archeological Sites]	No
E.3.i. [Designated River Corridor]	No

CENTERLINE

EXHIBIT 7

AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure	:	260 ft Guyed Tower
ATC Asset Name	:	Mount Zion NY
ATC Asset Number	:	10330
Engineering Number	:	14912089_C3_03
Proposed Carrier	:	T-Mobile
Carrier Site Name	:	Mt Zion
Carrier Site Number	:	UP50577A
Site Location	:	366 Mount Zion Rd Marlboro, NY 12542-5020 41.6409° N, 74.0209° W
County	:	Ulster
Date	:	December 10, 2024
Max Usage	:	104%
Analysis Result	:	Pass

Created By:

Robert D. Barrett, E.I.
Structural Engineer II

Robert D. Barrett

COA: #0012746

Table of Contents

Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 260 ft Guyed tower to reflect the change in loading by T-Mobile.

Supporting Documents

Tower:	Mapping by GEM, dated July 23, 2004
Foundation:	Stainless Project #359200, dated December 2, 1993
Geotechnical:	AMEC Earth & Environmental Project # 3-4917--0000, dated August 6, 2004
Modification:	ATC Project #73120177, dated September 7, 2004 ATC Project #54279336, dated March 28, 2014 ATC Project #54279337, dated November 12, 2014
Site Specific Study:	ICE Study dated, August 23, 2019

Analysis

The tower was analyzed using American Tower Corporation's tower analysis software. This program considers an elastic three-dimensional model and second-order effects per ANSI/TIA-222.

Basic Wind Speed:	113 mph (3-second gust)
Basic Wind Speed w/ Ice:	68 mph (3-second gust) w/ 0.50" radial ice concurrent
Code(s):	ANSI/TIA-222-I / 2018 IBC / 2020 New York Building Code
Exposure Category:	B
Risk Category:	II
Topographic Factor Procedure:	Method 2
Feature:	Hill
Crest Height (H):	217 ft
Crest Length (L):	2360 ft
Spectral Response:	S_{DS} = 0.17, S_{D1} = 0.07
Site Class:	Default

Wind pressures have been determined per the site-specific climatic study in accordance with ASCE 7-22 Section 26.5.3, IBC Section 1609.3, and TIA-222-I Section 2.6.6.2.2.
Ice thickness and wind pressures have been determined per the site-specific climatic study in accordance with ASCE 7-22 Section 10.1.1, IBC Section 1614, and TIA-222-I Section 2.6.4.1.
Wind load and Ice thickness have been reduced by applicable existing structure load modification factors in accordance with TIA-222, ANNEX-S

Conclusion

Based on the analysis results, the structure meets the requirements per the applicable codes listed above. The tower and foundation can support the equipment as described in this report.

If you have any questions or require additional information, please reach out to your American Tower contact. If you do not have an American Tower contact and have an Engineering question, please contact **Engineering@americantower.com** Please include the American Tower asset name, asset number, and engineering number in the subject line for any questions.

Structure Usages

Structural Component	Usage	Control	Location	Result
Leg	104.1%	Member X	Section 11	Pass
Diagonal	91.1%	Member X	Section 10	Pass
Horizontal	19.8%	Member	Section 9	Pass
Bolt	20.6%	-	Section 12	Pass
Torque Arm	17.3%	Tension	Elevation 190 ft	Pass
Cable	84.0%	Tension	Elevation 138 ft	Pass
Serviceability Usage	6.3%	Rotation	Elevation 234 ft	Pass
Base Foundation	79.0%	-	-	Pass
Inner Anchor Foundations	36.0%	-	-	Pass
Outer Anchor Foundations	39.0%	-	-	Pass

Maximum Reactions

Foundation	Moment (k-ft)	Axial (k)	Uplift (k)	Shear (k)
Guyed – Pivot Base	-	81.5	-	0.4
Guyed Anchor - A2	-	-	17.4	15.2
Guyed Anchor - A1	-	-	11.3	15.9

Reactions shown are maximum overall and not limited by Load Case excluding Overstrength Load Cases

Structure base reactions were analyzed using available geotechnical and foundation information.

T-MOBILE Final Loading

Elev (ft)	Qty	Equipment	Lines
212.0	3	Sector Frame	(3) 2.00" (50.8mm) Hybrid
	4	Amphenol Antel APXVAALL24M-U-J20	
	4	Ericsson Radio 4460 B25+B66	
	4	Ericsson Radio 4480 B71+B85	

Install proposed lines on the tower face with the least amount of existing lines.

Other Existing/Reserved Loading

Elev (ft)	Qty	Equipment	Lines
253.0	2	Band II (VHF) 903HP Panel Arrays	-
243.0	2	Band II (VHF) 903HP Panel Arrays	-
	1	RFS 903HP	(1) 1 5/8" Coax
233.0	2	Band II (VHF) 903HP Panel Arrays	-
203.0	1	8' Dipole	(1) 1/2" Coax
202.0	1	Side Arm	-
191.0	1	Side Arm	(1) 1/2" Coax
	1	5" x 3" x 2" Cavity Filter	
	1	Low Noise Amplifier	
	1	Procom CXL 900-3LW	
184.0	1	Stand-Off	-
177.0	1	Andrew VHLPX800-11	(2) 0.39" (10mm) Fiber Trunk (2) 0.41" (10.3mm) LMR-400 (4) 0.65" (16.4mm) 8 AWG 2C (2) 0.96" (24.3mm) Cable (12) 1 5/8" Coax
	1	Raycap DC6-48-60-18-8C-EV (Enclosure)	
	2	Ericsson MLTN11/2X 225T/128X	
	2	Raycap DC6-48-60-18-8F ("Squid")	
	3	Andrew E15Z01P13	
	3	Ericsson RRUS 4449 B5, B12	
	3	Ericsson RRUS 4478 B14 (16.5" Height)	
	3	Sector Frame	
	4	Ericsson RRUS-12 B2	
	6	Commscope NNH4-65C-R6 (102.1 lbs)	
154.0	1	Raycap RVZDC-6627-PF-48	(2) 1 5/8" Hybriflex
	3	Alcatel-Lucent B13 RRH4x30-4R w/ Solar Shield	
	3	Alcatel-Lucent B4 RRH2X60-4R	
	3	CSS X7C-865-4	
	3	Mount Reinforcement	
	3	Sector Frame	
	3	Samsung B2/B66A RRH ORAN (RF 4439d-25A)	
	3	Samsung B5/B13 RRH ORAN (RF4440d-13A)	
	3	Samsung MT6407-77A	
	6	JMA Wireless X7CQAP-FRO-845-VR0 (68.2 lbs)	
	9	JMA Wireless X7CQAP-FRO-845-V	
124.0	1	8' Omni	(1) 1/2" Coax
111.0	1	Kathrein Scala PR-850	-
75.0	-	-	(1) 1 1/4" conduit
59.0	1	Kathrein Scala CA7-490	(1) 1/2" Coax

(If table breaks across pages, please see previous page for data in merged cells)

Standard Conditions

All engineering services performed by A.T. Engineering Services, PLLC are prepared on the basis that the information used is current and correct. This information may consist of, but is not limited to the following:

- Information supplied by the client regarding antenna, mounts, and feed line loading
- Information from drawings, design and analysis documents, and field notes in the possession of A.T. Engineering Services, PLLC

It is the responsibility of the client to ensure that the information provided to A.T. Engineering Services, PLLC and used in the performance of our engineering services is correct and complete.

All assets of American Tower Corporation, its affiliates, and subsidiaries (collectively "American Tower") are inspected at regular intervals. Based upon these inspections and in the absence of information to the contrary, American Tower assumes that all structures were constructed in accordance with the drawings and specifications.

Unless explicitly agreed by both the client and A.T. Engineering Services, PLLC, all services will be performed in accordance with the current revision of ANSI/TIA-222.

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

ASSET: MOUNT ZION NY, 10330 CODE: ANSI/TIA-222-I
CUSTOMER: T-MOBILE PROJECT: 14912089

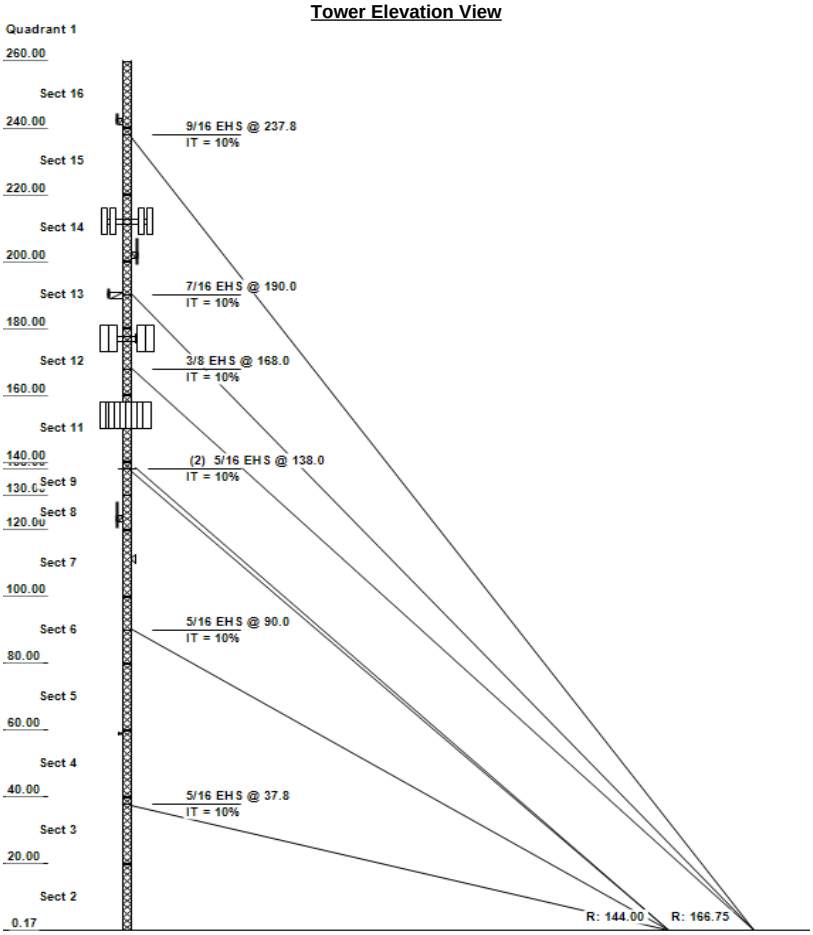
ANALYSIS PARAMETERS

Design Wind:	110 mph	**Ice Wind:**	66 mph w/ 0.43" ice	**Service Wind:**	60 mph
Risk Category	II	**Exposure:**	B	**S_{DS}:** 0.170	**S_{D1}:** 0.067
Topo Factor:	Method 2	**Topo Feature:**	**Hill**		
Structure Height:	260 ft	**Base Elevation:**	0 ft	**Shape:**	Triangle
Base Width:	2.00 ft	**Top Width:**	2.04 ft	**Base Type:**	Pivot

TOWER SECTION PROPERTIES

Section	Leg Members	Diagonal Members	Horizontal Members
1	SOL 50 ksi 2" SOLID		PL 36 ksi PL 2 x 0.5"
2 - 8	SOL 50 ksi 1 1/4" SOLID	SOL 36 ksi 1/2" SOLID	SOL 36 ksi 3/4" SOLID
9	SOL 50 ksi 1 1/4" SOLID	SOL 36 ksi 1/2" SOLID	PL 36 ksi PL 2 x 0.25"
10 - 16	SOL 50 ksi 1 1/4" SOLID	SOL 36 ksi 1/2" SOLID	SOL 36 ksi 3/4" SOLID

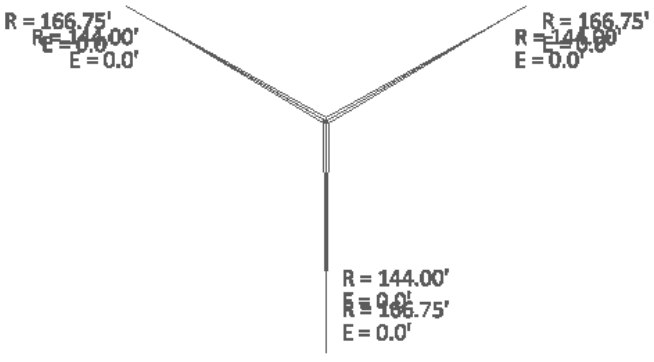
Tower Elevation View



BASE REACTIONS

Axial (k):	81.52
Shear (k):	0.37

Tower Plan View



DISCRETE APPURTENANCE

Elev (ft)	Description
253.0	(2) Band II (VHF) 903HP Panel Arrays
243.0	(1) RFS 903HP
243.0	(2) Band II (VHF) 903HP Panel Arrays
233.0	(2) Band II (VHF) 903HP Panel Arrays
212.0	(4) Ericsson Radio 4480 B71+B85
212.0	(3) Generic Sector Frame
212.0	(4) Ericsson Radio 4460 B25+B66
212.0	(4) Amphenol Antel APXVAALL24M-U-J2
203.0	(1) Generic 8' Dipole
202.0	(1) Flat Side Arm
191.0	(1) Procom CXL 900-3LW
191.0	(1) Generic Low Noise Amplifier
191.0	(1) Generic 5" x 3" x 2" Cavity Filter
191.0	(1) Generic Flat Side Arm
184.0	(1) Stand-Off
177.0	(6) Commscope NNH4-65C-R6 (102.1 lbs
177.0	(3) Ericsson RRUS 4478 B14 (16.5" Heig
177.0	(1) Andrew VHLPX800-11
177.0	(2) Ericsson MLTN11/2X 225T/128X
177.0	(2) Raycap DC6-48-60-18-8F ("Squid")
177.0	(3) Ericsson RRUS 4449 B5, B12
177.0	(3) Generic Round Sector Frame
177.0	(1) Raycap DC6-48-60-18-8C-EV (Enclos
177.0	(4) Ericsson RRUS-12 B2
177.0	(3) Andrew E15Z01P13
154.0	(3) Samsung B5/B13 RRH ORAN (RF444
154.0	(3) CSS X7C-865-4
154.0	(9) JMA Wireless X7CQAP-FRO-845-V
154.0	(3) Alcatel-Lucent B4 RRH2X60-4R
154.0	(1) Raycap RVZDC-6627-PF-48
154.0	(6) JMA Wireless X7CQAP-FRO-845-VR0
154.0	(3) Samsung MT6407-77A
154.0	(3) Generic Mount Reinforcement
154.0	(3) Generic Round Sector Frame
154.0	(3) Samsung B2/B66A RRH ORAN (RF 4
154.0	(3) Alcatel-Lucent B13 RRH4x30-4R w/ S
138.0	(1) Torque Arms
124.0	(1) Generic 8' Omni
111.0	(1) Kathrein Scala PR-850
59.0	(1) Kathrein Scala CA7-490

LINEAR APPURTENANCE

Elev (ft)	Description
243.0	(1) 1 5/8" Coax
212.0	(3) 2.00" (50.8mm) Hybrid
203.0	(1) 1/2" Coax
191.0	(1) 1/2" Coax
177.0	(2) 0.39" (10mm) Fiber Trunk
177.0	(2) 0.41" (10.3mm) LMR-400
177.0	(4) 0.65" (16.4mm) 8 AWG 2C
177.0	(2) 0.96" (24.3mm) Cable
177.0	(12) 1 5/8" Coax
154.0	(1) Waveguide
154.0	(2) 1 5/8" Hybriflex
124.0	(1) 1/2" Coax
75.0	(1) 1 1/4" conduit
59.0	(1) 1/2" Coax

GUY ANCHOR REACTIONS

Radius (ft)	Drop (ft)	Azimuth (°)	Uplift (k)	Shear (k)
144.0	0.00	0	11.26	15.89
144.0	0.00	120	11.26	15.89
144.0	0.00	240	11.26	15.89
166.8	0.00	0	17.35	15.22
166.8	0.00	120	17.36	15.22
166.8	0.00	240	17.35	15.21

ANALYSIS PARAMETERS

Location:	Ulster County, NY	**Height:**	260 ft
Type and Shape:	Guyed, Triangle	**Base Elevation:**	0.00 ft
Manufacturer:	Undetermined	**Bottom Face Width:**	2.00 ft
Kd	0.85	**Top Face Width:**	2.04 ft
Ke:	0.97		

ICE & WIND PARAMETERS

Exposure Category:	B	**Design Wind Speed Without Ice:**	110 mph
		Design Wind Speed with Ice:	66 mph
Risk Category:	II	**Operational Windspeed:**	60 mph
Topographic Factor Procedure:	Method 2		
Crest Height(H):	217 ft	**Design Ice Thickness:**	0.43 in
Crest Length(L):	2360 ft	**HMSL:**	983 ft
Feature:	Hill	**Distance from Apex (x):**	0
		Upwind/Downwind:	Downwind

SEISMIC PARAMETERS

Analysis Method:	Equivalent Lateral Force Method				
Site Class:	Default			**Period Based on Rayleigh Method (sec):**	1.39
T_L (sec):	6	**P:**	1.3	**C_s:**	0.030
S_{ds}:	0.170	**S_{d1}:**	0.067	**C_s Max:**	0.030
				C_s Min:	0.030

LOAD CASES

1.2D + 1.0W Normal	1.2D + 1.0W Normal - 110.14 mph Wind with No Ice
1.2D + 1.0W 60°	1.2D + 1.0W 60° - 110.14 mph Wind with No Ice
1.2D + 1.0W 90°	1.2D + 1.0W 90° - 110.14 mph Wind with No Ice
1.2D + 1.0W 120°	1.2D + 1.0W 120° - 110.14 mph Wind with No Ice
1.2D + 1.0W 180°	1.2D + 1.0W 180° - 110.14 mph Wind with No Ice
1.2D + 1.0W 210°	1.2D + 1.0W 210° - 110.14 mph Wind with No Ice
1.2D + 1.0W 240°	1.2D + 1.0W 240° - 110.14 mph Wind with No Ice
1.2D + 1.0W 300°	1.2D + 1.0W 300° - 110.14 mph Wind with No Ice
1.2D + 1.0W 330°	1.2D + 1.0W 330° - 110.14 mph Wind with No Ice
1.2D + 1.0Di + 1.0Wi Normal	1.2D + 1.0Di + 1.0Wi Normal - 66.28 mph Wind with 0.425" Radial Ice
1.2D + 1.0Di + 1.0Wi 60°	1.2D + 1.0Di + 1.0Wi 60° - 66.28 mph Wind with 0.425" Radial Ice
1.2D + 1.0Di + 1.0Wi 90°	1.2D + 1.0Di + 1.0Wi 90° - 66.28 mph Wind with 0.425" Radial Ice
1.2D + 1.0Di + 1.0Wi 120°	1.2D + 1.0Di + 1.0Wi 120° - 66.28 mph Wind with 0.425" Radial Ice
1.2D + 1.0Di + 1.0Wi 180°	1.2D + 1.0Di + 1.0Wi 180° - 66.28 mph Wind with 0.425" Radial Ice
1.2D + 1.0Di + 1.0Wi 210°	1.2D + 1.0Di + 1.0Wi 210° - 66.28 mph Wind with 0.425" Radial Ice
1.2D + 1.0Di + 1.0Wi 240°	1.2D + 1.0Di + 1.0Wi 240° - 66.28 mph Wind with 0.425" Radial Ice
1.2D + 1.0Di + 1.0Wi 300°	1.2D + 1.0Di + 1.0Wi 300° - 66.28 mph Wind with 0.425" Radial Ice
1.2D + 1.0Di + 1.0Wi 330°	1.2D + 1.0Di + 1.0Wi 330° - 66.28 mph Wind with 0.425" Radial Ice
1.2D + 1.0Ev + 1.0Eh Normal	1.2D + 1.0Ev + 1.0Eh Normal - Seismic
1.2D + 1.0Ev + 1.0Eh 60°	1.2D + 1.0Ev + 1.0Eh 60° - Seismic
1.2D + 1.0Ev + 1.0Eh 90°	1.2D + 1.0Ev + 1.0Eh 90° - Seismic
1.2D + 1.0Ev + 1.0Eh 120°	1.2D + 1.0Ev + 1.0Eh 120° - Seismic
1.2D + 1.0Ev + 1.0Eh 180°	1.2D + 1.0Ev + 1.0Eh 180° - Seismic
1.2D + 1.0Ev + 1.0Eh 210°	1.2D + 1.0Ev + 1.0Eh 210° - Seismic
1.2D + 1.0Ev + 1.0Eh 240°	1.2D + 1.0Ev + 1.0Eh 240° - Seismic
1.2D + 1.0Ev + 1.0Eh 300°	1.2D + 1.0Ev + 1.0Eh 300° - Seismic

LOAD CASES	
1.2D + 1.0Ev + 1.0Eh 330°	1.2D + 1.0Ev + 1.0Eh 330° - Seismic
1.0D + 1.0W Service Normal	1.0D + 1.0W Service Normal - 60 mph Wind with No Ice
1.0D + 1.0W Service 60°	1.0D + 1.0W Service 60° - 60 mph Wind with No Ice
1.0D + 1.0W Service 90°	1.0D + 1.0W Service 90° - 60 mph Wind with No Ice
1.0D + 1.0W Service 120°	1.0D + 1.0W Service 120° - 60 mph Wind with No Ice
1.0D + 1.0W Service 180°	1.0D + 1.0W Service 180° - 60 mph Wind with No Ice
1.0D + 1.0W Service 210°	1.0D + 1.0W Service 210° - 60 mph Wind with No Ice
1.0D + 1.0W Service 240°	1.0D + 1.0W Service 240° - 60 mph Wind with No Ice
1.0D + 1.0W Service 300°	1.0D + 1.0W Service 300° - 60 mph Wind with No Ice
1.0D + 1.0W Service 330°	1.0D + 1.0W Service 330° - 60 mph Wind with No Ice
1.2D + 1.0Ev + 1.5Eh Normal	1.2D + 1.0Ev + 1.5Eh Normal - Seismic Overstrength
1.2D + 1.0Ev + 1.5Eh 60°	1.2D + 1.0Ev + 1.5Eh 60° - Seismic Overstrength
1.2D + 1.0Ev + 1.5Eh 90°	1.2D + 1.0Ev + 1.5Eh 90° - Seismic Overstrength
1.2D + 1.0Ev + 1.5Eh 120°	1.2D + 1.0Ev + 1.5Eh 120° - Seismic Overstrength
1.2D + 1.0Ev + 1.5Eh 180°	1.2D + 1.0Ev + 1.5Eh 180° - Seismic Overstrength
1.2D + 1.0Ev + 1.5Eh 210°	1.2D + 1.0Ev + 1.5Eh 210° - Seismic Overstrength
1.2D + 1.0Ev + 1.5Eh 240°	1.2D + 1.0Ev + 1.5Eh 240° - Seismic Overstrength
1.2D + 1.0Ev + 1.5Eh 300°	1.2D + 1.0Ev + 1.5Eh 300° - Seismic Overstrength
1.2D + 1.0Ev + 1.5Eh 330°	1.2D + 1.0Ev + 1.5Eh 330° - Seismic Overstrength

TOWER LOADING – DISCRETE APPURTENANCE

Discrete Appurtenance Properties for LC: **1.2D + 1.0W**

Elev (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K_a	Orient. Factor	Vert. Ecc. (ft)	M_u (lb-ft)	Q_z (psf)	F_a (WL) (lb)	P_a (DL) (lb)
253.0	Band II (VHF) 903HP Panel Arra	2	103	5.2	5.6	95.5	36.3	1.00	1.00	0.0	0.00	31.00	272	247
243.0	RFS 903HP	1	103	4.4	2.7	16.3	16.3	1.00	1.00	0.0	0.00	30.67	115	124
243.0	Band II (VHF) 903HP Panel Arra	2	103	5.2	5.6	95.5	36.3	1.00	1.00	0.0	0.00	30.67	269	247
233.0	Band II (VHF) 903HP Panel Arra	2	103	5.2	5.6	95.5	36.3	1.00	1.00	0.0	0.00	30.33	266	247
212.0	Ericsson Radio 4460 B25+B66	4	109	2.6	1.6	15.7	12.1	0.80	0.50	0.0	0.00	29.57	103	523
212.0	Ericsson Radio 4480 B71+B85	4	93	2.8	1.8	15.4	7.5	0.80	0.50	0.0	0.00	29.57	113	446
212.0	Amphenol Antel APXVAALL24M-U-J	4	86	17.1	8.0	19.7	8.5	0.80	0.65	0.0	0.00	29.57	893	413
212.0	Generic Sector Frame	3	800	20.0	0.0	0.0	0.0	0.75	1.00	0.0	0.00	29.57	1131	2880
203.0	Generic 8' Dipole	1	25	3.0	8.0	3.0	3.0	1.00	1.00	0.0	0.00	29.23	75	30
202.0	Flat Side Arm	1	150	6.3	0.0	0.0	0.0	1.00	1.00	0.0	0.00	29.19	156	180
191.0	Procom CXL 900-3LW	1	2	0.1	2.3	0.6	0.6	1.00	1.00	0.0	0.00	28.76	3	2
191.0	Generic 5" x 3" x 2" Cavity Fi	1	2	0.1	0.4	3.2	1.9	1.00	1.00	0.0	0.00	28.76	3	2
191.0	Generic Low Noise Amplifier	1	2	0.2	0.4	4.0	2.0	1.00	1.00	0.0	0.00	28.76	4	2
191.0	Generic Flat Side Arm	1	188	6.3	0.0	0.0	0.0	1.00	1.00	0.0	0.00	28.76	154	225
184.0	Stand-Off	1	75	2.5	0.0	0.0	0.0	1.00	1.00	0.0	0.00	28.48	61	90
177.0	Andrew E15Z01P13	3	22	0.8	1.1	7.2	5.5	0.80	0.50	0.0	0.00	28.18	22	79
177.0	Ericsson MLTN11/2X 225T/128X	2	9	1.1	1.0	10.3	3.8	0.80	0.50	3.0	61.97	28.31	21	21
177.0	Raycap DC6-48-60-18-8F ("Squid	2	19	1.5	2.0	11.0	11.0	0.80	1.00	0.0	0.00	28.18	56	45
177.0	Ericsson RRUS 4478 B14 (16.5"	3	60	1.8	1.4	13.4	7.7	0.80	0.50	-2.0	105.59	28.10	53	216
177.0	Ericsson RRUS 4449 B5, B12	3	71	2.0	1.5	13.2	9.4	0.80	0.50	-2.0	112.87	28.10	56	256
177.0	Raycap DC6-48-60-18-8C-EV (Enc	1	16	2.7	2.2	12.4	9.7	0.80	1.00	0.0	0.00	28.18	51	19
177.0	Ericsson RRUS-12 B2	4	58	3.1	1.7	18.5	7.5	0.80	0.50	-2.0	240.37	28.10	120	278
177.0	Andrew VHLPX800-11	1	49	7.8	2.8	33.6	0.0	1.00	1.00	3.0	560.86	28.31	187	59
177.0	Generic Round Sector Frame	3	700	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.00	28.18	582	2520
177.0	Commscope NNH4-65C-R6 (102.1 l	6	102	17.1	8.0	19.6	7.8	0.80	0.64	0.0	0.00	28.18	1256	735
154.0	Samsung B2/B66A RRH ORAN (RF 4	3	75	1.9	1.3	15.0	10.0	0.80	0.50	0.0	0.00	27.16	52	269
154.0	Samsung B5/B13 RRH ORAN (RF444	3	70	1.9	1.3	15.0	9.1	0.80	0.50	0.0	0.00	27.16	52	253
154.0	Alcatel-Lucent B13 RRH4x30-4R	3	56	2.1	1.7	11.8	7.5	0.80	0.50	0.0	0.00	27.16	57	200
154.0	Alcatel-Lucent B4 RRH2X60-4R	3	55	3.3	3.0	10.6	5.7	0.80	0.50	0.0	0.00	27.16	93	198
154.0	Raycap RVZDC-6627-PF-48	1	32	3.8	2.4	15.7	10.3	0.80	1.00	0.0	0.00	27.16	70	38
154.0	Samsung MT6407-77A	3	82	4.7	2.9	16.1	5.5	0.80	0.61	0.0	0.00	27.16	159	294
154.0	Generic Mount Reinforcement	3	200	5.0	0.0	0.0	0.0	0.75	0.67	0.0	0.00	27.16	173	720
154.0	CSS X7C-865-4	3	37	11.8	8.0	12.5	7.0	0.80	0.69	0.0	0.00	27.16	453	131
154.0	Generic Round Sector Frame	3	700	14.4	0.0	0.0	0.0	0.75	0.67	0.0	0.00	27.16	501	2520
154.0	JMA Wireless X7CQAP-FRO-845-V	9	67	16.5	8.0	18.8	9.7	0.80	0.67	0.0	0.00	27.16	1836	724
154.0	JMA Wireless X7CQAP-FRO-845-VR	6	68	16.5	8.0	18.8	9.7	0.80	0.67	0.0	0.00	27.16	1224	491
138.0	Torque Arms	1	500	15.0	0.0	0.0	0.0	1.00	1.00	0.0	0.00	26.37	336	600
124.0	Generic 8' Omni	1	25	2.4	8.0	3.0	3.0	1.00	1.00	0.0	0.00	25.63	52	30
111.0	Kathrein Scala PR-850	1	38	7.3	3.0	68.0	18.0	1.00	0.91	0.0	0.00	24.89	141	46
59.0	Kathrein Scala CA7-490	1	7	1.1	1.0	37.6	0.0	1.00	1.00	0.0	0.00	21.03	20	8
	Totals	**101**	**13,674**	**803.5**									11,245	16,409

Discrete Appurtenance Properties for LC: **1.2D + 1.0Di + 1.0Wi**

Elev (ft)	Description	Qty	Ice Wt (lb)	Ice EPA (sf)	Length (ft)	Width (in)	Depth (in)	K_a	Orient. Factor	Vert. Ecc. (ft)	M_u (lb-ft)	Q_z (psf)	F_a (WL) (lb)	P_a (DL) (lb)
253.0	Band II (VHF) 903HP Panel Arra	2	124	6.2	5.6	95.5	36.3	1.00	1.00	0.0	0.00	11.23	119	290
243.0	RFS 903HP	1	150	4.9	2.7	16.3	16.3	1.00	1.00	0.0	0.00	11.11	46	171
243.0	Band II (VHF) 903HP Panel Arra	2	124	6.2	5.6	95.5	36.3	1.00	1.00	0.0	0.00	11.11	118	290
233.0	Band II (VHF) 903HP Panel Arra	2	124	6.2	5.6	95.5	36.3	1.00	1.00	0.0	0.00	10.98	116	290
212.0	Ericsson Radio 4460 B25+B66	4	135	2.9	1.6	15.7	12.1	0.80	0.50	0.0	0.00	10.71	42	627
212.0	Ericsson Radio 4480 B71+B85	4	115	3.1	1.8	15.4	7.5	0.80	0.50	0.0	0.00	10.71	45	534
212.0	Amphenol Antel APXVAALL24M-U-J	4	185	18.2	8.0	19.7	8.5	0.80	0.65	0.0	0.00	10.71	344	809
212.0	Generic Sector Frame	3	1127	24.9	0.0	0.0	0.0	0.75	1.00	0.0	0.00	10.71	510	3862
203.0	Generic 8' Dipole	1	51	4.4	8.0	3.0	3.0	1.00	1.00	0.0	0.00	10.59	39	56
202.0	Flat Side Arm	1	171	7.0	0.0	0.0	0.0	1.00	1.00	0.0	0.00	10.57	63	201
191.0	Procom CXL 900-3LW	1	3	0.3	2.3	0.6	0.6	1.00	1.00	0.0	0.00	10.42	3	3
191.0	Generic 5" x 3" x 2" Cavity Fi	1	3	0.2	0.4	3.2	1.9	1.00	1.00	0.0	0.00	10.42	2	3
191.0	Generic Low Noise Amplifier	1	4	0.3	0.4	4.0	2.0	1.00	1.00	0.0	0.00	10.42	2	4
191.0	Generic Flat Side Arm	1	226	7.2	0.0	0.0	0.0	1.00	1.00	0.0	0.00	10.42	64	264
184.0	Stand-Off	1	86	2.9	0.0	0.0	0.0	1.00	1.00	0.0	0.00	10.31	25	101
177.0	Andrew E15Z01P13	3	30	1.0	1.1	7.2	5.5	0.80	0.50	0.0	0.00	10.21	10	102
177.0	Ericsson MLTN11/2X 225T/128X	2	17	1.3	1.0	10.3	3.8	0.80	0.50	3.0	26.61	10.25	9	37
177.0	Raycap DC6-48-60-18-8F ("Squid	2	37	1.7	2.0	11.0	11.0	0.80	1.00	0.0	0.00	10.21	23	81
177.0	Ericsson RRUS 4478 B14 (16.5"	3	76	2.1	1.4	13.4	7.7	0.80	0.50	-2.0	43.59	10.18	22	263
177.0	Ericsson RRUS 4449 B5, B12	3	90	2.2	1.5	13.2	9.4	0.80	0.50	-2.0	46.44	10.18	23	311
177.0	Raycap DC6-48-60-18-8C-EV (Enc	1	40	3.0	2.2	12.4	9.7	0.80	1.00	0.0	0.00	10.21	21	43
177.0	Ericsson RRUS-12 B2	4	81	3.5	1.7	18.5	7.5	0.80	0.50	-2.0	96.27	10.18	48	371
177.0	Andrew VHLPX800-11	1	95	8.2	2.8	33.6	0.0	1.00	1.00	3.0	215.40	10.25	72	105
177.0	Generic Round Sector Frame	3	980	19.2	0.0	0.0	0.0	0.75	0.75	0.0	0.00	10.21	280	3361
177.0	Commscope NNH4-65C-R6 (102.1 l	6	196	18.1	8.0	19.6	7.8	0.80	0.64	0.0	0.00	10.21	483	1301
154.0	Samsung B2/B66A RRH ORAN (RF 4	3	93	2.1	1.3	15.0	10.0	0.80	0.50	0.0	0.00	9.83	21	323
154.0	Samsung B5/B13 RRH ORAN (RF444	3	88	2.1	1.3	15.0	9.1	0.80	0.50	0.0	0.00	9.83	21	306
154.0	Alcatel-Lucent B13 RRH4x30-4R	3	73	2.3	1.7	11.8	7.5	0.80	0.50	0.0	0.00	9.83	23	251
154.0	Alcatel-Lucent B4 RRH2X60-4R	3	78	3.8	3.0	10.6	5.7	0.80	0.50	0.0	0.00	9.83	38	266

Elev (ft)	Description	Qty	Ice Wt (lb)	Ice EPA (sf)	Length (ft)	Width (in)	Depth (in)	K_a	Orient. Factor	Vert. Ecc. (ft)	M_u (lb-ft)	Q_z (psf)	F_a (WL) (lb)	P_a (DL) (lb)
154.0	Raycap RVZDC-6627-PF-48	1	63	4.2	2.4	15.7	10.3	0.80	1.00	0.0	0.00	9.83	28	70
154.0	Samsung MT6407-77A	3	111	5.1	2.9	16.1	5.5	0.80	0.61	0.0	0.00	9.83	63	381
154.0	Generic Mount Reinforcement	3	255	6.4	0.0	0.0	0.0	0.75	0.67	0.0	0.00	9.83	81	885
154.0	CSS X7C-865-4	3	103	12.8	8.0	12.5	7.0	0.80	0.69	0.0	0.00	9.83	177	331
154.0	Generic Round Sector Frame	3	977	19.1	0.0	0.0	0.0	0.75	0.67	0.0	0.00	9.83	241	3351
154.0	JMA Wireless X7CQAP-FRO-845-V	9	165	17.5	8.0	18.8	9.7	0.80	0.67	0.0	0.00	9.83	707	1602
154.0	JMA Wireless X7CQAP-FRO-845-VR	6	166	17.5	8.0	18.8	9.7	0.80	0.67	0.0	0.00	9.83	472	1076
138.0	Torque Arms	1	598	17.9	0.0	0.0	0.0	1.00	1.00	0.0	0.00	9.55	146	698
124.0	Generic 8' Omni	1	42	3.2	8.0	3.0	3.0	1.00	1.00	0.0	0.00	9.28	25	47
111.0	Kathrein Scala PR-850	1	123	20.4	3.0	68.0	18.0	1.00	0.91	0.0	0.00	9.01	142	131
59.0	Kathrein Scala CA7-490	1	17	1.7	1.0	37.6	0.0	1.00	1.00	0.0	0.00	7.61	11	19
	Totals	**101**	**20,482**	**920.9**									4726	23,217

Discrete Appurtenance Properties for LC: **1.0D + 1.0W Service**

Elev (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K_a	Orient. Factor	Vert. Ecc. (ft)	M_u (lb-ft)	Q_z (psf)	F_a (WL) (lb)	P_a (DL) (lb)
253.0	Band II (VHF) 903HP Panel Arra	2	103	5.2	5.6	95.5	36.3	1.00	1.00	0.0	0.00	9.20	81	206
243.0	RFS 903HP	1	103	4.4	2.7	16.3	16.3	1.00	1.00	0.0	0.00	9.10	34	103
243.0	Band II (VHF) 903HP Panel Arra	2	103	5.2	5.6	95.5	36.3	1.00	1.00	0.0	0.00	9.10	80	206
233.0	Band II (VHF) 903HP Panel Arra	2	103	5.2	5.6	95.5	36.3	1.00	1.00	0.0	0.00	9.00	79	206
212.0	Ericsson Radio 4460 B25+B66	4	109	2.6	1.6	15.7	12.1	0.80	0.50	0.0	0.00	8.78	31	436
212.0	Ericsson Radio 4480 B71+B85	4	93	2.8	1.8	15.4	7.5	0.80	0.50	0.0	0.00	8.78	33	372
212.0	Amphenol Antel APXVAALL24M-U-J	4	86	17.1	8.0	19.7	8.5	0.80	0.65	0.0	0.00	8.78	265	344
212.0	Generic Sector Frame	3	800	20.0	0.0	0.0	0.0	0.75	1.00	0.0	0.00	8.78	336	2400
203.0	Generic 8' Dipole	1	25	3.0	8.0	3.0	3.0	1.00	1.00	0.0	0.00	8.68	22	25
202.0	Flat Side Arm	1	150	6.3	0.0	0.0	0.0	1.00	1.00	0.0	0.00	8.66	46	150
191.0	Procom CXL 900-3LW	1	2	0.1	2.3	0.6	0.6	1.00	1.00	0.0	0.00	8.54	1	2
191.0	Generic 5" x 3" x 2" Cavity Fi	1	2	0.1	0.4	3.2	1.9	1.00	1.00	0.0	0.00	8.54	1	2
191.0	Generic Low Noise Amplifier	1	2	0.2	0.4	4.0	2.0	1.00	1.00	0.0	0.00	8.54	1	2
191.0	Generic Flat Side Arm	1	188	6.3	0.0	0.0	0.0	1.00	1.00	0.0	0.00	8.54	46	188
184.0	Stand-Off	1	75	2.5	0.0	0.0	0.0	1.00	1.00	0.0	0.00	8.45	18	75
177.0	Andrew E15Z01P13	3	22	0.8	1.1	7.2	5.5	0.80	0.50	0.0	0.00	8.36	7	66
177.0	Ericsson MLTN11/2X 225T/128X	2	9	1.1	1.0	10.3	3.8	0.80	0.50	3.0	18.39	8.40	6	18
177.0	Raycap DC6-48-60-18-8F ("Squid	2	19	1.5	2.0	11.0	11.0	0.80	1.00	0.0	0.00	8.36	17	38
177.0	Ericsson RRUS 4478 B14 (16.5"	3	60	1.8	1.4	13.4	7.7	0.80	0.50	-2.0	31.33	8.34	16	180
177.0	Ericsson RRUS 4449 B5, B12	3	71	2.0	1.5	13.2	9.4	0.80	0.50	-2.0	33.49	8.34	17	213
177.0	Raycap DC6-48-60-18-8C-EV (Enc	1	16	2.7	2.2	12.4	9.7	0.80	1.00	0.0	0.00	8.36	15	16
177.0	Ericsson RRUS-12 B2	4	58	3.1	1.7	18.5	7.5	0.80	0.50	-2.0	71.33	8.34	36	232
177.0	Andrew VHLPX800-11	1	49	7.8	2.8	33.6	0.0	1.00	1.00	3.0	166.44	8.40	55	49
177.0	Generic Round Sector Frame	3	700	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.00	8.36	173	2100
177.0	Commscope NNH4-65C-R6 (102.1 l	6	102	17.1	8.0	19.6	7.8	0.80	0.64	0.0	0.00	8.36	373	613
154.0	Samsung B2/B66A RRH ORAN (RF 4	3	75	1.9	1.3	15.0	10.0	0.80	0.50	0.0	0.00	8.06	15	224
154.0	Samsung B5/B13 RRH ORAN (RF444	3	70	1.9	1.3	15.0	9.1	0.80	0.50	0.0	0.00	8.06	15	211
154.0	Alcatel-Lucent B13 RRH4x30-4R	3	56	2.1	1.7	11.8	7.5	0.80	0.50	0.0	0.00	8.06	17	167
154.0	Alcatel-Lucent B4 RRH2X60-4R	3	55	3.3	3.0	10.6	5.7	0.80	0.50	0.0	0.00	8.06	28	165
154.0	Raycap RVZDC-6627-PF-48	1	32	3.8	2.4	15.7	10.3	0.80	1.00	0.0	0.00	8.06	21	32
154.0	Samsung MT6407-77A	3	82	4.7	2.9	16.1	5.5	0.80	0.61	0.0	0.00	8.06	47	245
154.0	Generic Mount Reinforcement	3	200	5.0	0.0	0.0	0.0	0.75	0.67	0.0	0.00	8.06	51	600
154.0	CSS X7C-865-4	3	37	11.8	8.0	12.5	7.0	0.80	0.69	0.0	0.00	8.06	134	110
154.0	Generic Round Sector Frame	3	700	14.4	0.0	0.0	0.0	0.75	0.67	0.0	0.00	8.06	149	2100
154.0	JMA Wireless X7CQAP-FRO-845-V	9	67	16.5	8.0	18.8	9.7	0.80	0.67	0.0	0.00	8.06	545	603
154.0	JMA Wireless X7CQAP-FRO-845-VR	6	68	16.5	8.0	18.8	9.7	0.80	0.67	0.0	0.00	8.06	363	409
138.0	Torque Arms	1	500	15.0	0.0	0.0	0.0	1.00	1.00	0.0	0.00	7.83	100	500
124.0	Generic 8' Omni	1	25	2.4	8.0	3.0	3.0	1.00	1.00	0.0	0.00	7.61	16	25
111.0	Kathrein Scala PR-850	1	38	7.3	3.0	68.0	18.0	1.00	0.91	0.0	0.00	7.39	42	38
59.0	Kathrein Scala CA7-490	1	7	1.1	1.0	37.6	0.0	1.00	1.00	0.0	0.00	6.24	6	6
	Totals	**101**	**13,674**	**803.5**									3,337	13,674

