

November 20, 2019

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

Re: **Notice of Exempt Modification – Facility Modification  
Butternut Hollow Road, Greenwich, Connecticut**

Dear Ms. Bachman:

Cellco Partnership d/b/a Verizon Wireless (“Cellco”) currently maintains twelve (12) antennas at the 130-foot level on the existing 180-foot tower off Butternut Hollow Road in Greenwich, Connecticut (the “Property”). The tower is owned by the State of Connecticut, Department of Emergency Services and Public Protection (“DESPP”). The Siting Council approved Cellco’s use of the DESPP tower in 1992 (Docket No. 150). A copy of the Council’s Docket No. 150 approval is included in [Attachment 1](#).

Cellco now intends to modify its facility by replacing six (6) of its existing antennas with six (6) new antennas and installing six (6) remote radio heads (“RRHs”), and one (1) HYBRIFLEX™ fiber optic antenna cable. A set of project plans showing the proposed facility modifications and equipment specifications are included in [Attachment 2](#).

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Greenwich’s First Selectman, Peter Tesei; Katie DeLuca, Greenwich’s Director of Planning and Zoning; DESPP, the tower owner; and Aquarion Water Company (“Aquarion”), the owner of the Property.<sup>1</sup>

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<sup>1</sup> It remains unclear whether the building associated with the State Police tower is located in the Route 15 ROW or on property owned by Aquarion. In an excess of caution, we are sending a copy of this notice to both the Connecticut Department of Transportation and Aquarion.

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Page 2

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

1. The proposed modifications will not result in an increase in the height of the existing tower. Cellco's replacement antennas and RRHs will be installed at a centerline height of 130 feet on the 180-foot tower.
2. The proposed modifications will not involve any change to ground-mounted equipment and, therefore, will not require the extension of the site boundary.
3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
4. The installation of six (6) new antennas and six (6) RRHs will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. A cumulative General Power Density table for Cellco's modified facility is included in Attachment 3.
5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
6. The tower and its foundation, with certain modifications, and antenna mounting brackets can support Cellco's proposed equipment modifications. (*See* Detailed Structural Analysis Report, including Tower Reinforcement Drawings, included in Attachment 4).

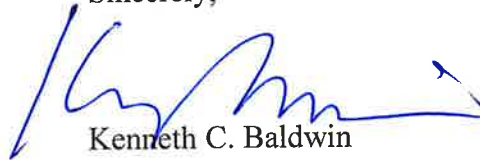
A copy of the parcel map and Property owner information is included in Attachment 5. A Certificate of Mailing verifying that this filing was sent to municipal officials and the Property owner is included in Attachment 6.

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

# Robinson+Cole

Melanie A. Bachman, Esq.  
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Page 3

Sincerely,



Kenneth C. Baldwin

Enclosures

Copy to:

Peter Tesei, Greenwich First Selectman  
Katie DeLuca, Greenwich Director of Planning and Zoning  
Brian Benito, DESPP  
Aquarion Water Company  
State of Connecticut Department of Transportation  
Tim Parks

# **ATTACHMENT 1**



ORIGINAL

DOCKET NO. 150 - An application of the State of Connecticut, Department of Public Safety, Division of State Police for a Certificate of Environmental Compatibility and Public Need for the construction, operation, and maintenance of a telecommunications facility located on Butternut Hollow Road, in the Town of Greenwich, Connecticut.

Connecticut  
Siting  
Council

August 4, 1992

DECISION AND ORDER

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

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

1. The self-supporting, lattice tower shall be designed no taller than necessary to provide the proposed communications, and in no event shall the tower exceed the proposed tower height of 200 feet above ground level, with antennas and all appurtenances, to maintain a clear microwave path from the Butternut Hollow Road site to the Greenwich Hospital rooftop facility.
2. Prior to construction, a Phase I archaeological survey of the facility site shall be conducted by a professional archaeologist with results submitted to the Council. All artifacts shall be made available for inspection by the Connecticut Historic Preservation Office and, if necessary, a Phase II archaeological survey shall be prepared and submitted to the Council.
3. New connecting utility lines to the facility shall be undergrounded along Butternut Hollow Road.

4. The Certificate Holder shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of State agencies. The D&M Plan shall be submitted and approved by the Council prior to the commencement of construction and shall also include:
  - A. Final comprehensive site plans detailing the tower location, tower foundation specifications and profiles, tower height and antenna placements, equipment building specifications and profiles, placement of the propane tank, all grading and cut and fill details showing existing and final contour lines and elevations, the security fence, and landscaping and placement of vegetative screening.
  - B. Detailed plans, including grading, for the final route of the site's access road, designed to minimize tree clearing and excessive cutting of earth.
  - C. Detailed plans for the underground utility line from the nearest existing utility pole on Butternut Hollow Road to the tower site. Such plans are to be developed with review by the Connecticut Light and Power Company and the Town of Greenwich.
  - D. Plans for erosion and sedimentation control consistent with the Connecticut Guidelines for Soil Erosion and Sediment Control, as amended, including measures for the protection of wetlands, watercourses, and Putnam Lake.
  - E. Plans for the final disposal of excess excavated material from trenching activities.
  - F. Plans and procedures for blasting, including explosion protection, and notification to adjacent property owners.
  - G. Final construction schedule.
5. Selective vegetative clearing shall be allowed prior to approval of the D&M plan to permit reconnaissance necessary to prepare the D&M Plan and the Phase I archaeological survey.
6. The Certificate Holder shall comply with existing and future radio frequency (RF) standards promulgated by State or federal regulatory agencies. Upon the establishment of any new governmental RF standards, the facility granted herein shall be brought into compliance with such standards.

7. The Certificate Holder shall provide the Council a recalculated report of electromagnetic radio frequency power density if and when circumstances in operation cause a change in power density above the levels originally calculated and provided in the application.
8. The Certificate Holder shall permit public or private entities to share space on the proposed tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.
9. The Certificate Holder shall notify the Council of the commencement of construction no less than seven days prior to construction and shall provide a report to the Council upon completion of construction, including the final construction costs and date of commercial operation.
10. If the facility does not initially provide, or permanently ceases to provide telecommunications service following completion of construction, this Decision and Order shall be void, and the tower and all associated equipment shall be dismantled and removed or reapplication for any new use shall be made to the Council before any such new use is made.

Unless otherwise approved by the Council, this Decision and Order shall be void if all construction authorized herein is not completed within five years of the effective date of this Decision and Order or within five years after all appeals to this Decision and Order have been resolved.

Pursuant to CGS Section 16-50p, we hereby directed that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed below, and notice of issuance shall be published in The Greenwich Time and The Greenwich News.

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

The parties to this proceeding are:

PARTIES

Connecticut State Police

ITS REPRESENTATIVES

L. D. McCallum and  
Stephen R. Sarnoski  
Office of the Attorney  
General  
Mackenzie Hall  
110 Sherman Street  
Hartford, CT 06105  
(203) 566-7570

Town of Greenwich

Attorney John K. Wetmore  
Assistant Town Attorney  
Town of Greenwich  
101 Field Point Road  
Greenwich, CT 06830

Metro Mobile CTS, Inc.

Henry H. Sprague III  
Robinson and Cole  
One Commercial Plaza  
Hartford, CT 06103-3597  
(203) 275-8200

INTERVENOR

Springwich Cellular  
Limited Partnership

ITS REPRESENTATIVES


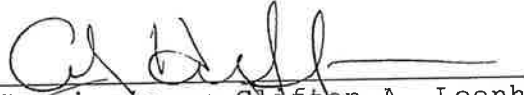


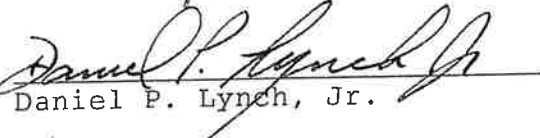
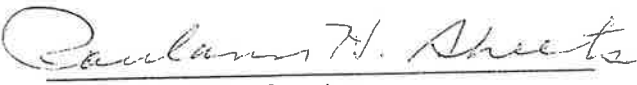

Peter J. Tyrrell, Esq.  
Springwich Cellular Limited  
Partnership  
227 Church Street  
New Haven, CT 06510  
(203) 771-7381

TEF/bd

6264E

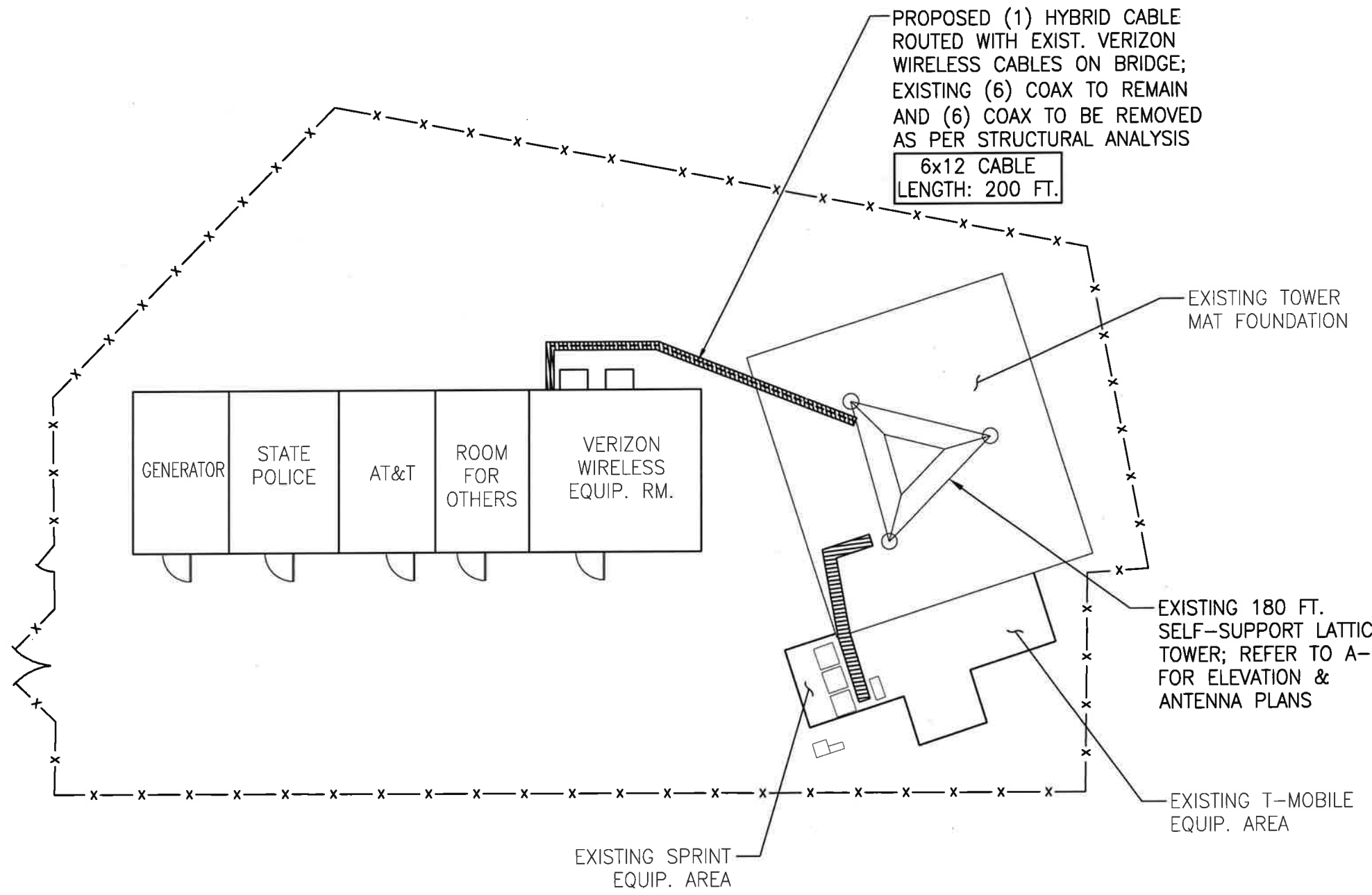
CERTIFICATION

The undersigned members of the Connecticut Siting Council (Council) hereby certify that they have heard this case, or read the record thereof, in DOCKET NO. 150 - An application of the State of Connecticut, Department of Public Safety, Division of State Police for a Certificate of Environmental Compatibility and Public Need for the construction, operation, and maintenance of a telecommunications facility located on Butternut Hollow Road, in the Town of Greenwich, Connecticut, and voted as follows to approve the site:

<u>Council Members</u>	<u>Vote Cast</u>
 Mortimer A. Gelston Chairman	YES
 Commissioner Clifton A. Leonhardt Designee: Gerald J. Heffernan	ABSTAIN
 Commissioner Timothy R.E. Keeney Designee: Brian Emerick	YES
 Harry E. Covey	YES
 Daniel P. Lynch, Jr.	YES
<hr/>	ABSENT
Gloria Dibble Pond	
 Paulann H. Sheets	YES
<hr/>	ABSENT
William H. Smith	
 Colin C. Tait	ABSTAIN

Dated at New Britain, Connecticut, August 4, 1992.