TOWER LOADING – LINEAR APPURTENANCE

Linear Appurtenance Properties

Elev From (ft)	Elev To (ft)	Description	Qty	Width (in)	Weight (lb/ft)	% In Wind	Spread On Faces	Bundling	Cluster Dia (in)	Out of Zone	Spacing (in)	Orient. Factor	K_a Override
0.0	243.0	1 5/8" Coax	1	1.98	0.82	100	2	Individual	0.00	N	1.00	1.00	0.00
0.0	212.0	2.00" (50.8mm) Hybrid	3	2.00	3.09	100	1	Individual	0.00	N	1.00	1.00	0.00
0.0	203.0	1/2" Coax	1	0.63	0.15	100	1	Individual	0.00	N	1.00	1.00	0.00
0.0	191.0	1/2" Coax	1	0.63	0.15	100	1	Individual	0.00	N	1.00	1.00	0.00
0.0	177.0	0.41" (10.3mm) LMR-400	2	0.41	0.07	100	3	Individual	0.00	N	1.00	1.00	0.00
0.0	177.0	0.96" (24.3mm) Cable	2	0.96	0.88	100	1	Individual	0.00	N	1.00	1.00	0.00
0.0	177.0	0.65" (16.4mm) 8 AWG 2C	4	0.65	0.31	100	3	Individual	0.00	N	1.00	1.00	0.00
0.0	177.0	0.39" (10mm) Fiber Trunk	2	0.39	0.06	100	3	Individual	0.00	N	1.00	1.00	0.01
0.0	177.0	1 5/8" Coax	12	1.98	0.82	50	3	Block	0.00	N	1.00	1.00	0.00
0.0	154.0	1 5/8" Hybriflex	2	1.98	1.30	100	2	Individual	0.00	N	1.00	1.00	0.00
0.0	154.0	Waveguide	1	2.00	6.00	100	1	Individual	0.00	N	1.00	1.00	0.00
0.0	124.0	1/2" Coax	1	0.63	0.15	100	2	Individual	0.00	N	1.00	1.00	0.00
0.0	75.0	1 1/4" conduit	1	1.66	2.27	100	2	Individual	0.00	N	1.00	1.00	0.00
0.0	59.0	1/2" Coax	1	0.63	0.15	100	1	Individual	0.00	N	1.00	1.00	0.00

SECTION FORCES

1.2D + 1.0W Normal — Gust Response Factor (Gh): 0.85
110.14 mph Wind with No Ice — Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)	
16	250	30.90	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	462	0	278	9	288	
15	230	30.22	0.340	6.680	0.00	0.164	2.72	1.00	1.00	0.0	4.20	11.43	0.00	491	0	294	61	355	
14	210	29.50	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	613	0	266	171	436	
13	190	28.72	0.340	6.680	0.00	0.164	2.72	1.00	1.00	0.0	4.20	11.43	0.00	719	0	279	262	541	
12	170	27.88	0.510	6.680	0.00	0.168	2.71	1.00	1.00	0.0	4.37	11.84	0.00	1004	0	281	902	1183	
11	150	26.97	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	1167	0	243	1122	1365	
10	139	26.43	0.000	0.756	0.00	0.176	2.68	1.00	1.00	0.0	0.44	1.18	0.00	131	0	26	116	142	
9	134	26.17	0.646	2.584	0.00	0.188	2.64	1.00	1.00	0.0	2.14	5.65	0.00	508	0	126	459	585	
8	125	25.69	0.000	3.340	0.00	0.156	2.75	1.00	1.00	0.0	1.93	5.30	0.00	615	0	116	566	682	
7	110	24.83	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	1233	0	224	1105	1328	
6	90	23.53	0.340	6.680	0.00	0.164	2.72	1.00	1.00	0.0	4.20	11.43	0.00	1256	0	229	1047	1276	
5	70	22.01	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	1273	0	198	1007	1205	
4	50	20.12	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	1291	0	181	941	1123	
3	30	17.83	0.340	6.680	0.00	0.164	2.72	1.00	1.00	0.0	4.20	11.43	0.00	1314	0	173	835	1008	
2	10	17.83	0.000	6.523	0.00	0.153	2.76	1.00	1.00	0.0	3.76	10.37	0.00	1270	0	157	828	985	
1	0	17.83	0.312	0.397	0.00	1.000	2.10	1.00	1.00	0.0	0.71	1.49	0.00	78	0	23	0	6	**
	*** = Section Force Exceeds Solidity Ratio Criteria*												**Totals**	**13,425**	**0**			**12,508**	

1.2D + 1.0W 60° — Gust Response Factor (Gh): 0.85
110.14 mph Wind with No Ice — Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)	
16	250	30.90	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	462	0	278	9	288	
15	230	30.22	0.340	6.680	0.00	0.164	2.72	0.80	1.00	0.0	4.13	11.24	0.00	491	0	289	61	350	
14	210	29.50	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	613	0	266	171	436	
13	190	28.72	0.340	6.680	0.00	0.164	2.72	0.80	1.00	0.0	4.13	11.24	0.00	719	0	274	262	537	
12	170	27.88	0.510	6.680	0.00	0.168	2.71	0.80	1.00	0.0	4.27	11.56	0.00	1004	0	274	902	1176	
11	150	26.97	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	1167	0	243	1122	1365	
10	139	26.43	0.000	0.756	0.00	0.176	2.68	0.80	1.00	0.0	0.44	1.18	0.00	131	0	26	116	142	
9	134	26.17	0.646	2.584	0.00	0.188	2.64	0.80	1.00	0.0	2.02	5.31	0.00	508	0	118	459	577	
8	125	25.69	0.000	3.340	0.00	0.156	2.75	0.80	1.00	0.0	1.93	5.30	0.00	615	0	116	566	682	
7	110	24.83	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	1233	0	224	1105	1328	
6	90	23.53	0.340	6.680	0.00	0.164	2.72	0.80	1.00	0.0	4.13	11.24	0.00	1256	0	225	1047	1272	
5	70	22.01	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	1273	0	198	1007	1205	
4	50	20.12	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	1291	0	181	941	1123	
3	30	17.83	0.340	6.680	0.00	0.164	2.72	0.80	1.00	0.0	4.13	11.24	0.00	1314	0	170	835	1005	
2	10	17.83	0.000	6.523	0.00	0.153	2.76	0.80	1.00	0.0	3.76	10.37	0.00	1270	0	157	828	985	
1	0	17.83	0.312	0.397	0.00	1.000	2.10	0.80	1.00	0.0	0.65	1.36	0.00	78	0	21	0	6	**
	*** = Section Force Exceeds Solidity Ratio Criteria*												**Totals**	**13,425**	**0**			**12,478**	

1.2D + 1.0W 90° — Gust Response Factor (Gh): 0.85
110.14 mph Wind with No Ice — Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)	
16	250	30.90	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	462	0	278	9	288	
15	230	30.22	0.340	6.680	0.00	0.164	2.72	0.85	1.00	0.0	4.15	11.29	0.00	491	0	290	61	351	
14	210	29.50	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	613	0	266	171	436	
13	190	28.72	0.340	6.680	0.00	0.164	2.72	0.85	1.00	0.0	4.15	11.29	0.00	719	0	276	262	538	
12	170	27.88	0.510	6.680	0.00	0.168	2.71	0.85	1.00	0.0	4.30	11.63	0.00	1004	0	276	902	1178	
11	150	26.97	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	1167	0	243	1122	1365	
10	139	26.43	0.000	0.756	0.00	0.176	2.68	0.85	1.00	0.0	0.44	1.18	0.00	131	0	26	116	142	
9	134	26.17	0.646	2.584	0.00	0.188	2.64	0.85	1.00	0.0	2.05	5.40	0.00	508	0	120	459	579	
8	125	25.69	0.000	3.340	0.00	0.156	2.75	0.85	1.00	0.0	1.93	5.30	0.00	615	0	116	566	682	
7	110	24.83	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	1233	0	224	1105	1328	
6	90	23.53	0.340	6.680	0.00	0.164	2.72	0.85	1.00	0.0	4.15	11.29	0.00	1256	0	226	1047	1273	
5	70	22.01	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	1273	0	198	1007	1205	
4	50	20.12	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	1291	0	181	941	1123	
3	30	17.83	0.340	6.680	0.00	0.164	2.72	0.85	1.00	0.0	4.15	11.29	0.00	1314	0	171	835	1006	
2	10	17.83	0.000	6.523	0.00	0.153	2.76	0.85	1.00	0.0	3.76	10.37	0.00	1270	0	157	828	985	
1	0	17.83	0.312	0.397	0.00	1.000	2.10	0.85	1.00	0.0	0.66	1.39	0.00	78	0	21	0	6	**
	*** = Section Force Exceeds Solidity Ratio Criteria*												**Totals**	**13,425**	**0**			**12,486**	

1.2D + 1.0W 120° — Gust Response Factor (Gh): 0.85
110.14 mph Wind with No Ice — Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
16	250	30.90	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	462	0	278	9	288
15	230	30.22	0.340	6.680	0.00	0.164	2.72	1.00	1.00	0.0	4.20	11.43	0.00	491	0	294	61	355
14	210	29.50	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	613	0	266	171	436
13	190	28.72	0.340	6.680	0.00	0.164	2.72	1.00	1.00	0.0	4.20	11.43	0.00	719	0	279	262	541
12	170	27.88	0.510	6.680	0.00	0.168	2.71	1.00	1.00	0.0	4.37	11.84	0.00	1004	0	281	902	1183
11	150	26.97	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	1167	0	243	1122	1365
10	139	26.43	0.000	0.756	0.00	0.176	2.68	1.00	1.00	0.0	0.44	1.18	0.00	131	0	26	116	142
9	134	26.17	0.646	2.584	0.00	0.188	2.64	1.00	1.00	0.0	2.14	5.65	0.00	508	0	126	459	585

SECTION FORCES

1.2D + 1.0W 120° Gust Response Factor (Gh): 0.85
110.14 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)	
8	125	25.69	0.000	3.340	0.00	0.156	2.75	1.00	1.00	0.0	1.93	5.30	0.00	615	0	116	566	682	
7	110	24.83	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	1233	0	224	1105	1328	
6	90	23.53	0.340	6.680	0.00	0.164	2.72	1.00	1.00	0.0	4.20	11.43	0.00	1256	0	229	1047	1276	
5	70	22.01	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	1273	0	198	1007	1205	
4	50	20.12	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	1291	0	181	941	1123	
3	30	17.83	0.340	6.680	0.00	0.164	2.72	1.00	1.00	0.0	4.20	11.43	0.00	1314	0	173	835	1008	
2	10	17.83	0.000	6.523	0.00	0.153	2.76	1.00	1.00	0.0	3.76	10.37	0.00	1270	0	157	828	985	
1	0	17.83	0.312	0.397	0.00	1.000	2.10	1.00	1.00	0.0	0.71	1.49	0.00	78	0	23	0	6	**
	*** = Section Force Exceeds Solidity Ratio Criteria*												**Totals**	**13,425**	**0**			**12,508**	

1.2D + 1.0W 180° Gust Response Factor (Gh): 0.85
110.14 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)	
16	250	30.90	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	462	0	278	9	288	
15	230	30.22	0.340	6.680	0.00	0.164	2.72	0.80	1.00	0.0	4.13	11.24	0.00	491	0	289	61	350	
14	210	29.50	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	613	0	266	171	436	
13	190	28.72	0.340	6.680	0.00	0.164	2.72	0.80	1.00	0.0	4.13	11.24	0.00	719	0	274	262	537	
12	170	27.88	0.510	6.680	0.00	0.168	2.71	0.80	1.00	0.0	4.27	11.56	0.00	1004	0	274	902	1176	
11	150	26.97	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	1167	0	243	1122	1365	
10	139	26.43	0.000	0.756	0.00	0.176	2.68	0.80	1.00	0.0	0.44	1.18	0.00	131	0	26	116	142	
9	134	26.17	0.646	2.584	0.00	0.188	2.64	0.80	1.00	0.0	2.02	5.31	0.00	508	0	118	459	577	
8	125	25.69	0.000	3.340	0.00	0.156	2.75	0.80	1.00	0.0	1.93	5.30	0.00	615	0	116	566	682	
7	110	24.83	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	1233	0	224	1105	1328	
6	90	23.53	0.340	6.680	0.00	0.164	2.72	0.80	1.00	0.0	4.13	11.24	0.00	1256	0	225	1047	1272	
5	70	22.01	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	1273	0	198	1007	1205	
4	50	20.12	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	1291	0	181	941	1123	
3	30	17.83	0.340	6.680	0.00	0.164	2.72	0.80	1.00	0.0	4.13	11.24	0.00	1314	0	170	835	1005	
2	10	17.83	0.000	6.523	0.00	0.153	2.76	0.80	1.00	0.0	3.76	10.37	0.00	1270	0	157	828	985	
1	0	17.83	0.312	0.397	0.00	1.000	2.10	0.80	1.00	0.0	0.65	1.36	0.00	78	0	21	0	6	**
	*** = Section Force Exceeds Solidity Ratio Criteria*												**Totals**	**13,425**	**0**			**12,478**	

1.2D + 1.0W 210° Gust Response Factor (Gh): 0.85
110.14 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)	
16	250	30.90	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	462	0	278	9	288	
15	230	30.22	0.340	6.680	0.00	0.164	2.72	0.85	1.00	0.0	4.15	11.29	0.00	491	0	290	61	351	
14	210	29.50	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	613	0	266	171	436	
13	190	28.72	0.340	6.680	0.00	0.164	2.72	0.85	1.00	0.0	4.15	11.29	0.00	719	0	276	262	538	
12	170	27.88	0.510	6.680	0.00	0.168	2.71	0.85	1.00	0.0	4.30	11.63	0.00	1004	0	276	902	1178	
11	150	26.97	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	1167	0	243	1122	1365	
10	139	26.43	0.000	0.756	0.00	0.176	2.68	0.85	1.00	0.0	0.44	1.18	0.00	131	0	26	116	142	
9	134	26.17	0.646	2.584	0.00	0.188	2.64	0.85	1.00	0.0	2.05	5.40	0.00	508	0	120	459	579	
8	125	25.69	0.000	3.340	0.00	0.156	2.75	0.85	1.00	0.0	1.93	5.30	0.00	615	0	116	566	682	
7	110	24.83	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	1233	0	224	1105	1328	
6	90	23.53	0.340	6.680	0.00	0.164	2.72	0.85	1.00	0.0	4.15	11.29	0.00	1256	0	226	1047	1273	
5	70	22.01	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	1273	0	198	1007	1205	
4	50	20.12	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	1291	0	181	941	1123	
3	30	17.83	0.340	6.680	0.00	0.164	2.72	0.85	1.00	0.0	4.15	11.29	0.00	1314	0	171	835	1006	
2	10	17.83	0.000	6.523	0.00	0.153	2.76	0.85	1.00	0.0	3.76	10.37	0.00	1270	0	157	828	985	
1	0	17.83	0.312	0.397	0.00	1.000	2.10	0.85	1.00	0.0	0.66	1.39	0.00	78	0	21	0	6	**
	*** = Section Force Exceeds Solidity Ratio Criteria*												**Totals**	**13,425**	**0**			**12,486**	

1.2D + 1.0W 240° Gust Response Factor (Gh): 0.85
110.14 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)	
16	250	30.90	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	462	0	278	9	288	
15	230	30.22	0.340	6.680	0.00	0.164	2.72	1.00	1.00	0.0	4.20	11.43	0.00	491	0	294	61	355	
14	210	29.50	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	613	0	266	171	436	
13	190	28.72	0.340	6.680	0.00	0.164	2.72	1.00	1.00	0.0	4.20	11.43	0.00	719	0	279	262	541	
12	170	27.88	0.510	6.680	0.00	0.168	2.71	1.00	1.00	0.0	4.37	11.84	0.00	1004	0	281	902	1183	
11	150	26.97	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	1167	0	243	1122	1365	
10	139	26.43	0.000	0.756	0.00	0.176	2.68	1.00	1.00	0.0	0.44	1.18	0.00	131	0	26	116	142	
9	134	26.17	0.646	2.584	0.00	0.188	2.64	1.00	1.00	0.0	2.14	5.65	0.00	508	0	126	459	585	
8	125	25.69	0.000	3.340	0.00	0.156	2.75	1.00	1.00	0.0	1.93	5.30	0.00	615	0	116	566	682	
7	110	24.83	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	1233	0	224	1105	1328	
6	90	23.53	0.340	6.680	0.00	0.164	2.72	1.00	1.00	0.0	4.20	11.43	0.00	1256	0	229	1047	1276	
5	70	22.01	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	1273	0	198	1007	1205	
4	50	20.12	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	1291	0	181	941	1123	
3	30	17.83	0.340	6.680	0.00	0.164	2.72	1.00	1.00	0.0	4.20	11.43	0.00	1314	0	173	835	1008	
2	10	17.83	0.000	6.523	0.00	0.153	2.76	1.00	1.00	0.0	3.76	10.37	0.00	1270	0	157	828	985	
1	0	17.83	0.312	0.397	0.00	1.000	2.10	1.00	1.00	0.0	0.71	1.49	0.00	78	0	23	0	6	**

SECTION FORCES

1.2D + 1.0W 240° Gust Response Factor (Gh): 0.85
110.14 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)	
*** = Section Force Exceeds Solidity Ratio Criteria*													**Totals**	**13,425**	**0**			**12,508**	

1.2D + 1.0W 300° Gust Response Factor (Gh): 0.85
110.14 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)	
16	250	30.90	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	462	0	278	9	288	
15	230	30.22	0.340	6.680	0.00	0.164	2.72	0.80	1.00	0.0	4.13	11.24	0.00	491	0	289	61	350	
14	210	29.50	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	613	0	266	171	436	
13	190	28.72	0.340	6.680	0.00	0.164	2.72	0.80	1.00	0.0	4.13	11.24	0.00	719	0	274	262	537	
12	170	27.88	0.510	6.680	0.00	0.168	2.71	0.80	1.00	0.0	4.27	11.56	0.00	1004	0	274	902	1176	
11	150	26.97	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	1167	0	243	1122	1365	
10	139	26.43	0.000	0.756	0.00	0.176	2.68	0.80	1.00	0.0	0.44	1.18	0.00	131	0	26	116	142	
9	134	26.17	0.646	2.584	0.00	0.188	2.64	0.80	1.00	0.0	2.02	5.31	0.00	508	0	118	459	577	
8	125	25.69	0.000	3.340	0.00	0.156	2.75	0.80	1.00	0.0	1.93	5.30	0.00	615	0	116	566	682	
7	110	24.83	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	1233	0	224	1105	1328	
6	90	23.53	0.340	6.680	0.00	0.164	2.72	0.80	1.00	0.0	4.13	11.24	0.00	1256	0	225	1047	1272	
5	70	22.01	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	1273	0	198	1007	1205	
4	50	20.12	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	1291	0	181	941	1123	
3	30	17.83	0.340	6.680	0.00	0.164	2.72	0.80	1.00	0.0	4.13	11.24	0.00	1314	0	170	835	1005	
2	10	17.83	0.000	6.523	0.00	0.153	2.76	0.80	1.00	0.0	3.76	10.37	0.00	1270	0	157	828	985	
1	0	17.83	0.312	0.397	0.00	1.000	2.10	0.80	1.00	0.0	0.65	1.36	0.00	78	0	21	0	6	**
*** = Section Force Exceeds Solidity Ratio Criteria*													**Totals**	**13,425**	**0**			**12,478**	

1.2D + 1.0W 330° Gust Response Factor (Gh): 0.85
110.14 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)	
16	250	30.90	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	462	0	278	9	288	
15	230	30.22	0.340	6.680	0.00	0.164	2.72	0.85	1.00	0.0	4.15	11.29	0.00	491	0	290	61	351	
14	210	29.50	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	613	0	266	171	436	
13	190	28.72	0.340	6.680	0.00	0.164	2.72	0.85	1.00	0.0	4.15	11.29	0.00	719	0	276	262	538	
12	170	27.88	0.510	6.680	0.00	0.168	2.71	0.85	1.00	0.0	4.30	11.63	0.00	1004	0	276	902	1178	
11	150	26.97	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	1167	0	243	1122	1365	
10	139	26.43	0.000	0.756	0.00	0.176	2.68	0.85	1.00	0.0	0.44	1.18	0.00	131	0	26	116	142	
9	134	26.17	0.646	2.584	0.00	0.188	2.64	0.85	1.00	0.0	2.05	5.40	0.00	508	0	120	459	579	
8	125	25.69	0.000	3.340	0.00	0.156	2.75	0.85	1.00	0.0	1.93	5.30	0.00	615	0	116	566	682	
7	110	24.83	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	1233	0	224	1105	1328	
6	90	23.53	0.340	6.680	0.00	0.164	2.72	0.85	1.00	0.0	4.15	11.29	0.00	1256	0	226	1047	1273	
5	70	22.01	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	1273	0	198	1007	1205	
4	50	20.12	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	1291	0	181	941	1123	
3	30	17.83	0.340	6.680	0.00	0.164	2.72	0.85	1.00	0.0	4.15	11.29	0.00	1314	0	171	835	1006	
2	10	17.83	0.000	6.523	0.00	0.153	2.76	0.85	1.00	0.0	3.76	10.37	0.00	1270	0	157	828	985	
1	0	17.83	0.312	0.397	0.00	1.000	2.10	0.85	1.00	0.0	0.66	1.39	0.00	78	0	21	0	6	**
*** = Section Force Exceeds Solidity Ratio Criteria*													**Totals**	**13,425**	**0**			**12,486**	

1.2D + 1.0Di + 1.0Wi Normal Gust Response Factor (Gh): 0.85
66.28 mph Wind with 0.425" Radial Ice Wind Importance Factor (Iw): 1.00 Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)	
16	250	11.19	0.000	15.412	8.73	0.345	2.18	1.00	1.00	0.5	9.53	20.80	8.73	654	192	198	6	203	
15	230	10.94	0.340	15.514	8.83	0.355	2.16	1.00	1.00	0.5	9.99	21.57	8.83	708	217	201	36	237	
14	210	10.68	0.000	15.261	8.58	0.342	2.19	1.00	1.00	0.5	9.42	20.63	8.58	885	273	187	104	291	
13	190	10.40	0.340	15.347	8.67	0.352	2.17	1.00	1.00	0.5	9.87	21.38	8.67	1045	326	189	167	356	
12	170	10.10	0.510	15.252	8.57	0.354	2.16	1.00	1.00	0.5	9.99	21.61	8.57	1789	785	185	491	677	
11	150	9.77	0.000	14.977	8.30	0.336	2.20	1.00	1.00	0.5	9.21	20.30	8.30	2044	877	169	617	777	**
10	139	9.57	0.000	1.695	0.94	0.381	2.10	1.00	1.00	0.5	1.07	2.26	0.94	224	93	18	61	76	**
9	134	9.48	0.646	6.084	3.50	0.378	2.11	1.00	1.00	0.5	4.48	9.45	3.50	862	353	76	243	301	**
8	125	9.30	0.000	7.413	4.07	0.333	2.21	1.00	1.00	0.5	4.55	10.07	4.07	1060	444	80	313	370	**
7	110	8.99	0.000	14.723	8.04	0.331	2.22	1.00	1.00	0.5	9.03	20.02	8.04	2115	882	153	613	714	**
6	90	8.52	0.340	14.723	8.04	0.339	2.20	1.00	1.00	0.5	9.41	20.69	8.04	2126	870	150	573	676	**
5	70	7.97	0.000	14.368	7.69	0.323	2.24	1.00	1.00	0.5	8.78	19.62	7.69	2124	850	133	557	632	**
4	50	7.29	0.000	14.114	7.43	0.318	2.25	1.00	1.00	0.4	8.60	19.33	7.43	2122	832	120	524	577	**
3	30	6.46	0.340	13.886	7.21	0.321	2.24	1.00	1.00	0.4	8.81	19.75	7.21	2103	789	108	457	511	**
2	10	6.46	0.000	12.709	6.19	0.290	2.32	1.00	1.00	0.4	7.63	17.72	6.19	1943	673	97	451	505	**
1	0	6.46	0.312	0.569	0.17	1.000	2.10	1.00	1.00	0.2	0.88	1.85	0.17	83	5	10	0	2	**
*** = Section Force Exceeds Solidity Ratio Criteria*													**Totals**	**21,887**	**8,462**			**6,905**	

1.2D + 1.0Di + 1.0Wi 60° Gust Response Factor (Gh): 0.85
66.28 mph Wind with 0.425" Radial Ice Wind Importance Factor (Iw): 1.00 Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
16	250	11.19	0.000	15.412	8.73	0.345	2.18	0.80	1.00	0.5	9.53	20.80	8.73	654	192	198	6	203

SECTION FORCES

1.2D + 1.0Di + 1.0Wi 60° Gust Response Factor (Gh): 0.85
66.28 mph Wind with 0.425" Radial Ice Wind Importance Factor (Iw): 1.00 Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)	
15	230	10.94	0.340	15.514	8.83	0.355	2.16	0.80	1.00	0.5	9.92	21.43	8.83	708	217	199	36	235	
14	210	10.68	0.000	15.261	8.58	0.342	2.19	0.80	1.00	0.5	9.42	20.63	8.58	885	273	187	104	291	
13	190	10.40	0.340	15.347	8.67	0.352	2.17	0.80	1.00	0.5	9.80	21.24	8.67	1045	326	188	167	355	
12	170	10.10	0.510	15.252	8.57	0.354	2.16	0.80	1.00	0.5	9.89	21.39	8.57	1789	785	184	491	675	
11	150	9.77	0.000	14.977	8.30	0.336	2.20	0.80	1.00	0.5	9.21	20.30	8.30	2044	877	169	617	777	**
10	139	9.57	0.000	1.695	0.94	0.381	2.10	0.80	1.00	0.5	1.07	2.26	0.94	224	93	18	61	76	**
9	134	9.48	0.646	6.084	3.50	0.378	2.11	0.80	1.00	0.5	4.35	9.18	3.50	862	353	74	243	301	**
8	125	9.30	0.000	7.413	4.07	0.333	2.21	0.80	1.00	0.5	4.55	10.07	4.07	1060	444	80	313	370	**
7	110	8.99	0.000	14.723	8.04	0.331	2.22	0.80	1.00	0.5	9.03	20.02	8.04	2115	882	153	613	714	**
6	90	8.52	0.340	14.723	8.04	0.339	2.20	0.80	1.00	0.5	9.34	20.54	8.04	2126	870	149	573	676	**
5	70	7.97	0.000	14.368	7.69	0.323	2.24	0.80	1.00	0.5	8.78	19.62	7.69	2124	850	133	557	632	**
4	50	7.29	0.000	14.114	7.43	0.318	2.25	0.80	1.00	0.4	8.60	19.33	7.43	2122	832	120	524	577	**
3	30	6.46	0.340	13.886	7.21	0.321	2.24	0.80	1.00	0.4	8.74	19.60	7.21	2103	789	108	457	511	**
2	10	6.46	0.000	12.709	6.19	0.290	2.32	0.80	1.00	0.4	7.63	17.72	6.19	1943	673	97	451	505	**
1	0	6.46	0.312	0.569	0.17	1.000	2.10	0.80	1.00	0.2	0.82	1.72	0.17	83	5	9	0	2	**
	*** = Section Force Exceeds Solidity Ratio Criteria*												**Totals**	**21,887**	**8,462**			**6,901**	

1.2D + 1.0Di + 1.0Wi 90° Gust Response Factor (Gh): 0.85
66.28 mph Wind with 0.425" Radial Ice Wind Importance Factor (Iw): 1.00 Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)	
16	250	11.19	0.000	15.412	8.73	0.345	2.18	0.85	1.00	0.5	9.53	20.80	8.73	654	192	198	6	203	
15	230	10.94	0.340	15.514	8.83	0.355	2.16	0.85	1.00	0.5	9.94	21.46	8.83	708	217	200	36	236	
14	210	10.68	0.000	15.261	8.58	0.342	2.19	0.85	1.00	0.5	9.42	20.63	8.58	885	273	187	104	291	
13	190	10.40	0.340	15.347	8.67	0.352	2.17	0.85	1.00	0.5	9.82	21.27	8.67	1045	326	188	167	355	
12	170	10.10	0.510	15.252	8.57	0.354	2.16	0.85	1.00	0.5	9.91	21.44	8.57	1789	785	184	491	675	
11	150	9.77	0.000	14.977	8.30	0.336	2.20	0.85	1.00	0.5	9.21	20.30	8.30	2044	877	169	617	777	**
10	139	9.57	0.000	1.695	0.94	0.381	2.10	0.85	1.00	0.5	1.07	2.26	0.94	224	93	18	61	76	**
9	134	9.48	0.646	6.084	3.50	0.378	2.11	0.85	1.00	0.5	4.38	9.25	3.50	862	353	75	243	301	**
8	125	9.30	0.000	7.413	4.07	0.333	2.21	0.85	1.00	0.5	4.55	10.07	4.07	1060	444	80	313	370	**
7	110	8.99	0.000	14.723	8.04	0.331	2.22	0.85	1.00	0.5	9.03	20.02	8.04	2115	882	153	613	714	**
6	90	8.52	0.340	14.723	8.04	0.339	2.20	0.85	1.00	0.5	9.36	20.57	8.04	2126	870	149	573	676	**
5	70	7.97	0.000	14.368	7.69	0.323	2.24	0.85	1.00	0.5	8.78	19.62	7.69	2124	850	133	557	632	**
4	50	7.29	0.000	14.114	7.43	0.318	2.25	0.85	1.00	0.4	8.60	19.33	7.43	2122	832	120	524	577	**
3	30	6.46	0.340	13.886	7.21	0.321	2.24	0.85	1.00	0.4	8.76	19.64	7.21	2103	789	108	457	511	**
2	10	6.46	0.000	12.709	6.19	0.290	2.32	0.85	1.00	0.4	7.63	17.72	6.19	1943	673	97	451	505	**
1	0	6.46	0.312	0.569	0.17	1.000	2.10	0.85	1.00	0.2	0.83	1.75	0.17	83	5	10	0	2	**
	*** = Section Force Exceeds Solidity Ratio Criteria*												**Totals**	**21,887**	**8,462**			**6,902**	

1.2D + 1.0Di + 1.0Wi 120° Gust Response Factor (Gh): 0.85
66.28 mph Wind with 0.425" Radial Ice Wind Importance Factor (Iw): 1.00 Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)	
16	250	11.19	0.000	15.412	8.73	0.345	2.18	1.00	1.00	0.5	9.53	20.80	8.73	654	192	198	6	203	
15	230	10.94	0.340	15.514	8.83	0.355	2.16	1.00	1.00	0.5	9.99	21.57	8.83	708	217	201	36	237	
14	210	10.68	0.000	15.261	8.58	0.342	2.19	1.00	1.00	0.5	9.42	20.63	8.58	885	273	187	104	291	
13	190	10.40	0.340	15.347	8.67	0.352	2.17	1.00	1.00	0.5	9.87	21.38	8.67	1045	326	189	167	356	
12	170	10.10	0.510	15.252	8.57	0.354	2.16	1.00	1.00	0.5	9.99	21.61	8.57	1789	785	185	491	677	
11	150	9.77	0.000	14.977	8.30	0.336	2.20	1.00	1.00	0.5	9.21	20.30	8.30	2044	877	169	617	777	**
10	139	9.57	0.000	1.695	0.94	0.381	2.10	1.00	1.00	0.5	1.07	2.26	0.94	224	93	18	61	76	**
9	134	9.48	0.646	6.084	3.50	0.378	2.11	1.00	1.00	0.5	4.48	9.45	3.50	862	353	76	243	301	**
8	125	9.30	0.000	7.413	4.07	0.333	2.21	1.00	1.00	0.5	4.55	10.07	4.07	1060	444	80	313	370	**
7	110	8.99	0.000	14.723	8.04	0.331	2.22	1.00	1.00	0.5	9.03	20.02	8.04	2115	882	153	613	714	**
6	90	8.52	0.340	14.723	8.04	0.339	2.20	1.00	1.00	0.5	9.41	20.69	8.04	2126	870	150	573	676	**
5	70	7.97	0.000	14.368	7.69	0.323	2.24	1.00	1.00	0.5	8.78	19.62	7.69	2124	850	133	557	632	**
4	50	7.29	0.000	14.114	7.43	0.318	2.25	1.00	1.00	0.4	8.60	19.33	7.43	2122	832	120	524	577	**
3	30	6.46	0.340	13.886	7.21	0.321	2.24	1.00	1.00	0.4	8.81	19.75	7.21	2103	789	108	457	511	**
2	10	6.46	0.000	12.709	6.19	0.290	2.32	1.00	1.00	0.4	7.63	17.72	6.19	1943	673	97	451	505	**
1	0	6.46	0.312	0.569	0.17	1.000	2.10	1.00	1.00	0.2	0.88	1.85	0.17	83	5	10	0	2	**
	*** = Section Force Exceeds Solidity Ratio Criteria*												**Totals**	**21,887**	**8,462**			**6,905**	

1.2D + 1.0Di + 1.0Wi 180° Gust Response Factor (Gh): 0.85
66.28 mph Wind with 0.425" Radial Ice Wind Importance Factor (Iw): 1.00 Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)	
16	250	11.19	0.000	15.412	8.73	0.345	2.18	0.80	1.00	0.5	9.53	20.80	8.73	654	192	198	6	203	
15	230	10.94	0.340	15.514	8.83	0.355	2.16	0.80	1.00	0.5	9.92	21.43	8.83	708	217	199	36	235	
14	210	10.68	0.000	15.261	8.58	0.342	2.19	0.80	1.00	0.5	9.42	20.63	8.58	885	273	187	104	291	
13	190	10.40	0.340	15.347	8.67	0.352	2.17	0.80	1.00	0.5	9.80	21.24	8.67	1045	326	188	167	355	
12	170	10.10	0.510	15.252	8.57	0.354	2.16	0.80	1.00	0.5	9.89	21.39	8.57	1789	785	184	491	675	
11	150	9.77	0.000	14.977	8.30	0.336	2.20	0.80	1.00	0.5	9.21	20.30	8.30	2044	877	169	617	777	**
10	139	9.57	0.000	1.695	0.94	0.381	2.10	0.80	1.00	0.5	1.07	2.26	0.94	224	93	18	61	76	**
9	134	9.48	0.646	6.084	3.50	0.378	2.11	0.80	1.00	0.5	4.35	9.18	3.50	862	353	74	243	301	**
8	125	9.30	0.000	7.413	4.07	0.333	2.21	0.80	1.00	0.5	4.55	10.07	4.07	1060	444	80	313	370	**

SECTION FORCES

1.2D + 1.0Di + 1.0Wi 180° Gust Response Factor (Gh): 0.85
66.28 mph Wind with 0.425" Radial Ice Wind Importance Factor (Iw): 1.00 Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)	
7	110	8.99	0.000	14.723	8.04	0.331	2.22	0.80	1.00	0.5	9.03	20.02	8.04	2115	882	153	613	714	**
6	90	8.52	0.340	14.723	8.04	0.339	2.20	0.80	1.00	0.5	9.34	20.54	8.04	2126	870	149	573	676	**
5	70	7.97	0.000	14.368	7.69	0.323	2.24	0.80	1.00	0.5	8.78	19.62	7.69	2124	850	133	557	632	**
4	50	7.29	0.000	14.114	7.43	0.318	2.25	0.80	1.00	0.4	8.60	19.33	7.43	2122	832	120	524	577	**
3	30	6.46	0.340	13.886	7.21	0.321	2.24	0.80	1.00	0.4	8.74	19.60	7.21	2103	789	108	457	511	**
2	10	6.46	0.000	12.709	6.19	0.290	2.32	0.80	1.00	0.4	7.63	17.72	6.19	1943	673	97	451	505	**
1	0	6.46	0.312	0.569	0.17	1.000	2.10	0.80	1.00	0.2	0.82	1.72	0.17	83	5	9	0	2	**
	*** = Section Force Exceeds Solidity Ratio Criteria*												**Totals**	**21,887**	**8,462**			**6,901**	

1.2D + 1.0Di + 1.0Wi 210° Gust Response Factor (Gh): 0.85
66.28 mph Wind with 0.425" Radial Ice Wind Importance Factor (Iw): 1.00 Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)	
16	250	11.19	0.000	15.412	8.73	0.345	2.18	0.85	1.00	0.5	9.53	20.80	8.73	654	192	198	6	203	
15	230	10.94	0.340	15.514	8.83	0.355	2.16	0.85	1.00	0.5	9.94	21.46	8.83	708	217	200	36	236	
14	210	10.68	0.000	15.261	8.58	0.342	2.19	0.85	1.00	0.5	9.42	20.63	8.58	885	273	187	104	291	
13	190	10.40	0.340	15.347	8.67	0.352	2.17	0.85	1.00	0.5	9.82	21.27	8.67	1045	326	188	167	355	
12	170	10.10	0.510	15.252	8.57	0.354	2.16	0.85	1.00	0.5	9.91	21.44	8.57	1789	785	184	491	675	
11	150	9.77	0.000	14.977	8.30	0.336	2.20	0.85	1.00	0.5	9.21	20.30	8.30	2044	877	169	617	777	**
10	139	9.57	0.000	1.695	0.94	0.381	2.10	0.85	1.00	0.5	1.07	2.26	0.94	224	93	18	61	76	**
9	134	9.48	0.646	6.084	3.50	0.378	2.11	0.85	1.00	0.5	4.38	9.25	3.50	862	353	75	243	301	**
8	125	9.30	0.000	7.413	4.07	0.333	2.21	0.85	1.00	0.5	4.55	10.07	4.07	1060	444	80	313	370	**
7	110	8.99	0.000	14.723	8.04	0.331	2.22	0.85	1.00	0.5	9.03	20.02	8.04	2115	882	153	613	714	**
6	90	8.52	0.340	14.723	8.04	0.339	2.20	0.85	1.00	0.5	9.36	20.57	8.04	2126	870	149	573	676	**
5	70	7.97	0.000	14.368	7.69	0.323	2.24	0.85	1.00	0.5	8.78	19.62	7.69	2124	850	133	557	632	**
4	50	7.29	0.000	14.114	7.43	0.318	2.25	0.85	1.00	0.4	8.60	19.33	7.43	2122	832	120	524	577	**
3	30	6.46	0.340	13.886	7.21	0.321	2.24	0.85	1.00	0.4	8.76	19.64	7.21	2103	789	108	457	511	**
2	10	6.46	0.000	12.709	6.19	0.290	2.32	0.85	1.00	0.4	7.63	17.72	6.19	1943	673	97	451	505	**
1	0	6.46	0.312	0.569	0.17	1.000	2.10	0.85	1.00	0.2	0.83	1.75	0.17	83	5	10	0	2	**
	*** = Section Force Exceeds Solidity Ratio Criteria*												**Totals**	**21,887**	**8,462**			**6,902**	

1.2D + 1.0Di + 1.0Wi 240° Gust Response Factor (Gh): 0.85
66.28 mph Wind with 0.425" Radial Ice Wind Importance Factor (Iw): 1.00 Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)	
16	250	11.19	0.000	15.412	8.73	0.345	2.18	1.00	1.00	0.5	9.53	20.80	8.73	654	192	198	6	203	
15	230	10.94	0.340	15.514	8.83	0.355	2.16	1.00	1.00	0.5	9.99	21.57	8.83	708	217	201	36	237	
14	210	10.68	0.000	15.261	8.58	0.342	2.19	1.00	1.00	0.5	9.42	20.63	8.58	885	273	187	104	291	
13	190	10.40	0.340	15.347	8.67	0.352	2.17	1.00	1.00	0.5	9.87	21.38	8.67	1045	326	189	167	356	
12	170	10.10	0.510	15.252	8.57	0.354	2.16	1.00	1.00	0.5	9.99	21.61	8.57	1789	785	185	491	677	
11	150	9.77	0.000	14.977	8.30	0.336	2.20	1.00	1.00	0.5	9.21	20.30	8.30	2044	877	169	617	777	**
10	139	9.57	0.000	1.695	0.94	0.381	2.10	1.00	1.00	0.5	1.07	2.26	0.94	224	93	18	61	76	**
9	134	9.48	0.646	6.084	3.50	0.378	2.11	1.00	1.00	0.5	4.48	9.45	3.50	862	353	76	243	301	**
8	125	9.30	0.000	7.413	4.07	0.333	2.21	1.00	1.00	0.5	4.55	10.07	4.07	1060	444	80	313	370	**
7	110	8.99	0.000	14.723	8.04	0.331	2.22	1.00	1.00	0.5	9.03	20.02	8.04	2115	882	153	613	714	**
6	90	8.52	0.340	14.723	8.04	0.339	2.20	1.00	1.00	0.5	9.41	20.69	8.04	2126	870	150	573	676	**
5	70	7.97	0.000	14.368	7.69	0.323	2.24	1.00	1.00	0.5	8.78	19.62	7.69	2124	850	133	557	632	**
4	50	7.29	0.000	14.114	7.43	0.318	2.25	1.00	1.00	0.4	8.60	19.33	7.43	2122	832	120	524	577	**
3	30	6.46	0.340	13.886	7.21	0.321	2.24	1.00	1.00	0.4	8.81	19.75	7.21	2103	789	108	457	511	**
2	10	6.46	0.000	12.709	6.19	0.290	2.32	1.00	1.00	0.4	7.63	17.72	6.19	1943	673	97	451	505	**
1	0	6.46	0.312	0.569	0.17	1.000	2.10	1.00	1.00	0.2	0.88	1.85	0.17	83	5	10	0	2	**
	*** = Section Force Exceeds Solidity Ratio Criteria*												**Totals**	**21,887**	**8,462**			**6,905**	

1.2D + 1.0Di + 1.0Wi 300° Gust Response Factor (Gh): 0.85
66.28 mph Wind with 0.425" Radial Ice Wind Importance Factor (Iw): 1.00 Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)	
16	250	11.19	0.000	15.412	8.73	0.345	2.18	0.80	1.00	0.5	9.53	20.80	8.73	654	192	198	6	203	
15	230	10.94	0.340	15.514	8.83	0.355	2.16	0.80	1.00	0.5	9.92	21.43	8.83	708	217	199	36	235	
14	210	10.68	0.000	15.261	8.58	0.342	2.19	0.80	1.00	0.5	9.42	20.63	8.58	885	273	187	104	291	
13	190	10.40	0.340	15.347	8.67	0.352	2.17	0.80	1.00	0.5	9.80	21.24	8.67	1045	326	188	167	355	
12	170	10.10	0.510	15.252	8.57	0.354	2.16	0.80	1.00	0.5	9.89	21.39	8.57	1789	785	184	491	675	
11	150	9.77	0.000	14.977	8.30	0.336	2.20	0.80	1.00	0.5	9.21	20.30	8.30	2044	877	169	617	777	**
10	139	9.57	0.000	1.695	0.94	0.381	2.10	0.80	1.00	0.5	1.07	2.26	0.94	224	93	18	61	76	**
9	134	9.48	0.646	6.084	3.50	0.378	2.11	0.80	1.00	0.5	4.35	9.18	3.50	862	353	74	243	301	**
8	125	9.30	0.000	7.413	4.07	0.333	2.21	0.80	1.00	0.5	4.55	10.07	4.07	1060	444	80	313	370	**
7	110	8.99	0.000	14.723	8.04	0.331	2.22	0.80	1.00	0.5	9.03	20.02	8.04	2115	882	153	613	714	**
6	90	8.52	0.340	14.723	8.04	0.339	2.20	0.80	1.00	0.5	9.34	20.54	8.04	2126	870	149	573	676	**
5	70	7.97	0.000	14.368	7.69	0.323	2.24	0.80	1.00	0.5	8.78	19.62	7.69	2124	850	133	557	632	**
4	50	7.29	0.000	14.114	7.43	0.318	2.25	0.80	1.00	0.4	8.60	19.33	7.43	2122	832	120	524	577	**
3	30	6.46	0.340	13.886	7.21	0.321	2.24	0.80	1.00	0.4	8.74	19.60	7.21	2103	789	108	457	511	**
2	10	6.46	0.000	12.709	6.19	0.290	2.32	0.80	1.00	0.4	7.63	17.72	6.19	1943	673	97	451	505	**
1	0	6.46	0.312	0.569	0.17	1.000	2.10	0.80	1.00	0.2	0.82	1.72	0.17	83	5	9	0	2	**
	*** = Section Force Exceeds Solidity Ratio Criteria*												**Totals**	**21,887**	**8,462**			**6,901**	

SECTION FORCES

1.2D + 1.0Di + 1.0Wi 330° Gust Response Factor (Gh): 0.85
66.28 mph Wind with 0.425" Radial Ice Wind Importance Factor (Iw): 1.00 Ice Dead Load Factor: 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)	
16	250	11.19	0.000	15.412	8.73	0.345	2.18	0.85	1.00	0.5	9.53	20.80	8.73	654	192	198	6	203	
15	230	10.94	0.340	15.514	8.83	0.355	2.16	0.85	1.00	0.5	9.94	21.46	8.83	708	217	200	36	236	
14	210	10.68	0.000	15.261	8.58	0.342	2.19	0.85	1.00	0.5	9.42	20.63	8.58	885	273	187	104	291	
13	190	10.40	0.340	15.347	8.67	0.352	2.17	0.85	1.00	0.5	9.82	21.27	8.67	1045	326	188	167	355	
12	170	10.10	0.510	15.252	8.57	0.354	2.16	0.85	1.00	0.5	9.91	21.44	8.57	1789	785	184	491	675	
11	150	9.77	0.000	14.977	8.30	0.336	2.20	0.85	1.00	0.5	9.21	20.30	8.30	2044	877	169	617	777	**
10	139	9.57	0.000	1.695	0.94	0.381	2.10	0.85	1.00	0.5	1.07	2.26	0.94	224	93	18	61	76	**
9	134	9.48	0.646	6.084	3.50	0.378	2.11	0.85	1.00	0.5	4.38	9.25	3.50	862	353	75	243	301	**
8	125	9.30	0.000	7.413	4.07	0.333	2.21	0.85	1.00	0.5	4.55	10.07	4.07	1060	444	80	313	370	**
7	110	8.99	0.000	14.723	8.04	0.331	2.22	0.85	1.00	0.5	9.03	20.02	8.04	2115	882	153	613	714	**
6	90	8.52	0.340	14.723	8.04	0.339	2.20	0.85	1.00	0.5	9.36	20.57	8.04	2126	870	149	573	676	**
5	70	7.97	0.000	14.368	7.69	0.323	2.24	0.85	1.00	0.5	8.78	19.62	7.69	2124	850	133	557	632	**
4	50	7.29	0.000	14.114	7.43	0.318	2.25	0.85	1.00	0.4	8.60	19.33	7.43	2122	832	120	524	577	**
3	30	6.46	0.340	13.886	7.21	0.321	2.24	0.85	1.00	0.4	8.76	19.64	7.21	2103	789	108	457	511	**
2	10	6.46	0.000	12.709	6.19	0.290	2.32	0.85	1.00	0.4	7.63	17.72	6.19	1943	673	97	451	505	**
1	0	6.46	0.312	0.569	0.17	1.000	2.10	0.85	1.00	0.2	0.83	1.75	0.17	83	5	10	0	2	**
	*** = Section Force Exceeds Solidity Ratio Criteria*												**Totals**	**21,887**	**8,462**			**6,902**	

1.0D + 1.0W Service Normal Gust Response Factor (Gh): 0.85
60 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)	
16	250	9.17	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	385	0	83	3	85	
15	230	8.97	0.340	6.680	0.00	0.164	2.72	1.00	1.00	0.0	4.20	11.43	0.00	409	0	87	18	105	
14	210	8.75	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	510	0	79	51	130	
13	190	8.52	0.340	6.680	0.00	0.164	2.72	1.00	1.00	0.0	4.20	11.43	0.00	599	0	83	78	161	
12	170	8.27	0.510	6.680	0.00	0.168	2.71	1.00	1.00	0.0	4.37	11.84	0.00	836	0	83	268	351	
11	150	8.00	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	973	0	72	333	405	
10	139	7.84	0.000	0.756	0.00	0.176	2.68	1.00	1.00	0.0	0.44	1.18	0.00	109	0	8	34	42	
9	134	7.77	0.646	2.584	0.00	0.188	2.64	1.00	1.00	0.0	2.14	5.65	0.00	424	0	37	136	174	
8	125	7.62	0.000	3.340	0.00	0.156	2.75	1.00	1.00	0.0	1.93	5.30	0.00	513	0	34	168	202	
7	110	7.37	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	1027	0	66	328	394	
6	90	6.98	0.340	6.680	0.00	0.164	2.72	1.00	1.00	0.0	4.20	11.43	0.00	1047	0	68	311	379	
5	70	6.53	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	1061	0	59	299	358	
4	50	5.97	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	1075	0	54	279	333	
3	30	5.29	0.340	6.680	0.00	0.164	2.72	1.00	1.00	0.0	4.20	11.43	0.00	1095	0	51	248	299	
2	10	5.29	0.000	6.523	0.00	0.153	2.76	1.00	1.00	0.0	3.76	10.37	0.00	1058	0	47	246	292	
1	0	5.29	0.312	0.397	0.00	1.000	2.10	1.00	1.00	0.0	0.71	1.49	0.00	65	0	7	0	2	**
	*** = Section Force Exceeds Solidity Ratio Criteria*												**Totals**	**11,187**	**0**			**3,712**	

1.0D + 1.0W Service 60° Gust Response Factor (Gh): 0.85
60 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)	
16	250	9.17	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	385	0	83	3	85	
15	230	8.97	0.340	6.680	0.00	0.164	2.72	0.80	1.00	0.0	4.13	11.24	0.00	409	0	86	18	104	
14	210	8.75	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	510	0	79	51	130	
13	190	8.52	0.340	6.680	0.00	0.164	2.72	0.80	1.00	0.0	4.13	11.24	0.00	599	0	81	78	159	
12	170	8.27	0.510	6.680	0.00	0.168	2.71	0.80	1.00	0.0	4.27	11.56	0.00	836	0	81	268	349	
11	150	8.00	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	973	0	72	333	405	
10	139	7.84	0.000	0.756	0.00	0.176	2.68	0.80	1.00	0.0	0.44	1.18	0.00	109	0	8	34	42	
9	134	7.77	0.646	2.584	0.00	0.188	2.64	0.80	1.00	0.0	2.02	5.31	0.00	424	0	35	136	171	
8	125	7.62	0.000	3.340	0.00	0.156	2.75	0.80	1.00	0.0	1.93	5.30	0.00	513	0	34	168	202	
7	110	7.37	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	1027	0	66	328	394	
6	90	6.98	0.340	6.680	0.00	0.164	2.72	0.80	1.00	0.0	4.13	11.24	0.00	1047	0	67	311	377	
5	70	6.53	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	1061	0	59	299	358	
4	50	5.97	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	1075	0	54	279	333	
3	30	5.29	0.340	6.680	0.00	0.164	2.72	0.80	1.00	0.0	4.13	11.24	0.00	1095	0	51	248	298	
2	10	5.29	0.000	6.523	0.00	0.153	2.76	0.80	1.00	0.0	3.76	10.37	0.00	1058	0	47	246	292	
1	0	5.29	0.312	0.397	0.00	1.000	2.10	0.80	1.00	0.0	0.65	1.36	0.00	65	0	6	0	2	**
	*** = Section Force Exceeds Solidity Ratio Criteria*												**Totals**	**11,187**	**0**			**3,703**	

1.0D + 1.0W Service 90° Gust Response Factor (Gh): 0.85
60 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_Z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
16	250	9.17	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	385	0	83	3	85
15	230	8.97	0.340	6.680	0.00	0.164	2.72	0.85	1.00	0.0	4.15	11.29	0.00	409	0	86	18	104
14	210	8.75	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	510	0	79	51	130
13	190	8.52	0.340	6.680	0.00	0.164	2.72	0.85	1.00	0.0	4.15	11.29	0.00	599	0	82	78	160
12	170	8.27	0.510	6.680	0.00	0.168	2.71	0.85	1.00	0.0	4.30	11.63	0.00	836	0	82	268	350
11	150	8.00	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	973	0	72	333	405
10	139	7.84	0.000	0.756	0.00	0.176	2.68	0.85	1.00	0.0	0.44	1.18	0.00	109	0	8	34	42

SECTION FORCES

1.0D + 1.0W Service 90° Gust Response Factor (Gh): 0.85
60 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)	
9	134	7.77	0.646	2.584	0.00	0.188	2.64	0.85	1.00	0.0	2.05	5.40	0.00	424	0	36	136	172	
8	125	7.62	0.000	3.340	0.00	0.156	2.75	0.85	1.00	0.0	1.93	5.30	0.00	513	0	34	168	202	
7	110	7.37	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	1027	0	66	328	394	
6	90	6.98	0.340	6.680	0.00	0.164	2.72	0.85	1.00	0.0	4.15	11.29	0.00	1047	0	67	311	378	
5	70	6.53	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	1061	0	59	299	358	
4	50	5.97	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	1075	0	54	279	333	
3	30	5.29	0.340	6.680	0.00	0.164	2.72	0.85	1.00	0.0	4.15	11.29	0.00	1095	0	51	248	299	
2	10	5.29	0.000	6.523	0.00	0.153	2.76	0.85	1.00	0.0	3.76	10.37	0.00	1058	0	47	246	292	
1	0	5.29	0.312	0.397	0.00	1.000	2.10	0.85	1.00	0.0	0.66	1.39	0.00	65	0	6	0	2	**
	*** = Section Force Exceeds Solidity Ratio Criteria*												**Totals**	**11,187**	**0**			**3,705**	

1.0D + 1.0W Service 120° Gust Response Factor (Gh): 0.85
60 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)	
16	250	9.17	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	385	0	83	3	85	
15	230	8.97	0.340	6.680	0.00	0.164	2.72	1.00	1.00	0.0	4.20	11.43	0.00	409	0	87	18	105	
14	210	8.75	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	510	0	79	51	130	
13	190	8.52	0.340	6.680	0.00	0.164	2.72	1.00	1.00	0.0	4.20	11.43	0.00	599	0	83	78	161	
12	170	8.27	0.510	6.680	0.00	0.168	2.71	1.00	1.00	0.0	4.37	11.84	0.00	836	0	83	268	351	
11	150	8.00	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	973	0	72	333	405	
10	139	7.84	0.000	0.756	0.00	0.176	2.68	1.00	1.00	0.0	0.44	1.18	0.00	109	0	8	34	42	
9	134	7.77	0.646	2.584	0.00	0.188	2.64	1.00	1.00	0.0	2.14	5.65	0.00	424	0	37	136	174	
8	125	7.62	0.000	3.340	0.00	0.156	2.75	1.00	1.00	0.0	1.93	5.30	0.00	513	0	34	168	202	
7	110	7.37	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	1027	0	66	328	394	
6	90	6.98	0.340	6.680	0.00	0.164	2.72	1.00	1.00	0.0	4.20	11.43	0.00	1047	0	68	311	379	
5	70	6.53	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	1061	0	59	299	358	
4	50	5.97	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	1075	0	54	279	333	
3	30	5.29	0.340	6.680	0.00	0.164	2.72	1.00	1.00	0.0	4.20	11.43	0.00	1095	0	51	248	299	
2	10	5.29	0.000	6.523	0.00	0.153	2.76	1.00	1.00	0.0	3.76	10.37	0.00	1058	0	47	246	292	
1	0	5.29	0.312	0.397	0.00	1.000	2.10	1.00	1.00	0.0	0.71	1.49	0.00	65	0	7	0	2	**
	*** = Section Force Exceeds Solidity Ratio Criteria*												**Totals**	**11,187**	**0**			**3,712**	

1.0D + 1.0W Service 180° Gust Response Factor (Gh): 0.85
60 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)	
16	250	9.17	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	385	0	83	3	85	
15	230	8.97	0.340	6.680	0.00	0.164	2.72	0.80	1.00	0.0	4.13	11.24	0.00	409	0	86	18	104	
14	210	8.75	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	510	0	79	51	130	
13	190	8.52	0.340	6.680	0.00	0.164	2.72	0.80	1.00	0.0	4.13	11.24	0.00	599	0	81	78	159	
12	170	8.27	0.510	6.680	0.00	0.168	2.71	0.80	1.00	0.0	4.27	11.56	0.00	836	0	81	268	349	
11	150	8.00	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	973	0	72	333	405	
10	139	7.84	0.000	0.756	0.00	0.176	2.68	0.80	1.00	0.0	0.44	1.18	0.00	109	0	8	34	42	
9	134	7.77	0.646	2.584	0.00	0.188	2.64	0.80	1.00	0.0	2.02	5.31	0.00	424	0	35	136	171	
8	125	7.62	0.000	3.340	0.00	0.156	2.75	0.80	1.00	0.0	1.93	5.30	0.00	513	0	34	168	202	
7	110	7.37	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	1027	0	66	328	394	
6	90	6.98	0.340	6.680	0.00	0.164	2.72	0.80	1.00	0.0	4.13	11.24	0.00	1047	0	67	311	377	
5	70	6.53	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	1061	0	59	299	358	
4	50	5.97	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	1075	0	54	279	333	
3	30	5.29	0.340	6.680	0.00	0.164	2.72	0.80	1.00	0.0	4.13	11.24	0.00	1095	0	51	248	298	
2	10	5.29	0.000	6.523	0.00	0.153	2.76	0.80	1.00	0.0	3.76	10.37	0.00	1058	0	47	246	292	
1	0	5.29	0.312	0.397	0.00	1.000	2.10	0.80	1.00	0.0	0.65	1.36	0.00	65	0	6	0	2	**
	*** = Section Force Exceeds Solidity Ratio Criteria*												**Totals**	**11,187**	**0**			**3,703**	

1.0D + 1.0W Service 210° Gust Response Factor (Gh): 0.85
60 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)
16	250	9.17	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	385	0	83	3	85
15	230	8.97	0.340	6.680	0.00	0.164	2.72	0.85	1.00	0.0	4.15	11.29	0.00	409	0	86	18	104
14	210	8.75	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	510	0	79	51	130
13	190	8.52	0.340	6.680	0.00	0.164	2.72	0.85	1.00	0.0	4.15	11.29	0.00	599	0	82	78	160
12	170	8.27	0.510	6.680	0.00	0.168	2.71	0.85	1.00	0.0	4.30	11.63	0.00	836	0	82	268	350
11	150	8.00	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	973	0	72	333	405
10	139	7.84	0.000	0.756	0.00	0.176	2.68	0.85	1.00	0.0	0.44	1.18	0.00	109	0	8	34	42
9	134	7.77	0.646	2.584	0.00	0.188	2.64	0.85	1.00	0.0	2.05	5.40	0.00	424	0	36	136	172
8	125	7.62	0.000	3.340	0.00	0.156	2.75	0.85	1.00	0.0	1.93	5.30	0.00	513	0	34	168	202
7	110	7.37	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	1027	0	66	328	394
6	90	6.98	0.340	6.680	0.00	0.164	2.72	0.85	1.00	0.0	4.15	11.29	0.00	1047	0	67	311	378
5	70	6.53	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	1061	0	59	299	358
4	50	5.97	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	1075	0	54	279	333
3	30	5.29	0.340	6.680	0.00	0.164	2.72	0.85	1.00	0.0	4.15	11.29	0.00	1095	0	51	248	299
2	10	5.29	0.000	6.523	0.00	0.153	2.76	0.85	1.00	0.0	3.76	10.37	0.00	1058	0	47	246	292

SECTION FORCES

1.0D + 1.0W Service 210° Gust Response Factor (Gh): 0.85
60 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)	
1	0	5.29	0.312	0.397	0.00	1.000	2.10	0.85	1.00	0.0	0.66	1.39	0.00	65	0	6	0	2	**
	** = Section Force Exceeds Solidity Ratio Criteria												**Totals**	**11,187**	**0**			**3,705**	

1.0D + 1.0W Service 240° Gust Response Factor (Gh): 0.85
60 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)	
16	250	9.17	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	385	0	83	3	85	
15	230	8.97	0.340	6.680	0.00	0.164	2.72	1.00	1.00	0.0	4.20	11.43	0.00	409	0	87	18	105	
14	210	8.75	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	510	0	79	51	130	
13	190	8.52	0.340	6.680	0.00	0.164	2.72	1.00	1.00	0.0	4.20	11.43	0.00	599	0	83	78	161	
12	170	8.27	0.510	6.680	0.00	0.168	2.71	1.00	1.00	0.0	4.37	11.84	0.00	836	0	83	268	351	
11	150	8.00	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	973	0	72	333	405	
10	139	7.84	0.000	0.756	0.00	0.176	2.68	1.00	1.00	0.0	0.44	1.18	0.00	109	0	8	34	42	
9	134	7.77	0.646	2.584	0.00	0.188	2.64	1.00	1.00	0.0	2.14	5.65	0.00	424	0	37	136	174	
8	125	7.62	0.000	3.340	0.00	0.156	2.75	1.00	1.00	0.0	1.93	5.30	0.00	513	0	34	168	202	
7	110	7.37	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	1027	0	66	328	394	
6	90	6.98	0.340	6.680	0.00	0.164	2.72	1.00	1.00	0.0	4.20	11.43	0.00	1047	0	68	311	379	
5	70	6.53	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	1061	0	59	299	358	
4	50	5.97	0.000	6.680	0.00	0.156	2.75	1.00	1.00	0.0	3.85	10.60	0.00	1075	0	54	279	333	
3	30	5.29	0.340	6.680	0.00	0.164	2.72	1.00	1.00	0.0	4.20	11.43	0.00	1095	0	51	248	299	
2	10	5.29	0.000	6.523	0.00	0.153	2.76	1.00	1.00	0.0	3.76	10.37	0.00	1058	0	47	246	292	
1	0	5.29	0.312	0.397	0.00	1.000	2.10	1.00	1.00	0.0	0.71	1.49	0.00	65	0	7	0	2	**
	** = Section Force Exceeds Solidity Ratio Criteria												**Totals**	**11,187**	**0**			**3,712**	

1.0D + 1.0W Service 300° Gust Response Factor (Gh): 0.85
60 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)	
16	250	9.17	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	385	0	83	3	85	
15	230	8.97	0.340	6.680	0.00	0.164	2.72	0.80	1.00	0.0	4.13	11.24	0.00	409	0	86	18	104	
14	210	8.75	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	510	0	79	51	130	
13	190	8.52	0.340	6.680	0.00	0.164	2.72	0.80	1.00	0.0	4.13	11.24	0.00	599	0	81	78	159	
12	170	8.27	0.510	6.680	0.00	0.168	2.71	0.80	1.00	0.0	4.27	11.56	0.00	836	0	81	268	349	
11	150	8.00	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	973	0	72	333	405	
10	139	7.84	0.000	0.756	0.00	0.176	2.68	0.80	1.00	0.0	0.44	1.18	0.00	109	0	8	34	42	
9	134	7.77	0.646	2.584	0.00	0.188	2.64	0.80	1.00	0.0	2.02	5.31	0.00	424	0	35	136	171	
8	125	7.62	0.000	3.340	0.00	0.156	2.75	0.80	1.00	0.0	1.93	5.30	0.00	513	0	34	168	202	
7	110	7.37	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	1027	0	66	328	394	
6	90	6.98	0.340	6.680	0.00	0.164	2.72	0.80	1.00	0.0	4.13	11.24	0.00	1047	0	67	311	377	
5	70	6.53	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	1061	0	59	299	358	
4	50	5.97	0.000	6.680	0.00	0.156	2.75	0.80	1.00	0.0	3.85	10.60	0.00	1075	0	54	279	333	
3	30	5.29	0.340	6.680	0.00	0.164	2.72	0.80	1.00	0.0	4.13	11.24	0.00	1095	0	51	248	298	
2	10	5.29	0.000	6.523	0.00	0.153	2.76	0.80	1.00	0.0	3.76	10.37	0.00	1058	0	47	246	292	
1	0	5.29	0.312	0.397	0.00	1.000	2.10	0.80	1.00	0.0	0.65	1.36	0.00	65	0	6	0	2	**
	** = Section Force Exceeds Solidity Ratio Criteria												**Totals**	**11,187**	**0**			**3,703**	

1.0D + 1.0W Service 330° Gust Response Factor (Gh): 0.85
60 mph Wind with No Ice Wind Importance Factor (Iw): 1.00

Section #	Elev (ft)	Q_z (psf)	A_f (sf)	A_r (sf)	Ice A_r (sf)	e	C_f	D_f	D_r	T_{iz} (in)	A_e (sf)	EPA_a (sf)	EPA_{ai} (sf)	Wt (lb)	Ice Wt (lb)	F_{st} (lb)	F_a (lb)	Force (lb)	
16	250	9.17	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	385	0	83	3	85	
15	230	8.97	0.340	6.680	0.00	0.164	2.72	0.85	1.00	0.0	4.15	11.29	0.00	409	0	86	18	104	
14	210	8.75	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	510	0	79	51	130	
13	190	8.52	0.340	6.680	0.00	0.164	2.72	0.85	1.00	0.0	4.15	11.29	0.00	599	0	82	78	160	
12	170	8.27	0.510	6.680	0.00	0.168	2.71	0.85	1.00	0.0	4.30	11.63	0.00	836	0	82	268	350	
11	150	8.00	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	973	0	72	333	405	
10	139	7.84	0.000	0.756	0.00	0.176	2.68	0.85	1.00	0.0	0.44	1.18	0.00	109	0	8	34	42	
9	134	7.77	0.646	2.584	0.00	0.188	2.64	0.85	1.00	0.0	2.05	5.40	0.00	424	0	36	136	172	
8	125	7.62	0.000	3.340	0.00	0.156	2.75	0.85	1.00	0.0	1.93	5.30	0.00	513	0	34	168	202	
7	110	7.37	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	1027	0	66	328	394	
6	90	6.98	0.340	6.680	0.00	0.164	2.72	0.85	1.00	0.0	4.15	11.29	0.00	1047	0	67	311	378	
5	70	6.53	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	1061	0	59	299	358	
4	50	5.97	0.000	6.680	0.00	0.156	2.75	0.85	1.00	0.0	3.85	10.60	0.00	1075	0	54	279	333	
3	30	5.29	0.340	6.680	0.00	0.164	2.72	0.85	1.00	0.0	4.15	11.29	0.00	1095	0	51	248	299	
2	10	5.29	0.000	6.523	0.00	0.153	2.76	0.85	1.00	0.0	3.76	10.37	0.00	1058	0	47	246	292	
1	0	5.29	0.312	0.397	0.00	1.000	2.10	0.85	1.00	0.0	0.66	1.39	0.00	65	0	6	0	2	**
	** = Section Force Exceeds Solidity Ratio Criteria												**Totals**	**11,187**	**0**			**3,705**	

EQUIVALENT LATERAL FORCE METHOD

Long-Period Transition Period (T_L – Seconds):	6
Importance Factor (I_e):	1.00
Response Modification Coefficient (R):	3.00
Design Spectral Response Acceleration at Short Period (S_{ds}):	0.17
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.07
Seismic Response Coefficient (C_s):	0.03
Upper Limit C_S:	0.03
Lower Limit C_S:	0.03
Period based on Rayleigh Method (sec):	1.39
Redundancy Factor (p):	1.30
Seismic Force Distribution Exponent (k):	1.44
Total Unfactored Dead Load:	24.86 k
Seismic Base Shear (E):	0.97 k

SEISMIC FORCES

1.2D + 1.0Ev + 1.0Eh

Section/Appurtenance	Height Above Base (ft)	Weight (lb)	W_Z (lb-ft)	Cvx	Horizontal Force (lb)	Vertical Force (lb)
16	250.00	385	1,117,435	0.031	30	475
15	230.00	409	1,053,364	0.029	28	505
14	210.00	510	1,152,293	0.032	31	630
13	190.00	599	1,170,654	0.033	32	739
12	170.00	836	1,391,372	0.039	38	1,032
11	150.00	973	1,350,493	0.038	36	1,200
10	139.00	109	136,019	0.004	4	135
9	134.00	424	499,768	0.014	13	523
8	125.00	513	547,108	0.015	15	633
7	110.00	1,027	911,361	0.025	25	1,268
6	90.00	1,047	695,047	0.019	19	1,292
5	70.00	1,061	490,205	0.014	13	1,310
4	50.00	1,075	305,578	0.008	8	1,327
3	30.00	1,095	148,805	0.004	4	1,351
2	10.08	1,058	29,792	0.001	1	1,306
1	0.08	65	2	0.000	0	80
Band II (VHF) 903HP Panel Arrays	253.00	206	608,552	0.017	16	254
RFS 903HP	243.00	103	287,062	0.008	8	127
Band II (VHF) 903HP Panel Arrays	243.00	206	574,123	0.016	15	254
Band II (VHF) 903HP Panel Arrays	233.00	206	540,318	0.015	15	254
Ericsson Radio 4460 B25+B66	212.00	436	997,769	0.028	27	538
Ericsson Radio 4480 B71+B85	212.00	372	851,307	0.024	23	459
Amphenol Antel APXVAALL24M-U-J20	212.00	344	787,230	0.022	21	424
Generic Sector Frame	212.00	2,400	5,492,304	0.153	148	2,962
Generic 8' Dipole	203.00	25	53,737	0.002	1	31
Flat Side Arm	202.00	150	320,133	0.009	9	185
Procom CXL 900-3LW	191.00	2	2,953	0.000	0	2
Generic 5" x 3" x 2" Cavity Filter	191.00	2	2,953	0.000	0	2
Generic Low Noise Amplifier	191.00	2	3,937	0.000	0	2
Generic Flat Side Arm	191.00	188	369,081	0.010	10	231
Stand-Off	184.00	75	139,883	0.004	4	93
Andrew E15Z01P13	177.00	66	116,391	0.003	3	81
Ericsson MLTN11/2X 225T/128X	177.00	18	31,038	0.001	1	22
Raycap DC6-48-60-18-8F ("Squid")	177.00	38	66,661	0.002	2	47
Ericsson RRUS 4478 B14 (16.5" Height)	177.00	180	316,902	0.009	9	222
Ericsson RRUS 4449 B5, B12	177.00	213	375,627	0.010	10	263
Raycap DC6-48-60-18-8C-EV (Enclosure)	177.00	16	28,216	0.001	1	20
Ericsson RRUS-12 B2	177.00	232	409,134	0.011	11	286
Andrew VHLPX800-11	177.00	49	86,412	0.002	2	60
Generic Round Sector Frame	177.00	2,100	3,703,364	0.103	100	2,591
Commscope NNH4-65C-R6 (102.1 lbs)	177.00	613	1,080,324	0.030	29	756
Samsung B2/B66A RRH ORAN (RF 4439d-25A)	154.00	224	323,234	0.009	9	277
Samsung B5/B13 RRH ORAN (RF4440d-13A)	154.00	211	304,195	0.008	8	260
Alcatel-Lucent B13 RRH4x30-4R w/ Solar Shield	154.00	167	240,587	0.007	6	206
Alcatel-Lucent B4 RRH2X60-4R	154.00	165	237,990	0.007	6	204
Raycap RVZDC-6627-PF-48	154.00	32	46,156	0.001	1	39
Samsung MT6407-77A	154.00	245	353,091	0.010	10	302
Generic Mount Reinforcement	154.00	600	865,420	0.024	23	740
CSS X7C-865-4	154.00	110	157,939	0.004	4	135

Generic Round Sector Frame	154.00	2,100	3,028,969	0.084	82	2,591
JMA Wireless X7CQAP-FRO-845-V	154.00	603	869,747	0.024	23	744
JMA Wireless X7CQAP-FRO-845-VR0 (68.2 lbs)	154.00	409	590,216	0.016	16	505
Torque Arms	138.00	500	615,523	0.017	17	617
Generic 8' Omni	124.00	25	26,371	0.001	1	31
Kathrein Scala PR-850	111.00	38	34,159	0.001	1	47
Kathrein Scala CA7-490	59.00	6	2,346	0.000	0	8
Totals		**24,861**	**35,940,649**	**1.000**	**970**	**30,679**

1.2D + 1.0Ev + 1.5Eh

Section/Appurtenance	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	Cvx	Horizontal Force (lb)	Vertical Force (lb)
16	250.00	385	1,117,435	0.031	45	475
15	230.00	409	1,053,364	0.029	43	505
14	210.00	510	1,152,293	0.032	47	630
13	190.00	599	1,170,654	0.033	47	739
12	170.00	836	1,391,372	0.039	56	1,032
11	150.00	973	1,350,493	0.038	55	1,200
10	139.00	109	136,019	0.004	6	135
9	134.00	424	499,768	0.014	20	523
8	125.00	513	547,108	0.015	22	633
7	110.00	1,027	911,361	0.025	37	1,268
6	90.00	1,047	695,047	0.019	28	1,292
5	70.00	1,061	490,205	0.014	20	1,310
4	50.00	1,075	305,578	0.008	12	1,327
3	30.00	1,095	148,805	0.004	6	1,351
2	10.08	1,058	29,792	0.001	1	1,306
1	0.08	65	2	0.000	0	80
Band II (VHF) 903HP Panel Arrays	253.00	206	608,552	0.017	25	254
RFS 903HP	243.00	103	287,062	0.008	12	127
Band II (VHF) 903HP Panel Arrays	243.00	206	574,123	0.016	23	254
Band II (VHF) 903HP Panel Arrays	233.00	206	540,318	0.015	22	254
Ericsson Radio 4460 B25+B66	212.00	436	997,769	0.028	40	538
Ericsson Radio 4480 B71+B85	212.00	372	851,307	0.024	34	459
Amphenol Antel APXVAALL24M-U-J20	212.00	344	787,230	0.022	32	424
Generic Sector Frame	212.00	2,400	5,492,304	0.153	222	2,962
Generic 8' Dipole	203.00	25	53,737	0.002	2	31
Flat Side Arm	202.00	150	320,133	0.009	13	185
Procom CXL 900-3LW	191.00	2	2,953	0.000	0	2
Generic 5" x 3" x 2" Cavity Filter	191.00	2	2,953	0.000	0	2
Generic Low Noise Amplifier	191.00	2	3,937	0.000	0	2
Generic Flat Side Arm	191.00	188	369,081	0.010	15	231
Stand-Off	184.00	75	139,883	0.004	6	93
Andrew E15Z01P13	177.00	66	116,391	0.003	5	81
Ericsson MLTN11/2X 225T/128X	177.00	18	31,038	0.001	1	22
Raycap DC6-48-60-18-8F ("Squid")	177.00	38	66,661	0.002	3	47
Ericsson RRUS 4478 B14 (16.5" Height)	177.00	180	316,902	0.009	13	222
Ericsson RRUS 4449 B5, B12	177.00	213	375,627	0.010	15	263
Raycap DC6-48-60-18-8C-EV (Enclosure)	177.00	16	28,216	0.001	1	20
Ericsson RRUS-12 B2	177.00	232	409,134	0.011	17	286
Andrew VHLPX800-11	177.00	49	86,412	0.002	3	60
Generic Round Sector Frame	177.00	2,100	3,703,364	0.103	150	2,591
Commscope NNH4-65C-R6 (102.1 lbs)	177.00	613	1,080,324	0.030	44	756
Samsung B2/B66A RRH ORAN (RF 4439d-25A)	154.00	224	323,234	0.009	13	277
Samsung B5/B13 RRH ORAN (RF4440d-13A)	154.00	211	304,195	0.008	12	260
Alcatel-Lucent B13 RRH4x30-4R w/ Solar Shield	154.00	167	240,587	0.007	10	206
Alcatel-Lucent B4 RRH2X60-4R	154.00	165	237,990	0.007	10	204
Raycap RVZDC-6627-PF-48	154.00	32	46,156	0.001	2	39
Samsung MT6407-77A	154.00	245	353,091	0.010	14	302
Generic Mount Reinforcement	154.00	600	865,420	0.024	35	740
CSS X7C-865-4	154.00	110	157,939	0.004	6	135
Generic Round Sector Frame	154.00	2,100	3,028,969	0.084	123	2,591
JMA Wireless X7CQAP-FRO-845-V	154.00	603	869,747	0.024	35	744
JMA Wireless X7CQAP-FRO-845-VR0 (68.2 lbs)	154.00	409	590,216	0.016	24	505
Torque Arms	138.00	500	615,523	0.017	25	617
Generic 8' Omni	124.00	25	26,371	0.001	1	31
Kathrein Scala PR-850	111.00	38	34,159	0.001	1	47
Kathrein Scala CA7-490	59.00	6	2,346	0.000	0	8
Totals		**24,861**	**35,940,649**	**1.000**	**1,454**	**30,679**

FORCE/STRESS SUMMARY

Section 1 – 0.0' to 0.17'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'_y (ksi)	$\Phi_c P_n$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	# Bolt	# Hole	Use %	Controls
L SOL - 2" SOLID	-131.36	1.2D + 1.0W N	1.191	100	100	100	0.00	0.00	1000.00	0.00	0.00	0	0	13	User Input

Member Tension	Pu (kip)	Load Case	F_y (ksi)	F_u (ksi)	$\Phi_c P_n$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	Blk Shear $\Phi_t P_n$ (kip)	# Bolt	# Hole	Use %	Controls
H PL - PL 2 x 0.5"	72.54	1.2D + 1.0W 120°	36.0	58	1000.00	0.00	0.00	0.00	0	0	7	User Input

Max Splice Forces	Pu (kip)	Load Case	ΦR_{nt} (kip)	Use %	Num Bolts	Bolt Type

Section 2 – 0.2' to 20.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'_y (ksi)	$\Phi_c P_n$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	# Bolt	# Hole	Use %	Controls
L SOL - 1 1/4" SOLID	-29.75	1.2D + 1.0W N	1.963	100	100	100	75.38	50.00	36.45	0.00	0.00	0	0	82	Member X
D SOL - 1/2" SOLID	-0.72	1.2D + 1.0W 330°	2.832	50	50	50	122.33	36.00	2.89	0.00	0.00	0	0	25	Member X

Member Tension	Pu (kip)	Load Case	F_y (ksi)	F_u (ksi)	$\Phi_c P_n$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	Blk Shear $\Phi_t P_n$ (kip)	# Bolt	# Hole	Use %	Controls
H SOL - 3/4" SOLID	0.20	1.2D + 1.0W 90°	36.0	58	14.31	0.00	0.00	0.00	0	0	1	Member
D SOL - 1/2" SOLID	1.96	1.2D + 1.0W N	36.0	58	6.36	0.00	0.00	0.00	0	0	31	Member

Max Splice Forces	Pu (kip)	Load Case	ΦR_{nt} (kip)	Use %	Num Bolts	Bolt Type

Section 3 – 20.0' to 40.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'_y (ksi)	$\Phi_c P_n$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	# Bolt	# Hole	Use %	Controls
L SOL - 1 1/4" SOLID	-33.28	1.2D + 1.0W 120°	1.96	100	100	100	75.26	50.00	36.50	0.00	0.00	0	0	91	Member X
D SOL - 1/2" SOLID	-2.37	1.2D + 1.0W 120°	2.83	50	50	50	122.24	36.00	2.90	0.00	0.00	0	0	82	Member X

Member Tension	Pu (kip)	Load Case	F_y (ksi)	F_u (ksi)	$\Phi_c P_n$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	Blk Shear $\Phi_t P_n$ (kip)	# Bolt	# Hole	Use %	Controls
H SOL - 3/4" SOLID	1.11	1.2D + 1.0W N	36.0	58	14.31	0.00	0.00	0.00	0	0	8	Member
D SOL - 1/2" SOLID	0.71	1.2D + 1.0W 90°	36.0	58	6.36	0.00	0.00	0.00	0	0	11	Member

Max Splice Forces	Pu (kip)	Load Case	ΦR_{nt} (kip)	Use %	Num Bolts	Bolt Type

Section 4 – 40.0' to 60.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'_y (ksi)	$\Phi_c P_n$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	# Bolt	# Hole	Use %	Controls
L SOL - 1 1/4" SOLID	-31.27	1.2D + 1.0W 120°	1.96	100	100	100	75.26	50.00	36.50	0.00	0.00	0	0	86	Member X
H SOL - 3/4" SOLID	-0.09	1.2D + 1.0W N	2.041	100	100	100	84.90	36.00	9.79	0.00	0.00	0	0	1	Member X
D SOL - 1/2" SOLID	-0.84	1.2D + 1.0W 330°	2.83	50	50	50	122.24	36.00	2.90	0.00	0.00	0	0	29	Member X

Member Tension	Pu (kip)	Load Case	F_y (ksi)	F_u (ksi)	$\Phi_c P_n$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	Blk Shear $\Phi_t P_n$ (kip)	# Bolt	# Hole	Use %	Controls
H SOL - 3/4" SOLID	0.50	1.2D + 1.0W 90°	36.0	58	14.31	0.00	0.00	0.00	0	0	3	Member
D SOL - 1/2" SOLID	0.63	1.2D + 1.0W 330°	36.0	58	6.36	0.00	0.00	0.00	0	0	10	Member

Max Splice Forces	Pu (kip)	Load Case	ΦR_{nt} (kip)	Use %	Num Bolts	Bolt Type

Section 5 – 60.0' to 80.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'_y (ksi)	$\Phi_c P_n$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	# Bolt	# Hole	Use %	Controls

FORCE/STRESS SUMMARY

Section 5 – 60.0' to 80.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'_y (ksi)	$\Phi_c P_n$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	# Bolt	# Hole	Use %	Controls
L SOL - 1 1/4" SOLID	-27.58	1.2D + 1.0W 330°	1.96	100	100	100	75.26	50.00	36.50	0.00	0.00	0	0	76	Member X
H SOL - 3/4" SOLID	-0.07	1.2D + 1.0W 120°	2.041	100	100	100	84.90	36.00	9.79	0.00	0.00	0	0	1	Member X
D SOL - 1/2" SOLID	-0.66	1.2D + 1.0W 330°	2.83	50	50	50	122.24	36.00	2.90	0.00	0.00	0	0	23	Member X

Member Tension	Pu (kip)	Load Case	F_y (ksi)	F_u (ksi)	$\Phi_c Pn$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	Blk Shear $\Phi_t P_n$ (kip)	# Bolt	# Hole	Use %	Controls
H SOL - 3/4" SOLID	0.36	1.2D + 1.0W 60°	36.0	58	14.31	0.00	0.00	0.00	0	0	3	Member
D SOL - 1/2" SOLID	0.49	1.2D + 1.0W 330°	36.0	58	6.36	0.00	0.00	0.00	0	0	8	Member

Max Splice Forces	Pu (kip)	Load Case	ΦR_{nt} (kip)	Use %	Num Bolts	Bolt Type

FORCE/STRESS SUMMARY

Section 6 – 80.0' to 100.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'_y (ksi)	$\Phi_c P_n$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	# Bolt	# Hole	Use %	Controls
L SOL - 1 1/4" SOLID	-34.01	1.2D + 1.0W 120°	1.96	100	100	100	75.26	50.00	36.50	0.00	0.00	0	0	93	Member X
H SOL - 3/4" SOLID	-0.06	1.2D + 1.0W 300°	2.041	100	100	100	84.90	36.00	9.79	0.00	0.00	0	0	1	Member X
D SOL - 1/2" SOLID	-1.23	1.2D + 1.0W 210°	2.83	50	50	50	122.24	36.00	2.90	0.00	0.00	0	0	42	Member X

Member Tension	Pu (kip)	Load Case	F_y (ksi)	F_u (ksi)	$\Phi_c Pn$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	Blk Shear $\Phi_t P_n$ (kip)	# Bolt	# Hole	Use %	Controls
H SOL - 3/4" SOLID	0.55	1.2D + 1.0W 240°	36.0	58	14.31	0.00	0.00	0.00	0	0	4	Member
D SOL - 1/2" SOLID	1.17	1.2D + 1.0W 210°	36.0	58	6.36	0.00	0.00	0.00	0	0	18	Member

Max Splice Forces	Pu (kip)	Load Case	ΦR_{nt} (kip)	Use %	Num Bolts	Bolt Type

Section 7 – 100.0' to 120.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'_y (ksi)	$\Phi_c P_n$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	# Bolt	# Hole	Use %	Controls
L SOL - 1 1/4" SOLID	-26.67	1.2D + 1.0W 240°	1.96	100	100	100	75.26	50.00	36.50	0.00	0.00	0	0	73	Member X
H SOL - 3/4" SOLID	-0.18	1.2D + 1.0W 120°	2.041	100	100	100	84.90	36.00	9.79	0.00	0.00	0	0	2	Member X
D SOL - 1/2" SOLID	-0.87	1.2D + 1.0W 210°	2.83	50	50	50	122.24	36.00	2.90	0.00	0.00	0	0	30	Member X

Member Tension	Pu (kip)	Load Case	F_y (ksi)	F_u (ksi)	$\Phi_c Pn$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	Blk Shear $\Phi_t P_n$ (kip)	# Bolt	# Hole	Use %	Controls
H SOL - 3/4" SOLID	0.37	1.2D + 1.0W 60°	36.0	58	14.31	0.00	0.00	0.00	0	0	3	Member
D SOL - 1/2" SOLID	0.65	1.2D + 1.0W 210°	36.0	58	6.36	0.00	0.00	0.00	0	0	10	Member