# **ATTACHMENT 2**



- NOTES:
1. COMPOUND PLAN IS BASED EXISTING DRAWINGS ON FILE WITH THE CT SITING COUNCIL AND A LIMITED DESIGN VISIT ON 9-23-19 FOR THE PURPOSE OF DETERMINING CABLE LENGTHS. A COMPOUND SURVEY WAS NOT PERFORMED.
  2. PLANS ARE DIAGRAMMATIC ONLY AND NOT TO BE SCALED.
  3. REFER TO STRUCTURAL ANALYSIS BY OTHERS.

**verizon**  
WIRELESS COMMUNICATIONS FACILITY

20 ALEXANDER DRIVE  
WALLINGFORD, CT 06492

**On Air Engineering, LLC**

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

LICENSURE



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

SUBMITTALS

NO	DATE	REVISION
0	10.30.19	REVIEW

NO	DATE	DESCRIPTION

DRAWN BY: MF  
CHECKED BY: DW  
PROJECT NAME:  
**ANTMO  
AWS-PCS-850-LTE  
DESIGN EXHIBITS**

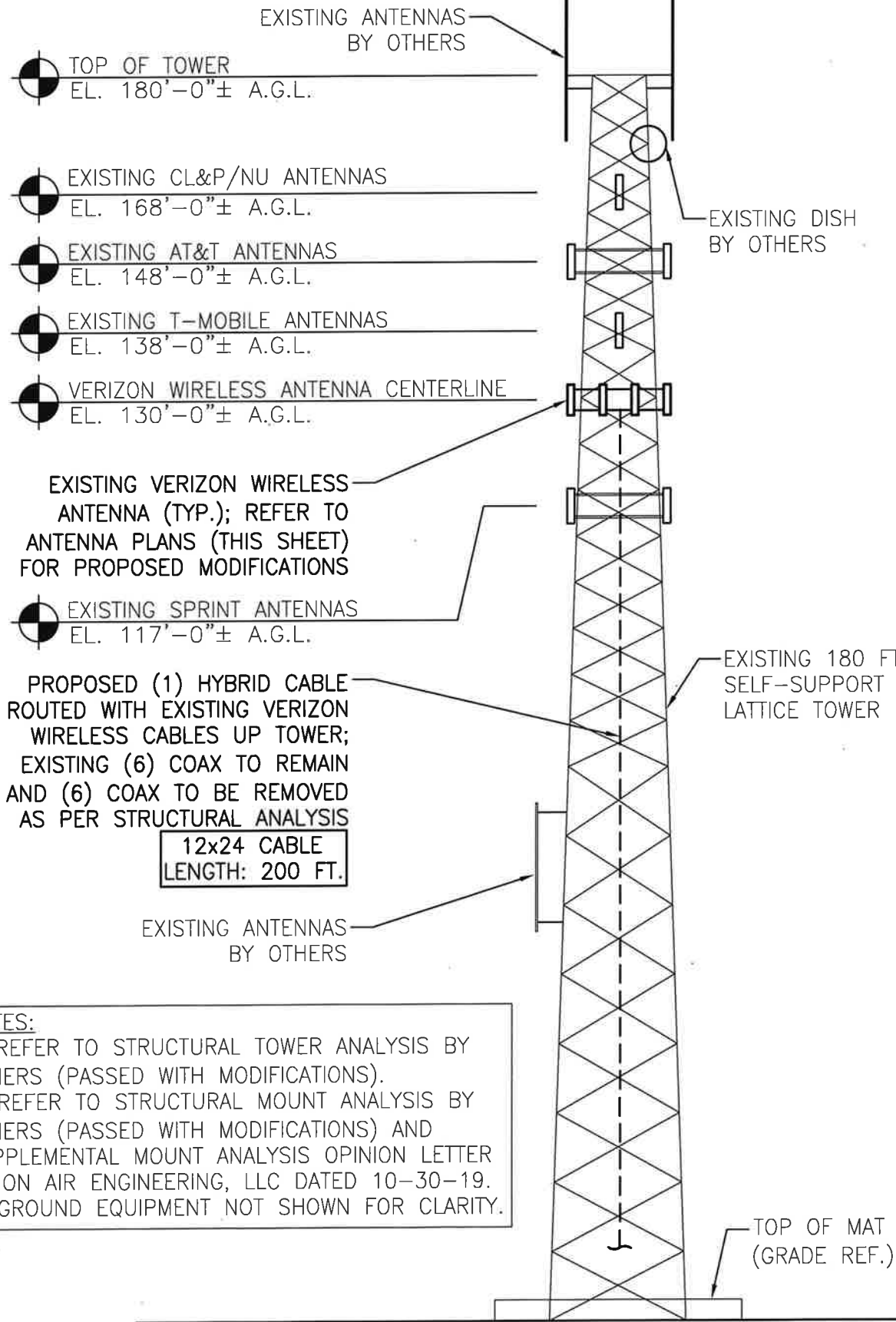
SITE NAME:  
**BUTTERNUT CT**

SITE ADDRESS:  
**CT STATE POLICE TOWER  
BUTTERNUT HOLLOW RD.  
GREENWICH, CT 06830**

SHEET TITLE:  
**COMPOUND PLAN**

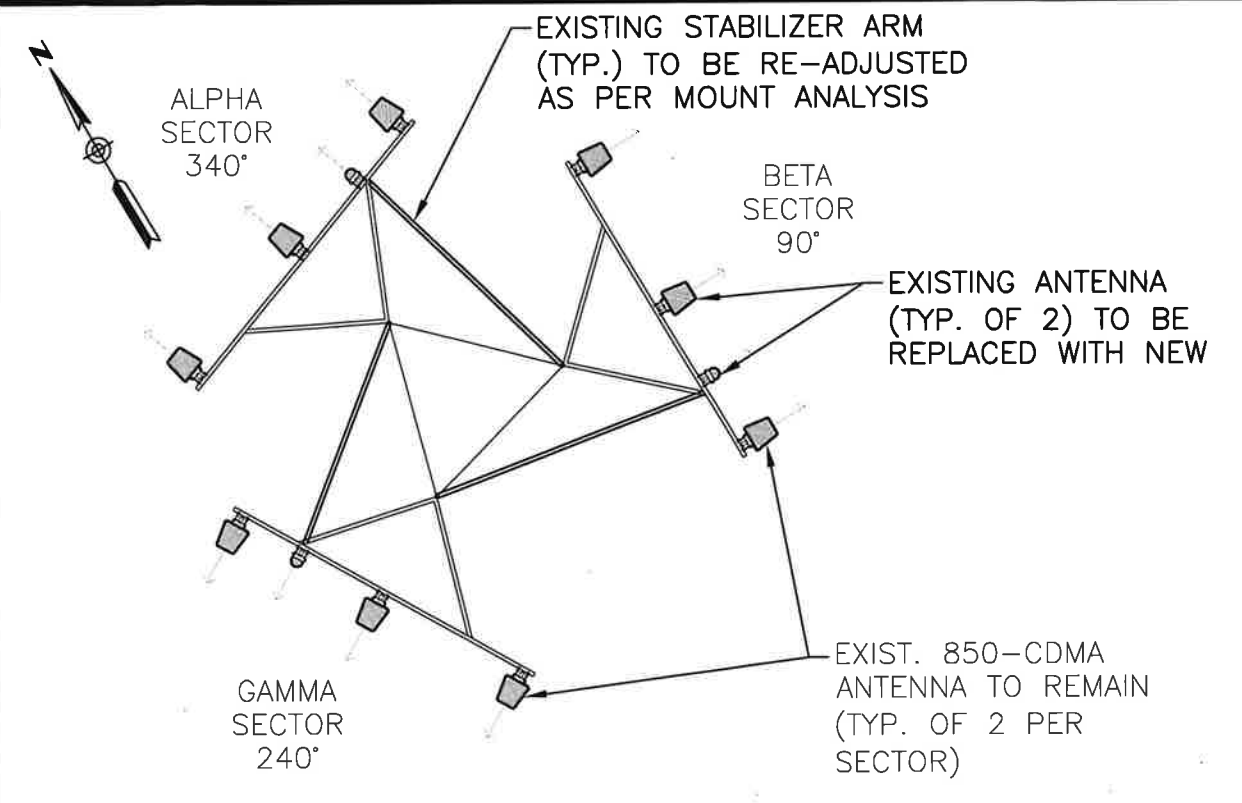
SHEET NUMBER:  
**A-1**

**1 COMPOUND PLAN**  
Scale: 1/16" = 1'-0"

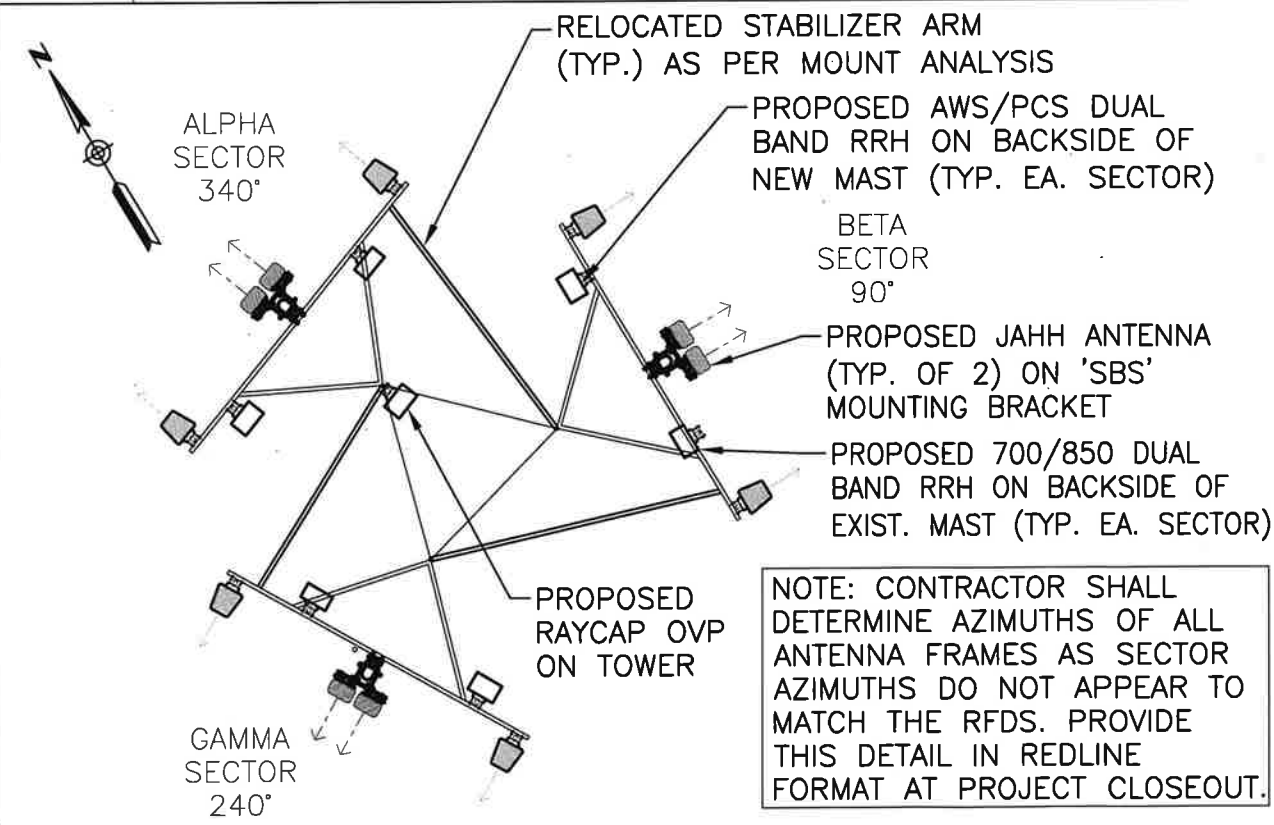


**NOTES:**  
 1. REFER TO STRUCTURAL TOWER ANALYSIS BY OTHERS (PASSED WITH MODIFICATIONS).  
 2. REFER TO STRUCTURAL MOUNT ANALYSIS BY OTHERS (PASSED WITH MODIFICATIONS) AND SUPPLEMENTAL MOUNT ANALYSIS OPINION LETTER BY ON AIR ENGINEERING, LLC DATED 10-30-19.  
 3. GROUND EQUIPMENT NOT SHOWN FOR CLARITY.