Max Splice Forces	Pu (kip)	Load Case	ΦR_{nt} (kip)	Use %	Num Bolts	Bolt Type

Section 8 – 120.0' to 130.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'_y (ksi)	$\Phi_c P_n$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	# Bolt	# Hole	Use %	Controls
L SOL - 1 1/4" SOLID	-26.67	1.2D + 1.0W 240°	1.96	100	100	100	75.26	50.00	36.50	0.00	0.00	0	0	73	Member X
D SOL - 1/2" SOLID	-0.68	1.2D + 1.0W 90°	2.83	50	50	50	122.24	36.00	2.90	0.00	0.00	0	0	23	Member X

Member Tension	Pu (kip)	Load Case	F_y (ksi)	F_u (ksi)	$\Phi_c Pn$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	Blk Shear $\Phi_t P_n$ (kip)	# Bolt	# Hole	Use %	Controls
H SOL - 3/4" SOLID	0.29	1.2D + 1.0W N	36.0	58	14.31	0.00	0.00	0.00	0	0	2	Member
D SOL - 1/2" SOLID	0.60	1.2D + 1.0W 300°	36.0	58	6.36	0.00	0.00	0.00	0	0	9	Member

Max Splice Forces	Pu (kip)	Load Case	ΦR_{nt} (kip)	Use %	Num Bolts	Bolt Type

Section 9 – 130.0' to 138.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'_y (ksi)	$\Phi_c P_n$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	# Bolt	# Hole	Use %	Controls
L SOL - 1 1/4" SOLID	-25.25	1.2D + 1.0W 90°	2	100	100	100	76.80	50.00	35.88	0.00	0.00	0	0	70	Member X
D SOL - 1/2" SOLID	-1.14	1.2D + 1.0W 240°	2.857	50	50	50	123.44	36.00	2.85	0.00	0.00	0	0	40	Member X

Member Tension	Pu (kip)	Load Case	F_y (ksi)	F_u (ksi)	$\Phi_c Pn$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	Blk Shear $\Phi_t P_n$ (kip)	# Bolt	# Hole	Use %	Controls
H PL - PL 2 x 0.25"	3.20	1.2D + 1.0W 90°	36.0	58	16.20	0.00	0.00	0.00	0	0	20	Member
D SOL - 1/2" SOLID	0.70	1.2D + 1.0W 90°	36.0	58	6.36	0.00	0.00	0.00	0	0	11	Member

Max Splice Forces	Pu (kip)	Load Case	ΦR_{nt} (kip)	Use %	Num Bolts	Bolt Type

FORCE/STRESS SUMMARY

Section 10 – 138.0' to 140.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'_y (ksi)	$\Phi_c P_n$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	# Bolt	# Hole	Use %	Controls
L SOL - 1 1/4" SOLID	-19.79	1.2D + 1.0W 210°	1.8	100	100	100	69.12	50.00	38.94	0.00	0.00	0	0	51	Member X
D SOL - 1/2" SOLID	-2.80	1.2D + 1.0W 330°	2.721	50	50	50	117.56	36.00	3.07	0.00	0.00	0	0	91	Member X

Member Tension	Pu (kip)	Load Case	F_y (ksi)	F_u (ksi)	$\Phi_c Pn$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	Blk Shear $\Phi_t P_n$ (kip)	# Bolt	# Hole	Use %	Controls
H SOL - 3/4" SOLID	1.82	1.2D + 1.0W 120°	36.0	58	14.31	0.00	0.00	0.00	0	0	13	Member
D SOL - 1/2" SOLID	1.53	1.2D + 1.0W 210°	36.0	58	6.36	0.00	0.00	0.00	0	0	24	Member

Max Splice Forces	Pu (kip)	Load Case	ΦR_{nt} (kip)	Use %	Num Bolts	Bolt Type

FORCE/STRESS SUMMARY

Section 11 – 140.0' to 160.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Φc Pn (kip)	Shear ΦRnv (kip)	Bear ΦRn (kip)	# Bolt	# Hole	Use %	Controls
L SOL - 1 1/4" SOLID	**-37.99**	**1.2D + 1.0W 90°**	**1.96**	**100**	**100**	**100**	**75.26**	**50.00**	**36.50**	**0.00**	**0.00**	**0**	**0**	**104**	**Member X**
H SOL - 3/4" SOLID	-1.10	1.2D + 1.0W 120°	2.041	100	100	100	84.90	36.00	9.79	0.00	0.00	0	0	11	Member X
D SOL - 1/2" SOLID	-2.39	1.2D + 1.0W 210°	2.83	50	50	50	122.24	36.00	2.90	0.00	0.00	0	0	82	Member X

Member Tension	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	ΦcPn (kip)	Shear ΦRnv (kip)	Bear ΦRn (kip)	Blk Shear Φt Pn (kip)	# Bolt	# Hole	Use %	Controls
L SOL - 1 1/4" SOLID	16.59	1.2D + 1.0W 120°	50.0	65	55.22	0.00	0.00		0	0	30	Member
H SOL - 3/4" SOLID	0.74	1.2D + 1.0W 60°	36.0	58	14.31	0.00	0.00	0.00	0	0	5	Member
D SOL - 1/2" SOLID	2.15	1.2D + 1.0W 330°	36.0	58	6.36	0.00	0.00	0.00	0	0	34	Member

Max Splice Forces	Pu (kip)	Load Case	ΦRnt (kip)	Use %	Num Bolts	Bolt Type

Section 12 – 160.0' to 180.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Φc Pn (kip)	Shear ΦRnv (kip)	Bear ΦRn (kip)	# Bolt	# Hole	Use %	Controls
L SOL - 1 1/4" SOLID	-30.63	1.2D + 1.0W 90°	1.96	100	100	100	75.26	50.00	36.50	0.00	0.00	0	0	84	Member X
H SOL - 3/4" SOLID	-0.47	1.2D + 1.0W 240°	2.041	100	100	100	84.90	36.00	9.79	0.00	0.00	0	0	5	Member X
D SOL - 1/2" SOLID	-1.35	1.2D + 1.0W 90°	2.83	50	50	50	122.24	36.00	2.90	0.00	0.00	0	0	47	Member X

Member Tension	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	ΦcPn (kip)	Shear ΦRnv (kip)	Bear ΦRn (kip)	Blk Shear Φt Pn (kip)	# Bolt	# Hole	Use %	Controls
L SOL - 1 1/4" SOLID	11.28	1.2D + 1.0W 120°	50.0	65	55.22	0.00	0.00		0	0	20	Member
H SOL - 3/4" SOLID	0.56	1.2D + 1.0W 300°	36.0	58	14.31	0.00	0.00	0.00	0	0	4	Member
D SOL - 1/2" SOLID	1.28	1.2D + 1.0W 90°	36.0	58	6.36	0.00	0.00	0.00	0	0	20	Member

Max Splice Forces	Pu (kip)	Load Case	ΦRnt (kip)	Use %	Num Bolts	Bolt Type
Bot Tension	11.25	1.2D + 1.0W 120°	54.52	21	1	1 A325

Section 13 – 180.0' to 200.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Φc Pn (kip)	Shear ΦRnv (kip)	Bear ΦRn (kip)	# Bolt	# Hole	Use %	Controls
L SOL - 1 1/4" SOLID	-17.65	1.2D + 1.0W 210°	1.96	100	100	100	75.26	50.00	36.50	0.00	0.00	0	0	48	Member X
H SOL - 3/4" SOLID	-0.35	1.2D + 1.0W 180°	2.041	100	100	100	84.90	36.00	9.79	0.00	0.00	0	0	4	Member X
D SOL - 1/2" SOLID	-1.20	1.2D + 1.0W 90°	2.83	50	50	50	122.24	36.00	2.90	0.00	0.00	0	0	41	Member X

Member Tension	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	ΦcPn (kip)	Shear ΦRnv (kip)	Bear ΦRn (kip)	Blk Shear Φt Pn (kip)	# Bolt	# Hole	Use %	Controls
L SOL - 1 1/4" SOLID	5.49	1.2D + 1.0W N	50.0	65	55.22	0.00	0.00		0	0	10	Member
H SOL - 3/4" SOLID	0.50	1.2D + 1.0W N	36.0	58	14.31	0.00	0.00	0.00	0	0	4	Member
D SOL - 1/2" SOLID	1.15	1.2D + 1.0W 90°	36.0	58	6.36	0.00	0.00	0.00	0	0	18	Member

Max Splice Forces	Pu (kip)	Load Case	ΦRnt (kip)	Use %	Num Bolts	Bolt Type
Bot Tension	5.47	1.2D + 1.0W N	54.52	10	1	1 A325

Section 14 – 200.0' to 220.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Φc Pn (kip)	Shear ΦRnv (kip)	Bear ΦRn (kip)	# Bolt	# Hole	Use %	Controls
L SOL - 1 1/4" SOLID	-20.87	1.2D + 1.0W 180°	1.96	100	100	100	75.26	50.00	36.50	0.00	0.00	0	0	57	Member X
H SOL - 3/4" SOLID	-0.23	1.2D + 1.0W 240°	2.041	100	100	100	84.90	36.00	9.79	0.00	0.00	0	0	2	Member X
D SOL - 1/2" SOLID	-0.95	1.2D + 1.0W 210°	2.83	50	50	50	122.24	36.00	2.90	0.00	0.00	0	0	33	Member X

Member Tension	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	ΦcPn (kip)	Shear ΦRnv (kip)	Bear ΦRn (kip)	Blk Shear Φt Pn (kip)	# Bolt	# Hole	Use %	Controls
L SOL - 1 1/4" SOLID	13.94	1.2D + 1.0W 120°	50.0	65	55.22	0.00	0.00		0	0	25	Member

FORCE/STRESS SUMMARY

H SOL - 3/4" SOLID	0.39	1.2D + 1.0W 60°	36.0	58	14.31	0.00	0.00	0.00	0	0	3	Member
D SOL - 1/2" SOLID	0.89	1.2D + 1.0W 330°	36.0	58	6.36	0.00	0.00	0.00	0	0	14	Member

Max Splice Forces	Pu (kip)	Load Case	ΦR_{nt} (kip)	Use %	Num Bolts	Bolt Type
Bot Tension	4.18	1.2D + 1.0W 120°	54.52	8	1	1 A325

Section 15 – 220.0' to 240.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'_y (ksi)	$\Phi_c P_n$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	# Bolt	# Hole	Use %	Controls
L SOL - 1 1/4" SOLID	-14.57	1.2D + 1.0W 180°	1.96	100	100	100	75.26	50.00	36.50	0.00	0.00	0	0	40	Member X
H SOL - 3/4" SOLID	-0.27	1.2D + 1.0W 60°	2.041	100	100	100	84.90	36.00	9.79	0.00	0.00	0	0	3	Member X
D SOL - 1/2" SOLID	-0.90	1.2D + 1.0W 90°	2.83	50	50	50	122.24	36.00	2.90	0.00	0.00	0	0	31	Member X

Member Tension	Pu (kip)	Load Case	F_y (ksi)	F_u (ksi)	$\Phi_c Pn$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	Blk Shear $\Phi_t P_n$ (kip)	# Bolt	# Hole	Use %	Controls
L SOL - 1 1/4" SOLID	9.00	1.2D + 1.0W 120°	50.0	65	55.22	0.00	0.00		0	0	16	Member
H SOL - 3/4" SOLID	0.38	1.2D + 1.0W N	36.0	58	14.31	0.00	0.00	0.00	0	0	3	Member
D SOL - 1/2" SOLID	0.89	1.2D + 1.0W 90°	36.0	58	6.36	0.00	0.00	0.00	0	0	14	Member

Max Splice Forces	Pu (kip)	Load Case	ΦR_{nt} (kip)	Use %	Num Bolts	Bolt Type
Bot Tension	8.99	1.2D + 1.0W 120°	54.52	16	1	1 A325

Section 16 – 240.0' to 260.00'

Member Compression	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'_y (ksi)	$\Phi_c P_n$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	# Bolt	# Hole	Use %	Controls
L SOL - 1 1/4" SOLID	-4.11	1.2D + 1.0W N	1.96	100	100	100	75.26	50.00	36.50	0.00	0.00	0	0	11	Member X
H SOL - 3/4" SOLID	-0.27	1.2D + 1.0W 120°	2.041	100	100	100	84.90	36.00	9.79	0.00	0.00	0	0	3	Member X
D SOL - 1/2" SOLID	-0.57	1.2D + 1.0W 120°	2.83	50	50	50	122.24	36.00	2.90	0.00	0.00	0	0	20	Member X

Member Tension	Pu (kip)	Load Case	F_y (ksi)	F_u (ksi)	$\Phi_c Pn$ (kip)	Shear ΦR_{nv} (kip)	Bear ΦR_n (kip)	Blk Shear $\Phi_t P_n$ (kip)	# Bolt	# Hole	Use %	Controls
L SOL - 1 1/4" SOLID	4.00	1.2D + 1.0W 60°	50.0	65	55.22	0.00	0.00		0	0	7	Member
H SOL - 3/4" SOLID	0.27	1.2D + 1.0W 60°	36.0	58	14.31	0.00	0.00	0.00	0	0	2	Member
D SOL - 1/2" SOLID	0.57	1.2D + 1.0W 60°	36.0	58	6.36	0.00	0.00	0.00	0	0	9	Member

Max Splice Forces	Pu (kip)	Load Case	ΦR_{nt} (kip)	Use %	Num Bolts	Bolt Type
Bot Tension	3.98	1.2D + 1.0W 60°	54.52	7	1	1 A325

DETAILED CABLE FORCES

Load Case	Elevation (ft)	Cable	Anchor Node	Tower Node	Available Tension (kip)	Applied Tension (kip)	Use (%)
1.2D + 1.0W Normal	37.84	5/16 EHS	A1	23	6.72	0.11	2
		5/16 EHS	A1b	23a	6.72	2.93	44
		5/16 EHS	A1a	23b	6.72	2.93	44
	90.00	5/16 EHS	A1	55	6.72	0.02	0
		5/16 EHS	A1b	55a	6.72	4.56	68
		5/16 EHS	A1a	55b	6.72	4.56	68
	138.00	5/16 EHS	A1	T3	6.72	0.12	2
		5/16 EHS	A1b	T3	6.72	4.91	73
		5/16 EHS	A1a	T3a	6.72	4.77	71
		5/16 EHS	A1b	T3a	6.72	4.77	71
		5/16 EHS	A1a	T3b	6.72	4.91	73
		5/16 EHS	A1	T3b	6.72	0.12	2
	168.04	3/8 EHS	A2	102	9.24	0.21	2
		3/8 EHS	A2b	102a	9.24	6.13	66
		3/8 EHS	A2a	102b	9.24	6.13	66
	190.00	7/16 EHS	A2	115	12.48	0.34	3
		7/16 EHS	A2b	115a	12.48	7.18	58
		7/16 EHS	A2a	115b	12.48	7.18	58
	237.84	9/16 EHS	A2	143	21	0.99	5
		9/16 EHS	A2b	143a	21	6.48	31
		9/16 EHS	A2a	143b	21	6.48	31
1.2D + 1.0W 60°	37.84	5/16 EHS	A1	23	6.72	0.59	9
		5/16 EHS	A1b	23a	6.72	0.59	9
		5/16 EHS	A1a	23b	6.72	3.35	50
	90.00	5/16 EHS	A1	55	6.72	0.51	8
		5/16 EHS	A1b	55a	6.72	0.51	8
		5/16 EHS	A1a	55b	6.72	4.77	71
	138.00	5/16 EHS	A1	T3	6.72	0.61	9
		5/16 EHS	A1b	T3	6.72	0.6	9
		5/16 EHS	A1a	T3a	6.72	5.21	78
		5/16 EHS	A1b	T3a	6.72	0.59	9
		5/16 EHS	A1	T3b	6.72	0.58	9
		5/16 EHS	A1a	T3b	6.72	5.26	78
	168.04	3/8 EHS	A2	102	9.24	0.93	10
		3/8 EHS	A2b	102a	9.24	0.93	10
		3/8 EHS	A2a	102b	9.24	6.91	75
	190.00	7/16 EHS	A2	115	12.48	1.3	10
		7/16 EHS	A2b	115a	12.48	1.29	10
		7/16 EHS	A2a	115b	12.48	8.35	67
	237.84	9/16 EHS	A2	143	21	2.66	13
		9/16 EHS	A2b	143a	21	2.67	13
		9/16 EHS	A2a	143b	21	8.02	38
1.2D + 1.0W 90°	37.84	5/16 EHS	A1	23	6.72	1.82	27
		5/16 EHS	A1b	23a	6.72	0.15	2
		5/16 EHS	A1a	23b	6.72	3.43	51
	90.00	5/16 EHS	A1	55	6.72	2.83	42
		5/16 EHS	A1b	55a	6.72	0.13	2
		5/16 EHS	A1a	55b	6.72	5.23	78
	138.00	5/16 EHS	A1	T3	6.72	3.06	46
		5/16 EHS	A1b	T3	6.72	0.21	3
		5/16 EHS	A1a	T3a	6.72	5.64	84
		5/16 EHS	A1b	T3a	6.72	0.21	3
		5/16 EHS	A1	T3b	6.72	2.85	42
		5/16 EHS	A1a	T3b	6.72	5.61	84
	168.04	3/8 EHS	A2	102	9.24	3.73	40
		3/8 EHS	A2b	102a	9.24	0.35	4
		3/8 EHS	A2a	102b	9.24	7.21	78
	190.00	7/16 EHS	A2	115	12.48	4.36	35
		7/16 EHS	A2b	115a	12.48	0.52	4

DETAILED CABLE FORCES

Load Case	Elevation (ft)	Cable	Anchor Node	Tower Node	Available Tension (kip)	Applied Tension (kip)	Use (%)
		7/16 EHS	A2a	115b	12.48	8.53	68
	237.84	9/16 EHS	A2	143	21	4.62	22
		9/16 EHS	A2b	143a	21	1.39	7
		9/16 EHS	A2a	143b	21	7.65	36
1.2D + 1.0W 120°	37.84	5/16 EHS	A1	23	6.72	2.93	44
		5/16 EHS	A1b	23a	6.72	0.11	2
		5/16 EHS	A1a	23b	6.72	2.93	44
	90.00	5/16 EHS	A1	55	6.72	4.56	68
		5/16 EHS	A1b	55a	6.72	0.02	0
		5/16 EHS	A1a	55b	6.72	4.56	68
	138.00	5/16 EHS	A1b	T3	6.72	0.12	2
		5/16 EHS	A1	T3	6.72	4.93	73
		5/16 EHS	A1b	T3a	6.72	0.12	2
		5/16 EHS	A1a	T3a	6.72	4.9	73
		5/16 EHS	A1	T3b	6.72	4.76	71
		5/16 EHS	A1a	T3b	6.72	4.79	71
	168.04	3/8 EHS	A2	102	9.24	6.13	66
		3/8 EHS	A2b	102a	9.24	0.21	2
		3/8 EHS	A2a	102b	9.24	6.13	66
	190.00	7/16 EHS	A2	115	12.48	7.18	58
		7/16 EHS	A2b	115a	12.48	0.34	3
		7/16 EHS	A2a	115b	12.48	7.18	57
	237.84	9/16 EHS	A2	143	21	6.47	31
		9/16 EHS	A2b	143a	21	1	5
		9/16 EHS	A2a	143b	21	6.47	31
1.2D + 1.0W 180°	37.84	5/16 EHS	A1	23	6.72	3.35	50
		5/16 EHS	A1b	23a	6.72	0.59	9
		5/16 EHS	A1a	23b	6.72	0.59	9
	90.00	5/16 EHS	A1	55	6.72	4.77	71
		5/16 EHS	A1b	55a	6.72	0.51	8
		5/16 EHS	A1a	55b	6.72	0.51	8
	138.00	5/16 EHS	A1b	T3	6.72	0.58	9
		5/16 EHS	A1	T3	6.72	5.23	78
		5/16 EHS	A1a	T3a	6.72	0.61	9
		5/16 EHS	A1b	T3a	6.72	0.61	9
		5/16 EHS	A1	T3b	6.72	5.23	78
		5/16 EHS	A1a	T3b	6.72	0.58	9
	168.04	3/8 EHS	A2	102	9.24	6.91	75
		3/8 EHS	A2b	102a	9.24	0.93	10
		3/8 EHS	A2a	102b	9.24	0.93	10
	190.00	7/16 EHS	A2	115	12.48	8.35	67
		7/16 EHS	A2b	115a	12.48	1.29	10
		7/16 EHS	A2a	115b	12.48	1.29	10
	237.84	9/16 EHS	A2	143	21	8	38
		9/16 EHS	A2b	143a	21	2.67	13
		9/16 EHS	A2a	143b	21	2.67	13
1.2D + 1.0W 210°	37.84	5/16 EHS	A1	23	6.72	3.43	51
		5/16 EHS	A1b	23a	6.72	1.82	27
		5/16 EHS	A1a	23b	6.72	0.15	2
	90.00	5/16 EHS	A1	55	6.72	5.23	78
		5/16 EHS	A1b	55a	6.72	2.83	42
		5/16 EHS	A1a	55b	6.72	0.13	2
	138.00	5/16 EHS	A1	T3	6.72	5.58	83
		5/16 EHS	A1b	T3	6.72	2.88	43
		5/16 EHS	A1b	T3a	6.72	3.03	45
		5/16 EHS	A1a	T3a	6.72	0.22	3
		5/16 EHS	A1a	T3b	6.72	0.21	3
		5/16 EHS	A1	T3b	6.72	5.67	84
	168.04	3/8 EHS	A2	102	9.24	7.21	78

DETAILED CABLE FORCES

Load Case	Elevation (ft)	Cable	Anchor Node	Tower Node	Available Tension (kip)	Applied Tension (kip)	Use (%)
		3/8 EHS	A2b	102a	9.24	3.73	40
		3/8 EHS	A2a	102b	9.24	0.35	4
	190.00	7/16 EHS	A2	115	12.48	8.54	68
		7/16 EHS	A2b	115a	12.48	4.36	35
		7/16 EHS	A2a	115b	12.48	0.52	4
	237.84	9/16 EHS	A2	143	21	7.65	36
		9/16 EHS	A2b	143a	21	4.63	22
		9/16 EHS	A2a	143b	21	1.39	7
1.2D + 1.0W 240°	37.84	5/16 EHS	A1	23	6.72	2.93	44
		5/16 EHS	A1b	23a	6.72	2.93	44
		5/16 EHS	A1a	23b	6.72	0.11	2
	90.00	5/16 EHS	A1	55	6.72	4.56	68
		5/16 EHS	A1b	55a	6.72	4.56	68
		5/16 EHS	A1a	55b	6.72	0.02	0
	138.00	5/16 EHS	A1	T3	6.72	4.76	71
		5/16 EHS	A1b	T3	6.72	4.79	71
		5/16 EHS	A1a	T3a	6.72	0.12	2
		5/16 EHS	A1b	T3a	6.72	4.9	73
		5/16 EHS	A1	T3b	6.72	4.93	73
		5/16 EHS	A1a	T3b	6.72	0.12	2
	168.04	3/8 EHS	A2	102	9.24	6.13	66
		3/8 EHS	A2b	102a	9.24	6.13	66
		3/8 EHS	A2a	102b	9.24	0.21	2
	190.00	7/16 EHS	A2	115	12.48	7.18	58
		7/16 EHS	A2b	115a	12.48	7.18	57
		7/16 EHS	A2a	115b	12.48	0.34	3
	237.84	9/16 EHS	A2	143	21	6.47	31
		9/16 EHS	A2b	143a	21	6.47	31
		9/16 EHS	A2a	143b	21	1	5
1.2D + 1.0W 300°	37.84	5/16 EHS	A1	23	6.72	0.59	9
		5/16 EHS	A1b	23a	6.72	3.35	50
		5/16 EHS	A1a	23b	6.72	0.59	9
	90.00	5/16 EHS	A1	55	6.72	0.51	8
		5/16 EHS	A1b	55a	6.72	4.77	71
		5/16 EHS	A1a	55b	6.72	0.51	8
	138.00	5/16 EHS	A1	T3	6.72	0.58	9
		5/16 EHS	A1b	T3	6.72	5.26	78
		5/16 EHS	A1b	T3a	6.72	5.21	78
		5/16 EHS	A1a	T3a	6.72	0.59	9
		5/16 EHS	A1a	T3b	6.72	0.6	9
		5/16 EHS	A1	T3b	6.72	0.61	9
	168.04	3/8 EHS	A2	102	9.24	0.93	10
		3/8 EHS	A2b	102a	9.24	6.91	75
		3/8 EHS	A2a	102b	9.24	0.93	10
	190.00	7/16 EHS	A2	115	12.48	1.3	10
		7/16 EHS	A2b	115a	12.48	8.35	67
		7/16 EHS	A2a	115b	12.48	1.29	10
	237.84	9/16 EHS	A2	143	21	2.66	13
		9/16 EHS	A2b	143a	21	8.02	38
		9/16 EHS	A2a	143b	21	2.67	13
1.2D + 1.0W 330°	37.84	5/16 EHS	A1	23	6.72	0.15	2
		5/16 EHS	A1b	23a	6.72	3.43	51
		5/16 EHS	A1a	23b	6.72	1.82	27
	90.00	5/16 EHS	A1	55	6.72	0.13	2
		5/16 EHS	A1b	55a	6.72	5.23	78
		5/16 EHS	A1a	55b	6.72	2.82	42
	138.00	5/16 EHS	A1	T3	6.72	0.21	3
		5/16 EHS	A1b	T3	6.72	5.66	84
		5/16 EHS	A1a	T3a	6.72	2.87	43

DETAILED CABLE FORCES

Load Case	Elevation (ft)	Cable	Anchor Node	Tower Node	Available Tension (kip)	Applied Tension (kip)	Use (%)
		5/16 EHS	A1b	T3a	6.72	5.58	83
		5/16 EHS	A1a	T3b	6.72	3.02	45
		5/16 EHS	A1	T3b	6.72	0.22	3
	168.04	3/8 EHS	A2	102	9.24	0.35	4
		3/8 EHS	A2b	102a	9.24	7.21	78
		3/8 EHS	A2a	102b	9.24	3.73	40
	190.00	7/16 EHS	A2	115	12.48	0.52	4
		7/16 EHS	A2b	115a	12.48	8.53	68
		7/16 EHS	A2a	115b	12.48	4.36	35
	237.84	9/16 EHS	A2	143	21	1.39	7
		9/16 EHS	A2b	143a	21	7.66	36
		9/16 EHS	A2a	143b	21	4.63	22
1.2D + 1.0Di + 1.0Wi Normal	37.84	5/16 EHS	A1	23	6.72	0.56	8
		5/16 EHS	A1b	23a	6.72	2.23	33
		5/16 EHS	A1a	23b	6.72	2.23	33
	90.00	5/16 EHS	A1	55	6.72	0.24	4
		5/16 EHS	A1b	55a	6.72	2.68	40
		5/16 EHS	A1a	55b	6.72	2.68	40
	138.00	5/16 EHS	A1b	T3	6.72	2.57	38
		5/16 EHS	A1	T3	6.72	0.11	2
		5/16 EHS	A1a	T3a	6.72	2.49	37
		5/16 EHS	A1b	T3a	6.72	2.49	37
		5/16 EHS	A1	T3b	6.72	0.11	2
		5/16 EHS	A1a	T3b	6.72	2.57	38
	168.04	3/8 EHS	A2	102	9.24	0.17	2
		3/8 EHS	A2b	102a	9.24	3.23	35
		3/8 EHS	A2a	102b	9.24	3.23	35
	190.00	7/16 EHS	A2	115	12.48	0.32	3
		7/16 EHS	A2b	115a	12.48	3.85	31
		7/16 EHS	A2a	115b	12.48	3.85	31
	237.84	9/16 EHS	A2	143	21	1.64	8
		9/16 EHS	A2b	143a	21	4.75	23
		9/16 EHS	A2a	143b	21	4.75	23
1.2D + 1.0Di + 1.0Wi 60°	37.84	5/16 EHS	A1	23	6.72	1.11	16
		5/16 EHS	A1b	23a	6.72	1.11	16
		5/16 EHS	A1a	23b	6.72	2.61	39
	90.00	5/16 EHS	A1	55	6.72	0.92	14
		5/16 EHS	A1b	55a	6.72	0.92	14
		5/16 EHS	A1a	55b	6.72	3.38	50
	138.00	5/16 EHS	A1	T3	6.72	1.04	16
		5/16 EHS	A1b	T3	6.72	1.04	15
		5/16 EHS	A1a	T3a	6.72	3.42	51
		5/16 EHS	A1b	T3a	6.72	1	15
		5/16 EHS	A1	T3b	6.72	1	15
		5/16 EHS	A1a	T3b	6.72	3.44	51
	168.04	3/8 EHS	A2	102	9.24	1.45	16
		3/8 EHS	A2b	102a	9.24	1.44	16
		3/8 EHS	A2a	102b	9.24	4.47	48
	190.00	7/16 EHS	A2	115	12.48	1.84	15
		7/16 EHS	A2b	115a	12.48	1.84	15
		7/16 EHS	A2a	115b	12.48	5.45	44
	237.84	9/16 EHS	A2	143	21	3.11	15
		9/16 EHS	A2b	143a	21	3.12	15
		9/16 EHS	A2a	143b	21	6.25	30
1.2D + 1.0Di + 1.0Wi 90°	37.84	5/16 EHS	A1	23	6.72	1.64	24
		5/16 EHS	A1b	23a	6.72	0.68	10
		5/16 EHS	A1a	23b	6.72	2.49	37
	90.00	5/16 EHS	A1	55	6.72	1.8	27
		5/16 EHS	A1b	55a	6.72	0.38	6

DETAILED CABLE FORCES

Load Case	Elevation (ft)	Cable	Anchor Node	Tower Node	Available Tension (kip)	Applied Tension (kip)	Use (%)
		5/16 EHS	A1a	55b	6.72	3.22	48
	138.00	5/16 EHS	A1	T3	6.72	1.89	28
		5/16 EHS	A1b	T3	6.72	0.45	7
		5/16 EHS	A1a	T3a	6.72	3.21	48
		5/16 EHS	A1b	T3a	6.72	0.43	6
		5/16 EHS	A1	T3b	6.72	1.78	27
		5/16 EHS	A1a	T3b	6.72	3.23	48
	168.04	3/8 EHS	A2	102	9.24	2.43	26
		3/8 EHS	A2b	102a	9.24	0.66	7
		3/8 EHS	A2a	102b	9.24	4.17	45
	190.00	7/16 EHS	A2	115	12.48	2.93	23
		7/16 EHS	A2b	115a	12.48	0.91	7
		7/16 EHS	A2a	115b	12.48	5.03	40
	237.84	9/16 EHS	A2	143	21	3.97	19
		9/16 EHS	A2b	143a	21	2.17	10
		9/16 EHS	A2a	143b	21	5.79	28
1.2D + 1.0Di + 1.0Wi 120°	37.84	5/16 EHS	A1	23	6.72	2.23	33
		5/16 EHS	A1b	23a	6.72	0.56	8
		5/16 EHS	A1a	23b	6.72	2.23	33
	90.00	5/16 EHS	A1	55	6.72	2.68	40
		5/16 EHS	A1b	55a	6.72	0.24	4
		5/16 EHS	A1a	55b	6.72	2.68	40
	138.00	5/16 EHS	A1	T3	6.72	2.58	38
		5/16 EHS	A1b	T3	6.72	0.11	2
		5/16 EHS	A1a	T3a	6.72	2.56	38
		5/16 EHS	A1b	T3a	6.72	0.11	2
		5/16 EHS	A1a	T3b	6.72	2.5	37
		5/16 EHS	A1	T3b	6.72	2.48	37
	168.04	3/8 EHS	A2	102	9.24	3.24	35
		3/8 EHS	A2b	102a	9.24	0.17	2
		3/8 EHS	A2a	102b	9.24	3.23	35
	190.00	7/16 EHS	A2	115	12.48	3.85	31
		7/16 EHS	A2b	115a	12.48	0.32	3
		7/16 EHS	A2a	115b	12.48	3.85	31
	237.84	9/16 EHS	A2	143	21	4.74	23
		9/16 EHS	A2b	143a	21	1.65	8
		9/16 EHS	A2a	143b	21	4.75	23
1.2D + 1.0Di + 1.0Wi 180°	37.84	5/16 EHS	A1	23	6.72	2.61	39
		5/16 EHS	A1b	23a	6.72	1.11	16
		5/16 EHS	A1a	23b	6.72	1.11	16
	90.00	5/16 EHS	A1	55	6.72	3.37	50
		5/16 EHS	A1b	55a	6.72	0.92	14
		5/16 EHS	A1a	55b	6.72	0.92	14
	138.00	5/16 EHS	A1	T3	6.72	3.43	51
		5/16 EHS	A1b	T3	6.72	1	15
		5/16 EHS	A1a	T3a	6.72	1.04	15
		5/16 EHS	A1b	T3a	6.72	1.04	15
		5/16 EHS	A1a	T3b	6.72	1	15
		5/16 EHS	A1	T3b	6.72	3.43	51
	168.04	3/8 EHS	A2	102	9.24	4.47	48
		3/8 EHS	A2b	102a	9.24	1.45	16
		3/8 EHS	A2a	102b	9.24	1.45	16
	190.00	7/16 EHS	A2	115	12.48	5.44	44
		7/16 EHS	A2b	115a	12.48	1.84	15
		7/16 EHS	A2a	115b	12.48	1.84	15
	237.84	9/16 EHS	A2	143	21	6.21	30
		9/16 EHS	A2b	143a	21	3.12	15
		9/16 EHS	A2a	143b	21	3.12	15
1.2D + 1.0Di + 1.0Wi 210°	37.84	5/16 EHS	A1	23	6.72	2.49	37

DETAILED CABLE FORCES

Load Case	Elevation (ft)	Cable	Anchor Node	Tower Node	Available Tension (kip)	Applied Tension (kip)	Use (%)
		5/16 EHS	A1b	23a	6.72	1.64	24
		5/16 EHS	A1a	23b	6.72	0.68	10
	90.00	5/16 EHS	A1	55	6.72	3.22	48
		5/16 EHS	A1b	55a	6.72	1.8	27
		5/16 EHS	A1a	55b	6.72	0.38	6
	138.00	5/16 EHS	A1	T3	6.72	3.21	48
		5/16 EHS	A1b	T3	6.72	1.79	27
		5/16 EHS	A1b	T3a	6.72	1.87	28
		5/16 EHS	A1a	T3a	6.72	0.45	7
		5/16 EHS	A1a	T3b	6.72	0.43	6
		5/16 EHS	A1	T3b	6.72	3.23	48
	168.04	3/8 EHS	A2	102	9.24	4.17	45
		3/8 EHS	A2b	102a	9.24	2.43	26
		3/8 EHS	A2a	102b	9.24	0.66	7
	190.00	7/16 EHS	A2	115	12.48	5.03	40
		7/16 EHS	A2b	115a	12.48	2.92	23
		7/16 EHS	A2a	115b	12.48	0.91	7
	237.84	9/16 EHS	A2	143	21	5.78	28
		9/16 EHS	A2b	143a	21	3.98	19
		9/16 EHS	A2a	143b	21	2.17	10
1.2D + 1.0Di + 1.0Wi 240°	37.84	5/16 EHS	A1	23	6.72	2.23	33
		5/16 EHS	A1b	23a	6.72	2.23	33
		5/16 EHS	A1a	23b	6.72	0.56	8
	90.00	5/16 EHS	A1	55	6.72	2.68	40
		5/16 EHS	A1b	55a	6.72	2.68	40
		5/16 EHS	A1a	55b	6.72	0.24	4
	138.00	5/16 EHS	A1	T3	6.72	2.48	37
		5/16 EHS	A1b	T3	6.72	2.5	37
		5/16 EHS	A1a	T3a	6.72	0.11	2
		5/16 EHS	A1b	T3a	6.72	2.56	38
		5/16 EHS	A1a	T3b	6.72	0.11	2
		5/16 EHS	A1	T3b	6.72	2.58	38
	168.04	3/8 EHS	A2	102	9.24	3.24	35
		3/8 EHS	A2b	102a	9.24	3.23	35
		3/8 EHS	A2a	102b	9.24	0.17	2
	190.00	7/16 EHS	A2	115	12.48	3.85	31
		7/16 EHS	A2b	115a	12.48	3.85	31
		7/16 EHS	A2a	115b	12.48	0.32	3
	237.84	9/16 EHS	A2	143	21	4.74	23
		9/16 EHS	A2b	143a	21	4.75	23
		9/16 EHS	A2a	143b	21	1.65	8
1.2D + 1.0Di + 1.0Wi 300°	37.84	5/16 EHS	A1	23	6.72	1.11	16
		5/16 EHS	A1b	23a	6.72	2.61	39
		5/16 EHS	A1a	23b	6.72	1.11	16
	90.00	5/16 EHS	A1	55	6.72	0.92	14
		5/16 EHS	A1b	55a	6.72	3.38	50
		5/16 EHS	A1a	55b	6.72	0.92	14
	138.00	5/16 EHS	A1	T3	6.72	1	15
		5/16 EHS	A1b	T3	6.72	3.44	51
		5/16 EHS	A1b	T3a	6.72	3.42	51
		5/16 EHS	A1a	T3a	6.72	1	15
		5/16 EHS	A1a	T3b	6.72	1.04	15
		5/16 EHS	A1	T3b	6.72	1.04	16
	168.04	3/8 EHS	A2	102	9.24	1.45	16
		3/8 EHS	A2b	102a	9.24	4.47	48
		3/8 EHS	A2a	102b	9.24	1.44	16
	190.00	7/16 EHS	A2	115	12.48	1.84	15
		7/16 EHS	A2b	115a	12.48	5.45	44
		7/16 EHS	A2a	115b	12.48	1.84	15

DETAILED CABLE FORCES

Load Case	Elevation (ft)	Cable	Anchor Node	Tower Node	Available Tension (kip)	Applied Tension (kip)	Use (%)
	237.84	9/16 EHS	A2	143	21	3.11	15
		9/16 EHS	A2b	143a	21	6.25	30
		9/16 EHS	A2a	143b	21	3.12	15
1.2D + 1.0Di + 1.0Wi 330°	37.84	5/16 EHS	A1	23	6.72	0.68	10
		5/16 EHS	A1b	23a	6.72	2.49	37
		5/16 EHS	A1a	23b	6.72	1.64	24
	90.00	5/16 EHS	A1	55	6.72	0.38	6
		5/16 EHS	A1b	55a	6.72	3.22	48
		5/16 EHS	A1a	55b	6.72	1.8	27
	138.00	5/16 EHS	A1	T3	6.72	0.43	6
		5/16 EHS	A1b	T3	6.72	3.23	48
		5/16 EHS	A1a	T3a	6.72	1.79	27
		5/16 EHS	A1b	T3a	6.72	3.21	48
		5/16 EHS	A1	T3b	6.72	0.45	7
		5/16 EHS	A1a	T3b	6.72	1.87	28
	168.04	3/8 EHS	A2	102	9.24	0.66	7
		3/8 EHS	A2b	102a	9.24	4.17	45
		3/8 EHS	A2a	102b	9.24	2.43	26
	190.00	7/16 EHS	A2	115	12.48	0.91	7
		7/16 EHS	A2b	115a	12.48	5.03	40
		7/16 EHS	A2a	115b	12.48	2.92	23
	237.84	9/16 EHS	A2	143	21	2.16	10
		9/16 EHS	A2b	143a	21	5.79	28
		9/16 EHS	A2a	143b	21	3.98	19
1.2D + 1.0Ev + 1.0Eh Normal	37.84	5/16 EHS	A1	23	6.72	1.04	15
		5/16 EHS	A1b	23a	6.72	1.04	15
		5/16 EHS	A1a	23b	6.72	1.04	15
	90.00	5/16 EHS	A1	55	6.72	0.86	13
		5/16 EHS	A1b	55a	6.72	0.91	14
		5/16 EHS	A1a	55b	6.72	0.91	14
	138.00	5/16 EHS	A1	T3	6.72	0.67	10
		5/16 EHS	A1b	T3	6.72	0.82	12
		5/16 EHS	A1a	T3a	6.72	0.83	12
		5/16 EHS	A1b	T3a	6.72	0.83	12
		5/16 EHS	A1	T3b	6.72	0.67	10
		5/16 EHS	A1a	T3b	6.72	0.82	12
	168.04	3/8 EHS	A2	102	9.24	0.97	11
		3/8 EHS	A2b	102a	9.24	1.24	13
		3/8 EHS	A2a	102b	9.24	1.24	13
	190.00	7/16 EHS	A2	115	12.48	1.29	10
		7/16 EHS	A2b	115a	12.48	1.63	13
		7/16 EHS	A2a	115b	12.48	1.63	13
	237.84	9/16 EHS	A2	143	21	2.33	11
		9/16 EHS	A2b	143a	21	2.65	13
		9/16 EHS	A2a	143b	21	2.65	13
1.2D + 1.0Ev + 1.0Eh 60°	37.84	5/16 EHS	A1	23	6.72	1.04	15
		5/16 EHS	A1b	23a	6.72	1.04	15
		5/16 EHS	A1a	23b	6.72	1.04	16
	90.00	5/16 EHS	A1	55	6.72	0.88	13
		5/16 EHS	A1b	55a	6.72	0.88	13
		5/16 EHS	A1a	55b	6.72	0.93	14
	138.00	5/16 EHS	A1	T3	6.72	0.72	11
		5/16 EHS	A1b	T3	6.72	0.72	11
		5/16 EHS	A1a	T3a	6.72	0.87	13
		5/16 EHS	A1b	T3a	6.72	0.72	11
		5/16 EHS	A1	T3b	6.72	0.72	11
		5/16 EHS	A1a	T3b	6.72	0.87	13
	168.04	3/8 EHS	A2	102	9.24	1.06	11
		3/8 EHS	A2b	102a	9.24	1.06	11