**1 ELEVATION**  
 Scale: NTS



**2 ANTENNA PLAN @ 130 FT. - EXISTING**  
 SCALE: 1/8" = 1'-0"

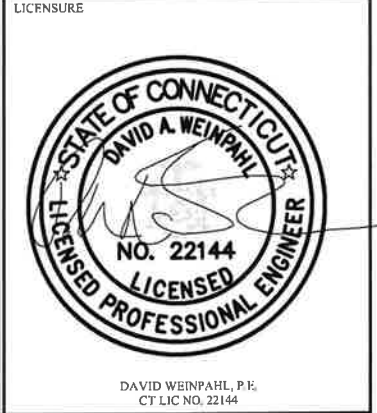


**NOTE:** CONTRACTOR SHALL DETERMINE AZIMUTHS OF ALL ANTENNA FRAMES AS SECTOR AZIMUTHS DO NOT APPEAR TO MATCH THE RFDS. PROVIDE THIS DETAIL IN REDLINE FORMAT AT PROJECT CLOSEOUT.

**3 ANTENNA PLAN @ 130 FT. - PROPOSED**  
 SCALE: 1/8" = 1'-0"

**verizon**  
 WIRELESS COMMUNICATIONS FACILITY  
 20 ALEXANDER DRIVE  
 WALLINGFORD, CT 06492

**On Air Engineering, LLC**  
 88 Foundry Pond Road  
 Cold Spring, NY 10516  
 201-456-4624  
 onair@optonline.net



**SUBMITTALS**

NO	DATE	REVIEW
0	10.30.19	REVIEW

NO	DATE	DESCRIPTION

**PROJECT NAME:**  
 ANTMO  
 AWS-PCS-850-LTE  
 DESIGN EXHIBITS

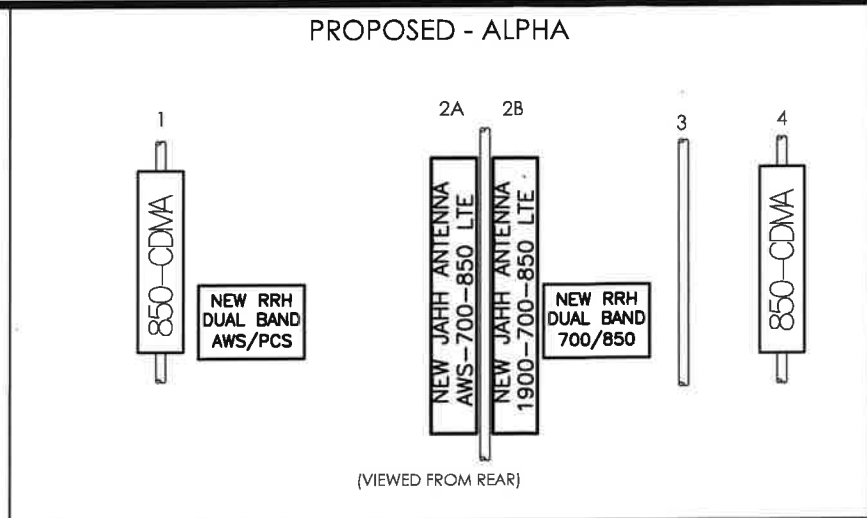
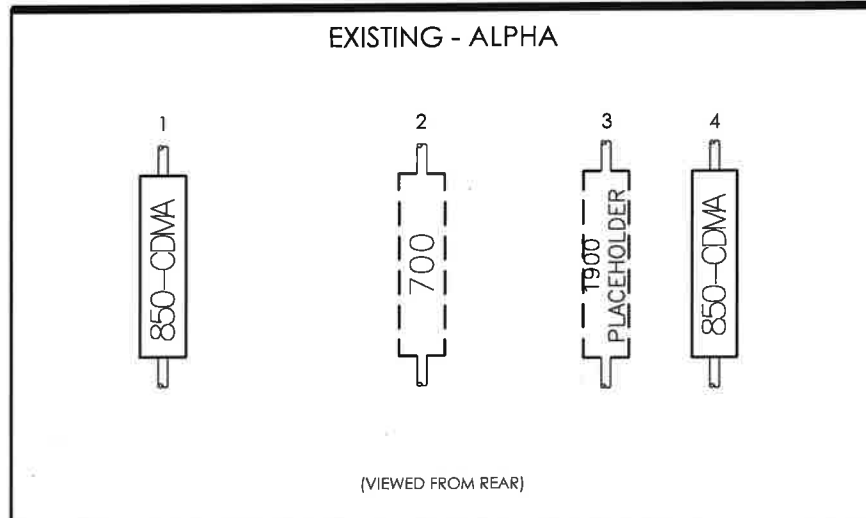
**SITE NAME:**  
 BUTTERNUT CT

**SITE ADDRESS:**  
 CT STATE POLICE TOWER  
 BUTTERNUT HOLLOW RD.  
 GREENWICH, CT 06830

**SHEET TITLE:**  
 ELEVATION &  
 ANTENNA PLANS

**SHEET NUMBER:**  
 A-2





SECTOR: ALPHA

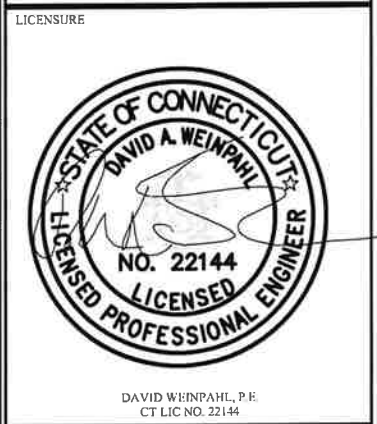
POSITION	EXISTING ANTENNA	PROPOSED		
		ANTENNA	RRH	OVP
1	850-CDMA	EXISTING TO REMAIN	-	-
2	700	NEW JAHH SEE NOTE 1	AWS/PCS DUAL BAND; SEE NOTE 2	SEE NOTE 4
3	1900 PLACEHOLDER	NEW JAHH SEE NOTE 1	700/850 DUAL BAND; SEE NOTE 3	-
4	850-CDMA	EXISTING TO REMAIN	-	-

NOTES:  
 1. NEW JAHH ANTENNAS ON 'SBS' BRACKETS AT POS. 2 MAST; LEAVE POS. 3 MAST SPARE FOR RRH SUPPORT  
 2. NEW DUAL BAND RRH TO BE MOUNTED ON BACKSIDE OF NEW MAST; SEE 3/A-2  
 3. NEW DUAL BAND RRH TO BE MOUNTED ON BACKSIDE OF EXISTING POS. 3 MAST; SEE 3/A-2  
 4. NEW 12-CKT. RAYCAP OVP TO BE MOUNTED ON TOWER AND FEED ALL RRH'S, ALL SECTORS; SEE 3/A-2

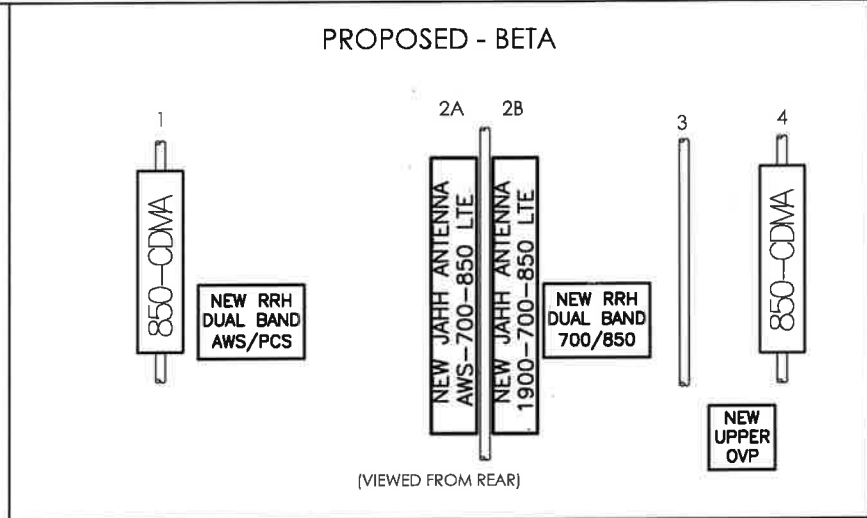
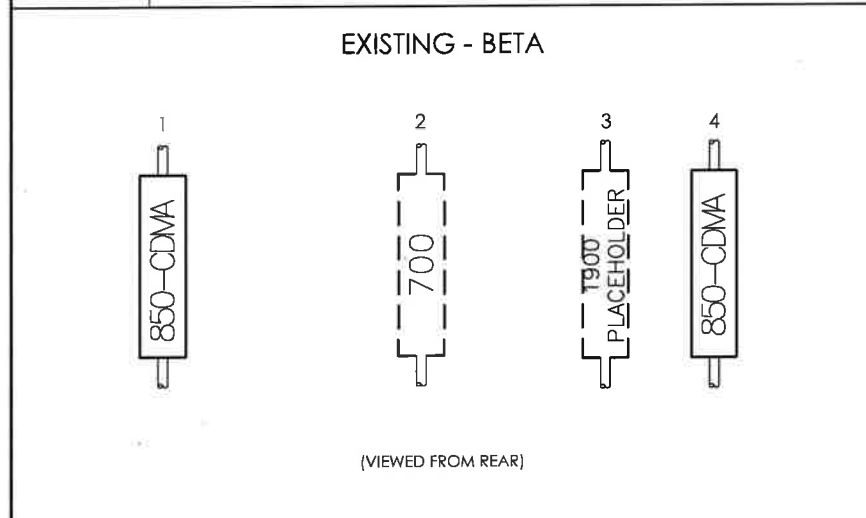
**verizon**  
 WIRELESS COMMUNICATIONS FACILITY

20 ALEXANDER DRIVE  
 WALLINGFORD, CT 06492

**On Air Engineering, LLC**  
 88 Foundry Pond Road  
 Cold Spring, NY 10516  
 201-456-4624  
 onair@optionline.net



**1 ANTENNA SECTOR CONFIGURATIONS - ALPHA**  
 Scale: N.T.S.

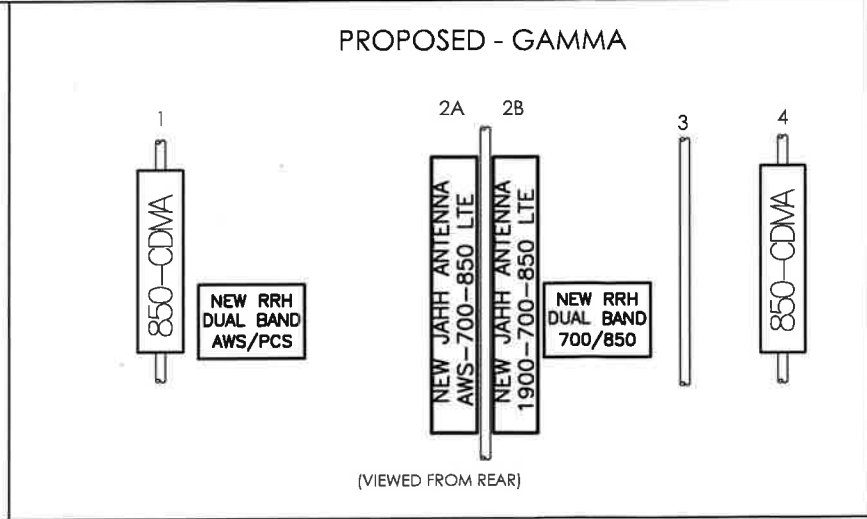
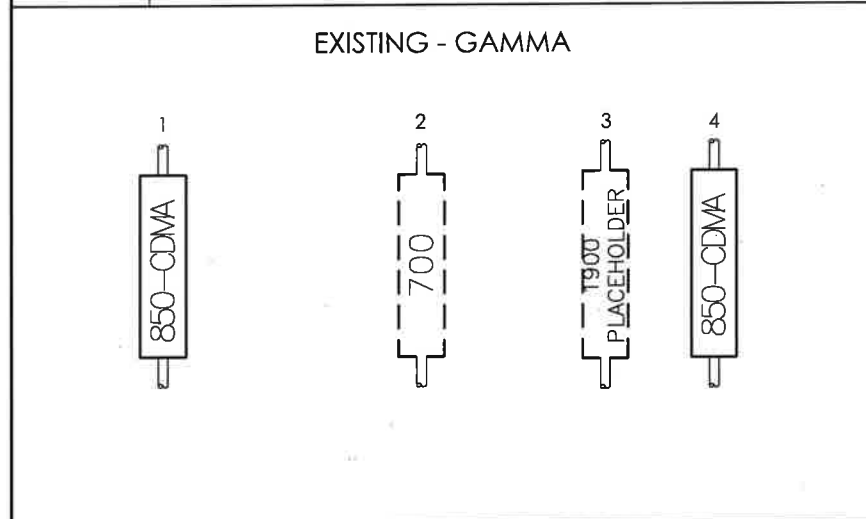


SECTOR: BETA

POSITION	EXISTING ANTENNA	PROPOSED		
		ANTENNA	RRH	OVP
1	850-CDMA	EXISTING TO REMAIN	-	-
2	700	NEW JAHH SEE NOTE 1	AWS/PCS DUAL BAND; SEE NOTE 2	SEE NOTE 4
3	1900 PLACEHOLDER	NEW JAHH SEE NOTE 1	700/850 DUAL BAND; SEE NOTE 3	-
4	850-CDMA	EXISTING TO REMAIN	-	-

NOTES:  
 1. NEW JAHH ANTENNAS ON 'SBS' BRACKETS AT POS. 2 MAST; LEAVE POS. 3 MAST SPARE FOR RRH SUPPORT  
 2. NEW DUAL BAND RRH TO BE MOUNTED ON BACKSIDE OF NEW MAST; SEE 3/A-2  
 3. NEW DUAL BAND RRH TO BE MOUNTED ON BACKSIDE OF EXISTING POS. 3 MAST; SEE 3/A-2  
 4. NEW 12-CKT. RAYCAP OVP TO BE MOUNTED ON TOWER AND FEED ALL RRH'S, ALL SECTORS; SEE 3/A-2

**2 ANTENNA SECTOR CONFIGURATIONS - BETA**  
 Scale: N.T.S.



SECTOR: GAMMA

POSITION	EXISTING ANTENNA	PROPOSED		
		ANTENNA	RRH	OVP
1	850-CDMA	EXISTING TO REMAIN	-	-
2	700	NEW JAHH SEE NOTE 1	AWS/PCS DUAL BAND; SEE NOTE 2	SEE NOTE 4
3	1900 PLACEHOLDER	NEW JAHH SEE NOTE 1	700/850 DUAL BAND; SEE NOTE 3	-
4	850-CDMA	EXISTING TO REMAIN	-	-

NOTES:  
 1. NEW JAHH ANTENNAS ON 'SBS' BRACKETS AT POS. 2 MAST; LEAVE POS. 3 MAST SPARE FOR RRH SUPPORT  
 2. NEW DUAL BAND RRH TO BE MOUNTED ON BACKSIDE OF NEW MAST; SEE 3/A-2  
 3. NEW DUAL BAND RRH TO BE MOUNTED ON BACKSIDE OF EXISTING POS. 3 MAST; SEE 3/A-2  
 4. NEW 12-CKT. RAYCAP OVP TO BE MOUNTED ON TOWER AND FEED ALL RRH'S, ALL SECTORS; SEE 3/A-2

**3 ANTENNA SECTOR CONFIGURATIONS - GAMMA**  
 Scale: N.T.S.

SUBMITTALS

NO	DATE	REVIEW	DESCRIPTION
0	10.30.19	REVIEW	

PROJECT NAME:  
**ANTMO  
 AWS-PCS-850-LTE  
 DESIGN EXHIBITS**

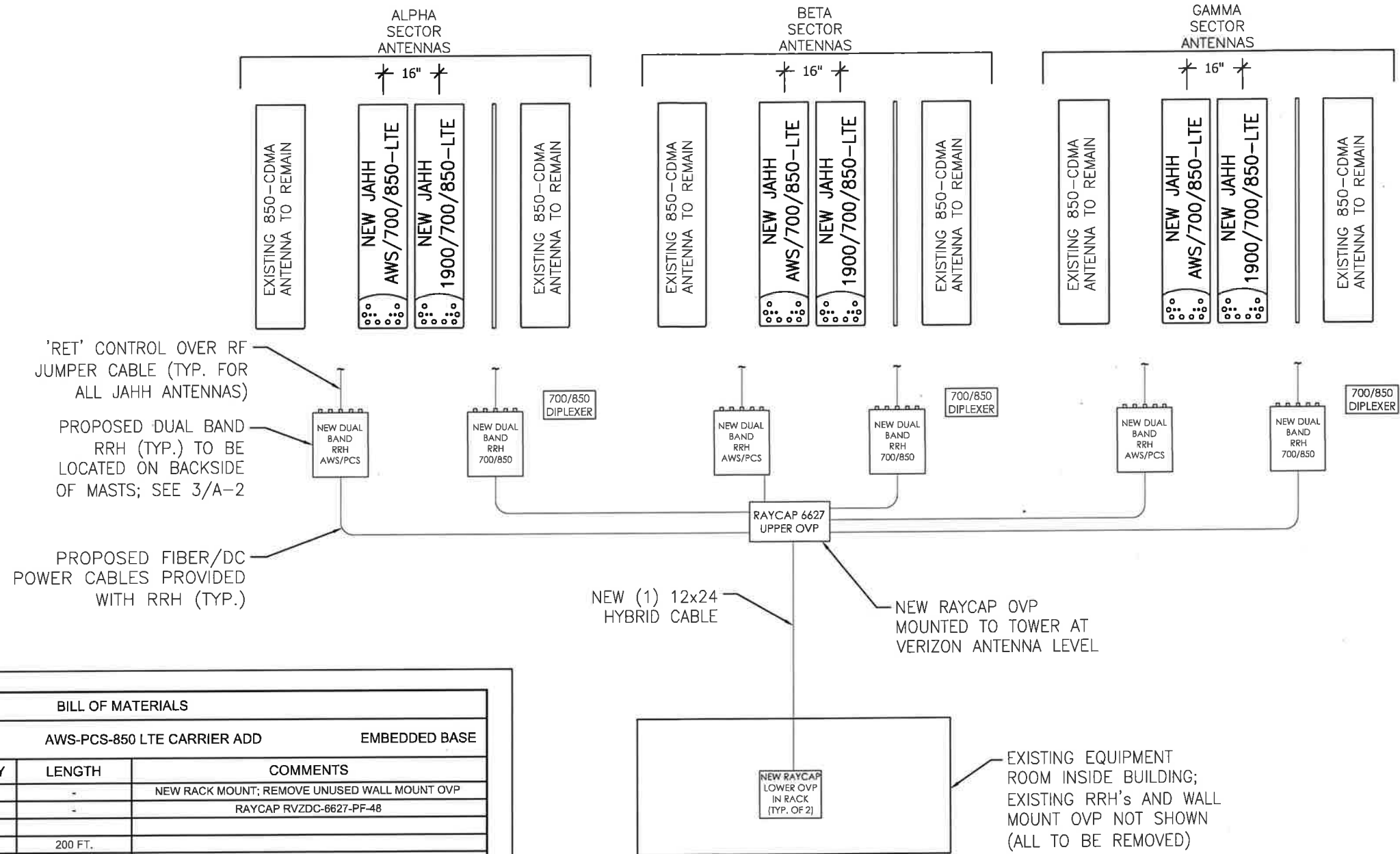
SITE NAME:  
**BUTTERNUT CT**

SITE ADDRESS:  
**CT STATE POLICE TOWER  
 BUTTERNUT HOLLOW RD.  
 GREENWICH, CT 06830**

SHEET TITLE:  
**ANTENNA SECTOR  
 CONFIGURATIONS**

SHEET NUMBER:  
**A-3**

NOTE: ALL ANTENNAS VIEWED FROM REAR



BILL OF MATERIALS			
DESCRIPTION	QTY	LENGTH	COMMENTS
LOWER OVP	2	-	NEW RACK MOUNT; REMOVE UNUSED WALL MOUNT OVP
UPPER OVP	1	-	RAYCAP RVZDC-6627-PF-48
12x24 HYBRID CABLE	1	200 FT.	
1x1 HYBRID CABLE	-	-	FIBER/DC POWER CABLES PROVIDED WITH RRH's
RET CONTROL CABLE	-	-	NOT REQUIRED FOR JAHH ANTENNAS
1/2" JUMPERS	60	6 FT.	(20) PER SECTOR; SEE NOTE 2
AWS/PCS DUAL BAND RRH	3	-	REFER TO RFDS FOR SPECS
700/850 DUAL BAND RRH	3	-	REFER TO RFDS FOR SPECS
DIPLEXER	3	-	REFER TO RFDS FOR SPECS
AWS ANTENNA	-	-	SHARED WITH NEW JAHH ANTENNA
700 ANTENNA	3	-	NEW JAHH TO REPLACE EXIST. 700
1900 ANTENNA	3	-	NEW JAHH TO REPLACE EXIST. 1900 PLACEHOLDER
850-CDMA ANTENNA	-	-	EXISTING TO REMAIN - 2 PER SECTOR
850-LTE ANTENNA	-	-	SHARED WITH NEW JAHH ANTENNA
SIDE-BY-SIDE MTG. BRACKET	3	-	COMMSCOPE BSAMNT-SBS-2-2

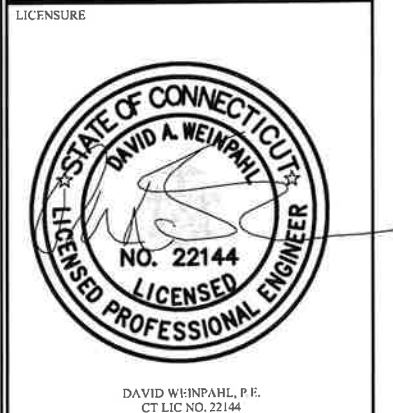
NOTES:  
 1. ITEMS SHOWN ARE FOR MAJOR DESIGN ELEMENTS ONLY. REFER TO VERIZON WIRELESS RFDS. FOR ALL MANUFACTURER PART NUMBERS AND ACCESSORY ITEMS REQUIRED FOR A COMPLETE INSTALLATION.  
 2. EXIST. 700 JUMPERS TO BE REPLACED; LENGTH NOTED IS AVERAGE; FIELD FABRICATE ALL JUMPERS TO MIN. LENGTHS.

**GENERAL NOTES:**

- CONTRACTOR SHALL REFER TO THE LATEST VERIZON WIRELESS RF DATA SHEET WHICH MAY INCLUDE ANTENNA SECTOR AZIMUTHS/ANTENNA CHANGES, ETC. THAT ARE REQUIRED AS PART OF THE PROJECT.
- CONTRACTOR SHALL SECURE ALL CONTROL CABLES IN ACCORDANCE WITH INDUSTRY STANDARDS AND MANUFACTURERS INSTRUCTIONS. EXTERIOR CONTROL CABLES MAY BE TAPED OR TIE-WRAPPED TO EXISTING COAXIAL CABLES EVERY 4 FT. MAX. FOR HORIZONTAL RUNS. CONTRACTOR MAY USE HOISTING GRIPS AT TOP OF VERTICAL CABLE RUNS IN CERTAIN APPLICATIONS.
- RET CABLES SHALL BE ROUTED AND SECURED ON STRUCTURAL MEMBERS ONLY - DO NOT "LOOP" THE CABLES IN MID-AIR BETWEEN ANTENNAS
- RF JUMPER CABLES, COAX AND DIPLEXER WIRING NOT SHOWN.

**verizon**  
 WIRELESS COMMUNICATIONS FACILITY  
 20 ALEXANDER DRIVE  
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 Cold Spring, NY 10516  
 201-456-4624  
 onair@optonline.net



SUBMITTALS	
NO	DATE
0	10.30.19
	REVIEW

NO DATE DESCRIPTION

DRAWN BY: MF  
 CHECKED BY: DW

PROJECT NAME:  
**ANTMO  
 AWS-PCS-850-LTE  
 DESIGN EXHIBITS**

SITE NAME:  
**BUTTERNUT CT**

SITE ADDRESS:  
**CT STATE POLICE TOWER  
 BUTTERNUT HOLLOW RD.  
 GREENWICH, CT 06830**

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

SHEET NUMBER:

**1** **BILL OF MATERIALS**  
 Scale: N.T.S.

**2** **RF PLUMBING DIAGRAM**  
 Scale: N.T.S.

**A-4**

# JAHH-65B-R3B



8-port sector antenna, 2x 698–787, 2x 824–894 and 4x 1695–2360 MHz, 65° HPBW, 3x RET and low bands have duplexers. Internal SBT's on first LB (Port 1) and first HB(Port 5).