DETAILED CABLE FORCES

Load Case	Elevation (ft)	Cable	Anchor Node	Tower Node	Available Tension (kip)	Applied Tension (kip)	Use (%)
		3/8 EHS	A2a	102b	9.24	1.32	14
	190.00	7/16 EHS	A2	115	12.48	1.4	11
		7/16 EHS	A2b	115a	12.48	1.4	11
		7/16 EHS	A2a	115b	12.48	1.74	14
	237.84	9/16 EHS	A2	143	21	2.44	12
		9/16 EHS	A2b	143a	21	2.44	12
		9/16 EHS	A2a	143b	21	2.74	13
1.2D + 1.0Ev + 1.0Eh 90°	37.84	5/16 EHS	A1	23	6.72	1.04	15
		5/16 EHS	A1b	23a	6.72	1.04	15
		5/16 EHS	A1a	23b	6.72	1.04	16
	90.00	5/16 EHS	A1	55	6.72	0.89	13
		5/16 EHS	A1b	55a	6.72	0.87	13
		5/16 EHS	A1a	55b	6.72	0.92	14
	138.00	5/16 EHS	A1	T3	6.72	0.77	11
		5/16 EHS	A1b	T3	6.72	0.69	10
		5/16 EHS	A1a	T3a	6.72	0.86	13
		5/16 EHS	A1b	T3a	6.72	0.69	10
		5/16 EHS	A1	T3b	6.72	0.77	11
		5/16 EHS	A1a	T3b	6.72	0.86	13
	168.04	3/8 EHS	A2	102	9.24	1.15	12
		3/8 EHS	A2b	102a	9.24	1	11
		3/8 EHS	A2a	102b	9.24	1.29	14
	190.00	7/16 EHS	A2	115	12.48	1.51	12
		7/16 EHS	A2b	115a	12.48	1.33	11
		7/16 EHS	A2a	115b	12.48	1.7	14
	237.84	9/16 EHS	A2	143	21	2.54	12
		9/16 EHS	A2b	143a	21	2.37	11
		9/16 EHS	A2a	143b	21	2.7	13
1.2D + 1.0Ev + 1.0Eh 120°	37.84	5/16 EHS	A1	23	6.72	1.04	15
		5/16 EHS	A1b	23a	6.72	1.04	15
		5/16 EHS	A1a	23b	6.72	1.04	15
	90.00	5/16 EHS	A1	55	6.72	0.91	14
		5/16 EHS	A1b	55a	6.72	0.86	13
		5/16 EHS	A1a	55b	6.72	0.91	14
	138.00	5/16 EHS	A1b	T3	6.72	0.67	10
		5/16 EHS	A1	T3	6.72	0.82	12
		5/16 EHS	A1a	T3a	6.72	0.82	12
		5/16 EHS	A1b	T3a	6.72	0.67	10
		5/16 EHS	A1	T3b	6.72	0.82	12
		5/16 EHS	A1a	T3b	6.72	0.82	12
	168.04	3/8 EHS	A2	102	9.24	1.23	13
		3/8 EHS	A2b	102a	9.24	0.98	11
		3/8 EHS	A2a	102b	9.24	1.23	13
	190.00	7/16 EHS	A2	115	12.48	1.63	13
		7/16 EHS	A2b	115a	12.48	1.29	10
		7/16 EHS	A2a	115b	12.48	1.63	13
	237.84	9/16 EHS	A2	143	21	2.64	13
		9/16 EHS	A2b	143a	21	2.34	11
		9/16 EHS	A2a	143b	21	2.64	13
1.2D + 1.0Ev + 1.0Eh 180°	37.84	5/16 EHS	A1	23	6.72	1.04	16
		5/16 EHS	A1b	23a	6.72	1.04	15
		5/16 EHS	A1a	23b	6.72	1.04	15
	90.00	5/16 EHS	A1	55	6.72	0.93	14
		5/16 EHS	A1b	55a	6.72	0.88	13
		5/16 EHS	A1a	55b	6.72	0.88	13
	138.00	5/16 EHS	A1b	T3	6.72	0.72	11
		5/16 EHS	A1	T3	6.72	0.87	13
		5/16 EHS	A1a	T3a	6.72	0.72	11
		5/16 EHS	A1b	T3a	6.72	0.72	11

DETAILED CABLE FORCES

Load Case	Elevation (ft)	Cable	Anchor Node	Tower Node	Available Tension (kip)	Applied Tension (kip)	Use (%)
		5/16 EHS	A1a	T3b	6.72	0.72	11
		5/16 EHS	A1	T3b	6.72	0.87	13
	168.04	3/8 EHS	A2	102	9.24	1.32	14
		3/8 EHS	A2b	102a	9.24	1.06	11
		3/8 EHS	A2a	102b	9.24	1.06	11
	190.00	7/16 EHS	A2	115	12.48	1.74	14
		7/16 EHS	A2b	115a	12.48	1.4	11
		7/16 EHS	A2a	115b	12.48	1.4	11
	237.84	9/16 EHS	A2	143	21	2.74	13
		9/16 EHS	A2b	143a	21	2.44	12
		9/16 EHS	A2a	143b	21	2.44	12
1.2D + 1.0Ev + 1.0Eh 210°	37.84	5/16 EHS	A1	23	6.72	1.04	16
		5/16 EHS	A1b	23a	6.72	1.04	15
		5/16 EHS	A1a	23b	6.72	1.04	15
	90.00	5/16 EHS	A1	55	6.72	0.92	14
		5/16 EHS	A1b	55a	6.72	0.89	13
		5/16 EHS	A1a	55b	6.72	0.86	13
	138.00	5/16 EHS	A1	T3	6.72	0.86	13
		5/16 EHS	A1b	T3	6.72	0.77	11
		5/16 EHS	A1a	T3a	6.72	0.68	10
		5/16 EHS	A1b	T3a	6.72	0.77	11
		5/16 EHS	A1a	T3b	6.72	0.68	10
		5/16 EHS	A1	T3b	6.72	0.86	13
	168.04	3/8 EHS	A2	102	9.24	1.3	14
		3/8 EHS	A2b	102a	9.24	1.15	12
		3/8 EHS	A2a	102b	9.24	1	11
	190.00	7/16 EHS	A2	115	12.48	1.71	14
		7/16 EHS	A2b	115a	12.48	1.51	12
		7/16 EHS	A2a	115b	12.48	1.32	11
	237.84	9/16 EHS	A2	143	21	2.71	13
		9/16 EHS	A2b	143a	21	2.54	12
		9/16 EHS	A2a	143b	21	2.36	11
1.2D + 1.0Ev + 1.0Eh 240°	37.84	5/16 EHS	A1	23	6.72	1.04	15
		5/16 EHS	A1b	23a	6.72	1.04	15
		5/16 EHS	A1a	23b	6.72	1.04	15
	90.00	5/16 EHS	A1	55	6.72	0.91	14
		5/16 EHS	A1b	55a	6.72	0.91	14
		5/16 EHS	A1a	55b	6.72	0.86	13
	138.00	5/16 EHS	A1	T3	6.72	0.82	12
		5/16 EHS	A1b	T3	6.72	0.82	12
		5/16 EHS	A1a	T3a	6.72	0.67	10
		5/16 EHS	A1b	T3a	6.72	0.82	12
		5/16 EHS	A1a	T3b	6.72	0.67	10
		5/16 EHS	A1	T3b	6.72	0.82	12
	168.04	3/8 EHS	A2	102	9.24	1.23	13
		3/8 EHS	A2b	102a	9.24	1.23	13
		3/8 EHS	A2a	102b	9.24	0.98	11
	190.00	7/16 EHS	A2	115	12.48	1.63	13
		7/16 EHS	A2b	115a	12.48	1.63	13
		7/16 EHS	A2a	115b	12.48	1.29	10
	237.84	9/16 EHS	A2	143	21	2.64	13
		9/16 EHS	A2b	143a	21	2.64	13
		9/16 EHS	A2a	143b	21	2.34	11
1.2D + 1.0Ev + 1.0Eh 300°	37.84	5/16 EHS	A1	23	6.72	1.04	15
		5/16 EHS	A1b	23a	6.72	1.04	16
		5/16 EHS	A1a	23b	6.72	1.04	15
	90.00	5/16 EHS	A1	55	6.72	0.88	13
		5/16 EHS	A1b	55a	6.72	0.93	14
		5/16 EHS	A1a	55b	6.72	0.88	13

DETAILED CABLE FORCES

Load Case	Elevation (ft)	Cable	Anchor Node	Tower Node	Available Tension (kip)	Applied Tension (kip)	Use (%)
	138.00	5/16 EHS	A1b	T3	6.72	0.87	13
		5/16 EHS	A1	T3	6.72	0.72	11
		5/16 EHS	A1b	T3a	6.72	0.87	13
		5/16 EHS	A1a	T3a	6.72	0.72	11
		5/16 EHS	A1	T3b	6.72	0.72	11
		5/16 EHS	A1a	T3b	6.72	0.72	11
	168.04	3/8 EHS	A2	102	9.24	1.06	11
		3/8 EHS	A2b	102a	9.24	1.32	14
		3/8 EHS	A2a	102b	9.24	1.06	11
	190.00	7/16 EHS	A2	115	12.48	1.4	11
		7/16 EHS	A2b	115a	12.48	1.74	14
		7/16 EHS	A2a	115b	12.48	1.4	11
	237.84	9/16 EHS	A2	143	21	2.44	12
		9/16 EHS	A2b	143a	21	2.74	13
		9/16 EHS	A2a	143b	21	2.44	12
1.2D + 1.0Ev + 1.0Eh 330°	37.84	5/16 EHS	A1	23	6.72	1.04	15
		5/16 EHS	A1b	23a	6.72	1.04	16
		5/16 EHS	A1a	23b	6.72	1.04	15
	90.00	5/16 EHS	A1	55	6.72	0.86	13
		5/16 EHS	A1b	55a	6.72	0.92	14
		5/16 EHS	A1a	55b	6.72	0.89	13
	138.00	5/16 EHS	A1	T3	6.72	0.68	10
		5/16 EHS	A1b	T3	6.72	0.86	13
		5/16 EHS	A1b	T3a	6.72	0.86	13
		5/16 EHS	A1a	T3a	6.72	0.77	11
		5/16 EHS	A1a	T3b	6.72	0.77	11
		5/16 EHS	A1	T3b	6.72	0.68	10
	168.04	3/8 EHS	A2	102	9.24	1	11
		3/8 EHS	A2b	102a	9.24	1.3	14
		3/8 EHS	A2a	102b	9.24	1.15	12
	190.00	7/16 EHS	A2	115	12.48	1.32	11
		7/16 EHS	A2b	115a	12.48	1.71	14
		7/16 EHS	A2a	115b	12.48	1.51	12
	237.84	9/16 EHS	A2	143	21	2.36	11
		9/16 EHS	A2b	143a	21	2.71	13
		9/16 EHS	A2a	143b	21	2.54	12
1.0D + 1.0W Service Normal	37.84	5/16 EHS	A1	23	6.72	0.52	8
		5/16 EHS	A1b	23a	6.72	1.37	20
		5/16 EHS	A1a	23b	6.72	1.37	20
	90.00	5/16 EHS	A1	55	6.72	0.22	3
		5/16 EHS	A1b	55a	6.72	1.48	22
		5/16 EHS	A1a	55b	6.72	1.48	22
	138.00	5/16 EHS	A1	T3	6.72	0.09	1
		5/16 EHS	A1b	T3	6.72	1.45	22
		5/16 EHS	A1a	T3a	6.72	1.41	21
		5/16 EHS	A1b	T3a	6.72	1.41	21
		5/16 EHS	A1	T3b	6.72	0.09	1
		5/16 EHS	A1a	T3b	6.72	1.45	22
	168.04	3/8 EHS	A2	102	9.24	0.17	2
		3/8 EHS	A2b	102a	9.24	1.94	21
		3/8 EHS	A2a	102b	9.24	1.94	21
	190.00	7/16 EHS	A2	115	12.48	0.3	2
		7/16 EHS	A2b	115a	12.48	2.4	19
		7/16 EHS	A2a	115b	12.48	2.4	19
	237.84	9/16 EHS	A2	143	21	1.65	8
		9/16 EHS	A2b	143a	21	3.25	15
		9/16 EHS	A2a	143b	21	3.25	15
1.0D + 1.0W Service 60°	37.84	5/16 EHS	A1	23	6.72	0.8	12
		5/16 EHS	A1b	23a	6.72	0.8	12

DETAILED CABLE FORCES

Load Case	Elevation (ft)	Cable	Anchor Node	Tower Node	Available Tension (kip)	Applied Tension (kip)	Use (%)
		5/16 EHS	A1a	23b	6.72	1.61	24
	90.00	5/16 EHS	A1	55	6.72	0.57	9
		5/16 EHS	A1b	55a	6.72	0.57	9
		5/16 EHS	A1a	55b	6.72	1.83	27
	138.00	5/16 EHS	A1	T3	6.72	0.51	8
		5/16 EHS	A1b	T3	6.72	0.51	8
		5/16 EHS	A1a	T3a	6.72	1.86	28
		5/16 EHS	A1b	T3a	6.72	0.49	7
		5/16 EHS	A1	T3b	6.72	0.49	7
		5/16 EHS	A1a	T3b	6.72	1.87	28
	168.04	3/8 EHS	A2	102	9.24	0.78	8
		3/8 EHS	A2b	102a	9.24	0.78	8
		3/8 EHS	A2a	102b	9.24	2.56	28
	190.00	7/16 EHS	A2	115	12.48	1.09	9
		7/16 EHS	A2b	115a	12.48	1.09	9
		7/16 EHS	A2a	115b	12.48	3.16	25
	237.84	9/16 EHS	A2	143	21	2.26	11
		9/16 EHS	A2b	143a	21	2.27	11
		9/16 EHS	A2a	143b	21	3.88	18
1.0D + 1.0W Service 90°	37.84	5/16 EHS	A1	23	6.72	1.08	16
		5/16 EHS	A1b	23a	6.72	0.6	9
		5/16 EHS	A1a	23b	6.72	1.55	23
	90.00	5/16 EHS	A1	55	6.72	1.03	15
		5/16 EHS	A1b	55a	6.72	0.28	4
		5/16 EHS	A1a	55b	6.72	1.75	26
	138.00	5/16 EHS	A1	T3	6.72	1	15
		5/16 EHS	A1b	T3	6.72	0.21	3
		5/16 EHS	A1a	T3a	6.72	1.76	26
		5/16 EHS	A1b	T3a	6.72	0.2	3
		5/16 EHS	A1	T3b	6.72	0.94	14
		5/16 EHS	A1a	T3b	6.72	1.76	26
	168.04	3/8 EHS	A2	102	9.24	1.38	15
		3/8 EHS	A2b	102a	9.24	0.35	4
		3/8 EHS	A2a	102b	9.24	2.4	26
	190.00	7/16 EHS	A2	115	12.48	1.76	14
		7/16 EHS	A2b	115a	12.48	0.56	4
		7/16 EHS	A2a	115b	12.48	2.96	24
	237.84	9/16 EHS	A2	143	21	2.76	13
		9/16 EHS	A2b	143a	21	1.83	9
		9/16 EHS	A2a	143b	21	3.69	18
1.0D + 1.0W Service 120°	37.84	5/16 EHS	A1	23	6.72	1.37	20
		5/16 EHS	A1b	23a	6.72	0.52	8
		5/16 EHS	A1a	23b	6.72	1.37	20
	90.00	5/16 EHS	A1	55	6.72	1.49	22
		5/16 EHS	A1b	55a	6.72	0.22	3
		5/16 EHS	A1a	55b	6.72	1.49	22
	138.00	5/16 EHS	A1b	T3	6.72	0.09	1
		5/16 EHS	A1	T3	6.72	1.46	22
		5/16 EHS	A1a	T3a	6.72	1.44	21
		5/16 EHS	A1b	T3a	6.72	0.09	1
		5/16 EHS	A1	T3b	6.72	1.4	21
		5/16 EHS	A1a	T3b	6.72	1.42	21
	168.04	3/8 EHS	A2	102	9.24	1.95	21
		3/8 EHS	A2b	102a	9.24	0.16	2
		3/8 EHS	A2a	102b	9.24	1.95	21
	190.00	7/16 EHS	A2	115	12.48	2.41	19
		7/16 EHS	A2b	115a	12.48	0.3	2
		7/16 EHS	A2a	115b	12.48	2.41	19
	237.84	9/16 EHS	A2	143	21	3.25	15

DETAILED CABLE FORCES

Load Case	Elevation (ft)	Cable	Anchor Node	Tower Node	Available Tension (kip)	Applied Tension (kip)	Use (%)
		9/16 EHS	A2b	143a	21	1.66	8
		9/16 EHS	A2a	143b	21	3.25	15
1.0D + 1.0W Service 180°	37.84	5/16 EHS	A1	23	6.72	1.61	24
		5/16 EHS	A1b	23a	6.72	0.8	12
		5/16 EHS	A1a	23b	6.72	0.8	12
	90.00	5/16 EHS	A1	55	6.72	1.82	27
		5/16 EHS	A1b	55a	6.72	0.58	9
		5/16 EHS	A1a	55b	6.72	0.58	9
	138.00	5/16 EHS	A1	T3	6.72	1.86	28
		5/16 EHS	A1b	T3	6.72	0.49	7
		5/16 EHS	A1a	T3a	6.72	0.51	8
		5/16 EHS	A1b	T3a	6.72	0.51	8
		5/16 EHS	A1a	T3b	6.72	0.49	7
		5/16 EHS	A1	T3b	6.72	1.86	28
	168.04	3/8 EHS	A2	102	9.24	2.55	28
		3/8 EHS	A2b	102a	9.24	0.78	8
		3/8 EHS	A2a	102b	9.24	0.78	8
	190.00	7/16 EHS	A2	115	12.48	3.15	25
		7/16 EHS	A2b	115a	12.48	1.09	9
		7/16 EHS	A2a	115b	12.48	1.09	9
	237.84	9/16 EHS	A2	143	21	3.85	18
		9/16 EHS	A2b	143a	21	2.28	11
		9/16 EHS	A2a	143b	21	2.28	11
1.0D + 1.0W Service 210°	37.84	5/16 EHS	A1	23	6.72	1.55	23
		5/16 EHS	A1b	23a	6.72	1.08	16
		5/16 EHS	A1a	23b	6.72	0.6	9
	90.00	5/16 EHS	A1	55	6.72	1.75	26
		5/16 EHS	A1b	55a	6.72	1.03	15
		5/16 EHS	A1a	55b	6.72	0.28	4
	138.00	5/16 EHS	A1	T3	6.72	1.75	26
		5/16 EHS	A1b	T3	6.72	0.94	14
		5/16 EHS	A1a	T3a	6.72	0.21	3
		5/16 EHS	A1b	T3a	6.72	0.98	15
		5/16 EHS	A1a	T3b	6.72	0.2	3
		5/16 EHS	A1	T3b	6.72	1.77	26
	168.04	3/8 EHS	A2	102	9.24	2.4	26
		3/8 EHS	A2b	102a	9.24	1.37	15
		3/8 EHS	A2a	102b	9.24	0.35	4
	190.00	7/16 EHS	A2	115	12.48	2.95	24
		7/16 EHS	A2b	115a	12.48	1.76	14
		7/16 EHS	A2a	115b	12.48	0.56	4
	237.84	9/16 EHS	A2	143	21	3.68	18
		9/16 EHS	A2b	143a	21	2.76	13
		9/16 EHS	A2a	143b	21	1.83	9
1.0D + 1.0W Service 240°	37.84	5/16 EHS	A1	23	6.72	1.37	20
		5/16 EHS	A1b	23a	6.72	1.37	20
		5/16 EHS	A1a	23b	6.72	0.52	8
	90.00	5/16 EHS	A1	55	6.72	1.49	22
		5/16 EHS	A1b	55a	6.72	1.49	22
		5/16 EHS	A1a	55b	6.72	0.22	3
	138.00	5/16 EHS	A1	T3	6.72	1.4	21
		5/16 EHS	A1b	T3	6.72	1.42	21
		5/16 EHS	A1a	T3a	6.72	0.09	1
		5/16 EHS	A1b	T3a	6.72	1.44	21
		5/16 EHS	A1	T3b	6.72	1.46	22
		5/16 EHS	A1a	T3b	6.72	0.09	1
	168.04	3/8 EHS	A2	102	9.24	1.95	21
		3/8 EHS	A2b	102a	9.24	1.95	21
		3/8 EHS	A2a	102b	9.24	0.16	2

DETAILED CABLE FORCES

Load Case	Elevation (ft)	Cable	Anchor Node	Tower Node	Available Tension (kip)	Applied Tension (kip)	Use (%)
	190.00	7/16 EHS	A2	115	12.48	2.41	19
		7/16 EHS	A2b	115a	12.48	2.41	19
		7/16 EHS	A2a	115b	12.48	0.3	2
	237.84	9/16 EHS	A2	143	21	3.25	15
		9/16 EHS	A2b	143a	21	3.25	15
		9/16 EHS	A2a	143b	21	1.66	8
1.0D + 1.0W Service 300°	37.84	5/16 EHS	A1	23	6.72	0.8	12
		5/16 EHS	A1b	23a	6.72	1.61	24
		5/16 EHS	A1a	23b	6.72	0.8	12
	90.00	5/16 EHS	A1	55	6.72	0.57	9
		5/16 EHS	A1b	55a	6.72	1.83	27
		5/16 EHS	A1a	55b	6.72	0.57	9
	138.00	5/16 EHS	A1	T3	6.72	0.49	7
		5/16 EHS	A1b	T3	6.72	1.87	28
		5/16 EHS	A1b	T3a	6.72	1.86	28
		5/16 EHS	A1a	T3a	6.72	0.49	7
		5/16 EHS	A1a	T3b	6.72	0.51	8
		5/16 EHS	A1	T3b	6.72	0.51	8
	168.04	3/8 EHS	A2	102	9.24	0.78	8
		3/8 EHS	A2b	102a	9.24	2.56	28
		3/8 EHS	A2a	102b	9.24	0.78	8
	190.00	7/16 EHS	A2	115	12.48	1.09	9
		7/16 EHS	A2b	115a	12.48	3.16	25
		7/16 EHS	A2a	115b	12.48	1.09	9
	237.84	9/16 EHS	A2	143	21	2.26	11
		9/16 EHS	A2b	143a	21	3.88	18
		9/16 EHS	A2a	143b	21	2.27	11
1.0D + 1.0W Service 330°	37.84	5/16 EHS	A1	23	6.72	0.6	9
		5/16 EHS	A1b	23a	6.72	1.55	23
		5/16 EHS	A1a	23b	6.72	1.08	16
	90.00	5/16 EHS	A1	55	6.72	0.28	4
		5/16 EHS	A1b	55a	6.72	1.75	26
		5/16 EHS	A1a	55b	6.72	1.03	15
	138.00	5/16 EHS	A1	T3	6.72	0.2	3
		5/16 EHS	A1b	T3	6.72	1.77	26
		5/16 EHS	A1a	T3a	6.72	0.94	14
		5/16 EHS	A1b	T3a	6.72	1.75	26
		5/16 EHS	A1	T3b	6.72	0.21	3
		5/16 EHS	A1a	T3b	6.72	0.98	15
	168.04	3/8 EHS	A2	102	9.24	0.35	4
		3/8 EHS	A2b	102a	9.24	2.4	26
		3/8 EHS	A2a	102b	9.24	1.37	15
	190.00	7/16 EHS	A2	115	12.48	0.56	4
		7/16 EHS	A2b	115a	12.48	2.95	24
		7/16 EHS	A2a	115b	12.48	1.76	14
	237.84	9/16 EHS	A2	143	21	1.83	9
		9/16 EHS	A2b	143a	21	3.69	18
		9/16 EHS	A2a	143b	21	2.77	13

MAXIMUM CABLE FORCES SUMMARY

Load Case	Elevation (ft)	Cable	Anchor Node	Tower Node	Available Tension (kip)	Applied Tension (kip)	Use (%)
1.2D + 1.0W 90°	37.84	5/16 EHS	A1a	23b	6.72	3.43	51
1.2D + 1.0W 90°	90.00	5/16 EHS	A1a	55b	6.72	5.23	78
1.2D + 1.0W 90°	138.00	5/16 EHS	A1a	T3a	6.72	5.64	84
1.2D + 1.0W 90°	168.04	3/8 EHS	A2a	102b	9.24	7.21	78
1.2D + 1.0W 90°	190.00	7/16 EHS	A2a	115b	12.48	8.53	68
1.2D + 1.0W 60°	237.84	9/16 EHS	A2a	143b	21.00	8.02	38

MAXIMUM TORQUE ARM STRESS SUMMARY

Load Case	Elevation (ft)	Member	Type	Compression (%)	Tension (%)
1.2D + 1.0W Normal	38.00	2X2X0.25	Horiz	0	8.8
1.2D + 1.0W 240°	90.00	2X2X0.25	Horiz	0	8.5
1.2D + 1.0W 210°	138.00	C6 x 10.5	Torque Arm	0	3
1.2D + 1.0W 120°	168.00	PL 3 x 0.375	Horiz	0	12.1
1.2D + 1.0W 120°	190.00	PL 2 x 0.25"	Horiz	0	17.3
1.2D + 1.0W 120°	238.00	PL 2 x 0.25"	Horiz	0	11.8

DEFLECTIONS AND ROTATIONS

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	59.80	0.1037	0.0001	0.0899	0.0899
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	111.96	0.1897	0.0020	0.1164	0.1164
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	124.12	0.2118	0.0042	0.1029	0.103
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	138.00	0.2339	0.0074	0.2283	0.2283
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	153.92	0.2647	0.0032	0.0599	0.06
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	177.84	0.2524	0.0010	0.0574	0.0574
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	184.12	0.2421	0.0006	0.1082	0.1082
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	191.96	0.2289	0.0004	0.0901	0.0901
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	202.16	0.2141	0.0002	0.1134	0.1134
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	211.96	0.1942	0.0001	0.1507	0.1507
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	233.92	0.1194	0.0001	0.2311	0.2311
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	242.16	0.0897	0.0001	0.2224	0.2224
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	253.92	0.0541	0.0001	0.2088	0.2088
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	59.80	0.1002	-0.0029	0.0802	0.0802
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	111.96	0.174	-0.0192	0.1069	0.1086
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	124.12	0.1948	-0.0320	0.1014	0.1059
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	138.00	0.2172	-0.0501	0.2190	0.2246
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	153.92	0.2517	-0.0288	0.0749	0.0799
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	177.84	0.2493	-0.0088	0.0421	0.0428
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	184.12	0.2419	-0.0060	0.0759	0.0761
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	191.96	0.2326	-0.0037	0.0573	0.0574
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	202.16	0.2232	-0.0017	0.0813	0.0814
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	211.96	0.2084	-0.0008	0.1166	0.1166
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	233.92	0.1433	-0.0001	0.1987	0.1987
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	242.16	0.116	-0.0001	0.1909	0.1909
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	253.92	0.0793	0.0000	0.1766	0.1766
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	59.80	0.1153	-0.0043	0.1196	0.1196
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	111.96	0.2091	-0.0211	0.1136	0.1154
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	124.12	0.2299	-0.0330	0.0894	0.0953
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	138.00	0.2489	-0.0495	0.2182	0.2233
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	153.92	0.2737	-0.0304	0.0318	0.044
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	177.84	0.2505	-0.0118	0.0960	0.0967
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	184.12	0.2373	-0.0087	0.1333	0.1336
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	191.96	0.2203	-0.0057	0.1130	0.1131
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	202.16	0.2009	-0.0030	0.1349	0.1349
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	211.96	0.177	-0.0016	0.1719	0.1719
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	233.92	0.0911	-0.0003	0.2535	0.2535
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	242.16	0.056	-0.0002	0.2460	0.246
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	253.92	0.0082	-0.0001	0.2322	0.2322
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	59.80	0.1036	0.0001	0.1054	0.1054
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	111.96	0.1897	0.0020	0.1167	0.1167
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	124.12	0.212	0.0042	0.1033	0.1034
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	138.00	0.2342	0.0074	0.2289	0.2289
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	153.92	0.2651	0.0031	0.0605	0.0605
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	177.84	0.253	0.0002	0.0654	0.0654
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	184.12	0.2427	0.0001	0.1081	0.1081
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	191.96	0.2295	0.0001	0.0903	0.0903
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	202.16	0.2146	0.0000	0.1143	0.1143
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	211.96	0.1946	0.0001	0.1517	0.1517
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	233.92	0.119	0.0001	0.2344	0.2344
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	242.16	0.0888	0.0001	0.2269	0.2269
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	253.92	0.0526	0.0001	0.2135	0.2135
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	59.80	0.0984	0.0000	0.0930	0.093
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	111.96	0.1718	0.0003	0.1069	0.1069
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	124.12	0.1927	0.0010	0.1019	0.1019
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	138.00	0.2153	0.0023	0.2187	0.2187
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	153.92	0.2495	0.0004	0.0749	0.0749
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	177.84	0.2467	0.0000	0.0243	0.0243
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	184.12	0.2391	0.0000	0.0764	0.0764

DEFLECTIONS AND ROTATIONS

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	191.96	0.2296	0.0000	0.0590	0.059
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	202.16	0.2196	0.0000	0.0838	0.0838
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	211.96	0.2043	0.0000	0.1190	0.119
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	233.92	0.1378	0.0000	0.2031	0.2031
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	242.16	0.1096	0.0000	0.1965	0.1965
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	253.92	0.0715	0.0000	0.1836	0.1836
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	59.80	0.1153	0.0043	0.1196	0.1196
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	111.96	0.2091	0.0211	0.1136	0.1154
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	124.12	0.2299	0.0330	0.0894	0.0953
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	138.00	0.2489	0.0495	0.2182	0.2233
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	153.92	0.2737	0.0304	0.0318	0.044
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	177.84	0.2505	0.0118	0.0960	0.0967
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	184.12	0.2373	0.0087	0.1333	0.1336
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	191.96	0.2203	0.0057	0.1130	0.1131
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	202.16	0.2009	0.0030	0.1349	0.1349
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	211.96	0.177	0.0016	0.1719	0.1719
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	233.92	0.0911	0.0003	0.2535	0.2535
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	242.16	0.056	0.0002	0.2460	0.246
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	253.92	0.0082	0.0001	0.2322	0.2322
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	59.80	0.1066	0.0296	0.0996	0.1039
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	111.96	0.1934	0.0550	0.1174	0.1286
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	124.12	0.2156	0.0709	0.1034	0.1236
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	138.00	0.2379	0.0911	0.2284	0.2444
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	153.92	0.2691	0.0662	0.0593	0.0876
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	177.84	0.2571	0.0365	0.0777	0.0855
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	184.12	0.2467	0.0303	0.1096	0.1135
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	191.96	0.2333	0.0237	0.0921	0.0948
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	202.16	0.2186	0.0165	0.1149	0.116
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	211.96	0.1988	0.0115	0.1529	0.1533
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	233.92	0.1231	0.0047	0.2345	0.2346
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	242.16	0.0932	0.0035	0.2275	0.2275
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	253.92	0.0575	0.0025	0.2134	0.2135
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	59.80	0.1002	0.0029	0.0802	0.0802
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	111.96	0.174	0.0192	0.1069	0.1086
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	124.12	0.1948	0.0320	0.1014	0.1059
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	138.00	0.2172	0.0501	0.2190	0.2246
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	153.92	0.2517	0.0288	0.0749	0.0799
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	177.84	0.2493	0.0088	0.0421	0.0428
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	184.12	0.2419	0.0060	0.0759	0.0761
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	191.96	0.2326	0.0037	0.0573	0.0574
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	202.16	0.2232	0.0017	0.0813	0.0814
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	211.96	0.2084	0.0008	0.1166	0.1166
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	233.92	0.1433	0.0001	0.1987	0.1987
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	242.16	0.116	0.0001	0.1909	0.1909
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	253.92	0.0793	0.0000	0.1766	0.1766
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	59.80	0.1137	0.0000	0.1054	0.1054
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	111.96	0.2065	0.0006	0.1125	0.1125
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	124.12	0.2272	0.0013	0.0888	0.0888
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	138.00	0.2459	0.0023	0.2175	0.2175
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	153.92	0.2702	0.0006	0.0312	0.0312
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	177.84	0.2472	0.0002	0.0772	0.0772
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	184.12	0.234	0.0002	0.1322	0.1322
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	191.96	0.2172	0.0001	0.1109	0.1109
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	202.16	0.1979	0.0000	0.1330	0.133
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	211.96	0.174	0.0000	0.1696	0.1696
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	233.92	0.0894	0.0000	0.2486	0.2486
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	242.16	0.0549	0.0000	0.2399	0.2399
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	253.92	0.008	0.0000	0.2262	0.2262
1.2D + 1.0Ev + 1.0Eh 330° Seismic	59.80	0.0011	0.0000	0.0073	0.0073

DEFLECTIONS AND ROTATIONS

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
1.2D + 1.0Ev + 1.0Eh 330° Seismic	111.96	0.0126	0.0000	0.0235	0.0235
1.2D + 1.0Ev + 1.0Eh 330° Seismic	124.12	0.0177	0.0001	0.0353	0.0353
1.2D + 1.0Ev + 1.0Eh 330° Seismic	138.00	0.0241	0.0003	0.1810	0.181
1.2D + 1.0Ev + 1.0Eh 330° Seismic	153.92	0.033	0.0000	0.0269	0.0269
1.2D + 1.0Ev + 1.0Eh 330° Seismic	177.84	0.0394	0.0000	0.0108	0.0108
1.2D + 1.0Ev + 1.0Eh 330° Seismic	184.12	0.04	0.0000	0.0102	0.0102
1.2D + 1.0Ev + 1.0Eh 330° Seismic	191.96	0.0409	0.0000	0.0111	0.0111
1.2D + 1.0Ev + 1.0Eh 330° Seismic	202.16	0.0422	0.0000	0.0017	0.0017
1.2D + 1.0Ev + 1.0Eh 330° Seismic	211.96	0.0414	0.0000	0.0116	0.0116
1.2D + 1.0Ev + 1.0Eh 330° Seismic	233.92	0.0315	0.0000	0.0339	0.0339
1.2D + 1.0Ev + 1.0Eh 330° Seismic	242.16	0.0269	0.0000	0.0312	0.0312
1.2D + 1.0Ev + 1.0Eh 330° Seismic	253.92	0.021	0.0000	0.0279	0.0279
1.2D + 1.0Ev + 1.0Eh 300° Seismic	59.80	0.0012	0.0000	0.0086	0.0086
1.2D + 1.0Ev + 1.0Eh 300° Seismic	111.96	0.0123	0.0000	0.0226	0.0226
1.2D + 1.0Ev + 1.0Eh 300° Seismic	124.12	0.0174	0.0001	0.0359	0.0359
1.2D + 1.0Ev + 1.0Eh 300° Seismic	138.00	0.0237	0.0002	0.1732	0.1732
1.2D + 1.0Ev + 1.0Eh 300° Seismic	153.92	0.0324	0.0000	0.0267	0.0267
1.2D + 1.0Ev + 1.0Eh 300° Seismic	177.84	0.0386	0.0000	0.0108	0.0108
1.2D + 1.0Ev + 1.0Eh 300° Seismic	184.12	0.0393	0.0000	0.0105	0.0105
1.2D + 1.0Ev + 1.0Eh 300° Seismic	191.96	0.0402	0.0000	0.0105	0.0105
1.2D + 1.0Ev + 1.0Eh 300° Seismic	202.16	0.0416	0.0000	0.0016	0.0016
1.2D + 1.0Ev + 1.0Eh 300° Seismic	211.96	0.0409	0.0000	0.0111	0.0111
1.2D + 1.0Ev + 1.0Eh 300° Seismic	233.92	0.0311	0.0000	0.0334	0.0334
1.2D + 1.0Ev + 1.0Eh 300° Seismic	242.16	0.0266	0.0000	0.0306	0.0306
1.2D + 1.0Ev + 1.0Eh 300° Seismic	253.92	0.0209	0.0000	0.0274	0.0274
1.2D + 1.0Ev + 1.0Eh 240° Seismic	59.80	0.0011	0.0000	0.0113	0.0113
1.2D + 1.0Ev + 1.0Eh 240° Seismic	111.96	0.0128	0.0000	0.0241	0.0241
1.2D + 1.0Ev + 1.0Eh 240° Seismic	124.12	0.018	-0.0001	0.0329	0.0329
1.2D + 1.0Ev + 1.0Eh 240° Seismic	138.00	0.0245	0.0002	0.1839	0.1839
1.2D + 1.0Ev + 1.0Eh 240° Seismic	153.92	0.0336	0.0000	0.0266	0.0266
1.2D + 1.0Ev + 1.0Eh 240° Seismic	177.84	0.0401	0.0000	0.0106	0.0106
1.2D + 1.0Ev + 1.0Eh 240° Seismic	184.12	0.0406	0.0000	0.0091	0.0091
1.2D + 1.0Ev + 1.0Eh 240° Seismic	191.96	0.0416	0.0000	0.0112	0.0112
1.2D + 1.0Ev + 1.0Eh 240° Seismic	202.16	0.0428	0.0000	0.0018	0.0018
1.2D + 1.0Ev + 1.0Eh 240° Seismic	211.96	0.0419	0.0000	0.0121	0.0121
1.2D + 1.0Ev + 1.0Eh 240° Seismic	233.92	0.0318	0.0000	0.0344	0.0344
1.2D + 1.0Ev + 1.0Eh 240° Seismic	242.16	0.0271	0.0000	0.0317	0.0317
1.2D + 1.0Ev + 1.0Eh 240° Seismic	253.92	0.0211	0.0000	0.0284	0.0284
1.2D + 1.0Ev + 1.0Eh 210° Seismic	59.80	0.0011	0.0000	0.0122	0.0122
1.2D + 1.0Ev + 1.0Eh 210° Seismic	111.96	0.0126	0.0000	0.0235	0.0235
1.2D + 1.0Ev + 1.0Eh 210° Seismic	124.12	0.0177	0.0001	0.0353	0.0353
1.2D + 1.0Ev + 1.0Eh 210° Seismic	138.00	0.0241	0.0003	0.1810	0.181
1.2D + 1.0Ev + 1.0Eh 210° Seismic	153.92	0.033	0.0000	0.0269	0.0269
1.2D + 1.0Ev + 1.0Eh 210° Seismic	177.84	0.0394	0.0000	0.0108	0.0108
1.2D + 1.0Ev + 1.0Eh 210° Seismic	184.12	0.04	0.0000	0.0102	0.0102
1.2D + 1.0Ev + 1.0Eh 210° Seismic	191.96	0.0409	0.0000	0.0111	0.0111
1.2D + 1.0Ev + 1.0Eh 210° Seismic	202.16	0.0422	0.0000	0.0017	0.0017
1.2D + 1.0Ev + 1.0Eh 210° Seismic	211.96	0.0414	0.0000	0.0116	0.0116
1.2D + 1.0Ev + 1.0Eh 210° Seismic	233.92	0.0315	0.0000	0.0339	0.0339
1.2D + 1.0Ev + 1.0Eh 210° Seismic	242.16	0.0269	0.0000	0.0312	0.0312
1.2D + 1.0Ev + 1.0Eh 210° Seismic	253.92	0.021	0.0000	0.0279	0.0279
1.2D + 1.0Ev + 1.0Eh 180° Seismic	59.80	0.0012	0.0000	0.0125	0.0125
1.2D + 1.0Ev + 1.0Eh 180° Seismic	111.96	0.0123	0.0000	0.0226	0.0226
1.2D + 1.0Ev + 1.0Eh 180° Seismic	124.12	0.0174	0.0001	0.0359	0.0359
1.2D + 1.0Ev + 1.0Eh 180° Seismic	138.00	0.0237	0.0002	0.1732	0.1732
1.2D + 1.0Ev + 1.0Eh 180° Seismic	153.92	0.0324	0.0000	0.0267	0.0267
1.2D + 1.0Ev + 1.0Eh 180° Seismic	177.84	0.0386	0.0000	0.0108	0.0108
1.2D + 1.0Ev + 1.0Eh 180° Seismic	184.12	0.0393	0.0000	0.0105	0.0105
1.2D + 1.0Ev + 1.0Eh 180° Seismic	191.96	0.0402	0.0000	0.0105	0.0105