- Internal SBT on low and high band allow remote RET control from the radio over the RF jumper cable
- One RET for 700MHz, one RET for 850MHz, and one RET for both high bands to ensure same tilt level for 4x Rx or 4x MIMO
- Internal filter on low band and interleaved dipole technology providing for attractive, low wind load mechanical package
- Separate RS-485 RET input/output for low and high band

## Electrical Specifications

Frequency Band, MHz	698–787	824–894	1695–1880	1850–1990	1920–2200	2300–2360
Gain, dBi	14.5	15.8	18.0	18.4	18.5	18.8
Beamwidth, Horizontal, degrees	67	65	63	63	65	68
Beamwidth, Vertical, degrees	12.4	10.5	5.7	5.2	4.9	4.4
Beam Tilt, degrees	2–14	2–14	0–10	0–10	0–10	0–10
USLS (First Lobe), dB	18	18	20	20	21	23
Front-to-Back Ratio at 180°, dB	32	34	31	35	36	38
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	30	30	30	30	30	30
VSWR   Return Loss, dB	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	200	200	300	300	300	250
Polarization	±45°	±45°	±45°	±45°	±45°	±45°
Impedance	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm

## Electrical Specifications, BASTA\*

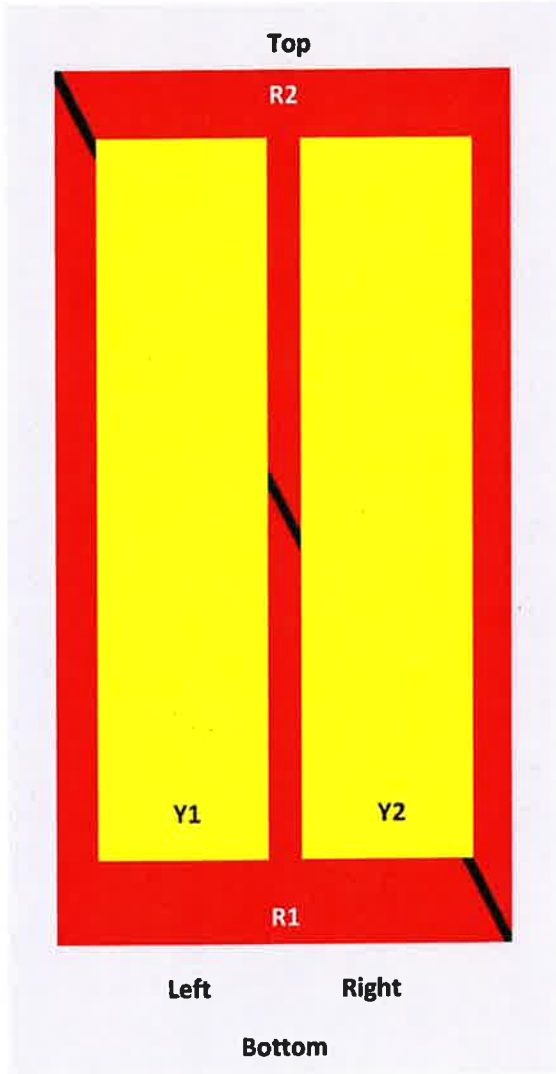
Frequency Band, MHz	698–787	824–894	1695–1880	1850–1990	1920–2200	2300–2360
Gain by all Beam Tilts, average, dBi	14.3	14.9	17.6	18.1	18.2	18.5
Gain by all Beam Tilts Tolerance, dB	±0.3	±0.5	±0.6	±0.4	±0.5	±0.6
Gain by Beam Tilt, average, dBi	2 °   14.3 8 °   14.3 14 °   14.3	2 °   15.0 8 °   14.9 14 °   15.4	0 °   17.2 5 °   17.6 10 °   17.6	0 °   17.6 5 °   18.2 10 °   18.2	0 °   17.7 5 °   18.3 10 °   18.3	0 °   17.9 5 °   18.7 10 °   18.7
Beamwidth, Horizontal Tolerance, degrees	±1.2	±1.4	±4	±2.4	±2.9	±2.7
Beamwidth, Vertical Tolerance, degrees	±0.9	±0.5	±0.3	±0.2	±0.3	±0.1
USLS, beampeak to 20° above beampeak, dB	18	17	17	18	19	18
Front-to-Back Total Power at 180° ± 30°, dB	25	24	26	29	27	29
CPR at Boresight, dB	22	23	20	21	21	24
CPR at Sector, dB	11	12	11	11	11	8

\* CommScope® supports NGMN recommendations on Base Station Antenna Standards (BASTA). To learn more about the benefits of BASTA, [download the whitepaper Time to Raise the Bar on BSAs.](#)

# JAHH-65B-R3B

## Array Layout

JAHH-65A-R3B JAHH-65B-R3B JAHH-65C-R3B



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	698-798	1-2	1	ANXXXXXXXXXXXXX1
R2	824-894	3-4	2	ANXXXXXXXXXXXXX2
Y1	1695-2360	5-6	3	ANXXXXXXXXXXXXX3
Y2	1695-2360	7-8		

View from the front of the antenna

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

## General Specifications

Operating Frequency Band

1695 – 2360 MHz | 698 – 787 MHz | 824 – 894 MHz

# JAHH-65B-R3B

<b>Antenna Type</b>	Sector
<b>Band</b>	Multiband
<b>Performance Note</b>	Outdoor usage   Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN

## Mechanical Specifications

<b>RF Connector Quantity, total</b>	8
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, high band</b>	4
<b>RF Connector Interface</b>	4.3-10 Female
<b>Color</b>	Light gray
<b>Grounding Type</b>	RF connector body grounded to reflector and mounting bracket
<b>Radiator Material</b>	Aluminum   Low loss circuit board
<b>Radome Material</b>	Fiberglass, UV resistant
<b>Reflector Material</b>	Aluminum
<b>RF Connector Location</b>	Bottom
<b>Wind Loading, frontal</b>	301.0 N @ 150 km/h   67.7 lbf @ 150 km/h
<b>Wind Loading, lateral</b>	254.0 N @ 150 km/h   57.1 lbf @ 150 km/h
<b>Wind Loading, maximum</b>	143.4 lbf @ 150 km/h   638.0 N @ 150 km/h
<b>Effective Projected Area (EPA), frontal</b>	0.28 m <sup>2</sup>   3.01 ft <sup>2</sup>
<b>Effective Projected Area (EPA), lateral</b>	0.24 m <sup>2</sup>   2.58 ft <sup>2</sup>
<b>Wind Speed, maximum</b>	241 km/h   150 mph

## Dimensions

<b>Length</b>	1828.0 mm   72.0 in
<b>Width</b>	350.0 mm   13.8 in
<b>Depth</b>	208.0 mm   8.2 in
<b>Net Weight, without mounting kit</b>	29.2 kg   64.4 lb

## Remote Electrical Tilt (RET) Information

<b>Input Voltage</b>	10–30 Vdc
<b>Internal Bias Tee</b>	Port 1   Port 5
<b>Internal RET</b>	High band (1)   Low band (2)
<b>Power Consumption, idle state, maximum</b>	2 W
<b>Power Consumption, normal conditions, maximum</b>	13 W
<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	2 female   2 male

# JAHH-65B-R3B

---

## Packed Dimensions

<b>Length</b>	1975.0 mm   77.8 in
<b>Width</b>	456.0 mm   18.0 in
<b>Depth</b>	357.0 mm   14.1 in
<b>Shipping Weight</b>	42.5 kg   93.7 lb

## Regulatory Compliance/Certifications

### Agency

RoHS 2011/65/EU

ISO 9001:2015

China RoHS SJ/T 11364-2014

### Classification

Compliant by Exemption

Designed, manufactured and/or distributed under this quality management system

Above Maximum Concentration Value (MCV)



## Included Products

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

## \* Footnotes

### Performance Note

Severe environmental conditions may degrade optimum performance



# SAMSUNG

## Dual-Band Radio Unit 700/850MHz (B13/B5) RFV01U-D2A

Samsung's RFV01U-D2A is a compact remote Radio Unit (RU) designed for deployments that require flexibility in installation and rapid onlining, without compromising on coverage, capacity or operational expenses.



The RFV01U-D2A RU targets dual-band support across Band 13 (700MHz) and Band 5 (850MHz), making it an ideal product for broad coverage footprints across multiple common low-end, long-range frequencies.

The RU handles all Radio Frequency (RF) processing in a single, compact unit, and is designed to interface via CPRI with Samsung's CDU baseband offerings, in both distributed- and central-RAN configurations.

In addition to its minimal footprint and ease of installation, the RU is also designed to reduce cost of ownership through its integrated spectrum analyzer, which allows for remote RF monitoring, greatly reducing the need for on-site maintenance visits.

### Features and Benefits

- Dual-band support for broad frequency coverage
- Minimal footprint reduces site costs
- Rapid, easy installation
- Flexibly deployable in any location
- Remote RF monitoring capability
- Convection cooled, silent operation

### Key Technical Specifications

Duplex Type: FDD  
Operating Frequencies:  
B13: DL(746-756MHz)/UL(777-787MHz)  
B5: DL(869-894MHz)/UL(824-849MHz)  
Instantaneous Bandwidth: 10MHz(B13) + 25MHz(B5)  
RF Chain: 4T4R/2T4R/2T2R  
Output Power: Total 320W  
DU-RU Interface: CPRI (10Gbps)  
Dimensions: 380 x 380 x 207mm (29.9L)  
Weight: 31.9kg  
Input Power: -48V DC  
Operating Temp.: -40 - 55°(w/o solar load)  
Cooling: Natural convection

# SAMSUNG

## Dual-Band Radio Unit AWS/PCS (B66/B2)

RFV01U-D1A

Samsung's RFV01U-D1A is a compact remote Radio Unit (RU) designed for deployments that require flexibility in installation and rapid onlining, without compromising on coverage, capacity or operational expenses.



The RFV01U-D1A RU targets dual-band support across Band 66 (AWS) and Band 2 (PCS), making it an ideal product for broad coverage footprints across multiple common mid-range frequencies.

The RU handles all Radio Frequency (RF) processing in a single, compact unit, and is designed to interface via CPRI with Samsung's CDU baseband offerings, in both distributed- and central-RAN configurations.

In addition to its minimal footprint and ease of installation, the RU is also designed to reduce cost of ownership through its integrated spectrum analyzer, which allows for remote RF monitoring, greatly reducing the need for on-site maintenance visits.

### Features and Benefits

- Dual-band support for broad frequency coverage
- Minimal footprint reduces site costs
- Rapid, easy installation
- Flexibly deployable in any location
- Remote RF monitoring capability
- Convection cooled, silent operation
- Built-in Broadcast Auxiliary Services (BAS) filter ensures compliant AWS operation without impacting footprint

### Key Technical Specifications

Duplex Type: FDD

Operating Frequencies:

B66: DL(2,110-2,180MHz)/UL(1,710-1,780MHz)

B2: DL(1,930-1,990MHz)/UL(1,850-1,910MHz)

Instantaneous Bandwidth:

70MHz(B66) + 60MHz(B2)

RF Chain: 4T4R/2T4R/2T2R

Output Power: Total 320W

DU-RU Interface: CPRI (10Gbps)

Dimensions: 380 x 380 x 255mm (36.8L)

Weight: 38.3kg

Input Power: -48V DC

Operating Temp.: -40 - 55°(w/o solar load)

Cooling: Natural convection



# **ATTACHMENT 3**

Site Name: Butternut (Greenwich) Tower Height: 180Ft.		General	Power	Density				
CARRIER	# OF CHAN.	WATTS ERP	HEIGHT	CALC. POWER DENS	FREQ.	MAX. PERMISS. EXP.	FRACTION MPE	Total
*State Police	1	1000	180	866.0125	0.0119	0.5773	0.21%	
*Greenwich	1	1000	180	866.7875	0.0119	0.5779	0.21%	
*DOT	1	100	180	42.8	0.0012	0.2000	0.06%	
*Greenwich	1	432	177	18700	0.0053	1.0000	0.05%	
*NU	1	50	150	928	0.0009	0.6187	0.01%	
*NU	1	316	150	150	0.0055	0.2000	0.27%	
*NU	1	100	80	37.8	0.0066	0.2000	0.33%	
*NU	1	555	165	944	0.0079	0.6293	0.13%	
*NU	1	316	150	450	0.0055	0.3000	0.18%	
*NU	1	100	130	47.86	0.0023	0.2000	0.12%	
*State Police	1	56	176	6700	0.0007	1.0000	0.01%	
*T-Mobile	2	2334	137	2100	0.0978	1.0000	0.98%	
*T-Mobile	2	2334	137	1900	0.0978	1.0000	0.98%	
*T-Mobile	2	1167	137	2100	0.0489	1.0000	0.49%	
*T-Mobile	2	1167	137	1900	0.0489	1.0000	0.49%	
*T-Mobile	2	1167	137	1900	0.0489	1.0000	0.49%	
*T-Mobile	2	620	137	600	0.0260	0.4000	0.65%	
*T-Mobile	2	679	137	700	0.0285	0.4667	0.61%	
*Sprint	1	438	117	850	0.0128	0.5667	0.23%	
*Sprint	5	623	117	1900	0.0909	1.0000	0.91%	
*Sprint	2	1556	117	1900	0.0908	1.0000	0.91%	
*Sprint	8	640	117	2500	0.1494	1.0000	1.49%	
*Sprint	2	1081	117	850	0.0631	0.5667	1.11%	
*AT&T	2	424	148	850	0.0151	0.5667	0.27%	
*AT&T	2	656	148	1900	0.0234	1.0000	0.23%	
*AT&T	3	585	148	700	0.0313	0.4667	0.67%	
*AT&T	4	1222	148	1900	0.0872	1.0000	0.87%	
*AT&T	2	424	148	850	0.0151	0.5667	0.27%	
<b>VZW PCS</b>	<b>4</b>	<b>1525</b>	<b>130</b>	<b>0.1298</b>	<b>1970</b>	<b>1.0</b>	<b>12.98%</b>	
<b>VZW Cellular</b>	<b>3</b>	<b>498</b>	<b>130</b>	<b>0.0318</b>	<b>880</b>	<b>0.5793</b>	<b>5.49%</b>	
<b>VZW Cellular</b>	<b>4</b>	<b>355</b>	<b>130</b>	<b>0.0302</b>	<b>869</b>	<b>0.5866</b>	<b>5.15%</b>	
<b>VZW AWS</b>	<b>4</b>	<b>1493</b>	<b>130</b>	<b>0.1271</b>	<b>2145</b>	<b>1.0</b>	<b>12.71%</b>	
<b>VZW 700</b>	<b>4</b>	<b>628</b>	<b>130</b>	<b>0.0534</b>	<b>746</b>	<b>0.4973</b>	<b>10.75%</b>	
<b>VZW CBRS</b>	<b>0</b>	<b>31</b>	<b>130</b>	<b>0.0000</b>	<b>3550</b>	<b>2.36</b>	<b>0.00%</b>	<b>60.29%</b>
* Source: Siting Council								

# **ATTACHMENT 4**



Submitted to  
Empire Telecom USA, LLC  
16 Esquire Road  
Billerica, MA 01862

Airosmith Development, Inc.  
32 Clinton Street  
Saratoga Springs, NY 12866

Northeast Site Solutions  
199 Brickyard Road  
Farmington, CT 06032

Verizon Wireless  
20 Alexander Drive, 2<sup>nd</sup> Floor  
Wallingford, CT

Submitted by  
AECOM  
500 Enterprise Drive,  
Suite 3B  
Rocky Hill, CT 06067  
July 31, 2019

# DETAILED STRUCTURAL ANALYSIS AND MODIFICATION OF AN EXISTING 180' SELF SUPPORTING LATTICE TOWER WITH STACK-N-BOLT SYSTEM AND FOUNDATION FOR PROPOSED ANTENNA ARRANGEMENT

AT&T Site No. : CT2129  
Sprint Site No. : CT03XC343  
T-Mobile Site No. : CT11070B  
Verizon Site No. : Butternut, CT

Site Name : Connecticut State Police Tower #74  
Site Address: 150 Butternut Hollow Road  
CSP Tower # 74

60537397  
Revision #4

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    - **CONNECTION BETWEEN TOWERS EVALUATION**
    - **FOUNDATION EVALUATION**
-

**1. EXECUTIVE SUMMARY**

This report summarizes the controlling load case structural analysis and evaluation of the 180' dual lattice tower, comprised of an exterior tower and an interior tower, located off of Butternut Hollow Road in Greenwich, Connecticut.

The structural analysis was conducted in accordance with the 2018 Connecticut State Building Code which includes the TIA-222-G<sup>1</sup> Standard, 2015 International Building Code, the 2018 Connecticut State Building Code Amendments, the AISC<sup>2</sup> Load Resistance Factor Design (LRFD), the ASCE 7<sup>3</sup> design Code, and the Connecticut State Police Requirements which include the TIA/EIA-222-F<sup>4</sup>.

The antenna loading considered in the analysis consists of all the existing antennas, transmission lines and ancillary items as outlined in the Introduction Section of this report.

The proposed antenna modifications are listed below:

<b>Proposed Antenna, Mounts &amp; Cables</b>	<b>Carrier</b>	<b>Antenna Center Elevation</b>
<b><u>Remove:</u></b>		
(3) Windload Dishes	<b>CSP (Existing)</b>	<b>@ 180'</b>
(3) Powerwave P65-16-XLH-RR Panel Antennas	<b>AT&amp;T (Existing)</b>	<b>@ 148'</b>
(3) EMS RR90-17-02DP Panel Antennas (3) GSM TMA Units	<b>T-Mobile (Existing)</b>	<b>@ 136'</b>
(3) Swedcom SLCP 2x6014 Panel Antennas (3) Amphenol BXA-171063-8BF Panel Antennas (3) Commscope HBXX6516DS-A2M Panel Antennas (6) Commscope HBXX6517DS-A2M Panel Antennas (9) 1-5/8" Coaxial Cables (1) (OVP Box) Distribution Box (1) Hybrid Cable	<b>Verizon (Existing)</b>	<b>@ 126'</b>
<b><u>Install:</u></b>		
(3) CCI OPA-65R-LCUU-H6 Panel Antennas (3) Ericsson RRUS-32 B2 RRH Units	<b>AT&amp;T (Proposed)</b>	<b>@ 148'</b>
(3) Ericsson AIR 21 B2A/B4P Panel Antennas (3) Ericsson AIR 32 B66A/B2A Panel Antennas (3) APXVSAA24_43-U-A20 Panel Antennas (3) (AWS) TMA Units (3) Ericsson 4478 B71 RRH Units (3) Ericsson RRUS-11 RRH Units (3) Generic 600/700 Diplexer Units (3) Ericsson Hybriflex Cable 6x12 Fiber Optic Cables	<b>T-Mobile (Proposed)</b>	<b>@ 136'</b>

Proposed Antenna, Mounts & Cables (Cont.)	Carrier	Antenna Center Elevation
<b>(6) Commscope JAHH-65B-R3B-2DT Panel Antennas</b> <b>(3) BSAMNT-SBS-2-2 (JAHH Panel Antenna) Mounting Brackets</b> <b>(3) Samsung B2/B66a (RFV01U-D1A) RRH Units</b> <b>(3) Samsung B5/B13 (RFV01U-D2A) RRH Units</b> <b>(1) RFS DB-C1-12C-24AB-0Z Distribution Box</b> <b>(1) 1-5/8" O.D. Fiber Optic Cable (HB158-13U12S24-270-LI)</b> <b>(3) Commscope CBC78T-DS-43-2X Diplexer Units</b>	<b>Verizon (Proposed)</b>	<b>@ 126'</b>
<b>(3) Commscope DT465B-2XR Panel Antennas</b> <b>(3) 2x50W (800MHz) RRH Units</b> <b>(3) TD-RRH8x20-25 RRH Units w/ Solar Shield</b> <b>(1) Hybrid Cable (1-1/4" O.D. Cable used for Analysis)</b> <b>(3) Stiff-Arm Mount Support Attachments (1 per Sector) (SitePro1 Part # STK-U)</b>	<b>Sprint (Proposed)</b>	<b>@ 115'</b>

The results of an initial assessment analysis indicated the existing exterior and interior tower structures did not have enough capacity for the proposed loading conditions. The existing tower structures require modifications shown on SK-1 through SK-5. **Once the modifications indicated on sheets SK-1 through SK-5 are performed, the modified structures are considered structurally adequate with the wind load classification specified with the existing and proposed antenna loading. No installation of proposed antennas shall occur without the required modification being completed.**

The results of the analysis indicate the modified tower's sway (deflection) is 0.65 degrees and the modified tower's twist (rotation) is 0.07 degrees. These figures are within the Connecticut State Police requirements of 0.75 degrees for combined twist (rotation) and sway (deflection) when applying the TIA/EIA-222-F design conditions.

1. TIA = Telecommunications Industry Association Structural Standard for Antenna Supporting Structures and Antennas (Version G)
2. AISC = American Institute of Steel Construction (14<sup>th</sup> Edition)
3. ASCE 7 = American Society of Civil Engineers Standard 7 (2010 Edition)
4. TIA/EIA = Telecommunications Industry Association Structural Standard for Antenna Supporting Structures and Antennas (Version F)

1. **EXECUTIVE SUMMARY** *(continued)*

This analysis is based on:

- 1) The tower structure's theoretical capacity not including any assessment of the condition of the tower.
- 2) Member sizes and tower geometry of the outer tower taken from manufacturers' drawings prepared by Rohn Industries, Inc., file number 28325, dated December 28, 1992.
- 3) Member sizes and tower geometry of the inner tower taken from design calculations and drawings prepared by Towertek Industries Inc., signed and sealed May 9, 2002.
- 4) Foundation modifications taken from drawings prepared by Walker Engineering Incorporated, Job number 0206-237R2, signed and sealed November 26, 2002.
- 5) Tower Mapping and Existing Inventory performed by D&K Nationwide Communications, Inc. on March 31, 2016
- 6) Previous structural analysis performed by AECOM on behalf of the Connecticut State Police, project # 60509756.08 / PNS-608, signed and sealed on September 6, 2016.
- 7) Proposed antenna inventory Radio Frequency Data Sheet (RFDS) and contract drawings provided by AT&T, obtained via e-mail, dated May 5, 2017.
- 8) Proposed antenna inventory RFDS provided by T-Mobile, obtained via e-mail, dated February 15, 2018, with a revision to proposed inventory obtained via e-mail dated March 26, 2018.
- 9) Proposed antenna inventory RFDS provided by Verizon Wireless, obtained via e-mail, dated March 18, 2019.
- 10) Proposed antenna inventory from site Construction Drawings, signed and sealed October 19, 2018, provided by Sprint, obtained via e-mail, dated July 31, 2019.
- 11) Antenna inventory as specified in section 2 and 6 of this report.

This report is only valid as per the information and data provided by others for antenna inventory, mounts, tower structure, existing foundation and associated cables. The user of this report shall field verify the antenna, cabling and mount configuration used, as well as the physical condition of the tower members, connections and foundations. Notify the engineer in writing immediately if any of the information in this report is found to be other than specified.

If you should have any questions, please call.

Sincerely,

**AECOM,**



Richard A. Sambor, P.E.  
Senior Structural Engineer

RAS/mcd

Cc: IA, CF/Book – AECOM



## 2. INTRODUCTION

The subject tower is located off of Butternut Hollow Road in Greenwich, Connecticut. The original outer structure is a self-supporting three-legged 180' steel tapered lattice tower manufactured by Rohn Industries. A subsequent inner tower structure, a Stack-N-Bolt system, was installed inside the original tower and was designed by Towertek.

The structural analysis was conducted in accordance with the following:

- TIA-222-G Standard for Standard for a wind velocity of range of 90 mph to 110 mph (3-second gust) and 50 mph (3-second gust) concurrent with 0.75" ice thickness, considered to increase in thickness with height
- 2015 International Building Code with 2018 Connecticut State Building Code Amendments for a wind speed of 101 mph (3-second gust)
- 2010 AISC Load Resistance Factor Design (LRFD)
- 2010 ASCE 7 Minimum Design Loads for Buildings and Other Structures for the ice thickness referenced in the TIA-222-G Standard
- Connecticut State Police Requirements for a wind velocity of 90 mph (fastest mile) and 90 mph (fastest mile) concurrent with 0.5" ice. Twist (rotation) and sway (deflection) were determined in accordance with Connecticut State Police Requirements for a wind velocity of 90 mph (fastest mile) concurrent with 0.5" ice, analyzed under the TIA/EIA-222-F design Standard.