DEFLECTIONS AND ROTATIONS

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
1.2D + 1.0Ev + 1.0Eh 180° Seismic	202.16	0.0416	0.0000	0.0016	0.0016
1.2D + 1.0Ev + 1.0Eh 180° Seismic	211.96	0.0409	0.0000	0.0111	0.0111
1.2D + 1.0Ev + 1.0Eh 180° Seismic	233.92	0.0311	0.0000	0.0334	0.0334
1.2D + 1.0Ev + 1.0Eh 180° Seismic	242.16	0.0266	0.0000	0.0306	0.0306
1.2D + 1.0Ev + 1.0Eh 180° Seismic	253.92	0.0209	0.0000	0.0274	0.0274
1.2D + 1.0Ev + 1.0Eh 120° Seismic	59.80	0.0011	0.0000	0.0113	0.0113
1.2D + 1.0Ev + 1.0Eh 120° Seismic	111.96	0.0128	0.0000	0.0241	0.0241
1.2D + 1.0Ev + 1.0Eh 120° Seismic	124.12	0.018	0.0001	0.0329	0.0329
1.2D + 1.0Ev + 1.0Eh 120° Seismic	138.00	0.0245	0.0002	0.1839	0.1839
1.2D + 1.0Ev + 1.0Eh 120° Seismic	153.92	0.0336	0.0000	0.0266	0.0266
1.2D + 1.0Ev + 1.0Eh 120° Seismic	177.84	0.0401	0.0000	0.0106	0.0106
1.2D + 1.0Ev + 1.0Eh 120° Seismic	184.12	0.0406	0.0000	0.0091	0.0091
1.2D + 1.0Ev + 1.0Eh 120° Seismic	191.96	0.0416	0.0000	0.0112	0.0112
1.2D + 1.0Ev + 1.0Eh 120° Seismic	202.16	0.0428	0.0000	0.0018	0.0018
1.2D + 1.0Ev + 1.0Eh 120° Seismic	211.96	0.0419	0.0000	0.0121	0.0121
1.2D + 1.0Ev + 1.0Eh 120° Seismic	233.92	0.0318	0.0000	0.0344	0.0344
1.2D + 1.0Ev + 1.0Eh 120° Seismic	242.16	0.0271	0.0000	0.0317	0.0317
1.2D + 1.0Ev + 1.0Eh 120° Seismic	253.92	0.0211	0.0000	0.0284	0.0284
1.2D + 1.0Ev + 1.0Eh 90° Seismic	59.80	0.0011	0.0000	0.0099	0.0099
1.2D + 1.0Ev + 1.0Eh 90° Seismic	111.96	0.012	0.0000	0.0229	0.0229
1.2D + 1.0Ev + 1.0Eh 90° Seismic	124.12	0.017	0.0000	0.0347	0.0347
1.2D + 1.0Ev + 1.0Eh 90° Seismic	138.00	0.0233	0.0002	0.1805	0.1805
1.2D + 1.0Ev + 1.0Eh 90° Seismic	153.92	0.0319	0.0000	0.0258	0.0258
1.2D + 1.0Ev + 1.0Eh 90° Seismic	177.84	0.0378	0.0000	0.0097	0.0097
1.2D + 1.0Ev + 1.0Eh 90° Seismic	184.12	0.0383	0.0000	0.0092	0.0092
1.2D + 1.0Ev + 1.0Eh 90° Seismic	191.96	0.0391	0.0000	0.0101	0.0101
1.2D + 1.0Ev + 1.0Eh 90° Seismic	202.16	0.0402	0.0000	0.0024	0.0024
1.2D + 1.0Ev + 1.0Eh 90° Seismic	211.96	0.0393	0.0000	0.0117	0.0117
1.2D + 1.0Ev + 1.0Eh 90° Seismic	233.92	0.0296	0.0000	0.0331	0.0331
1.2D + 1.0Ev + 1.0Eh 90° Seismic	242.16	0.0251	0.0000	0.0305	0.0305
1.2D + 1.0Ev + 1.0Eh 90° Seismic	253.92	0.0193	0.0000	0.0274	0.0274
1.2D + 1.0Ev + 1.0Eh 60° Seismic	59.80	0.0012	0.0000	0.0086	0.0086
1.2D + 1.0Ev + 1.0Eh 60° Seismic	111.96	0.0123	0.0000	0.0226	0.0226
1.2D + 1.0Ev + 1.0Eh 60° Seismic	124.12	0.0174	0.0001	0.0359	0.0359
1.2D + 1.0Ev + 1.0Eh 60° Seismic	138.00	0.0237	0.0002	0.1732	0.1732
1.2D + 1.0Ev + 1.0Eh 60° Seismic	153.92	0.0324	0.0000	0.0267	0.0267
1.2D + 1.0Ev + 1.0Eh 60° Seismic	177.84	0.0386	0.0000	0.0108	0.0108
1.2D + 1.0Ev + 1.0Eh 60° Seismic	184.12	0.0393	0.0000	0.0105	0.0105
1.2D + 1.0Ev + 1.0Eh 60° Seismic	191.96	0.0402	0.0000	0.0105	0.0105
1.2D + 1.0Ev + 1.0Eh 60° Seismic	202.16	0.0416	0.0000	0.0016	0.0016
1.2D + 1.0Ev + 1.0Eh 60° Seismic	211.96	0.0409	0.0000	0.0111	0.0111
1.2D + 1.0Ev + 1.0Eh 60° Seismic	233.92	0.0311	0.0000	0.0334	0.0334
1.2D + 1.0Ev + 1.0Eh 60° Seismic	242.16	0.0266	0.0000	0.0306	0.0306
1.2D + 1.0Ev + 1.0Eh 60° Seismic	253.92	0.0209	0.0000	0.0274	0.0274
1.2D + 1.0Ev + 1.0Eh Normal Seismic	59.80	0.0012	0.0000	0.0065	0.0065
1.2D + 1.0Ev + 1.0Eh Normal Seismic	111.96	0.0132	0.0000	0.0247	0.0247
1.2D + 1.0Ev + 1.0Eh Normal Seismic	124.12	0.0186	0.0001	0.0334	0.0334
1.2D + 1.0Ev + 1.0Eh Normal Seismic	138.00	0.0252	0.0002	0.1844	0.1844
1.2D + 1.0Ev + 1.0Eh Normal Seismic	153.92	0.0345	0.0000	0.0275	0.0275
1.2D + 1.0Ev + 1.0Eh Normal Seismic	177.84	0.0414	0.0000	0.0115	0.0115
1.2D + 1.0Ev + 1.0Eh Normal Seismic	184.12	0.0421	0.0000	0.0100	0.01
1.2D + 1.0Ev + 1.0Eh Normal Seismic	191.96	0.0432	0.0000	0.0122	0.0122
1.2D + 1.0Ev + 1.0Eh Normal Seismic	202.16	0.0445	0.0000	0.0013	0.0013
1.2D + 1.0Ev + 1.0Eh Normal Seismic	211.96	0.0437	0.0000	0.0119	0.0119
1.2D + 1.0Ev + 1.0Eh Normal Seismic	233.92	0.0335	0.0000	0.0350	0.035
1.2D + 1.0Ev + 1.0Eh Normal Seismic	242.16	0.0288	0.0000	0.0321	0.0321
1.2D + 1.0Ev + 1.0Eh Normal Seismic	253.92	0.0227	0.0000	0.0287	0.0287
1.2D + 1.0Di + 1.0Wi 330° 66.28 mph Wind with 0.425" Radial Ice	59.80	0.2539	0.1277	0.2786	0.3064
1.2D + 1.0Di + 1.0Wi 330° 66.28 mph Wind with 0.425" Radial Ice	111.96	0.4963	0.1359	0.2537	0.2865

DEFLECTIONS AND ROTATIONS

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
1.2D + 1.0Di + 1.0Wi 330° 66.28 mph Wind with 0.425" Radial Ice	124.12	0.5408	0.1356	0.1886	0.2242
1.2D + 1.0Di + 1.0Wi 330° 66.28 mph Wind with 0.425" Radial Ice	138.00	0.5761	0.1351	0.4279	0.4487
1.2D + 1.0Di + 1.0Wi 330° 66.28 mph Wind with 0.425" Radial Ice	153.92	0.6176	0.1211	0.0834	0.1415
1.2D + 1.0Di + 1.0Wi 330° 66.28 mph Wind with 0.425" Radial Ice	177.84	0.5799	0.1066	0.1625	0.1918
1.2D + 1.0Di + 1.0Wi 330° 66.28 mph Wind with 0.425" Radial Ice	184.12	0.5571	0.1027	0.2429	0.2609
1.2D + 1.0Di + 1.0Wi 330° 66.28 mph Wind with 0.425" Radial Ice	191.96	0.5272	0.0981	0.2265	0.2468
1.2D + 1.0Di + 1.0Wi 330° 66.28 mph Wind with 0.425" Radial Ice	202.16	0.4911	0.0923	0.2722	0.2854
1.2D + 1.0Di + 1.0Wi 330° 66.28 mph Wind with 0.425" Radial Ice	211.96	0.447	0.0876	0.3376	0.3473
1.2D + 1.0Di + 1.0Wi 330° 66.28 mph Wind with 0.425" Radial Ice	233.92	0.3015	0.0798	0.4708	0.4775
1.2D + 1.0Di + 1.0Wi 330° 66.28 mph Wind with 0.425" Radial Ice	242.16	0.2475	0.0780	0.4558	0.4618
1.2D + 1.0Di + 1.0Wi 330° 66.28 mph Wind with 0.425" Radial Ice	253.92	0.1876	0.0767	0.4319	0.4383
1.2D + 1.0Di + 1.0Wi 300° 66.28 mph Wind with 0.425" Radial Ice	59.80	0.2352	-0.0541	0.2199	0.2265
1.2D + 1.0Di + 1.0Wi 300° 66.28 mph Wind with 0.425" Radial Ice	111.96	0.432	-0.0644	0.2393	0.2478
1.2D + 1.0Di + 1.0Wi 300° 66.28 mph Wind with 0.425" Radial Ice	124.12	0.4762	-0.0704	0.1993	0.2088
1.2D + 1.0Di + 1.0Wi 300° 66.28 mph Wind with 0.425" Radial Ice	138.00	0.5168	-0.0773	0.4167	0.4238
1.2D + 1.0Di + 1.0Wi 300° 66.28 mph Wind with 0.425" Radial Ice	153.92	0.5717	-0.0613	0.1174	0.1304
1.2D + 1.0Di + 1.0Wi 300° 66.28 mph Wind with 0.425" Radial Ice	177.84	0.5653	-0.0432	0.0763	0.0874
1.2D + 1.0Di + 1.0Wi 300° 66.28 mph Wind with 0.425" Radial Ice	184.12	0.5522	-0.0393	0.1342	0.1383
1.2D + 1.0Di + 1.0Wi 300° 66.28 mph Wind with 0.425" Radial Ice	191.96	0.5352	-0.0348	0.1085	0.1131
1.2D + 1.0Di + 1.0Wi 300° 66.28 mph Wind with 0.425" Radial Ice	202.16	0.5167	-0.0294	0.1508	0.1533
1.2D + 1.0Di + 1.0Wi 300° 66.28 mph Wind with 0.425" Radial Ice	211.96	0.4891	-0.0251	0.2087	0.2097
1.2D + 1.0Di + 1.0Wi 300° 66.28 mph Wind with 0.425" Radial Ice	233.92	0.3762	-0.0181	0.3431	0.3434
1.2D + 1.0Di + 1.0Wi 300° 66.28 mph Wind with 0.425" Radial Ice	242.16	0.3289	-0.0165	0.3291	0.3296
1.2D + 1.0Di + 1.0Wi 300° 66.28 mph Wind with 0.425" Radial Ice	253.92	0.2658	-0.0152	0.3036	0.304
1.2D + 1.0Di + 1.0Wi 240° 66.28 mph Wind with 0.425" Radial Ice	59.80	0.2998	-0.0596	0.3298	0.3352
1.2D + 1.0Di + 1.0Wi 240° 66.28 mph Wind with 0.425" Radial Ice	111.96	0.5152	-0.0674	0.1786	0.1891
1.2D + 1.0Di + 1.0Wi 240° 66.28 mph Wind with 0.425" Radial Ice	124.12	0.5424	-0.0721	0.0913	0.1164
1.2D + 1.0Di + 1.0Wi 240° 66.28 mph Wind with 0.425" Radial Ice	138.00	0.5558	-0.0784	0.4307	0.4377
1.2D + 1.0Di + 1.0Wi 240° 66.28 mph Wind with 0.425" Radial Ice	153.92	0.5713	-0.0660	0.0440	0.0753
1.2D + 1.0Di + 1.0Wi 240° 66.28 mph Wind with 0.425" Radial Ice	177.84	0.4988	-0.0536	0.2416	0.2466
1.2D + 1.0Di + 1.0Wi 240° 66.28 mph Wind with 0.425" Radial Ice	184.12	0.4679	-0.0496	0.3038	0.3072
1.2D + 1.0Di + 1.0Wi 240° 66.28 mph Wind with 0.425" Radial Ice	191.96	0.4276	-0.0448	0.2806	0.283
1.2D + 1.0Di + 1.0Wi 240° 66.28 mph Wind with 0.425" Radial Ice	202.16	0.3779	-0.0389	0.3247	0.3267
1.2D + 1.0Di + 1.0Wi 240° 66.28 mph Wind with 0.425" Radial Ice	211.96	0.3202	-0.0342	0.3893	0.3905
1.2D + 1.0Di + 1.0Wi 240° 66.28 mph Wind with 0.425" Radial Ice	233.92	0.1381	-0.0266	0.5256	0.5261
1.2D + 1.0Di + 1.0Wi 240° 66.28 mph Wind with 0.425" Radial Ice	242.16	0.0647	-0.0247	0.5124	0.513
1.2D + 1.0Di + 1.0Wi 240° 66.28 mph Wind with 0.425" Radial Ice	253.92	0.0418	-0.0234	0.4876	0.4881
1.2D + 1.0Di + 1.0Wi 210° 66.28 mph Wind with 0.425" Radial Ice	59.80	0.2537	0.1200	0.3055	0.3283
1.2D + 1.0Di + 1.0Wi 210° 66.28 mph Wind with 0.425" Radial Ice	111.96	0.4966	0.1307	0.2548	0.285
1.2D + 1.0Di + 1.0Wi 210° 66.28 mph Wind with 0.425" Radial Ice	124.12	0.5413	0.1328	0.1898	0.2239
1.2D + 1.0Di + 1.0Wi 210° 66.28 mph Wind with 0.425" Radial Ice	138.00	0.577	0.1352	0.4275	0.4484
1.2D + 1.0Di + 1.0Wi 210° 66.28 mph Wind with 0.425" Radial Ice	153.92	0.6188	0.1144	0.0840	0.1361
1.2D + 1.0Di + 1.0Wi 210° 66.28 mph Wind with 0.425" Radial Ice	177.84	0.5812	0.0899	0.1747	0.1934
1.2D + 1.0Di + 1.0Wi 210° 66.28 mph Wind with 0.425" Radial Ice	184.12	0.5584	0.0850	0.2438	0.256
1.2D + 1.0Di + 1.0Wi 210° 66.28 mph Wind with 0.425" Radial Ice	191.96	0.5284	0.0793	0.2279	0.2413
1.2D + 1.0Di + 1.0Wi 210° 66.28 mph Wind with 0.425" Radial Ice	202.16	0.492	0.0723	0.2750	0.2828
1.2D + 1.0Di + 1.0Wi 210° 66.28 mph Wind with 0.425" Radial Ice	211.96	0.4474	0.0666	0.3408	0.3462
1.2D + 1.0Di + 1.0Wi 210° 66.28 mph Wind with 0.425" Radial Ice	233.92	0.3002	0.0571	0.4777	0.4811
1.2D + 1.0Di + 1.0Wi 210° 66.28 mph Wind with 0.425" Radial Ice	242.16	0.2454	0.0549	0.4646	0.4676
1.2D + 1.0Di + 1.0Wi 210° 66.28 mph Wind with 0.425" Radial Ice	253.92	0.1848	0.0533	0.4412	0.4439
1.2D + 1.0Di + 1.0Wi 180° 66.28 mph Wind with 0.425" Radial Ice	59.80	0.2339	0.0000	0.2452	0.2452
1.2D + 1.0Di + 1.0Wi 180° 66.28 mph Wind with 0.425" Radial Ice	111.96	0.4304	0.0020	0.2398	0.2398
1.2D + 1.0Di + 1.0Wi 180° 66.28 mph Wind with 0.425" Radial Ice	124.12	0.4747	0.0045	0.2000	0.2
1.2D + 1.0Di + 1.0Wi 180° 66.28 mph Wind with 0.425" Radial Ice	138.00	0.5158	0.0081	0.4164	0.4165
1.2D + 1.0Di + 1.0Wi 180° 66.28 mph Wind with 0.425" Radial Ice	153.92	0.5703	0.0024	0.1178	0.1178
1.2D + 1.0Di + 1.0Wi 180° 66.28 mph Wind with 0.425" Radial Ice	177.84	0.5634	0.0004	0.0566	0.0566
1.2D + 1.0Di + 1.0Wi 180° 66.28 mph Wind with 0.425" Radial Ice	184.12	0.5501	0.0003	0.1349	0.1349
1.2D + 1.0Di + 1.0Wi 180° 66.28 mph Wind with 0.425" Radial Ice	191.96	0.5327	0.0002	0.1107	0.1107
1.2D + 1.0Di + 1.0Wi 180° 66.28 mph Wind with 0.425" Radial Ice	202.16	0.5134	0.0000	0.1547	0.1547

DEFLECTIONS AND ROTATIONS

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
1.2D + 1.0Di + 1.0Wi 180° 66.28 mph Wind with 0.425" Radial Ice	211.96	0.4852	0.0000	0.2127	0.2127
1.2D + 1.0Di + 1.0Wi 180° 66.28 mph Wind with 0.425" Radial Ice	233.92	0.3698	0.0000	0.3511	0.3511
1.2D + 1.0Di + 1.0Wi 180° 66.28 mph Wind with 0.425" Radial Ice	242.16	0.3213	0.0000	0.3388	0.3388
1.2D + 1.0Di + 1.0Wi 180° 66.28 mph Wind with 0.425" Radial Ice	253.92	0.2559	0.0000	0.3147	0.3147
1.2D + 1.0Di + 1.0Wi 120° 66.28 mph Wind with 0.425" Radial Ice	59.80	0.2998	0.0596	0.3298	0.3352
1.2D + 1.0Di + 1.0Wi 120° 66.28 mph Wind with 0.425" Radial Ice	111.96	0.5152	0.0674	0.1786	0.1891
1.2D + 1.0Di + 1.0Wi 120° 66.28 mph Wind with 0.425" Radial Ice	124.12	0.5424	0.0721	0.0913	0.1164
1.2D + 1.0Di + 1.0Wi 120° 66.28 mph Wind with 0.425" Radial Ice	138.00	0.5558	0.0784	0.4307	0.4377
1.2D + 1.0Di + 1.0Wi 120° 66.28 mph Wind with 0.425" Radial Ice	153.92	0.5713	0.0660	0.0440	0.0753
1.2D + 1.0Di + 1.0Wi 120° 66.28 mph Wind with 0.425" Radial Ice	177.84	0.4988	0.0536	0.2416	0.2466
1.2D + 1.0Di + 1.0Wi 120° 66.28 mph Wind with 0.425" Radial Ice	184.12	0.4679	0.0496	0.3038	0.3072
1.2D + 1.0Di + 1.0Wi 120° 66.28 mph Wind with 0.425" Radial Ice	191.96	0.4276	0.0448	0.2806	0.283
1.2D + 1.0Di + 1.0Wi 120° 66.28 mph Wind with 0.425" Radial Ice	202.16	0.3779	0.0389	0.3247	0.3267
1.2D + 1.0Di + 1.0Wi 120° 66.28 mph Wind with 0.425" Radial Ice	211.96	0.3202	0.0342	0.3893	0.3905
1.2D + 1.0Di + 1.0Wi 120° 66.28 mph Wind with 0.425" Radial Ice	233.92	0.1381	0.0265	0.5256	0.5261
1.2D + 1.0Di + 1.0Wi 120° 66.28 mph Wind with 0.425" Radial Ice	242.16	0.0647	0.0247	0.5124	0.513
1.2D + 1.0Di + 1.0Wi 120° 66.28 mph Wind with 0.425" Radial Ice	253.92	0.0418	0.0234	0.4876	0.4881
1.2D + 1.0Di + 1.0Wi 90° 66.28 mph Wind with 0.425" Radial Ice	59.80	0.2608	0.2669	0.2933	0.3966
1.2D + 1.0Di + 1.0Wi 90° 66.28 mph Wind with 0.425" Radial Ice	111.96	0.4992	0.2581	0.2548	0.3616
1.2D + 1.0Di + 1.0Wi 90° 66.28 mph Wind with 0.425" Radial Ice	124.12	0.544	0.2564	0.1896	0.3087
1.2D + 1.0Di + 1.0Wi 90° 66.28 mph Wind with 0.425" Radial Ice	138.00	0.5796	0.2541	0.4291	0.4987
1.2D + 1.0Di + 1.0Wi 90° 66.28 mph Wind with 0.425" Radial Ice	153.92	0.6218	0.2429	0.0837	0.2541
1.2D + 1.0Di + 1.0Wi 90° 66.28 mph Wind with 0.425" Radial Ice	177.84	0.5848	0.2326	0.1865	0.2964
1.2D + 1.0Di + 1.0Wi 90° 66.28 mph Wind with 0.425" Radial Ice	184.12	0.5621	0.2297	0.2446	0.3297
1.2D + 1.0Di + 1.0Wi 90° 66.28 mph Wind with 0.425" Radial Ice	191.96	0.5323	0.2263	0.2288	0.3205
1.2D + 1.0Di + 1.0Wi 90° 66.28 mph Wind with 0.425" Radial Ice	202.16	0.4963	0.2219	0.2751	0.352
1.2D + 1.0Di + 1.0Wi 90° 66.28 mph Wind with 0.425" Radial Ice	211.96	0.4519	0.2184	0.3411	0.4011
1.2D + 1.0Di + 1.0Wi 90° 66.28 mph Wind with 0.425" Radial Ice	233.92	0.3059	0.2126	0.4762	0.5213
1.2D + 1.0Di + 1.0Wi 90° 66.28 mph Wind with 0.425" Radial Ice	242.16	0.252	0.2112	0.4639	0.5098
1.2D + 1.0Di + 1.0Wi 90° 66.28 mph Wind with 0.425" Radial Ice	253.92	0.1928	0.2103	0.4396	0.4869
1.2D + 1.0Di + 1.0Wi 60° 66.28 mph Wind with 0.425" Radial Ice	59.80	0.2352	0.0541	0.2199	0.2265
1.2D + 1.0Di + 1.0Wi 60° 66.28 mph Wind with 0.425" Radial Ice	111.96	0.432	0.0644	0.2393	0.2478
1.2D + 1.0Di + 1.0Wi 60° 66.28 mph Wind with 0.425" Radial Ice	124.12	0.4762	0.0704	0.1993	0.2088
1.2D + 1.0Di + 1.0Wi 60° 66.28 mph Wind with 0.425" Radial Ice	138.00	0.5168	0.0773	0.4167	0.4238
1.2D + 1.0Di + 1.0Wi 60° 66.28 mph Wind with 0.425" Radial Ice	153.92	0.5717	0.0613	0.1174	0.1304
1.2D + 1.0Di + 1.0Wi 60° 66.28 mph Wind with 0.425" Radial Ice	177.84	0.5653	0.0432	0.0763	0.0874
1.2D + 1.0Di + 1.0Wi 60° 66.28 mph Wind with 0.425" Radial Ice	184.12	0.5522	0.0393	0.1342	0.1383
1.2D + 1.0Di + 1.0Wi 60° 66.28 mph Wind with 0.425" Radial Ice	191.96	0.5352	0.0348	0.1085	0.1131
1.2D + 1.0Di + 1.0Wi 60° 66.28 mph Wind with 0.425" Radial Ice	202.16	0.5167	0.0294	0.1508	0.1533
1.2D + 1.0Di + 1.0Wi 60° 66.28 mph Wind with 0.425" Radial Ice	211.96	0.4891	0.0251	0.2087	0.2097
1.2D + 1.0Di + 1.0Wi 60° 66.28 mph Wind with 0.425" Radial Ice	233.92	0.3762	0.0181	0.3431	0.3434
1.2D + 1.0Di + 1.0Wi 60° 66.28 mph Wind with 0.425" Radial Ice	242.16	0.3289	0.0165	0.3291	0.3296
1.2D + 1.0Di + 1.0Wi 60° 66.28 mph Wind with 0.425" Radial Ice	253.92	0.2658	0.0152	0.3036	0.304
1.2D + 1.0Di + 1.0Wi Normal 66.28 mph Wind with 0.425" Radial Ice	59.80	0.298	0.0000	0.3086	0.3086
1.2D + 1.0Di + 1.0Wi Normal 66.28 mph Wind with 0.425" Radial Ice	111.96	0.5126	0.0038	0.1769	0.1769
1.2D + 1.0Di + 1.0Wi Normal 66.28 mph Wind with 0.425" Radial Ice	124.12	0.5397	0.0058	0.0897	0.0899
1.2D + 1.0Di + 1.0Wi Normal 66.28 mph Wind with 0.425" Radial Ice	138.00	0.5524	0.0089	0.4307	0.4308
1.2D + 1.0Di + 1.0Wi Normal 66.28 mph Wind with 0.425" Radial Ice	153.92	0.5673	0.0037	0.0447	0.0447
1.2D + 1.0Di + 1.0Wi Normal 66.28 mph Wind with 0.425" Radial Ice	177.84	0.4945	0.0018	0.2203	0.2203
1.2D + 1.0Di + 1.0Wi Normal 66.28 mph Wind with 0.425" Radial Ice	184.12	0.4636	0.0015	0.3023	0.3023
1.2D + 1.0Di + 1.0Wi Normal 66.28 mph Wind with 0.425" Radial Ice	191.96	0.4236	0.0011	0.2775	0.2775
1.2D + 1.0Di + 1.0Wi Normal 66.28 mph Wind with 0.425" Radial Ice	202.16	0.374	0.0006	0.3216	0.3216
1.2D + 1.0Di + 1.0Wi Normal 66.28 mph Wind with 0.425" Radial Ice	211.96	0.3169	0.0003	0.3856	0.3856
1.2D + 1.0Di + 1.0Wi Normal 66.28 mph Wind with 0.425" Radial Ice	233.92	0.1366	0.0001	0.5181	0.5181
1.2D + 1.0Di + 1.0Wi Normal 66.28 mph Wind with 0.425" Radial Ice	242.16	0.0642	0.0001	0.5028	0.5028
1.2D + 1.0Di + 1.0Wi Normal 66.28 mph Wind with 0.425" Radial Ice	253.92	0.0351	0.0000	0.4783	0.4783
1.2D + 1.0W 330° 110.14 mph Wind with No Ice	59.80	0.6045	0.0195	0.6548	0.6551
1.2D + 1.0W 330° 110.14 mph Wind with No Ice	111.96	1.2308	0.0374	0.7440	0.7441
1.2D + 1.0W 330° 110.14 mph Wind with No Ice	124.12	1.375	0.0364	0.6282	0.6283

DEFLECTIONS AND ROTATIONS

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
1.2D + 1.0W 330° 110.14 mph Wind with No Ice	138.00	1.5126	0.0314	0.9290	0.9291
1.2D + 1.0W 330° 110.14 mph Wind with No Ice	153.92	1.6615	0.0237	0.2959	0.2964
1.2D + 1.0W 330° 110.14 mph Wind with No Ice	177.84	1.6228	0.0297	0.2660	0.2671
1.2D + 1.0W 330° 110.14 mph Wind with No Ice	184.12	1.5753	0.0286	0.4828	0.4834
1.2D + 1.0W 330° 110.14 mph Wind with No Ice	191.96	1.5085	0.0274	0.4823	0.4831
1.2D + 1.0W 330° 110.14 mph Wind with No Ice	202.16	1.4201	0.0250	0.6166	0.617
1.2D + 1.0W 330° 110.14 mph Wind with No Ice	211.96	1.3091	0.0229	0.7801	0.7803
1.2D + 1.0W 330° 110.14 mph Wind with No Ice	233.92	0.936	0.0191	1.0906	1.0907
1.2D + 1.0W 330° 110.14 mph Wind with No Ice	242.16	0.7843	0.0186	1.0640	1.0641
1.2D + 1.0W 330° 110.14 mph Wind with No Ice	253.92	0.5776	0.0184	1.0210	1.0211
1.2D + 1.0W 300° 110.14 mph Wind with No Ice	59.80	0.407	-0.1615	0.3539	0.389
1.2D + 1.0W 300° 110.14 mph Wind with No Ice	111.96	0.7337	-0.1642	0.4531	0.4819
1.2D + 1.0W 300° 110.14 mph Wind with No Ice	124.12	0.8232	-0.1653	0.4110	0.4379
1.2D + 1.0W 300° 110.14 mph Wind with No Ice	138.00	0.9191	-0.1637	0.5636	0.587
1.2D + 1.0W 300° 110.14 mph Wind with No Ice	153.92	1.0536	-0.1463	0.3004	0.3321
1.2D + 1.0W 300° 110.14 mph Wind with No Ice	177.84	1.0598	-0.1313	0.1197	0.1776
1.2D + 1.0W 300° 110.14 mph Wind with No Ice	184.12	1.0368	-0.1292	0.2380	0.2675
1.2D + 1.0W 300° 110.14 mph Wind with No Ice	191.96	1.0069	-0.1267	0.1753	0.2143
1.2D + 1.0W 300° 110.14 mph Wind with No Ice	202.16	0.977	-0.1237	0.2639	0.2901
1.2D + 1.0W 300° 110.14 mph Wind with No Ice	211.96	0.9287	-0.1213	0.3844	0.4015
1.2D + 1.0W 300° 110.14 mph Wind with No Ice	233.92	0.7109	-0.1174	0.6678	0.6769
1.2D + 1.0W 300° 110.14 mph Wind with No Ice	242.16	0.6191	-0.1165	0.6418	0.6523
1.2D + 1.0W 300° 110.14 mph Wind with No Ice	253.92	0.4957	-0.1158	0.5942	0.6048
1.2D + 1.0W 240° 110.14 mph Wind with No Ice	59.80	0.6994	-0.1139	0.7621	0.7706
1.2D + 1.0W 240° 110.14 mph Wind with No Ice	111.96	1.4115	-0.1121	0.8428	0.8485
1.2D + 1.0W 240° 110.14 mph Wind with No Ice	124.12	1.5753	-0.1122	0.7081	0.7169
1.2D + 1.0W 240° 110.14 mph Wind with No Ice	138.00	1.7309	-0.1086	1.0507	1.0551
1.2D + 1.0W 240° 110.14 mph Wind with No Ice	153.92	1.894	-0.1102	0.3137	0.3325
1.2D + 1.0W 240° 110.14 mph Wind with No Ice	177.84	1.8509	-0.1278	0.3556	0.3761
1.2D + 1.0W 240° 110.14 mph Wind with No Ice	184.12	1.798	-0.1276	0.5420	0.5554
1.2D + 1.0W 240° 110.14 mph Wind with No Ice	191.96	1.7222	-0.1263	0.5450	0.5564
1.2D + 1.0W 240° 110.14 mph Wind with No Ice	202.16	1.6196	-0.1244	0.6984	0.7083
1.2D + 1.0W 240° 110.14 mph Wind with No Ice	211.96	1.4911	-0.1231	0.8816	0.8894
1.2D + 1.0W 240° 110.14 mph Wind with No Ice	233.92	1.0693	-0.1212	1.2238	1.2285
1.2D + 1.0W 240° 110.14 mph Wind with No Ice	242.16	0.8976	-0.1207	1.1983	1.2044
1.2D + 1.0W 240° 110.14 mph Wind with No Ice	253.92	0.6598	-0.1204	1.1518	1.1574
1.2D + 1.0W 210° 110.14 mph Wind with No Ice	59.80	0.6041	0.0181	0.6814	0.6816
1.2D + 1.0W 210° 110.14 mph Wind with No Ice	111.96	1.2311	0.0367	0.7449	0.745
1.2D + 1.0W 210° 110.14 mph Wind with No Ice	124.12	1.3756	0.0362	0.6291	0.6292
1.2D + 1.0W 210° 110.14 mph Wind with No Ice	138.00	1.5134	0.0317	0.9300	0.9301
1.2D + 1.0W 210° 110.14 mph Wind with No Ice	153.92	1.6624	0.0089	0.2959	0.2959
1.2D + 1.0W 210° 110.14 mph Wind with No Ice	177.84	1.6236	-0.0155	0.3009	0.3012
1.2D + 1.0W 210° 110.14 mph Wind with No Ice	184.12	1.576	-0.0154	0.4840	0.4842
1.2D + 1.0W 210° 110.14 mph Wind with No Ice	191.96	1.509	-0.0138	0.4841	0.4841
1.2D + 1.0W 210° 110.14 mph Wind with No Ice	202.16	1.4203	-0.0122	0.6187	0.6188
1.2D + 1.0W 210° 110.14 mph Wind with No Ice	211.96	1.3089	-0.0113	0.7826	0.7827
1.2D + 1.0W 210° 110.14 mph Wind with No Ice	233.92	0.9344	-0.0107	1.0959	1.0959
1.2D + 1.0W 210° 110.14 mph Wind with No Ice	242.16	0.7818	-0.0100	1.0710	1.0711
1.2D + 1.0W 210° 110.14 mph Wind with No Ice	253.92	0.5737	-0.0094	1.0282	1.0282
1.2D + 1.0W 180° 110.14 mph Wind with No Ice	59.80	0.404	0.0000	0.3778	0.3778
1.2D + 1.0W 180° 110.14 mph Wind with No Ice	111.96	0.7304	0.0036	0.4530	0.453
1.2D + 1.0W 180° 110.14 mph Wind with No Ice	124.12	0.8199	0.0076	0.4113	0.4113
1.2D + 1.0W 180° 110.14 mph Wind with No Ice	138.00	0.916	0.0113	0.5598	0.5599
1.2D + 1.0W 180° 110.14 mph Wind with No Ice	153.92	1.05	0.0023	0.3010	0.301
1.2D + 1.0W 180° 110.14 mph Wind with No Ice	177.84	1.0557	0.0004	0.0554	0.0555
1.2D + 1.0W 180° 110.14 mph Wind with No Ice	184.12	1.0324	0.0002	0.2362	0.2362
1.2D + 1.0W 180° 110.14 mph Wind with No Ice	191.96	1.0024	0.0001	0.1756	0.1756
1.2D + 1.0W 180° 110.14 mph Wind with No Ice	202.16	0.9718	0.0000	0.2659	0.2659
1.2D + 1.0W 180° 110.14 mph Wind with No Ice	211.96	0.923	0.0000	0.3862	0.3862

DEFLECTIONS AND ROTATIONS

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
1.2D + 1.0W 180° 110.14 mph Wind with No Ice	233.92	0.7032	0.0000	0.6728	0.6728
1.2D + 1.0W 180° 110.14 mph Wind with No Ice	242.16	0.6103	0.0000	0.6469	0.6469
1.2D + 1.0W 180° 110.14 mph Wind with No Ice	253.92	0.4852	0.0000	0.6018	0.6018
1.2D + 1.0W 120° 110.14 mph Wind with No Ice	59.80	0.6994	0.1139	0.7621	0.7706
1.2D + 1.0W 120° 110.14 mph Wind with No Ice	111.96	1.4115	0.1121	0.8428	0.8485
1.2D + 1.0W 120° 110.14 mph Wind with No Ice	124.12	1.5753	0.1122	0.7081	0.7169
1.2D + 1.0W 120° 110.14 mph Wind with No Ice	138.00	1.7309	0.1086	1.0507	1.0552
1.2D + 1.0W 120° 110.14 mph Wind with No Ice	153.92	1.894	0.1102	0.3137	0.3325
1.2D + 1.0W 120° 110.14 mph Wind with No Ice	177.84	1.8509	0.1278	0.3556	0.3761
1.2D + 1.0W 120° 110.14 mph Wind with No Ice	184.12	1.798	0.1276	0.5420	0.5554
1.2D + 1.0W 120° 110.14 mph Wind with No Ice	191.96	1.7222	0.1263	0.5450	0.5564
1.2D + 1.0W 120° 110.14 mph Wind with No Ice	202.16	1.6196	0.1244	0.6984	0.7083
1.2D + 1.0W 120° 110.14 mph Wind with No Ice	211.96	1.4911	0.1231	0.8816	0.8894
1.2D + 1.0W 120° 110.14 mph Wind with No Ice	233.92	1.0693	0.1212	1.2238	1.2285
1.2D + 1.0W 120° 110.14 mph Wind with No Ice	242.16	0.8976	0.1207	1.1983	1.2044
1.2D + 1.0W 120° 110.14 mph Wind with No Ice	253.92	0.6598	0.1204	1.1518	1.1574
1.2D + 1.0W 90° 110.14 mph Wind with No Ice	59.80	0.609	0.2280	0.6714	0.7091
1.2D + 1.0W 90° 110.14 mph Wind with No Ice	111.96	1.235	0.2185	0.7453	0.7754
1.2D + 1.0W 90° 110.14 mph Wind with No Ice	124.12	1.3795	0.2169	0.6293	0.6582
1.2D + 1.0W 90° 110.14 mph Wind with No Ice	138.00	1.5174	0.2109	0.9291	0.9482
1.2D + 1.0W 90° 110.14 mph Wind with No Ice	153.92	1.6675	0.2021	0.2949	0.3575
1.2D + 1.0W 90° 110.14 mph Wind with No Ice	177.84	1.6299	0.2077	0.3350	0.3929
1.2D + 1.0W 90° 110.14 mph Wind with No Ice	184.12	1.5826	0.2068	0.4857	0.5253
1.2D + 1.0W 90° 110.14 mph Wind with No Ice	191.96	1.5159	0.2060	0.4851	0.5238
1.2D + 1.0W 90° 110.14 mph Wind with No Ice	202.16	1.4279	0.2039	0.6198	0.6505
1.2D + 1.0W 90° 110.14 mph Wind with No Ice	211.96	1.3167	0.2021	0.7835	0.8076
1.2D + 1.0W 90° 110.14 mph Wind with No Ice	233.92	0.9432	0.1989	1.0955	1.112
1.2D + 1.0W 90° 110.14 mph Wind with No Ice	242.16	0.7915	0.1986	1.0725	1.0907
1.2D + 1.0W 90° 110.14 mph Wind with No Ice	253.92	0.5839	0.1986	1.0278	1.0459
1.2D + 1.0W 60° 110.14 mph Wind with No Ice	59.80	0.407	0.1615	0.3539	0.389
1.2D + 1.0W 60° 110.14 mph Wind with No Ice	111.96	0.7337	0.1642	0.4531	0.4819
1.2D + 1.0W 60° 110.14 mph Wind with No Ice	124.12	0.8232	0.1653	0.4110	0.4379
1.2D + 1.0W 60° 110.14 mph Wind with No Ice	138.00	0.9191	0.1637	0.5636	0.5869
1.2D + 1.0W 60° 110.14 mph Wind with No Ice	153.92	1.0536	0.1463	0.3004	0.3321
1.2D + 1.0W 60° 110.14 mph Wind with No Ice	177.84	1.0598	0.1313	0.1197	0.1776
1.2D + 1.0W 60° 110.14 mph Wind with No Ice	184.12	1.0368	0.1292	0.2380	0.2675
1.2D + 1.0W 60° 110.14 mph Wind with No Ice	191.96	1.0069	0.1267	0.1753	0.2143
1.2D + 1.0W 60° 110.14 mph Wind with No Ice	202.16	0.977	0.1237	0.2639	0.2901
1.2D + 1.0W 60° 110.14 mph Wind with No Ice	211.96	0.9287	0.1213	0.3844	0.4015
1.2D + 1.0W 60° 110.14 mph Wind with No Ice	233.92	0.7109	0.1174	0.6678	0.6769
1.2D + 1.0W 60° 110.14 mph Wind with No Ice	242.16	0.6191	0.1165	0.6418	0.6523
1.2D + 1.0W 60° 110.14 mph Wind with No Ice	253.92	0.4957	0.1158	0.5942	0.6048
1.2D + 1.0W Normal 110.14 mph Wind with No Ice	59.80	0.6977	0.0000	0.7392	0.7392
1.2D + 1.0W Normal 110.14 mph Wind with No Ice	111.96	1.4095	0.0133	0.8416	0.8416
1.2D + 1.0W Normal 110.14 mph Wind with No Ice	124.12	1.5733	0.0144	0.7070	0.7071
1.2D + 1.0W Normal 110.14 mph Wind with No Ice	138.00	1.7285	0.0121	1.0497	1.0497
1.2D + 1.0W Normal 110.14 mph Wind with No Ice	153.92	1.8904	0.0031	0.3121	0.3121
1.2D + 1.0W Normal 110.14 mph Wind with No Ice	177.84	1.847	0.0041	0.2940	0.294
1.2D + 1.0W Normal 110.14 mph Wind with No Ice	184.12	1.7941	0.0048	0.5403	0.5403
1.2D + 1.0W Normal 110.14 mph Wind with No Ice	191.96	1.7186	0.0043	0.5406	0.5406
1.2D + 1.0W Normal 110.14 mph Wind with No Ice	202.16	1.6156	0.0034	0.6959	0.6959
1.2D + 1.0W Normal 110.14 mph Wind with No Ice	211.96	1.4875	0.0028	0.8790	0.879
1.2D + 1.0W Normal 110.14 mph Wind with No Ice	233.92	1.0667	0.0023	1.2180	1.218
1.2D + 1.0W Normal 110.14 mph Wind with No Ice	242.16	0.8954	0.0020	1.1903	1.1903
1.2D + 1.0W Normal 110.14 mph Wind with No Ice	253.92	0.6591	0.0019	1.1451	1.1451

DETAILED REACTIONS

Load Case	Radius (ft)	Elevation (ft)	Azimuth (deg)	Node	FX* (kip)	FY* (kip)	FZ* (kip)
					(-) Uplift and (+) Down		
	0.00	0.00		1	0.00	81.52	0.37
	144.00	0.00	0	A1	0.00	-0.18	0.21
	144.00	0.00	240	A1a	-11.71	-9.73	-7.11
1.2D + 1.0W Normal	144.00	0.00	120	A1b	11.71	-9.73	-7.11
	166.75	0.00	0	A2	0.00	-1.10	0.62
	166.75	0.00	240	A2a	-10.84	-14.67	-6.82
	166.75	0.00	120	A2b	10.84	-14.67	-6.82
	0.00	0.00		1	-0.17	68.60	-0.10
	144.00	0.00	0	A1	-0.20	-1.20	1.77
	144.00	0.00	240	A1a	-12.87	-10.48	-7.43
1.2D + 1.0W 60°	144.00	0.00	120	A1b	1.43	-1.19	-1.06
	166.75	0.00	0	A2	-0.40	-3.63	2.79
	166.75	0.00	240	A2a	-13.08	-17.30	-7.55
	166.75	0.00	120	A2b	2.22	-3.64	-1.74
	0.00	0.00		1	0.17	77.34	-0.26
	144.00	0.00	0	A1	-0.31	-5.96	8.37
	144.00	0.00	240	A1a	-13.85	-11.26	-7.79
1.2D + 1.0W 90°	144.00	0.00	120	A1b	0.36	-0.37	-0.31
	166.75	0.00	0	A2	-0.53	-9.43	8.04
	166.75	0.00	240	A2a	-13.32	-17.35	-7.36
	166.75	0.00	120	A2b	0.84	-1.66	-0.71
	0.00	0.00		1	0.32	81.51	-0.18
	144.00	0.00	0	A1	-0.30	-9.73	13.70
	144.00	0.00	240	A1a	-12.01	-9.73	-6.59
1.2D + 1.0W 120°	144.00	0.00	120	A1b	0.18	-0.18	-0.10
	166.75	0.00	0	A2	-0.49	-14.66	12.80
	166.75	0.00	240	A2a	-11.33	-14.66	-5.98
	166.75	0.00	120	A2b	0.54	-1.11	-0.31
	0.00	0.00		1	0.00	68.58	0.20
	144.00	0.00	0	A1	0.00	-10.47	14.86
	144.00	0.00	240	A1a	-1.63	-1.19	-0.71
1.2D + 1.0W 180°	144.00	0.00	120	A1b	1.63	-1.19	-0.71
	166.75	0.00	0	A2	0.00	-17.28	15.10
	166.75	0.00	240	A2a	-2.62	-3.64	-1.05
	166.75	0.00	120	A2b	2.62	-3.64	-1.05
	0.00	0.00		1	-0.31	77.34	-0.02
	144.00	0.00	0	A1	0.18	-11.26	15.89
	144.00	0.00	240	A1a	-0.45	-0.37	-0.16
1.2D + 1.0W 210°	144.00	0.00	120	A1b	7.40	-5.96	-3.92
	166.75	0.00	0	A2	0.28	-17.35	15.21
	166.75	0.00	240	A2a	-1.03	-1.66	-0.37
	166.75	0.00	120	A2b	7.23	-9.44	-3.56
	0.00	0.00		1	-0.32	81.51	-0.18
	144.00	0.00	0	A1	0.30	-9.73	13.70
	144.00	0.00	240	A1a	-0.18	-0.18	-0.10
1.2D + 1.0W 240°	144.00	0.00	120	A1b	12.01	-9.73	-6.59
	166.75	0.00	0	A2	0.49	-14.66	12.80
	166.75	0.00	240	A2a	-0.54	-1.11	-0.31
	166.75	0.00	120	A2b	11.33	-14.66	-5.98
	0.00	0.00		1	0.17	68.60	-0.10
	144.00	0.00	0	A1	0.20	-1.20	1.77
	144.00	0.00	240	A1a	-1.43	-1.19	-1.06
1.2D + 1.0W 300°	144.00	0.00	120	A1b	12.87	-10.48	-7.43
	166.75	0.00	0	A2	0.40	-3.63	2.79
	166.75	0.00	240	A2a	-2.22	-3.64	-1.74
	166.75	0.00	120	A2b	13.08	-17.30	-7.55
	0.00	0.00		1	0.14	77.34	0.27
1.2D + 1.0W 330°	144.00	0.00	0	A1	0.09	-0.37	0.46
	144.00	0.00	240	A1a	-7.09	-5.95	-4.45