The existing structure supports numerous communication antennas. The inventory is summarized below:

<b>Antenna Type</b>	<b>Carrier</b>	<b>Mount</b>	<b>Centerline Elevation / Leg</b>	<b>Cable</b>
(1) Scala OGT9-806 (inverted) * (1) Sinclair SC479-HF1LDF (inverted) (1) TTA/Junction Box *	#27A,27B,27C CSP 2 *, 4 & 74 * (existing)	3' Stand-Off	175 / B	(2) 1-5/8" (1) 3/8" *
(1) (inverted) Dipole Antenna	#26-A NEU – 20 (existing)	Shared with Above (Omni @ 175')	175 / A	(1) 7/8"
(1) Sinclair SC479-HF1LDF (inverted) (1) Junction Box	#26-B CSP – 67 (existing)	Shared with Above (Omni @ 175')	175 / A	(1) 1-5/8" (1) 1/2"
(1) PD-420 20' Dipole Antenna	#28D NEU – 55 (existing)	3' Stand-Off	174 / C	(1) 7/8"
(1) DB-583 Omni Antenna	#28C TOG – 5 (existing)	Shared with Above	174 / C	(1) 1-5/8"
(1) Scala OGT9-806N * (1) Sinclair SC479-HF1LDF	#28A,28B CSP - 1 * & 3 (existing)	3' Stand-Off	174 / C	(2) 1-5/8"

<b>Antenna Type</b>	<b>Carrier</b>	<b>Mount</b>	<b>Centerline Elevation / Leg</b>	<b>Cable</b>
(1) SC3-W100AC 3' Dish Antenna	#25 Greenwich Police Dep. (existing)	Dish Mount	168 / B	(1) Elliptical Cable
(1) Kathrine 197-501 Panel Antenna (1) TMA	#23 Stamford 64 & 65 (existing)	3' Arm	168 / A	(1) 1-5/8" (1) 1/2"
DB-586-Y	#22 TOG - 6 (existing)	Leg Mounted	165 / A	(1) 7/8"
8' (solid) Dish with Radome	#21 SPD - 9 (existing)	Dish Mount	160 / A	(1) EW90
(3) Sinclair SC-479-HF1LDF (1 upright, 2 inverted) (1) TMA	CSP 70 to 73 (reserve)	3' Stand-Off	160	(3) 1-5/8" (1) 1/2"
(1) Kathrine 197-501 Panel Antenna	#20 Unknown (existing)	3' Arm	159.5 / A	(1) 7/8"
(1) Kathrine 197-501 Panel Antenna	#19 Stamford 63 (existing)	3' Arm	159 / B	(1) 7/8"
<b>(3) OPA-65R-LCUU-H6 Panel Antennas (3) RRUS-32 B2 RRH Units</b>	<b>AT&amp;T (Proposed)</b>	<i>Shared with Below Mounts</i>	<b>147.5 / ABC</b>	<i>See Below Cables</i>
(6) Powerwave 7770 (12) TMAs (6) Ericsson RRU (1) Raycap Surge Suppressor	AT&T (existing)	(3) Side Arm Mounts	147.5 / ABC	(12) 1-5/8" (1) Fiber Optic Cable (2) DC Cables
(1) Celwave PD1142	#15 CSP - 21 (existing)	3' Arm	137 / B	(1) 7/8"
<b>(3) AIR 21 B2A/B4P Panels (3) AIR32 B66A/B2A Panels (3) APXVSA24_43-U-A20 Panel Antennas (3) (AWS) TMA Units (3) 4478 B71 RRH Units (3) RRUS-11 RRH Units (3) Generic Diplexer (600/700)</b>	<b>T-Mobile (Proposed)</b>	<i>Shared with Below Mounts</i>	<b>136 / ABC</b>	<b>(3) 1-1/4" Hybriflex Cables (6x12)</b>
-----	T-Mobile (existing)	Face Mounted	136 / ABC	(6) 1-5/8"

<b>Antenna Type</b>	<b>Carrier</b>	<b>Mount</b>	<b>Centerline Elevation / Leg</b>	<b>Cable</b>
(1) 6' Dipole Antenna	#12 unknown (existing)	3' Arm	135 / C	(1) 7/8"
(1) Kreco CO41AN	#11 NEU – 18 (existing)	Mounted on Below Frame	130 / A	(1) 1-5/8"
<b>(6) JAHH-65B-R3B-2DT Panels (3) Samsung B2/B66a (RFV01U-D1A) RRH Units (3) Samsung B5/B13 (RFV01U-D2A) RRH Units (1) RFS DB-C1-12C- 24AB-0Z Distribution Box (3) Commscope CBC78T-DS-43-2X Duplexer Units</b>	<b>Verizon (Proposed)</b>	<b>(3) Mount Brackets for JAHH Panels Shared with Below Mounts</b>	<b>126 / ABC</b>	<b>(1) 1-5/8" Fiber Optic Cables</b>
(6) Andrew DB844H80- XY Panels	Verizon (existing)	(3) Boom Gates (existing)	126 / ABC	(6) 1 5/8"
(1) Celwave PD1142	#9 DEP – 54 (existing)	3' Arm	122 / B	(1) 7/8"
(1) Celwave PD1142	#8 CSP – 66 (existing)	Share with (#9) 3' Arm	122 / B	(1) 7/8"
<b>(3) DT465B-2XR Panels (3) 800 MHz RRH Units (3) TD-RRH 8x20-25 RRH Units</b>	<b>Sprint (Proposed)</b>	<b>(3) STK-U Stiff Arm Support to Below Mount</b>	<b>115 / ABC</b>	<b>(1) Hybriflex Cable</b>
(3) APXVSP18-C Panel Antennas (3) 800 MHz 2x50W RRH Units (3) 1900 MHz 4x45 RRH Units	Sprint (existing)	(3) 12' T-Arm Mount	115 / ABC	(3) Hybriflex Cables
(1) Celwave PD1142	#7 NEU – 17 (existing)	3' Stand-off	110 / A	(1) 7/8"
(1) Celwave PD1142	#5 NEU – 16 (existing)	6' Arm	82 / C	(1) 1-5/8"
(1) 10' Dipole	#4 DOT – 56 (existing)	3' Arm	65 / C	(1) 7/8"
(1) GPS	#3 Sprint - 69 (existing)	3' Arm	60 / C	(1) 7/8"

<i>Antenna Type</i>	<i>Carrier</i>	<i>Mount</i>	<i>Centerline Elevation / Leg</i>	<i>Cable</i>
(1) 4' Dipole Antenna	#1 Unknown (existing)	3' Arm	56 / A	(1) 7/8"
(1) GPS (TMG-26N)	#2 Verizon - 68 (existing)	3' Arm	54 / B	(1) 7/8"

**Notes:** Antenna elevations and ID numbering obtained from Tower Mapping and Existing Inventory via tower climb, performed by D&K Nationwide Communications, Inc. on March 31, 2016.

" \* " indicated future decommissioning of CSP antennas

This structural analysis and evaluation of the communications tower was performed by AECOM on behalf of AT&T, Sprint, T-Mobile and Verizon Wireless (VZW). The purpose of this analysis was to investigate the structural integrity of the modified tower and existing foundation for existing and proposed antenna loads in compliance with the 2018 Connecticut State Building Code. This analysis was conducted to evaluate stress on the tower and the effect forces to the foundation of the tower resulting from existing and proposed antenna arrangements.

### 3. ANALYSIS METHODOLOGY AND LOADING CONDITIONS

The structural analysis was done in accordance with, the TIA-222-G–Structural Standard for Antenna Towers and Antenna Supporting Structures and Antennas, the 2015 International Building Code with 2018 Connecticut State Building Code Amendments and the American Institute of Steel Construction (AISC) Manual of Steel Construction – Load Resistance Factor Design (LRFD)

The analysis was conducted using PLS-Tower (version 10.62) and used the following conditions for this tower review (following the TIA/EIA-222-G Standard):

- Structure Class 3 – (Essential Communications)
  - NOTE: ASCE 7 and CT State Building Code Applied Risk Category 4 for design wind loads (see below)
- Topographic Category 3 – (Tower location on top of hill – rolling wind conditions considered)
  - Crest Height used for analysis: (approximate elevations listed below)
    - Tower Base Elevation = 350 feet
    - High point (2 mile Radius) = 560 feet (Ref. Round Hill – West of Tower Site)
    - Low Point (2 mile Radius) = 212 feet (Ref. Near intersection of Grahampton Lane – South of Tower Site)
    - “H” = (Avg of High/Low) – Base Elevation = 36 feet
- Exposure Class C – (Open Terrain with scattered obstructions)
- Load Conditions:
  - Five load conditions were evaluated as shown which were compared to design stresses according to AISC and TIA-222-G Standard. The load conditions apply TIA-222-G load combinations from Section 2.3.2 (shown at the end of this section)

Basic Wind Speed:

- TIA-222-G:
  - Fairfield County (Wind Speed Range): V = 90 mph - 110 mph (3-second gust) [Annex of TIA/EIA-222-G 2006]
- IBC 2015 w/ 2018 CT State Building Code Amendment:
  - (2015) IBC Section 1609.1.1 – Determination of Wind Loads – Exception 5 “Designs using TIA-222” applies for determination of Design Wind Load obtained as “V<sub>ult</sub>” are to be converted to “V<sub>asd</sub>” when applying the TIA-222-G design Standard (under Section 1609.3) for Basic Wind Speed.
  - (2018) CT State Building Code Amendment to the IBC Section 1609.3 wind loads are obtained from Appendix N of the State Building Code.
    - **V<sub>asd</sub> = 101 mph** (3-Second Gust) Wind Design Parameter for the Town of Greenwich, Connecticut for Risk Category four (IV) for essential communications (Connecticut State Police).

Ice thickness used for this analysis is **0.75 inch** (assumed to start at the base of the tower) and is considered to increase in thickness with height. The initial ice thickness for design is referenced in the Annex of TIA-222-G and follows the same design criteria as the ASCE 7 Standard.

The below load condition implements the design requirements of the Connecticut State Police for the tower structures deflection limits with the allowable deflection limit of the combination of the tower’s sway (deflection) and twist (rotation) under the TIA-222-F design Standard. This design limit required the design combined value of sway (deflection) and twist (rotation) to be under 0.75 degrees following the TIA-222-F design Standard.

Load Condition (TIA-222-F) = 90 mph (fastest mile) Wind Load (with ice) + Ice Load + Tower Dead Load

### 3. ANALYSIS METHODOLOGY AND LOADING CONDITIONS (cont.)

Seismic event consideration factors/values for design (and are applied into the PLS-Tower design outputs – see below load combination):

- $S_s = 0.259$  (2018 CT State Building Code – Location Specific Value)
- $S_1 = 0.070$  (2018 CT State Building Code – Location Specific Value)
- Seismic Design Category = "C" – (2015 International Building Code)
- $F_a = 1.6$  (Obtained from TIA-222-G Table 2-12 Considering above conditions)
- $F_v = 2.4$  (Obtained from TIA-222-G Table 2-13 Considering above conditions)

Strength Limit State Load Combinations (TIA-222-G Section 2.3.2):

The structural analysis herein has considered the following load combinations within the analysis:

1. **1.2 Dead Load Tower structure + 1.0 Dead Load Guy Assemblies + 1.6 Wind load without ice**
2. 0.9 Dead Load Tower structure + 1.0 Dead Load Guy Assemblies + 1.6 Wind load without ice
3. 1.2 Dead Load Tower structure + 1.0 Dead Load Guy Assemblies + 1.0 Dead weight of ice due to factored ice thickness + 1.0 Concurrent wind load with factored ice thickness + 1.0 Load effects due to temperature
4. 1.2 Dead Load Tower structure + 1.0 Dead Load Guy Assemblies + 1.0 Earthquake Load
5. 0.9 Dead Load Tower structure + 1.0 Dead Load Guy Assemblies + 1.0 Earthquake Load

NOTE 1: The above **bolded** load combination is considered to create the governing design loads per the results of the analysis.

NOTE 2: The above "Dead Load Guy Assemblies" are not considered as part of the analysis and are considered as a value of zero.

NOTE 3: The "Load effects due to temperature" do not apply for structures that are self-sustaining (from the TIA-222-G Standard).

**4. FINDINGS AND EVALUATION**

The combined axial and bending stresses on the tower structure were evaluated to compare with the strength design in accordance with AISC (LRFD). The results of an initial analysis indicated that the existing exterior and interior tower structures did not have enough capacity to support the proposed loading conditions. The tower structure requires modifications shown on SK-1 through SK-5. **Once the modifications indicated on sheets SK-1 through SK-5 are performed, the modified structure and existing foundation are considered structurally adequate with the wind load specification and with the existing and proposed antenna loading included herein.**

The existing dual lattice tower's sway (deflection) is 0.65 degrees, and the existing tower's twist (rotation) is 0.07 degrees. The figures combined ARE within the Connecticut State Police requirement of 0.75 degrees for combined twist and sway.