DETAILED REACTIONS

Load Case	Radius (ft)	Elevation (ft)	Azimuth (deg)	Node	FX* (kip)	FY* (kip)	FZ* (kip)
					*(-) Uplift and (+) Down		
	144.00	0.00	120	A1b	13.67	-11.26	-8.10
	166.75	0.00	0	A2	0.20	-1.65	1.08
	166.75	0.00	240	A2a	-6.71	-9.44	-4.48
	166.75	0.00	120	A2b	13.03	-17.36	-7.85
	0.00	0.00		1	0.00	77.35	0.10
	144.00	0.00	0	A1	0.00	-0.22	0.72
	144.00	0.00	240	A1a	-6.80	-5.13	-4.26
1.2D + 1.0Di + 1.0Wi Normal	144.00	0.00	120	A1b	6.80	-5.13	-4.26
	166.75	0.00	0	A2	0.00	-1.28	0.84
	166.75	0.00	240	A2a	-6.25	-8.35	-4.11
	166.75	0.00	120	A2b	6.25	-8.35	-4.11
	0.00	0.00		1	-0.01	79.78	-0.01
	144.00	0.00	0	A1	-0.27	-1.96	3.15
	144.00	0.00	240	A1a	-8.93	-6.82	-5.16
1.2D + 1.0Di + 1.0Wi 60°	144.00	0.00	120	A1b	2.59	-1.96	-1.81
	166.75	0.00	0	A2	-0.43	-4.46	3.66
	166.75	0.00	240	A2a	-8.96	-11.58	-5.18
	166.75	0.00	120	A2b	2.96	-4.46	-2.20
	0.00	0.00		1	0.05	79.28	-0.06
	144.00	0.00	0	A1	-0.35	-3.63	5.65
	144.00	0.00	240	A1a	-8.52	-6.42	-4.76
1.2D + 1.0Di + 1.0Wi 90°	144.00	0.00	120	A1b	1.17	-0.78	-0.81
	166.75	0.00	0	A2	-0.53	-6.56	5.70
	166.75	0.00	240	A2a	-8.41	-10.69	-4.59
	166.75	0.00	120	A2b	1.53	-2.49	-1.12
	0.00	0.00		1	0.08	77.37	-0.05
	144.00	0.00	0	A1	-0.29	-5.14	8.02
	144.00	0.00	240	A1a	-7.09	-5.14	-3.76
1.2D + 1.0Di + 1.0Wi 120°	144.00	0.00	120	A1b	0.63	-0.22	-0.36
	166.75	0.00	0	A2	-0.43	-8.35	7.47
	166.75	0.00	240	A2a	-6.68	-8.35	-3.36
	166.75	0.00	120	A2b	0.74	-1.28	-0.42
	0.00	0.00		1	0.00	79.76	0.01
	144.00	0.00	0	A1	0.00	-6.82	10.31
	144.00	0.00	240	A1a	-2.87	-1.96	-1.34
1.2D + 1.0Di + 1.0Wi 180°	144.00	0.00	120	A1b	2.87	-1.96	-1.34
	166.75	0.00	0	A2	0.00	-11.56	10.33
	166.75	0.00	240	A2a	-3.38	-4.47	-1.46
	166.75	0.00	120	A2b	3.38	-4.47	-1.46
	0.00	0.00		1	-0.07	79.27	-0.01
	144.00	0.00	0	A1	0.14	-6.42	9.76
	144.00	0.00	240	A1a	-1.29	-0.78	-0.61
1.2D + 1.0Di + 1.0Wi 210°	144.00	0.00	120	A1b	5.07	-3.62	-2.52
	166.75	0.00	0	A2	0.22	-10.68	9.58
	166.75	0.00	240	A2a	-1.74	-2.49	-0.76
	166.75	0.00	120	A2b	5.20	-6.56	-2.39
	0.00	0.00		1	-0.08	77.37	-0.05
	144.00	0.00	0	A1	0.29	-5.14	8.02
	144.00	0.00	240	A1a	-0.63	-0.22	-0.36
1.2D + 1.0Di + 1.0Wi 240°	144.00	0.00	120	A1b	7.09	-5.14	-3.76
	166.75	0.00	0	A2	0.43	-8.35	7.47
	166.75	0.00	240	A2a	-0.74	-1.28	-0.42
	166.75	0.00	120	A2b	6.68	-8.35	-3.36
	0.00	0.00		1	0.01	79.78	-0.01
	144.00	0.00	0	A1	0.27	-1.96	3.15
	144.00	0.00	240	A1a	-2.59	-1.96	-1.81
1.2D + 1.0Di + 1.0Wi 300°	144.00	0.00	120	A1b	8.93	-6.82	-5.16
	166.75	0.00	0	A2	0.43	-4.46	3.66
	166.75	0.00	240	A2a	-2.96	-4.46	-2.20

DETAILED REACTIONS

Load Case	Radius (ft)	Elevation (ft)	Azimuth (deg)	Node	FX* (kip)	FY* (kip)	FZ* (kip)
					*(-) Uplift and (+) Down		
	166.75	0.00	120	A2b	8.96	-11.58	-5.18
	0.00	0.00		1	0.03	79.27	0.07
	144.00	0.00	0	A1	0.12	-0.78	1.42
	144.00	0.00	240	A1a	-4.71	-3.62	-3.13
1.2D + 1.0Di + 1.0Wi 330°	144.00	0.00	120	A1b	8.38	-6.42	-5.00
	166.75	0.00	0	A2	0.21	-2.48	1.88
	166.75	0.00	240	A2a	-4.67	-6.56	-3.30
	166.75	0.00	120	A2b	8.18	-10.68	-4.98
	0.00	0.00		1	0.00	48.58	0.00
	144.00	0.00	0	A1	0.00	-1.55	2.66
	144.00	0.00	240	A1a	-2.54	-1.80	-1.47
1.2D + 1.0Ev + 1.0Eh Normal	144.00	0.00	120	A1b	2.54	-1.80	-1.47
	166.75	0.00	0	A2	0.00	-3.29	2.77
	166.75	0.00	240	A2a	-2.91	-4.00	-1.68
	166.75	0.00	120	A2b	2.91	-4.00	-1.68
	0.00	0.00		1	0.00	48.57	0.00
	144.00	0.00	0	A1	0.00	-1.63	2.75
	144.00	0.00	240	A1a	-2.61	-1.88	-1.51
1.2D + 1.0Ev + 1.0Eh 60°	144.00	0.00	120	A1b	2.38	-1.63	-1.38
	166.75	0.00	0	A2	0.00	-3.53	2.97
	166.75	0.00	240	A2a	-3.08	-4.22	-1.78
	166.75	0.00	120	A2b	2.57	-3.53	-1.49
	0.00	0.00		1	0.00	48.57	0.00
	144.00	0.00	0	A1	0.00	-1.71	2.84
	144.00	0.00	240	A1a	-2.59	-1.85	-1.49
1.2D + 1.0Ev + 1.0Eh 90°	144.00	0.00	120	A1b	2.33	-1.58	-1.35
	166.75	0.00	0	A2	0.00	-3.76	3.16
	166.75	0.00	240	A2a	-3.02	-4.14	-1.74
	166.75	0.00	120	A2b	2.47	-3.38	-1.43
	0.00	0.00		1	0.00	48.57	0.00
	144.00	0.00	0	A1	0.00	-1.80	2.93
	144.00	0.00	240	A1a	-2.54	-1.80	-1.46
1.2D + 1.0Ev + 1.0Eh 120°	144.00	0.00	120	A1b	2.31	-1.56	-1.33
	166.75	0.00	0	A2	0.00	-3.99	3.36
	166.75	0.00	240	A2a	-2.91	-3.99	-1.68
	166.75	0.00	120	A2b	2.41	-3.31	-1.39
	0.00	0.00		1	0.00	48.57	0.00
	144.00	0.00	0	A1	0.00	-1.88	3.02
	144.00	0.00	240	A1a	-2.38	-1.63	-1.37
1.2D + 1.0Ev + 1.0Eh 180°	144.00	0.00	120	A1b	2.38	-1.63	-1.37
	166.75	0.00	0	A2	0.00	-4.22	3.55
	166.75	0.00	240	A2a	-2.57	-3.53	-1.49
	166.75	0.00	120	A2b	2.57	-3.53	-1.49
	0.00	0.00		1	0.00	48.57	0.00
	144.00	0.00	0	A1	0.00	-1.85	2.99
	144.00	0.00	240	A1a	-2.33	-1.58	-1.34
1.2D + 1.0Ev + 1.0Eh 210°	144.00	0.00	120	A1b	2.46	-1.72	-1.42
	166.75	0.00	0	A2	0.00	-4.16	3.50
	166.75	0.00	240	A2a	-2.45	-3.37	-1.42
	166.75	0.00	120	A2b	2.74	-3.76	-1.58
	0.00	0.00		1	0.00	48.57	0.00
	144.00	0.00	0	A1	0.00	-1.80	2.93
	144.00	0.00	240	A1a	-2.31	-1.56	-1.33
1.2D + 1.0Ev + 1.0Eh 240°	144.00	0.00	120	A1b	2.54	-1.80	-1.46
	166.75	0.00	0	A2	0.00	-3.99	3.36
	166.75	0.00	240	A2a	-2.41	-3.31	-1.39
	166.75	0.00	120	A2b	2.91	-3.99	-1.68
1.2D + 1.0Ev + 1.0Eh 300°	0.00	0.00		1	0.00	48.57	0.00
	144.00	0.00	0	A1	0.00	-1.63	2.75

DETAILED REACTIONS

Load Case	Radius (ft)	Elevation (ft)	Azimuth (deg)	Node	FX* (kip)	FY* (kip)	FZ* (kip)
					*(-) Uplift and (+) Down		
	144.00	0.00	240	A1a	-2.38	-1.63	-1.38
	144.00	0.00	120	A1b	2.61	-1.88	-1.51
	166.75	0.00	0	A2	0.00	-3.53	2.97
	166.75	0.00	240	A2a	-2.57	-3.53	-1.49
	166.75	0.00	120	A2b	3.08	-4.22	-1.78
	0.00	0.00		1	0.00	48.57	0.00
	144.00	0.00	0	A1	0.00	-1.58	2.69
	144.00	0.00	240	A1a	-2.46	-1.72	-1.42
1.2D + 1.0Ev + 1.0Eh 330°	144.00	0.00	120	A1b	2.59	-1.85	-1.50
	166.75	0.00	0	A2	0.00	-3.37	2.83
	166.75	0.00	240	A2a	-2.74	-3.76	-1.58
	166.75	0.00	120	A2b	3.03	-4.16	-1.75
	0.00	0.00		1	0.00	45.25	-0.10
	144.00	0.00	0	A1	0.00	-0.30	0.78
	144.00	0.00	240	A1a	-3.96	-3.01	-2.36
1.0D + 1.0W Service Normal	144.00	0.00	120	A1b	3.96	-3.01	-2.36
	166.75	0.00	0	A2	0.00	-1.47	1.11
	166.75	0.00	240	A2a	-4.06	-5.55	-2.48
	166.75	0.00	120	A2b	4.06	-5.55	-2.48
	0.00	0.00		1	-0.11	45.42	-0.06
	144.00	0.00	0	A1	-0.06	-1.12	1.94
	144.00	0.00	240	A1a	-5.00	-3.86	-2.89
1.0D + 1.0W Service 60°	144.00	0.00	120	A1b	1.65	-1.12	-1.02
	166.75	0.00	0	A2	-0.12	-2.99	2.43
	166.75	0.00	240	A2a	-5.26	-7.05	-3.04
	166.75	0.00	120	A2b	2.05	-2.99	-1.32
	0.00	0.00		1	-0.11	45.43	-0.01
	144.00	0.00	0	A1	-0.08	-2.07	3.28
	144.00	0.00	240	A1a	-4.78	-3.65	-2.72
1.0D + 1.0W Service 90°	144.00	0.00	120	A1b	0.90	-0.51	-0.55
	166.75	0.00	0	A2	-0.14	-4.29	3.62
	166.75	0.00	240	A2a	-4.98	-6.63	-2.80
	166.75	0.00	120	A2b	1.28	-1.94	-0.81
	0.00	0.00		1	-0.08	45.28	0.05
	144.00	0.00	0	A1	-0.06	-3.02	4.62
	144.00	0.00	240	A1a	-4.03	-3.02	-2.26
1.0D + 1.0W Service 120°	144.00	0.00	120	A1b	0.67	-0.30	-0.39
	166.75	0.00	0	A2	-0.12	-5.55	4.76
	166.75	0.00	240	A2a	-4.18	-5.55	-2.28
	166.75	0.00	120	A2b	0.96	-1.47	-0.55
	0.00	0.00		1	0.00	45.40	0.12
	144.00	0.00	0	A1	0.00	-3.84	5.76
	144.00	0.00	240	A1a	-1.71	-1.12	-0.92
1.0D + 1.0W Service 180°	144.00	0.00	120	A1b	1.71	-1.12	-0.92
	166.75	0.00	0	A2	0.00	-7.01	6.04
	166.75	0.00	240	A2a	-2.18	-3.00	-1.12
	166.75	0.00	120	A2b	2.18	-3.00	-1.12
	0.00	0.00		1	0.05	45.40	0.10
	144.00	0.00	0	A1	0.03	-3.64	5.49
	144.00	0.00	240	A1a	-0.93	-0.51	-0.51
1.0D + 1.0W Service 210°	144.00	0.00	120	A1b	2.87	-2.06	-1.57
	166.75	0.00	0	A2	0.06	-6.62	5.71
	166.75	0.00	240	A2a	-1.34	-1.94	-0.71
	166.75	0.00	120	A2b	3.20	-4.29	-1.68
	0.00	0.00		1	0.08	45.28	0.05
	144.00	0.00	0	A1	0.06	-3.02	4.62
1.0D + 1.0W Service 240°	144.00	0.00	240	A1a	-0.67	-0.30	-0.39
	144.00	0.00	120	A1b	4.03	-3.02	-2.26
	166.75	0.00	0	A2	0.12	-5.55	4.76

DETAILED REACTIONS

Load Case	Radius (ft)	Elevation (ft)	Azimuth (deg)	Node	FX* (kip)	FY* (kip)	FZ* (kip)
					*(-) Uplift and (+) Down		
	166.75	0.00	240	A2a	-0.96	-1.47	-0.55
	166.75	0.00	120	A2b	4.18	-5.55	-2.28
	0.00	0.00		1	0.11	45.42	-0.06
	144.00	0.00	0	A1	0.06	-1.12	1.94
	144.00	0.00	240	A1a	-1.65	-1.12	-1.02
1.0D + 1.0W Service 300°	144.00	0.00	120	A1b	5.00	-3.86	-2.89
	166.75	0.00	0	A2	0.12	-2.99	2.43
	166.75	0.00	240	A2a	-2.05	-2.99	-1.32
	166.75	0.00	120	A2b	5.26	-7.05	-3.04
	0.00	0.00		1	0.06	45.40	-0.09
	144.00	0.00	0	A1	0.03	-0.51	1.06
	144.00	0.00	240	A1a	-2.79	-2.06	-1.70
1.0D + 1.0W Service 330°	144.00	0.00	120	A1b	4.74	-3.64	-2.77
	166.75	0.00	0	A2	0.06	-1.94	1.51
	166.75	0.00	240	A2a	-3.06	-4.29	-1.93
	166.75	0.00	120	A2b	4.91	-6.62	-2.91
	0.00	0.00		1	0.00	48.63	0.00
	144.00	0.00	0	A1	0.00	-1.47	2.56
	144.00	0.00	240	A1a	-2.58	-1.85	-1.49
1.2D + 1.0Ev + 1.5Eh Normal	144.00	0.00	120	A1b	2.58	-1.85	-1.49
	166.75	0.00	0	A2	0.00	-3.05	2.57
	166.75	0.00	240	A2a	-3.02	-4.14	-1.74
	166.75	0.00	120	A2b	3.02	-4.14	-1.74
	0.00	0.00		1	0.00	48.61	0.00
	144.00	0.00	0	A1	0.00	-1.59	2.70
	144.00	0.00	240	A1a	-2.70	-1.97	-1.56
1.2D + 1.0Ev + 1.5Eh 60°	144.00	0.00	120	A1b	2.34	-1.59	-1.35
	166.75	0.00	0	A2	0.00	-3.41	2.87
	166.75	0.00	240	A2a	-3.27	-4.49	-1.89
	166.75	0.00	120	A2b	2.49	-3.41	-1.44
	0.00	0.00		1	0.00	48.62	0.00
	144.00	0.00	0	A1	0.00	-1.72	2.84
	144.00	0.00	240	A1a	-2.67	-1.93	-1.54
1.2D + 1.0Ev + 1.5Eh 90°	144.00	0.00	120	A1b	2.26	-1.51	-1.30
	166.75	0.00	0	A2	0.00	-3.76	3.17
	166.75	0.00	240	A2a	-3.20	-4.40	-1.85
	166.75	0.00	120	A2b	2.30	-3.16	-1.33
	0.00	0.00		1	0.00	48.63	0.00
	144.00	0.00	0	A1	0.00	-1.85	2.98
	144.00	0.00	240	A1a	-2.58	-1.85	-1.49
1.2D + 1.0Ev + 1.5Eh 120°	144.00	0.00	120	A1b	2.22	-1.47	-1.28
	166.75	0.00	0	A2	0.00	-4.14	3.49
	166.75	0.00	240	A2a	-3.02	-4.14	-1.74
	166.75	0.00	120	A2b	2.22	-3.05	-1.28
	0.00	0.00		1	0.00	48.61	0.00
	144.00	0.00	0	A1	0.00	-1.97	3.12
	144.00	0.00	240	A1a	-2.34	-1.59	-1.35
1.2D + 1.0Ev + 1.5Eh 180°	144.00	0.00	120	A1b	2.34	-1.59	-1.35
	166.75	0.00	0	A2	0.00	-4.52	3.80
	166.75	0.00	240	A2a	-2.48	-3.40	-1.43
	166.75	0.00	120	A2b	2.48	-3.40	-1.43
	0.00	0.00		1	0.00	48.62	0.00
	144.00	0.00	0	A1	0.00	-1.94	3.09
	144.00	0.00	240	A1a	-2.25	-1.50	-1.30
1.2D + 1.0Ev + 1.5Eh 210°	144.00	0.00	120	A1b	2.46	-1.72	-1.42
	166.75	0.00	0	A2	0.00	-4.42	3.72
	166.75	0.00	240	A2a	-2.29	-3.14	-1.32
	166.75	0.00	120	A2b	2.75	-3.77	-1.58
1.2D + 1.0Ev + 1.5Eh 240°	0.00	0.00		1	0.00	48.63	0.00

DETAILED REACTIONS

Load Case	Radius (ft)	Elevation (ft)	Azimuth (deg)	Node	FX* (kip)	FY* (kip)	FZ* (kip)
					*(-) Uplift and (+) Down		
	144.00	0.00	0	A1	0.00	-1.85	2.98
	144.00	0.00	240	A1a	-2.22	-1.47	-1.28
	144.00	0.00	120	A1b	2.58	-1.85	-1.49
	166.75	0.00	0	A2	0.00	-4.14	3.49
	166.75	0.00	240	A2a	-2.22	-3.05	-1.28
	166.75	0.00	120	A2b	3.02	-4.14	-1.74
	0.00	0.00		1	0.00	48.61	0.00
	144.00	0.00	0	A1	0.00	-1.59	2.70
	144.00	0.00	240	A1a	-2.34	-1.59	-1.35
1.2D + 1.0Ev + 1.5Eh 300°	144.00	0.00	120	A1b	2.70	-1.97	-1.56
	166.75	0.00	0	A2	0.00	-3.41	2.87
	166.75	0.00	240	A2a	-2.49	-3.41	-1.44
	166.75	0.00	120	A2b	3.27	-4.49	-1.89
	0.00	0.00		1	0.00	48.62	0.00
	144.00	0.00	0	A1	0.00	-1.50	2.60
	144.00	0.00	240	A1a	-2.46	-1.72	-1.42
1.2D + 1.0Ev + 1.5Eh 330°	144.00	0.00	120	A1b	2.67	-1.94	-1.54
	166.75	0.00	0	A2	0.00	-3.14	2.65
	166.75	0.00	240	A2a	-2.75	-3.77	-1.59
	166.75	0.00	120	A2b	3.22	-4.42	-1.86

MAXIMUM GUY ANCHOR REACTIONS

Radius (ft)	Drop (ft)	Azimuth (deg)	Uplift (kip)	Shear (kip)
144.00	0.00	0	11.26	15.89
144.00	0.00	120	11.26	15.89
144.00	0.00	240	11.26	15.89
166.75	0.00	0	17.35	15.22
166.75	0.00	120	17.36	15.22
166.75	0.00	240	17.35	15.21

MAXIMUM REACTIONS SUMMARY

Base / Anchor Group	Vertical Load *(Compression for Base; Uplift for Anchor)*	Horizontal Shear
Guyed – Pivot Base	81.52 (kip)	0.37 (kip)
Guyed Anchor - A1	11.26 (kip)	15.89 (kip)
Guyed Anchor - A2	17.36 (kip)	15.22 (kip)

MAXIMUM GUY ANCHOR REACTIONS WITH OVERSTRENGTH

Radius (ft)	Drop (ft)	Azimuth (deg)	Uplift (kip)	Shear (kip)
144.00	0.00	0	11.26	15.89
144.00	0.00	120	11.26	15.89
144.00	0.00	240	11.26	15.89
166.75	0.00	0	17.35	15.22
166.75	0.00	120	17.36	15.22
166.75	0.00	240	17.35	15.21

MAXIMUM REACTIONS SUMMARY WITH OVERSTRENGTH

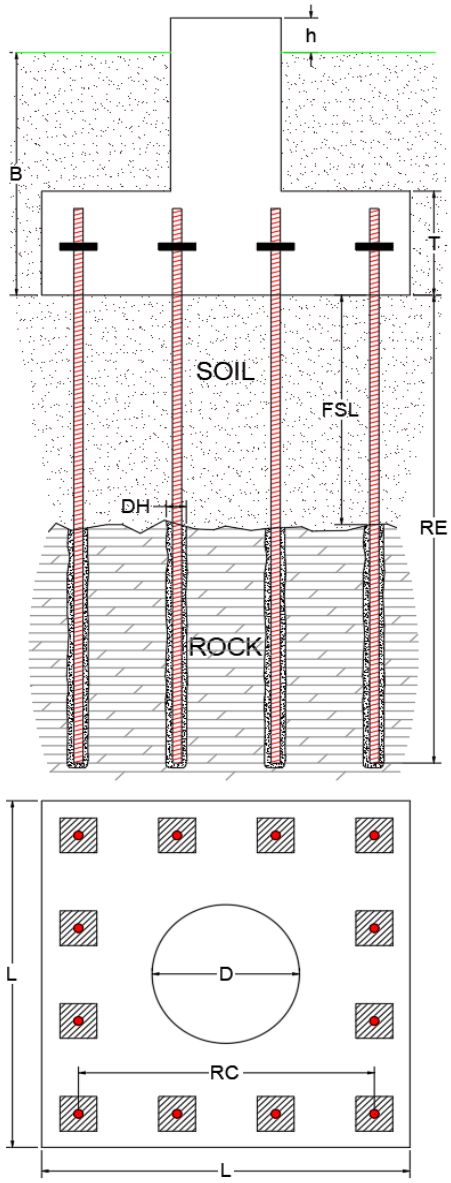
Base / Anchor Group	Vertical Load *(Compression for Base; Uplift for Anchor)*	Horizontal Shear
Guyed – Pivot Base w/Overstrength	81.52 (kip)	0.37 (kip)
Guyed Anchor - A1 w/Overstrength	11.26 (kip)	15.89 (kip)
Guyed Anchor - A2 w/Overstrength	17.36 (kip)	15.22 (kip)

AMERICAN TOWER CORPORATION

Site Name: Mount Zion NY, NY
Site Number: 10330
Tower Type: GT
Design Base Loads (Factored) - Analysis per TIA-222-H Standards

Rock Anchor Group Foundation Analysis

Foundation Parameters		
Include Rebar Analysis?	N	
Include Bearing Plate Analysis?	N	
Moment (Overturning) (M_u):	0	k-ft
Shear/Leg (V_u):	0.4	k
Compression/Leg (P_u):	81.5	k
Uplift/Leg (T_u):	0.0	k
Mat/Pier Height Above Ground [h]:	1	ft
Pier Diameter [D]:	3	ft
Length / Width of Mat [L]:	3	ft
Mat Thickness [T]:	2.5	ft
Base Depth of Mat [B]:	1.5	ft
Water Table Depth (BGL):	99	ft
Unit Weight of Concrete:	150	pcf
Unit Weight of Soil at Mat/Pier:	110	pcf
Unit Weight of Water:	62.4	pcf
Unit Weight of Soil Below Water Table:	47.6	pcf
Ultimate Compressive Bearing Pressure at Mat:	65,300	psf
Bearing on Rock?	Y	
Shear Friction Coefficient:	0.3	
Capacity Increase (Due to Transient Loads):	1	
Pullout Angle:	45	°
Rod Diameter, d:	0.875	in
Rod Yield Strength, Fy:	60	ksi
Rod Ultimate Strength, Fu:	90	ksi
Rod Gross Area, Ag:	0.60	in^2
Rod Net Area, An:	0.46	in^2
Number of Rods:	4	
Rod Arrangment:	Square	
If Square: Grid or Border?	Border	
Number of Rows:	2	
Number of Columns:	2	
Rod Group Width [RC]:	30	in
Diameter of Cored Hole [DH]:	2	in
Overall Rod Embedment Length [RE]:	30	in
Free Stress Length [FSL]	0	in
Ultimate Rod-to-Grout Interface Bond Strength:	220	psi
Ultimate Grout-to-Rock Interface Bond Strength:	100	psi
Lock Off Load:	0	k
Rock Anchor Design Plastic or Elastic:	Elastic	
Ignore Pullout Weight Resistance (Y/N):	Y	



Capacities & Results			
Soil Strength Reduction Factor (ϕ_s):	0.75		
Bearing Strength Reduction Factor (ϕ_b):	0.60		
Factored Moment Capacity per Leg ($\phi_s M_n$):	68.8	k	
Factored Uplift Capacity per Leg ($\phi_s T_n$):	57.5	k	
Applied Moment, M_u:	0.9	k-ft	
Applied Uplift, T_u:	0.0	k	
$T_u/\phi_s T_n + M_u/\phi_s M_n$:	1%		Pass
Applied Axial, P_u:	85.6	k	
Factored Compressive Capacity per Leg ($\phi_b P_n$):	108.2	k	
$P_u/\phi_b P_n$:	79%		Pass
Applied Shear, V_u:	0.4	k	
Factored Shear Capacity per Leg ($\phi_s V_n$):	74.8	k	
$V_u/\phi_s V_n$:	0%		Pass

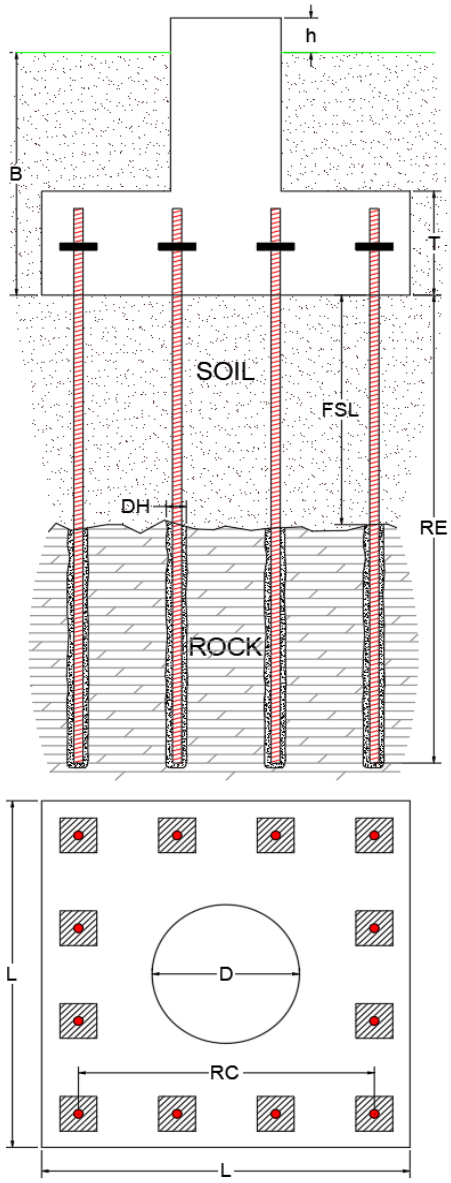
Unfactored Governing Strengths		
Total Pullout Weight:	Ignored	k
Total Grout-to-Rock Bond Strength:	75.4	k
Total Rod-to-Grout Bond Strength:	72.6	k
Total Rod Yield Strength:	144.3	k
Total Rod Rupture Strength:	166.2	k
Pullout Weight per Rod:	Ignored	k
Rock-to-Grout Bond Strength per Rod:	18.8	k
Rod-to-Grout Bond Strength per Rod:	18.1	k
Rod Yield Strength per Rod:	36.1	k
Rod Rupture Strength per Rod:	41.6	k

AMERICAN TOWER CORPORATION

Site Name: Mount Zion NY, NY
Site Number: 10330
Tower Type: GT
Design Base Loads (Factored) - Analysis per TIA-222-H Standards

Rock Anchor Group Foundation Analysis

Foundation Parameters		
Include Rebar Analysis?	N	
Include Bearing Plate Analysis?	N	
Moment (Overturning) (M_u):	0	k-ft
Shear/Leg (V_u):	15.9	k
Compression/Leg (P_u):	0.0	k
Uplift/Leg (T_u):	11.3	k
Mat/Pier Height Above Ground [h]:	2.5	ft
Pier Diameter [D]:	4	ft
Length / Width of Mat [L]:	5.75	ft
Mat Thickness [T]:	3	ft
Base Depth of Mat [B]:	0.5	ft
Water Table Depth (BGL):	99	ft
Unit Weight of Concrete:	150	pcf
Unit Weight of Soil at Mat/Pier:	112	pcf
Unit Weight of Water:	62.4	pcf
Unit Weight of Soil Below Water Table:	49.6	pcf
Ultimate Compressive Bearing Pressure at Mat:	4,700	psf
Bearing on Rock?	Y	
Shear Friction Coefficient:	0.3	
Capacity Increase (Due to Transient Loads):	1	
Pullout Angle:	45	°
Rod Diameter, d:	0.875	in
Rod Yield Strength, Fy:	60	ksi
Rod Ultimate Strength, Fu:	90	ksi
Rod Gross Area, Ag:	0.60	in^2
Rod Net Area, An:	0.46	in^2
Number of Rods:	4	
Rod Arrangment:	Square	
If Square: Grid or Border?	Border	
Number of Rows:	2	
Number of Columns:	2	
Rod Group Width [RC]:	36	in
Diameter of Cored Hole [DH]:	2	in
Overall Rod Embedment Length [RE]:	72	in
Free Stress Length [FSL]	0	in
Ultimate Rod-to-Grout Interface Bond Strength:	220	psi
Ultimate Grout-to-Rock Interface Bond Strength:	100	psi
Lock Off Load:	0	k
Rock Anchor Design Plastic or Elastic:	Elastic	
Ignore Pullout Weight Resistance (Y/N):	Y	



Capacities & Results			
Soil Strength Reduction Factor (ϕ_s):	0.75		
Bearing Strength Reduction Factor (ϕ_b):	0.60		
Factored Moment Capacity per Leg ($\phi_s M_n$):	172.5	k	
Factored Uplift Capacity per Leg ($\phi_s T_n$):	138.1	k	
Applied Moment, M_u:	47.7	k-ft	
Applied Uplift, T_u:	11.3	k	
$T_u/\phi_s T_n + M_u/\phi_s M_n$:	36%	Pass	
Applied Axial, P_u:	17.9	k	
Factored Compressive Capacity per Leg ($\phi_b P_n$):	73.2	k	
$P_u/\phi_b P_n$:	24%	Pass	
Applied Shear, V_u:	15.9	k	
Factored Shear Capacity per Leg ($\phi_s V_n$):	74.8	k	
$V_u/\phi_s V_n$:	21%	Pass	

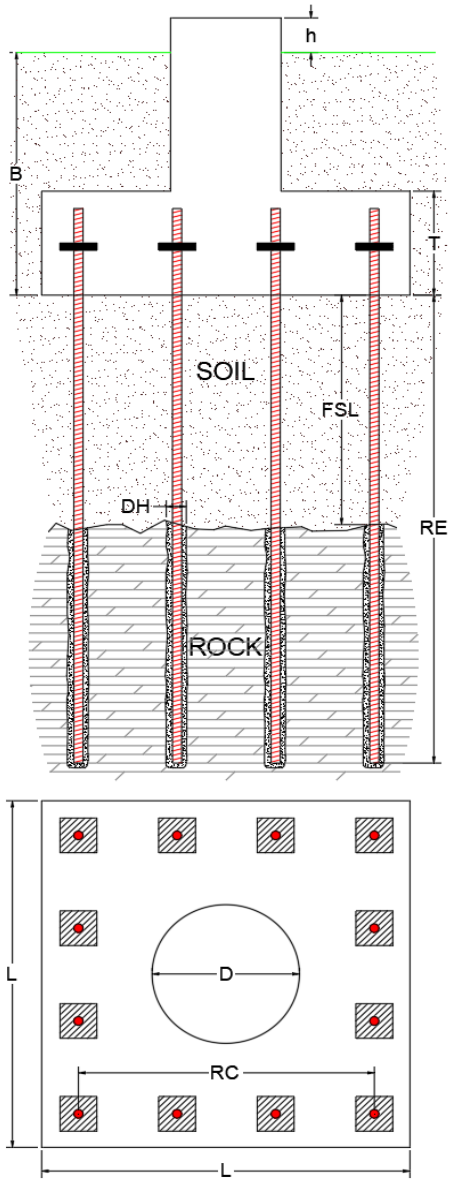
Unfactored Governing Strengths		
Total Pullout Weight:	Ignored	k
Total Grout-to-Rock Bond Strength:	181.0	k
Total Rod-to-Grout Bond Strength:	174.2	k
Total Rod Yield Strength:	144.3	k
Total Rod Rupture Strength:	166.2	k
Pullout Weight per Rod:	Ignored	k
Rock-to-Grout Bond Strength per Rod:	45.2	k
Rod-to-Grout Bond Strength per Rod:	43.5	k
Rod Yield Strength per Rod:	36.1	k
Rod Rupture Strength per Rod:	41.6	k

AMERICAN TOWER CORPORATION

Site Name: Mount Zion NY, NY
Site Number: 10330
Tower Type: GT
Design Base Loads (Factored) - Analysis per TIA-222-H Standards

Rock Anchor Group Foundation Analysis

Foundation Parameters		
Include Rebar Analysis?	N	
Include Bearing Plate Analysis?	N	
Moment (Overturning) (M_u):	0	k-ft
Shear/Leg (V_u):	15.2	k
Compression/Leg (P_u):	0.0	k
Uplift/Leg (T_u):	17.4	k
Mat/Pier Height Above Ground [h]:	2.5	ft
Pier Diameter [D]:	4	ft
Length / Width of Mat [L]:	5.75	ft
Mat Thickness [T]:	3	ft
Base Depth of Mat [B]:	0.5	ft
Water Table Depth (BGL):	99	ft
Unit Weight of Concrete:	150	pcf
Unit Weight of Soil at Mat/Pier:	112	pcf
Unit Weight of Water:	62.4	pcf
Unit Weight of Soil Below Water Table:	49.6	pcf
Ultimate Compressive Bearing Pressure at Mat:	4,700	psf
Bearing on Rock?	Y	
Shear Friction Coefficient:	0.3	
Capacity Increase (Due to Transient Loads):	1	
Pullout Angle:	45	°
Rod Diameter, d:	0.875	in
Rod Yield Strength, Fy:	60	ksi
Rod Ultimate Strength, Fu:	90	ksi
Rod Gross Area, Ag:	0.60	in^2
Rod Net Area, An:	0.46	in^2
Number of Rods:	4	
Rod Arrangment:	Square	
If Square: Grid or Border?	Border	
Number of Rows:	2	
Number of Columns:	2	
Rod Group Width [RC]:	36	in
Diameter of Cored Hole [DH]:	2	in
Overall Rod Embedment Length [RE]:	72	in
Free Stress Length [FSL]	0	in
Ultimate Rod-to-Grout Interface Bond Strength:	220	psi
Ultimate Grout-to-Rock Interface Bond Strength:	100	psi
Lock Off Load:	0	k
Rock Anchor Design Plastic or Elastic:	Elastic	
Ignore Pullout Weight Resistance (Y/N):	Y	



Capacities & Results		
Soil Strength Reduction Factor (ϕ_s):	0.75	
Bearing Strength Reduction Factor (ϕ_b):	0.60	
Factored Moment Capacity per Leg ($\phi_s M_n$):	172.5	k
Factored Uplift Capacity per Leg ($\phi_s T_n$):	138.1	k
Applied Moment, M_u:	45.7	k-ft
Applied Uplift, T_u:	17.4	k
$T_u/\phi_s T_n + M_u/\phi_s M_n$:	39%	Pass
Applied Axial, P_u:	17.9	k
Factored Compressive Capacity per Leg ($\phi_b P_n$):	73.2	k
$P_u/\phi_b P_n$:	24%	Pass
Applied Shear, V_u:	15.2	k
Factored Shear Capacity per Leg ($\phi_s V_n$):	74.8	k
$V_u/\phi_s V_n$:	20%	Pass

Unfactored Governing Strengths		
Total Pullout Weight:	Ignored	k
Total Grout-to-Rock Bond Strength:	181.0	k
Total Rod-to-Grout Bond Strength:	174.2	k
Total Rod Yield Strength:	144.3	k
Total Rod Rupture Strength:	166.2	k
Pullout Weight per Rod:	Ignored	k
Rock-to-Grout Bond Strength per Rod:	45.2	k
Rod-to-Grout Bond Strength per Rod:	43.5	k
Rod Yield Strength per Rod:	36.1	k
Rod Rupture Strength per Rod:	41.6	k

CENTERLINE

EXHIBIT 8

Radio Frequency – Electromagnetic Energy (RF-EME) Compliance Report

T-Mobile Guyed Tower Facility

Report Findings: To comply with FCC Regulations, T-Mobile should follow the safety recommendations in this report while operating its proposed equipment upgrade.

Site ID: UP50577A
Site Name: Mt Zion
366 Mount Zion Rd, Marlboro, NY 12542
8/21/2025

Table of Contents

1.0 Executive Summary

Centerline has been contracted to perform a radio frequency (RF) analysis for a proposed equipment upgrade at the following T-Mobile wireless facility. This analysis includes theoretical emissions calculations ("Modeled Measurements"), which were performed assuming that all of the proposed radios operate at full power and uncombined in their RF paths to yield a worst-case scenario.

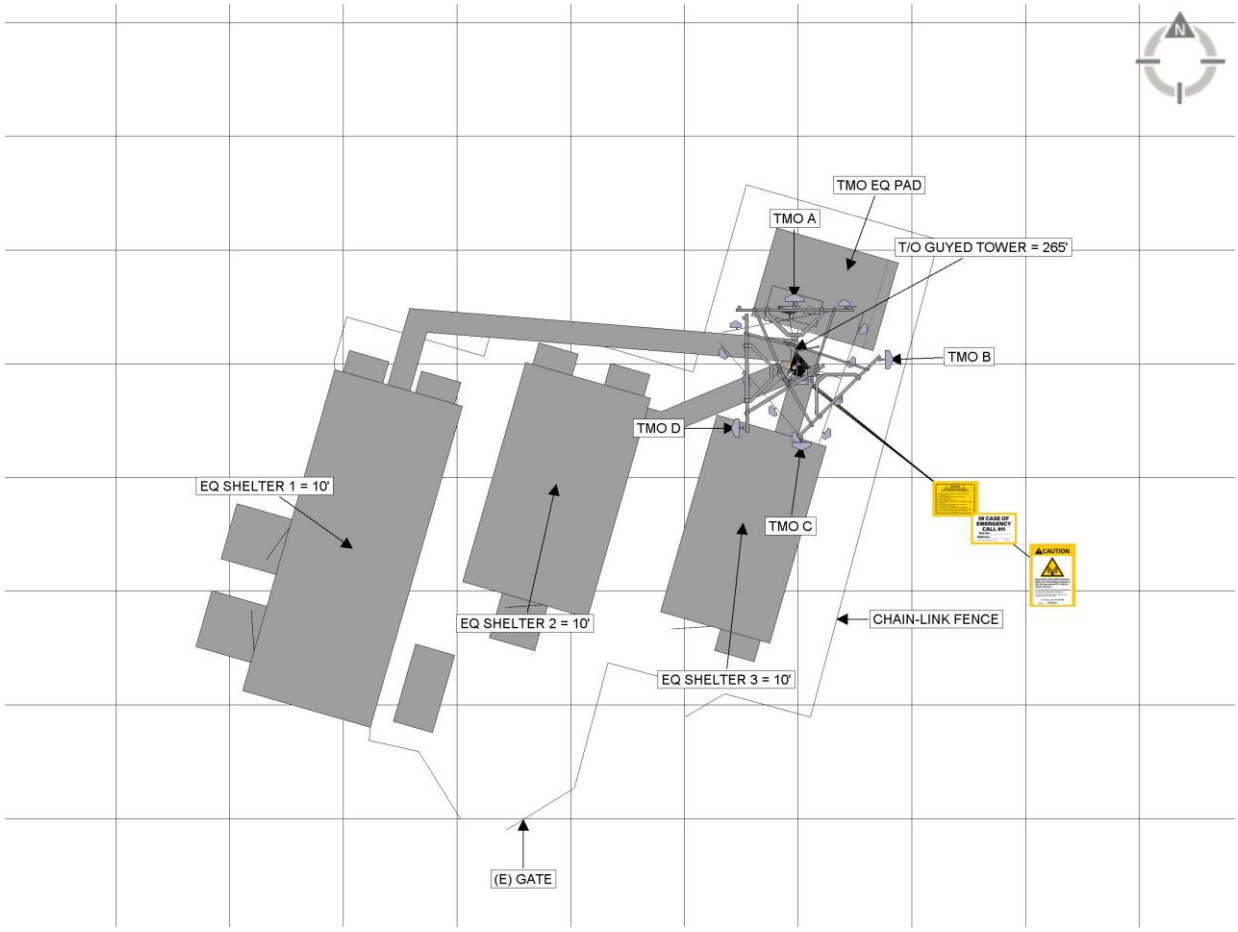
The facility (Site ID: UP50577A) is located on a Guyed Tower in Marlboro, NY.

T-Mobile Measurements – Maximum Permissible Exposure (MPE%)

Measurement Type	General Population/ Uncontrolled (GP)	Occupational/ Controlled (OCC)
Max Modeled Measurement on Ground	0.02%	0.00%

The FCC has established safety guidelines relating to potential RF-EME exposure from radio transmitters. FCC regulations define two separate tiers of exposure limits: Occupational/Controlled and General Population/Uncontrolled. The General Population limits are five times more conservative or restrictive than the Occupational limits and these limits apply to accessible areas where workers or the general public may be exposed to RF-EME. Areas equal to or greater than 100% GP MPE (20% OCC MPE) should use methods to reduce or control exposure. Any wireless operator that contributes 5% GP MPE (1% OCC MPE) or greater in an area that is identified to be greater than 100% GP MPE (20% OCC MPE) is responsible for taking corrective actions to bring the site into compliance.

In all areas around the site, the Modeled Measurements are less than 100% GP MPE (20% OCC MPE). In accordance with T-Mobile policy, the following mitigation should be installed with the upgraded facility:



For further details see Section 5 Safety Recommendations.

2.0 Antenna Inventory

The antenna data below was supplied by T-Mobile:

Antenna ID	Operator	Antenna Manufacturer	Antenna Model	System / Freq (MHz)	Azimuth (°)	Antenna Centerline Height (ft.) AGL*
1	T-Mobile	Amphenol Antel	APXVAALL24M-U-J20	LTE 700	0	212
1	T-Mobile	Amphenol Antel	APXVAALL24M-U-J20	NR 600	0	212
1	T-Mobile	Amphenol Antel	APXVAALL24M-U-J20	LTE 1900	0	212
1	T-Mobile	Amphenol Antel	APXVAALL24M-U-J20	NR 1900	0	212
1	T-Mobile	Amphenol Antel	APXVAALL24M-U-J20	LTE 2100	0	212
2	T-Mobile	Amphenol Antel	APXVAALL24M-U-J20	LTE 700	90	212
2	T-Mobile	Amphenol Antel	APXVAALL24M-U-J20	NR 600	90	212
2	T-Mobile	Amphenol Antel	APXVAALL24M-U-J20	LTE 1900	90	212
2	T-Mobile	Amphenol Antel	APXVAALL24M-U-J20	NR 1900	90	212
2	T-Mobile	Amphenol Antel	APXVAALL24M-U-J20	LTE 2100	90	212
3	T-Mobile	Amphenol Antel	APXVAALL24M-U-J20	LTE 700	180	212
3	T-Mobile	Amphenol Antel	APXVAALL24M-U-J20	NR 600	180	212
3	T-Mobile	Amphenol Antel	APXVAALL24M-U-J20	LTE 1900	180	212
3	T-Mobile	Amphenol Antel	APXVAALL24M-U-J20	NR 1900	180	212
3	T-Mobile	Amphenol Antel	APXVAALL24M-U-J20	LTE 2100	180	212
4	T-Mobile	Amphenol Antel	APXVAALL24M-U-J20	LTE 700	270	212
4	T-Mobile	Amphenol Antel	APXVAALL24M-U-J20	NR 600	270	212
4	T-Mobile	Amphenol Antel	APXVAALL24M-U-J20	LTE 1900	270	212
4	T-Mobile	Amphenol Antel	APXVAALL24M-U-J20	NR 1900	270	212
4	T-Mobile	Amphenol Antel	APXVAALL24M-U-J20	LTE 2100	270	212

*Above Ground Level

Sectors are comprised of one or more antennas grouped on azimuth, the compass direction toward which the antennas are pointed. Technology refers to the standard or generation of wireless technology. Centerline is the distance from the middle of the antenna to a reference point.

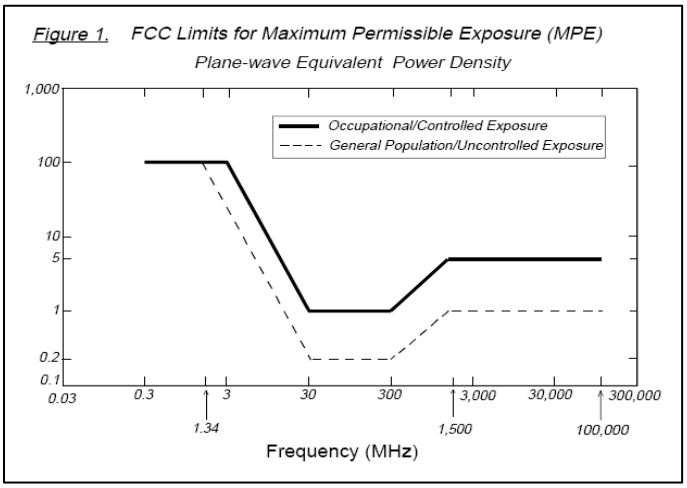
3.0 FCC Guidelines and Emissions Threshold Limits

All information used in this report was analyzed as a percentage of the MPE limits as detailed in 47 CFR § 1.1310 as well as Federal Communications Commission (FCC) OET Bulletin 65 Edition 97-01. The FCC MPE limits are typically expressed in units of milliwatts per square centimeter (mW/cm^2) or microwatts per square centimeter ($\mu W/cm^2$). The exposure limits vary depending upon the frequencies being utilized. The calculated power density at each sample point divided by the limit at each calculated frequency provides a result in % MPE. Summing the calculated % MPE from all contributors provides a cumulative % MPE at a particular sample point. Because exposure limits may vary for each frequency band, it is necessary to report % MPE rather than power density.

All results were compared to the FCC radio frequency exposure rules as detailed in 47 CFR § 1.1307(b) to determine compliance with the MPE limits for General Population/Uncontrolled environments as defined below. Additional details can be found in FCC OET 65.

Limits for Maximum Permissible Exposure (MPE)				
(A) Limits for Occupational/Controlled Exposure				
Frequency Range (MHz)	**Electric Field Strength (E) (V/m)**	**Magnetic Field Strength (H) (A/m)**	**Power Density (S) (mW/cm^2)**	**Averaging Time $[E]^2$, $[H]^2$, or S (minutes)**
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f2)*	6
30-300	61.4	0.163	1	6
300-1,500	--	--	f/300	6
1,500-	--	--	5	6
(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	**Electric Field Strength (E) (V/m)**	**Magnetic Field Strength (H) (A/m)**	**Power Density (S) (mW/cm^2)**	**Averaging Time $[E]^2$, $[H]^2$, or S (minutes)**
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f2)*	30
30-300	27.5	0.073	0.2	30
300-1,500	--	--	f/1,500	30
1,500-	--	--	1	30

f = Frequency in (MHz)
* Plane-wave equivalent power density

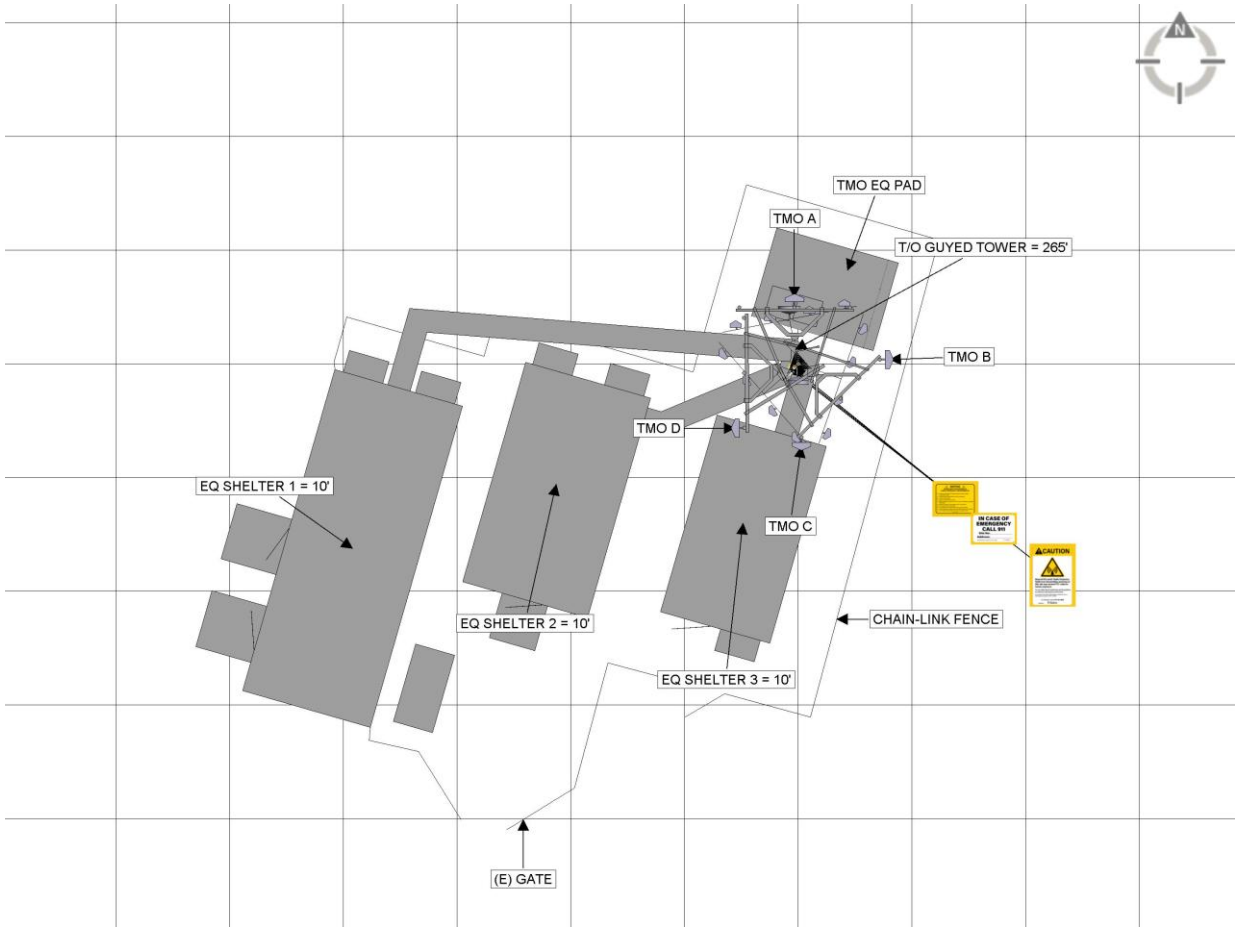


4.0 Modeled Measurements

Modeled calculations were performed based upon the data listed in Section 2.0 Antenna Inventory. All modeled calculations for this facility were performed assuming that all radios were running at full power and were uncombined in their RF paths with the configuration shown in Table 1. FCC OET Bulletin 65 – Edition 97-01 recommends that modeling of this nature should be done as described prior to yield a worst-case scenario. Due to the dynamic nature of many deployed systems the "real world" values will most likely be less than those shown in this section due to worst-case values being shown in all instances. For further details on how these calculations were performed, see Appendix A: Calculation Methodology.

Measurement Type	General Population/ Uncontrolled (GP)	Occupational/ Controlled (OCC)
Max Modeled Measurement on Ground	0.02%	0.00%

5.0 Safety Recommendations



Access	• Install (1) Guideline sign at the base of the tower. • Install (1) Caution sign at the base of the tower. • Install (1) Emergency sign at the base of the tower.
Alpha Sector	• No action required.
Beta Sector	• No action required.
Gamma Sector	• No action required.
Delta Sector	• No action required.
Notes	• N/A

Occupational Safety and Health Administration (OSHA) Requirements

OSHA requires that those in the Occupational classification must complete training in RF Safety, RF Awareness, and Utilization of Personal Protective Equipment. OSHA also provides options for Hazard Prevention and Control:

Hazard Prevention	Control
• Utilization of good equipment • Enact control of hazard areas • Limit exposures • Employ medical surveillance and accident response	• Employ Lockout/Tag out • Utilize personal alarms & protective clothing • Prevent access to hazardous locations • Develop or operate an administrative control program

RF Signage and Barriers

RF signs should be obeyed at all times.

Sign	Description
	**RF Guideline Sign** Gives guidelines on how to proceed in areas that may exceed either the FCC's General Population or Occupational exposure limits.
	**Information Sign** Informational Sign to be posted at access points.
	**Blue Notice Sign** Used to inform individuals that they are entering an area that may exceed the FCC's General Population limits. It must be placed so it is visible from all approachable sides. It must also be just outside of the area predicted to exceed the MPE limits so it can be read without standing within the affected area.
	**Yellow Caution Sign** Used to inform individuals that they are entering an area that may exceed either the FCC's General Population or Occupational exposure limits. It must be placed so it is visible from all approachable sides. It must also be just outside of the area predicted to exceed the MPE limits so it can be read without standing within the affected area.
	**Orange Warning Sign** Used to inform individuals that they are entering an area that may exceed 10x the FCC's Occupational exposure limit. It must be placed so it is visible from all approachable sides. It must also be just outside of the area predicted to exceed the MPE limits so it can be read without standing within the affected area.

If there are workers in an area with a sign that they do not understand, they can call the NOC Number at 877-611-5868 for guidance.

6.0 Conclusion

In all areas around the site, the Modeled Measurements are less than 100% General Population MPE (20% Occupational MPE). Based on worst-case predictive modeling, there are no areas at ground level at this site related to the proposed antennas that exceed the FCC's General Population or Occupational MPE limits. At ground level, the maximum power density generated by the antennas is approximately 0.02% GP MPE (0.00% OCC MPE).

To comply with T-Mobile policy, the mitigation detailed in Section 5 of this report should be implemented.

To reduce the risk of exposure and/or injury, Centerline recommends that access to the areas associated with the active antenna installation be restricted and secured where possible.

7.0 Certification

Michael Fischer, P.E.
Registered Professional Engineer (Electrical)
New York License Number 101714
Expires March 31, 2028

Signed 21 August 2025

Michael Fischer

Site ID: UP50577A
Site Name: Mt Zion
366 Mount Zion Rd, Marlboro, NY 12542

Appendix A: Calculation Methodology

IXUS electromagnetic energy (EME) calculation software was used to assess all RF field levels presented in this study. IXUS software uses a fast and accurate EME calculation tool that allows for the determination of RF field strength in the vicinity of radio communication base stations and transmitters. At its core, the IXUS EME calculation module implements evaluation techniques detailed in the ITU-T K.61, CENELEC EN 50383, and IEC 62232 specifications and referenced in *C95.3 IEEE Recommended Practice for Measurements and Computations of Electric, Magnetic, and Electromagnetic Fields with Respect to Human Exposure to Such Fields, 0 Hz to 300 GHz*. The EME calculation result at any point in 3D space is achieved via a synthetic ray tracing technique, a conservative cylindrical envelope method, or through full-wave electromagnetic simulation. The ray tracing method is an advanced computation method described in IEC 622322 where the power is summed from elemental sources representing the individual components of the antenna which are selected by an analysis of published manufacturer datasheets and antenna pattern information. The selection of the solution method is determined by the particular antenna being considered.

CENTERLINE

EXHIBIT 9

CERTIFICATE OF LIABILITY INSURANCE

5/1/2026

DATE (MM/DD/YYYY) 7/8/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Lockton Companies, LLC Three City Place Dr., Ste. 900 St. Louis MO 63141-7081 (314) 432-0500 midwestcertificates@lockton.com	**CONTACT NAME:** **PHONE (A/C, No, Ext):** **FAX (A/C, No):** **E-MAIL ADDRESS:**
INSURED 1359691 T-Mobile US, Inc. Its Subsidiaries and Affiliates 12920 SE 38th Street Bellevue WA 98006	**INSURER(S) AFFORDING COVERAGE** — **NAIC #** **INSURER A :** Continental Casualty Company — 20443 **INSURER B :** The Continental Insurance Company — 35289 **INSURER C :** Transportation Insurance Company — 20494 **INSURER D :** **INSURER E :** **INSURER F :**

COVERAGES **CERTIFICATE NUMBER:** 22116995 **REVISION NUMBER:** XXXXXXX

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X **COMMERCIAL GENERAL LIABILITY** CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY [ ] PRO-JECT [X] LOC OTHER:	Y	N	7012343900	5/1/2025	5/1/2026	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 10,000,000 $ 10,000,000 $ 25,000 $ 10,000,000 $ 20,000,000 $ 20,000,000
A	**AUTOMOBILE LIABILITY** X ANY AUTO OWNED AUTOS ONLY HIRED AUTOS ONLY SCHEDULED AUTOS NON-OWNED AUTOS ONLY	N	N	7012343878	5/1/2025	5/1/2026	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 5,000,000 $ XXXXXXX $ XXXXXXX $ XXXXXXX
B	X **UMBRELLA LIAB** X OCCUR	N	N	7014886953 SIR applies per policy terms & conditions	5/1/2025	5/1/2026	EACH OCCURRENCE	$ 5,000,000
B	**EXCESS LIAB** CLAIMS-MADE						AGGREGATE	$ 5,000,000
B	DED X RETENTION $ 10,000							$ XXXXXXX
B	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY** Y / N ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? N **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below	N / A	N	7012343895 (AOS) 7012343881 (CA) 7012447142 (AZ,MA,OR,WI)	5/1/2025 5/1/2025 5/1/2025	5/1/2026 5/1/2026 5/1/2026	X PER STATUTE [ ] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ 2,000,000 $ 2,000,000 $ 2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

SEE ATTACHED ENDORSEMENTS The Certificate Holder, Town of Marlborough, and other entities defined by written contract, statute, permit application or written agreement are additional insureds on a primary and non-contributory basis under general liability as required by written contract. UP50577A - 366 Mount Zion Rd, Marlboro, NY 12542.

CERTIFICATE HOLDER

22116995
American Tower Management, LLC
c/o American Tower, L.P
10 Presidential Way
Woburn MA 01801

CANCELLATION See Attachments

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

American Tower Management, LLC c/o American Tower, L.P
10 Presidential Way
Woburn MA 01801

IMPORTANT NOTICE

Dear Certificate Holder for T-Mobile and its subsidiaries (including Sprint):

In our continued effort to provide timely certificate delivery, Lockton Companies is transitioning to paperless delivery of Certificates of Insurance going forward.

To ensure future renewals of this certificate, we need your email address. Please contact us via one of the methods below, referencing Certificate ID 22116995

- Email: *stl-edelivery@lockton.com*
- Phone: *314-812-3888*

If we do not receive your email address via one of the above methods prior to the client's next renewal, we will assume you no longer need the certificate.

If you received this certificate through an internet link where the current certificate is viewable, we have your email and no further action is needed.

The above inbox is for collecting email addresses for renewal electronic certificate delivery ONLY. You will not receive a response from this inbox.

Thank you for your cooperation.

Lockton Companies

POLICY HOLDER NOTICE – COUNTRYWIDE

It is understood and agreed that:

If the Named Insured has agreed under written contract to provide notice of cancellation to a party to whom the Agent of Record has issued a Certificate of Insurance, and if the Insurer cancels a policy term described on that Certificate of Insurance for any reason other than nonpayment of premium, then notice of cancellation will be provided to such Certificate holders at least 30 days in advance of the date cancellation is effective.

If notice is mailed, then proof of mailing to the last known mailing address of the Certificate holder on file with the Agent of Record will be sufficient to prove notice.

Any failure by the Insurer to notify such persons or organizations will not extend or invalidate such cancellation, or impose any liability or obligation upon the Insurer or the Agent of Record.

All other terms and conditions of the policy remain unchanged.

This endorsement, which forms a part of and is for attachment to the policy issued by the designated Insurers, takes effect on the Policy Effective date of said policy at the hour stated in said policy, unless another effective date (the Endorsement Effective Date) is shown below, and expires concurrently with said policy.

NOTICE OF CANCELLATION TO CERTIFICATEHOLDERS

It is understood and agreed that:

If you have agreed under written contract to provide notice of cancellation to a party to whom the Agent of Record has issued a Certificate of Insurance, and if we cancel a policy term described on that Certificate of Insurance for any reason other than nonpayment of premium, then notice of cancellation will be provided to such Certificateholders at least 30 days in advance of the date cancellation is effective.

If notice is mailed, then proof of mailing to the last known mailing address of the Certificateholder on file with the Agent of Record will be sufficient to prove notice.

Any failure by us to notify such persons or organizations will not extend or invalidate such cancellation, or impose any liability or obligation upon us or the Agent of Record.

All other terms and conditions of the policy remain unchanged.

This endorsement, which forms a part of and is for attachment to the policy issued by the designated Insurers, takes effect on the Policy Effective date of said policy at the hour stated in said policy, unless another effective date (the Endorsement Effective Date) is shown below, and expires concurrently with said policy.

CERTIFICATE OF PROPERTY INSURANCE

5/1/2026

DATE (MM/DD/YYYY) 7/8/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

PRODUCER Lockton Companies, LLC Three City Place Dr., Ste. 900 St. Louis MO 63141-7081 (314) 432-0500 midwestcertificates@lockton.com	CONTACT NAME: PHONE (A/C, No, Ext): FAX (A/C, No): E-MAIL ADDRESS: PRODUCER CUSTOMER ID:
INSURED 102405 T-Mobile US, Inc. Its Subsidiaries and Affiliates 12920 SE 38th Street Bellevue WA 98006	INSURER A : Allianz Global Corporate & Specialty SE INSURER B : INSURER C : INSURER D : INSURER E : INSURER F :

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

LOCATION OF PREMISES / DESCRIPTION OF PROPERTY (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YYYY)	POLICY EXPIRATION DATE (MM/DD/YYYY)	COVERED PROPERTY	LIMITS
A	X **PROPERTY** CAUSES OF LOSS / DEDUCTIBLES BASIC / BUILDING BROAD / CONTENTS X SPECIAL EARTHQUAKE WIND FLOOD	USP00023325	5/1/2025	5/1/2026	BUILDING PERSONAL PROPERTY BUSINESS INCOME EXTRA EXPENSE RENTAL VALUE BLANKET BUILDING BLANKET PERS PROP X BLANKET BLDG & PP	$ XXXXXXX $ XXXXXXX $ XXXXXXX $ XXXXXXX $ XXXXXXX $ XXXXXXX $ XXXXXXX $ $5,000,000
	INLAND MARINE CAUSES OF LOSS NAMED PERILS	TYPE OF POLICY: NOT APPLICABLE POLICY NUMBER				$ XXXXXXX $ XXXXXXX $ XXXXXXX $ XXXXXXX
	CRIME TYPE OF POLICY	NOT APPLICABLE				$ XXXXXXX $ XXXXXXX $ XXXXXXX
	BOILER & MACHINERY / EQUIPMENT BREAKDOWN	NOT APPLICABLE				$ XXXXXXX $ XXXXXXX
						$ $

SPECIAL CONDITIONS / OTHER COVERAGES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

All Risk of Direct Physical Loss or Damage; Includes Property, BPP, BI, EE, Flood & Earth Movement; Replacement Cost - Property Damage; Actual Loss Sustained - Time Element. Waiver of Subrogation included as required by written contract. UP50577A - 366 Mount Zion Rd, Marlboro, NY 12542.

CERTIFICATE HOLDER

269621 American Tower Management, LLC
c/o American Tower, L.P
10 Presidential Way
Woburn MA 01801

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Bond No. BLNA880741

Tower Removal Bond

KNOW ALL PERSONS BY THESE PRESENTS: That we American Tower Management, Inc. of 116 Huntington Avenue Boston, MA 02116, a corporation duly organized under the laws of the State of _____, as Principal and The Hanover Insurance Company, as Surety are held and firmly bound unto Town of Marlborough New York 21 Milton Turnpike, Suite 200 Milton, NY 12547 as Obligee, in the amount of Seventy Five Thousand Dollars ($ 75,000.00) Dollars, for the payment of which, well and truly to made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents, the liability of the Surety being limited to the penal sum of this bond regardless of the number of years the bond is in effect.

Whereas, the Principal has obtained written approval from the Obligee for the construction and erection of a wireless communication tower located at 366 Mount Zion Rd., Marlboro, NY 12542

Now, therefore, if the principal well and truly complies with the maintenance, replacement, removal or relocation of the tower from the aforementioned address within 30 days upon receipt of written notice from the Obligee, to remove, replace, modify, or relocate the tower from said premises then this obligation is void, otherwise to remain in full force and effect unless cancelled as set forth below:

1. It shall be a condition precedent to any right of recovery hereunder that, in the event of any default on the part of the Principal, a written statement of the particular facts of such default shall be, within Thirty (30) days, delivered to Surety at its Home Office located at 440 Lincoln St Worcester, MA 01653 by registered mail to the Surety and the Surety shall not be obligated to perform Principals obligation until sixty (60) days after Surety's receipt of such statement.

2. The Surety may cancel this bond at any time by giving Thirty (30) days notice, by registered mail or overnight courier service to Town of Marlborough New York 21 Milton Turnpike, Suite 200 Milton, NY 12547 (Obligee). Such termination shall not affect liability incurred under this obligation prior to the effective date of such termination.

3. No action, suit, or proceeding shall be maintained against the Surety on this bond unless the action is brought within twelve (12) months of the cancellation date of this bond.

4. Regardless of the number of years this bond may be renewed; in no event shall the liability of the Surety exceed the penal sum of this bond.

5. It is understood that the non-renewal of this bond by the Surety, or failure or inability of the Principal to file a replacement bond shall not constitute a loss recoverable by the Obligee under this bond.

Signed, sealed, and witnessed this 22nd day of March, 2016.

American Tower Management, Inc.

_____

Witness

_____

The Hanover Insurance Company

_____

Witness

By: _____

Bobby Montrond , Attorney-in-Fact

Bond No.: BLNA880741

THE HANOVER INSURANCE COMPANY
MASSACHUSETTS BAY INSURANCE COMPANY
CITIZENS INSURANCE COMPANY OF AMERICA

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That THE HANOVER INSURANCE COMPANY and MASSACHUSETTS BAY INSURANCE COMPANY, both being corporations organized and existing under the laws of the State of New Hampshire, and CITIZENS INSURANCE COMPANY OF AMERICA, a corporation organized and existing under the laws of the State of Michigan, do hereby constitute and appoint

Bobby Montrond

of WELLS FARGO INS SERVICES, Boston, MA

and each is a true and lawful Attorney(s)-in-fact to sign, execute, seal, knowledge and deliver for, and on its behalf, and as its act and deed any place within the United States, or, if the following line be filled in, only within the area therein designated any and all bonds, recognizances, undertakings, contracts of indemnity or other writings obligatory in the nature thereof, as follows:

Tower Removal Program

in the amount of: $75,000.00

WHEREAS, the Board of Directors of the Company duly adopted a resolution on March 24, 2014 authorizing and empowering certain officers of the Company to appoint attorneys-in-fact of the Company to execute on the Company's behalf certain surety obligations and other writings and obligations related thereto (the "Original Surety Resolution");

WHEREAS, the Company's Board of Directors wishes to affirm the continued authority of all of the attorneys-in-fact that were issued pursuant to the Original Surety Resolution prior to the date hereof and that remain issued and outstanding; and

WHEREAS, the Company's Board of Directors wishes to restate the Original Resolution and adopt certain related resolutions.

NOW THEREFORE, be it hereby:

RESOLVED: That the authority of all attorneys-in-fact of the Company validly issued pursuant to the Original Surety Resolution prior to the date hereof and that remain issued and outstanding as of the date hereof are hereby ratified, confirmed and approved in all respects.

RESOLVED: That the President or any Vice President, in conjunction with any Vice President, be and they hereby are authorized and empowered to appoint Attorneys-in-fact of the Company, in its name and as it acts, to execute and acknowledge for and on its behalf as surety, any and all bonds, recognizances, contracts of indemnity, waivers of citation and all other writings obligatory in the nature thereof, with power to attach thereto the seal of the Company. Any such writings so executed by such Attorneys-in-fact shall be binding upon the Company as if they had been duly executed and acknowledged by the regularly elected officers of the Company in their own proper persons.

RESOLVED: That all such surety Attorneys-in-facts issued by the Company from and including the date hereof shall be authorized pursuant to the foregoing resolution (the "Surety Resolution").

RESOLVED: That the President or any Vice President of the Company, in conjunction with any Vice President, be and hereby are authorized and empowered to establish, and from time to time review and amend, written security measures, protocols and safeguards for all Attorneys-in-fact issued by the Company pursuant to the Surety Resolution, including without limitation, security features on the actual certificates issued by the Company and evidencing such Attorneys-in-fact.

IN WITNESS WHEREOF, THE HANOVER INSURANCE COMPANY, MASSACHUSETTS BAY INSURANCE COMPANY and CITIZENS INSURANCE COMPANY OF AMERICA have caused these presents to be sealed with their respective corporate seals, duly attested by two Vice Presidents, this **27th day of April, 2015.**

THE HANOVER INSURANCE COMPANY
MASSACHUSETTS BAY INSURANCE COMPANY
CITIZENS INSURANCE COMPANY OF AMERICA

Robert Thomas, Vice President

THE HANOVER INSURANCE COMPANY
MASSACHUSETTS BAY INSURANCE COMPANY
CITIZENS INSURANCE COMPANY OF AMERICA

J. Michael Pete, Vice President

THE COMMONWEALTH OF MASSACHUSETTS)
COUNTY OF WORCESTER) ss.

On this **27th** day of **April 2015** before me came the above named Vice Presidents of The Hanover Insurance Company, Massachusetts Bay Insurance Company and Citizens Insurance Company of America, to me personally known to be the individuals and officers described herein, and acknowledged that the seals affixed to the preceding instrument are the corporate seals of The Hanover Insurance Company, Massachusetts Bay Insurance Company and Citizens Insurance Company of America, respectively, and that the said corporate seals and their signatures as officers were duly affixed and subscribed to said instrument by the authority and direction of said Corporations.

DIANE J. MARINO
Notary Public
COMMONWEALTH OF MASSACHUSETTS
My Commission Expires
March 4, 2022

Diane J. Marino, Notary Public
My Commission Expires March 4, 2022

I, the undersigned Vice President of The Hanover Insurance Company, Massachusetts Bay Insurance Company and Citizens Insurance Company of America, hereby certify that the above and foregoing is a full, true and correct copy of the Original Power of Attorney issued by said Companies, and do hereby further certify that the said Powers of Attorney are still in force and effect.

GIVEN under my hand and the seals of said Companies, at Worcester, Massachusetts, this **22nd** day of **March 2016**.

CERTIFIED COPY

Theodore G. Martinez, Vice President

CENTERLINE

EXHIBIT 10

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 09/24/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Hylant - Grand Rapids 85 Campau Ave. NW, Ste 100 Grand Rapids MI 49503 License#: 23894 CENTCOM-06	**CONTACT NAME:** Jenny Nugent **PHONE (A/C, No, Ext):** **FAX (A/C, No):** **E-MAIL ADDRESS:** jenny.nugent@hylant.com
INSURED Centerline Communications LLC 750 W Center St West Bridgewater, MA 02379-1545	**INSURER(S) AFFORDING COVERAGE** — **NAIC #** **INSURER A :** Continental Insurance Company — 35289 **INSURER B :** Berkley Assurance Company — 39462 **INSURER C :** National Fire Ins Co Hartford — 20478 **INSURER D :** American Casualty Co of Reading PA — 20427 **INSURER E :** Navigators Specialty Ins Co — 36056 **INSURER F :**

COVERAGES **CERTIFICATE NUMBER:** 588842997 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
C	X **COMMERCIAL GENERAL LIABILITY** [ ] CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: [ ] POLICY [X] PRO-JECT [ ] LOC [ ] OTHER:	Y	Y	7094707132	11/8/2024	11/8/2025	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 100,000 $ 15,000 $ 1,000,000 $ 2,000,000 $ 2,000,000
D	**AUTOMOBILE LIABILITY** X ANY AUTO [ ] OWNED AUTOS ONLY [ ] SCHEDULED AUTOS X HIRED AUTOS ONLY X NON-OWNED AUTOS ONLY	Y	Y	7094722701	11/8/2024	11/8/2025	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
A	X **UMBRELLA LIAB** X OCCUR **EXCESS LIAB** [ ] CLAIMS-MADE [ ] DED X RETENTION $ 10,000	Y	Y	7094741720	11/8/2024	11/8/2025	EACH OCCURRENCE AGGREGATE	$ 10,000,000 $ 10,000,000
C	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY** ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N [N] **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below	N / A	Y	7094721290	11/8/2024	11/8/2025	X PER STATUTE [ ] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ 1,000,000 $ 1,000,000 $ 1,000,000
B E C	Professional Liability Pollution Liability Installation Floater	N Y	Y Y	PCAB-5026348-1124 NY24ECPZ064AWIC 7094707132	11/8/2024 11/8/2024 11/8/2024	11/8/2025 11/8/2025 11/8/2025	Ea Claim/Aggregate Ea Incident/Aggregate Limit	5,000,000 5,000,000 400,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

Town of Marlborough
21 Milton Turnpike
Suite 200
Milton, NY 12547

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Nicholas R Hylant

NEW YORK STATE | Workers' Compensation Board

CERTIFICATE OF NYS WORKERS' COMPENSATION INSURANCE COVERAGE

1a. Legal Name & Address of Insured (use street address only) CENTERLINE COMMUNICATIONS LLC 750 W CENTER ST STE 3 WEST BRIDGEWATER, MA 02379-1545 Work Location of Insured *(Only required if coverage is specifically limited to certain locations in New York State, i.e., a Wrap-Up Policy)*	1b. Business Telephone Number of Insured 1c. NYS Unemployment Insurance Employer Registration Number of Insured 53-374864 1d. Federal Employer Identification Number of Insured or Social Security Number 61-1851360
2. Name and Address of Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder) Town of Marlborough 21 Milton Turnpike Suite 200 Milton, NY 12547	3a. Name of Insurance Carrier National Fire Insurance Company of Hartford 3b. Policy Number of Entity Listed in Box "1a" WC 7 94721290 3c. Policy effective period 11/08/2024 to 11/08/2025 3d. The Proprietor, Partners or Executive Officers are ☐ included. (Only check box if all partners/officers included) ☐ all excluded or certain partners/officers excluded.

This certifies that the insurance carrier indicated above in box "3" insures the business referenced above in box "1a" for workers' compensation under the New York State Workers' Compensation Law. **(To use this form, New York (NY) must be listed under Item 3A on the INFORMATION PAGE of the workers' compensation insurance policy).** The Insurance Carrier or its licensed agent will send this Certificate of Insurance to the entity listed above as the certificate holder in box "2".

The insurance carrier must notify the above certificate holder and the Workers' Compensation Board within 10 days IF a policy is canceled due to nonpayment of premiums or within 30 days IF there are reasons other than nonpayment of premiums that cancel the policy or eliminate the insured from the coverage indicated on this Certificate.

(These notices may be sent by regular mail.) **Otherwise, this Certificate is valid for one year after this form is approved by the insurance carrier or its licensed agent, or until the policy expiration date listed in box "3c", whichever is earlier.**

This certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend or alter the coverage afforded by the policy listed, nor does it confer any rights or responsibilities beyond those contained in the referenced policy.

This certificate may be used as evidence of a Workers' Compensation contract of insurance only while the underlying policy is in effect.

Please Note: Upon cancellation of the workers' compensation policy indicated on this form, if the business continues to be named on a permit, license or contract issued by a certificate holder, the business must provide that certificate holder with a new Certificate of Workers' Compensation Coverage or other authorized proof that the business is complying with the mandatory coverage requirements of the New York State Workers' Compensation Law.

Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has the coverage as depicted on this form.

Approved by: Ilene Greene
(Print name of authorized representative or licensed agent of insurance carrier)

Approved by: Ilene M. Greene 09/24/2025
(Signature) (Date)

Title: Policy Support Specialist

Telephone Number of authorized representative or licensed agent of insurance carrier: 407-804-7513

Please Note: Only insurance carriers and their licensed agents are authorized to issue Form C-105.2. Insurance brokers are NOT authorized to issue it.

Workers' Compensation Law

Section 57. Restriction on issue of permits and the entering into contracts unless compensation is secured.

1. The head of a state or municipal department, board, commission or office authorized or required by law to issue any permit for or in connection with any work involving the employment of employees in a hazardous employment defined by this chapter, and notwithstanding any general or special statute requiring or authorizing the issue of such permits, shall not issue such permit unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that compensation for all employees has been secured as provided by this chapter. Nothing herein, however, shall be construed as creating any liability on the part of such state or municipal department, board, commission or office to pay any compensation to any such employee if so employed.

2. The head of a state or municipal department, board, commission or office authorized or required by law to enter into any contract for or in connection with any work involving the employment of employees in a hazardous employment defined by this chapter, notwithstanding any general or special statute requiring or authorizing any such contract, shall not enter into any such contract unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that compensation for all employees has been secured as provided by this chapter.

NEW YORK STATE | Workers' Compensation Board

CERTIFICATE OF INSURANCE COVERAGE
NYS DISABILITY AND PAID FAMILY LEAVE BENEFITS LAW

PART 1. To be completed by NYS disability and Paid Family Leave benefits carrier or licensed insurance agent of that carrier

1a. Legal Name & Address of Insured (use street address only)

Centerline Communications LLC
750 W Center St #301
West Bridgewater, MA 02379

Work Location of Insured *(Only required if coverage is specifically limited to certain locations in New York State, i.e., Wrap-Up Policy)*

1b. Business Telephone Number of Insured

1c. Federal Employer Identification Number of Insured or Social Security Number

61-1851360

2. Name and Address of Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder)

Town of Marlborough
21 Milton Turnpike
Suite 200
Milton, NY 12547

3a. Name of Insurance Carrier

Metropolitan Life Insurance Company

3b. Policy Number of Entity Listed in Box 1a

257737

3c. Policy Effective Period:

January 1, 2025 to **December 31, 2025**

4. Policy provides the following benefits:
- [x] A. Both disability and Paid Family Leave benefits.
- [ ] B. Disability benefits only.
- [ ] C. Paid Family Leave benefits only.

5. Policy covers:
- [x] A. All of the employer's employees eligible under the NYS Disability and Paid Family Leave Benefits Law.
- [ ] B. Only the following class or classes of employer's employees:

Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has NYS disability and/or Paid Family Leave benefits insurance coverage as described above.

Date Signed: 09/24/2025 By: Precious Jackson

(Signature of insurance carrier's authorized representative or NYS licensed insurance agent of that insurance carrier)

Telephone Number **spu_group_contracts@metlife.com** Name and Title: **Precious Jackson, State Plan Consultant**

IMPORTANT: If Boxes 4A and 5A are checked, and this form is signed by the insurance carrier's authorized representative or NYS Licensed Insurance Agent of that carrier, this certificate is COMPLETE. Mail it directly to the certificate holder.

If Box 4B, 4C or 5B is checked, this certificate is NOT COMPLETE for purposes of Section 220, Subd. 8 of the NYS Disability and Paid Family Leave Benefits Law. It must be emailed to PAU@wcb.ny.gov or it can be mailed for completion to the Workers' Compensation Board, Plans Acceptance Unit, PO Box 5200, Binghamton, NY 13902-5200.

PART 2. To be completed by the NYS Workers' Compensation Board (Only if Box 4B, 4C or 5B have been checked)

State of New York
Workers' Compensation Board

According to information maintained by the NYS Workers' Compensation Board, the above-named employer has complied with the NYS Disability and Paid Family Leave Benefits Law(Article 9 of the Workers' Compensation Law) with respect to all of their employees.

Date Signed _____ By _____

(Signature of Authorized NYS Workers' Compensation Board Employee)

Telephone Number _____ Name and Title _____

Please Note: *Only insurance carriers licensed to write NYS disability and Paid Family Leave benefits insurance policies and NYS licensed insurance agents of those insurance carriers are authorized to issue Form DB-120.1.* ***Insurance brokers are NOT authorized to issue this form.***

Additional Instructions for Form DB-120.1

By signing this form, the insurance carrier identified in Box 3 on this form is certifying that it is insuring the business referenced in Box 1a for disability and/or Paid Family Leave benefits under the NYS Disability and Paid Family Leave Benefits Law. The insurance carrier or its licensed agent will send this Certificate of Insurance Coverage (Certificate) to the entity listed as the certificate holder in Box 2.

The insurance carrier must notify the above certificate holder and the Workers' Compensation Board within 10 days IF a policy is cancelled due to nonpayment of premiums or within 30 days IF there are reasons other than nonpayment of premiums that cancel the policy or eliminate the insured from coverage indicated on this Certificate. (These notices may be sent by regular mail.) Otherwise, this Certificate is valid for one year after this form is approved by the insurance carrier or its licensed agent, or until the policy expiration date listed in Box 3c, whichever is earlier.

This Certificate is issued as a matter of information only and confers no rights upon the certificate holder. This Certificate does not amend, extend or alter the coverage afforded by the policy listed, nor does it confer any rights or responsibilities beyond those contained in the referenced policy.

This Certificate may be used as evidence of a NYS disability and/or Paid Family Leave benefits contract of insurance only while the underlying policy is in effect.

Please Note: Upon the cancellation of the disability and/or Paid Family Leave benefits policy indicated on this form, if the business continues to be named on a permit, license or contract issued by a certificate holder, the business must provide that certificate holder with a new Certificate of Insurance Coverage for NYS disability and/or Paid Family Leave Benefits or other authorized proof that the business is complying with the mandatory coverage requirements of the NYS Disability and Paid Family Leave Benefits Law.

NYS DISABILITY AND PAID FAMILY LEAVE BENEFITS LAW

§220. Subd. 8

(a) The head of a state or municipal department, board, commission or office authorized or required by law to issue any permit for or in connection with any work involving the employment of employees in employment as defined in this article, and not withstanding any general or special statute requiring or authorizing the issue of such permits, shall not issue such permit unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that the payment of disability benefits and after January first, two thousand and twenty-one, the payment of family leave benefits for all employees has been secured as provided by this article. Nothing herein, however, shall be construed as creating any liability on the part of such state or municipal department, board, commission or office to pay any disability benefits to any such employee if so employed.

(b) The head of a state or municipal department, board, commission or office authorized or required by law to enter into any contract for or in connection with any work involving the employment of employees in employment as defined in this article and notwithstanding any general or special statute requiring or authorizing any such contract, shall not enter into any such contract unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that the payment of disability benefits and after January first, two thousand eighteen, the payment of family leave benefits for all employees has been secured as provided by this article.