See the below tables for tower capacity and tower deflection (sway) and rotation (twist) figures:

**Tower Twist & Sway 90 mph concurrent with ice (TIA-222-F Condition):**

<b>Component</b>	<b>Allowable</b>	<b>Actual</b>
Twist	0.75°	0.07°
Sway		0.65°

**Proposed Tower Component Stress vs Capacity Summary (TIA-222-G Condition):**

<b>Component</b>	<b>Component Size</b>	<b>Controlling Member</b>	<b>Stress (% Capacity)</b>	<b>Pass/Fail</b>
Rohn Diagonal	L3-1/2x3-1/2x1/4	Rohn-DF42	96.34	Pass
Rohn Leg	Rohn 6 EH (Extra Heavy)	Rohn-LG2P	91.06	Pass
Rohn Horizontal	L1-3/4x1-3/4x3/16	Rohn-H2P	16.10	Pass
Rohn Flange Bolts	(6) 1" Diameter A325 Bolts – Tension	Rohn-LH21	84.15	Pass
Interior Tower Diagonal	L6x6x3/8	SNB-DI42	95.44	Pass
Interior Tower Leg	Pipe 8 SCH 80 (Extra Strong)	SNB-LH2P	97.93	Pass
Interior Tower Horizontal	Pipe 4"x0.494" (Pipe 4 XXS)	SNB-H9cP	3.85	Pass
Interior Flange Bolts	(6) 1" Diameter A325 Bolts – Tension	SNB-LG21	96.67	Pass
Tower-to-Tower Connection	A325 Bolt	3/4" Bolt	67.7	Pass
Foundation	36.5' Square	Overturning Moment Resistance	93.8	Pass
Foundation	36.5' Square	Soil Bearing Resistance	72.3	Pass
Foundation	36.5' Square	Punching Shear Capacity	78.9	Pass
Foundation	36.5' Square	Foundation Flexure Capacity	91.4	Pass

Structure Rating (Maximum from all components) =	97.93 %	Pass
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## 5. CONCLUSIONS

The results of an initial assessment analysis indicated the existing Exterior and Interior tower structures did not have enough capacity for the proposed loading conditions. The existing tower structures require modifications shown on SK-1 through SK-5. **Once the modifications indicated on sheets SK-1 through SK-5 are performed, the modified structures are considered structurally adequate with the wind load classification specified with the existing and proposed antenna loading. No installation of proposed antennas shall occur without the required modification being completed.**

The results of the analysis indicate the modified tower's sway (deflection) is 0.65 degrees and the modified tower's twist (rotation) is 0.07 degrees. These figures are within the Connecticut State Police requirements of 0.75 degrees for combined twist (rotation) and sway (deflection) when applying the TIA/EIA-222-F design conditions.

### Limitations/Assumptions:

This report is based on the following:

- A. Tower is properly installed and maintained.
- B. All members and their geometry are as specified in the original manufacturer drawings and are in good condition.
- C. All required members are in place.
- D. All bolts are in place and are properly tightened.
- E. Tower is in plumb condition.
- F. All member protective coatings are in good condition.
- G. All tower members were properly designed, detailed, fabricated, installed, and have been properly maintained since erection.
- H. Foundations are in good condition without defect and were properly constructed to support original design loads as specified in the original design documents.

AECOM is not responsible for any modifications completed prior to or hereafter in which AECOM is not or was not directly involved. Modifications include but are not limited to:

- A. Adding antennas
- B. Removing/replacing antennas
- C. Adding coaxial cables

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



**Ongoing and Periodic Inspection and Maintenance:**

After the Contractor has successfully completed the installation and the work has been accepted, the owner will be responsible for the ongoing and periodic inspection and maintenance of the tower.

The owner shall refer to TIA-222-G Section 14.2 for recommendations for maintenance and inspection. The frequency of the inspection and maintenance intervals is to be determined by the owner based upon actual site and environmental conditions. It is recommended that a complete and thorough inspection of the entire tower structural system be performed at least yearly and more frequently as conditions warrant. It is also recommended that the structure be inspected after severe wind and/or ice storms or other extreme loading conditions.

## **6. ANALYSIS DATA**

## TOWER REINFORCEMENT DRAWINGS SK-1 THROUGH SK-5

## GENERAL CONSTRUCTION NOTES

- ALL WORK SHALL COMPLY WITH THE CONNECTICUT STATE BUILDING AND LIFE SAFETY CODES, SUPPLEMENTS AND AMENDMENTS.
- CONTRACTOR IS TO REVIEW ALL DRAWINGS AND NOTES IN THE CONTRACT DOCUMENT SET. CONTRACTOR SHALL COORDINATE ALL WORK SHOWN IN THE SET OF DRAWINGS. THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF DRAWINGS TO ALL SUB-CONTRACTORS AND ALL RELATED PARTIES. THE SUB-CONTRACTORS SHALL EXAMINE ALL THE DRAWINGS AND SPECIFICATIONS FOR THE INFORMATION THAT AFFECTS THEIR WORK.
- CONTRACTOR SHALL PROVIDE A COMPLETE BUILD-OUT WITH ALL FINISHES, STRUCTURAL, MECHANICAL, AND ELECTRICAL COMPONENTS AND PROVIDE ALL ITEMS AS SHOWN OR INDICATED ON DRAWINGS OR WRITTEN IN SPECIFICATIONS.
- CONTRACTOR SHALL FURNISH ALL MATERIAL, LABOR AND EQUIPMENT TO COMPLETE THE WORK AND FURNISH A COMPLETED JOB ALL IN ACCORDANCE WITH LOCAL AND STATE GOVERNING AUTHORITIES AND OTHER AUTHORITIES HAVING LAWFUL JURISDICTION OVER THE WORK.
- CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND ALL INSPECTIONS REQUIRED AND SHALL ALSO PAY FEES REQUIRED FOR THE GENERAL CONSTRUCTION AND ELECTRICAL SUB-CONTRACTORS SHALL PAY FOR THEIR PERMITS.
- CONTRACTOR SHALL MAINTAIN A CURRENT SET OF DRAWINGS ON SITE AT ALL TIMES AND ENSURE THE DISTRIBUTION OF NEW DRAWINGS TO SUB-CONTRACTORS AND OTHER RELEVANT PARTIES AS SOON AS THEY ARE MADE AVAILABLE. ALL OLD DRAWINGS SHALL BE MARKED VOID AND REMOVED FROM THE CONTRACT AREA. CONTRACTOR SHALL FURNISH 'AS-BUILT' SET OF DRAWINGS TO OWNER UPON COMPLETION OF PROJECT.
- INSTALLATION OF THIS WIRELESS COMMUNICATIONS EQUIPMENT SITE REQUIRES WORK IN THE IMMEDIATE VICINITY OF EXISTING TELECOMMUNICATION SYSTEMS. THE CONTRACTOR SHALL PROVIDE AND COORDINATE THE METHODS OF PROTECTION WITH THE VARIOUS TELECOMMUNICATION CARRIERS AND THE TOWER OWNER. THERE SHALL BE NO INTERRUPTION OF OPERATION WITHOUT TIMELY COORDINATION WITH AND APPROVAL BY THE VARIOUS COMMUNICATIONS OPERATORS INCLUDING THE CONNECTICUT STATE POLICE.
- THE REINFORCEMENT OF PORTIONS OF THIS TOWER STRUCTURE WILL AFFECT CRITICAL CONNECTICUT STATE POLICE ANTENNAS.
- NO MOVEMENT, ALTERATION, OR DISCONNECTION OF CONNECTICUT STATE POLICE ANTENNAS MAY OCCUR WITHOUT THE NOTIFICATION AND APPROVAL OF THE CONNECTICUT STATE POLICE. CONTACT THE NETWORK CONTROL CENTER AT 860-865-8008.
- TOWER REINFORCING WORK AFFECTING CRITICAL CONNECTICUT STATE POLICE ANTENNAS MAY BE REQUIRED TO BE CONDUCTED AT TIMES AS DETERMINED BY THE REQUIREMENTS OF THE CONNECTICUT STATE POLICE.
- ALL EQUIPMENT AND PRODUCTS PURCHASED ARE TO BE REVIEWED BY CONTRACTOR AND ALL APPLICABLE SUB-CONTRACTORS FOR ANY CONDITION PER MFR'S RECOMMENDATIONS. CONTRACTOR TO SUPPLY THESE ITEMS AT NO COST TO OWNER OR ARCHITECT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE SAFETY FROM THE TIME THE JOB IS AWARDED UNTIL ALL WORK IS COMPLETE AND ACCEPTED BY THE OWNER.
- CONTRACTOR TO REVIEW ALL SHOP DRAWINGS AND SUBMIT COPY TO ARCHITECT FOR REVIEW. DRAWINGS MUST BEAR THE CHECKER'S INITIALS BEFORE SUBMITTAL TO THE ARCHITECT FOR REVIEW.
- THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS, ANGLES, AND EXISTING CONDITIONS AT THE SITE, PRIOR TO FABRICATION AND/OR INSTALLATION OF ANY WORK IN THE CONTRACT AREA. SUBMIT ANY DISCREPANCIES FROM THE DRAWINGS TO THE ARCHITECT.
- THE CONTRACTOR IS SOLELY RESPONSIBLE TO DETERMINE CONSTRUCTION PROCEDURE AND SEQUENCE, AND TO ENSURE THE SAFETY OF THE EXISTING STRUCTURE AND ITS COMPONENT PARTS DURING CONSTRUCTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, BRACING, UNDERPINNING, ETC. THAT MAY BE NECESSARY.
- CONTRACTOR TO CONTACT "CALL BEFORE YOU DIG" AT 1-800-922-4455 TO VERIFY AND IDENTIFY THE EXACT LOCATIONS OF ALL UNDERGROUND UTILITIES AND OBSTRUCTIONS IDENTIFIED PRIOR TO COMMENCING WORK IN THE CONTRACT AREA.
- CONTRACTOR SHALL COMPLY WITH OWNER ENVIRONMENTAL ENGINEER ON ALL METHODS AND PROVISIONS FOR ALL EXCAVATION ACTIVITIES INCLUDING SOIL DISPOSAL. ALL BACKFILL MATERIALS TO BE PROVIDED BY THE CONTRACTOR.
- DIMENSIONS OF EXISTING TOWER ARE BASED ON MANUFACTURER'S DRAWINGS PREPARED BY ROHN INDUSTRIES, INC., DATED DECEMBER 1992, AND ARE NOT GUARANTEED. CONTRACTOR SHALL TAKE FIELD DIMENSIONS AS NECESSARY TO ASSURE PROPER FIT OF ALL FINISHED WORK AND SHALL ASSUME FULL RESPONSIBILITY FOR THEIR ACCURACY. WHEN SHOP DRAWINGS BASED ON FIELD MEASUREMENT ARE SUBMITTED FOR REVIEW, DIMENSIONS ARE PROVIDED FOR THE ENGINEER'S REFERENCE ONLY.
- TOWER INVENTORY IS BASED ON INFORMATION OBTAINED BY CONNECTICUT STATE POLICE DATED APRIL 12, 2016. TOWER MAPPING AND EXISTING INVENTORY OBTAINED FROM D&K NATIONWIDE COMMUNICATIONS, INC. DATED MARCH 2, 2016.
- CONTRACTOR TO VERIFY REQUIRED CLEARANCES INCLUDING BUT NOT LIMITED TO EXISTING BUILDINGS, EQUIPMENT PADS AND SHELTERS PRIOR TO COMMENCING WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE DURING CONSTRUCTION. NO MEMBER OF THE TOWER SHALL BE LEFT DISCONNECTED FOR THE NEXT WORKING DAY. THE CONTRACTOR SHALL BE AWARE OF WEATHER AND WIND CONDITIONS AND NOT PERFORM MEMBER REPLACEMENT IN A WIND.

## STRUCTURAL NOTES

### STRUCTURAL STEEL MATERIAL:

ALL STRUCTURAL STEEL MEMBERS AND HSS TUBING USED FOR REINFORCING SHALL BE MINIMUM 50 KSI WITH THE BELOW EXCEPTIONS:  
 ANGLE SIZE 2-1/2"x2-1/2"x3/16" AND SMALLER ..... A36  
 STRUCTURAL PLATES ..... A36

STRUCTURAL STEEL SHALL CONFORM TO ALL THE REQUIREMENTS OF THE ASTM SPECIFICATION, AS REFERENCED IN THE CODE.

UNLESS OTHERWISE NOTED, ALL STEEL WILL BE GALVANIZED IN ACCORDANCE WITH ASTM 123 AFTER FABRICATION. TOUCH UP ALL DAMAGED GALVANIZED STEEL WITH APPROVED COLD ZINC, "GALVANOX", "DRY GALV", "ZINC-IT", OR APPROVED EQUIVALENT, IN ACCORDANCE WITH MANUFACTURERS GUIDELINES. TOUCH-UP DAMAGED NON GALVANIZED STEEL WITH SAME PAINT APPLIED IN SHOP OR FIELD.

SHOP AND ERECTION DRAWINGS SHALL BE SUBMITTED FOR ALL STRUCTURAL STEEL WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. SUBMIT 2 SETS OF PRINTS FOR THE ENGINEER REVIEW.

MILL BEARING ENDS OF COLUMNS, STIFFENERS, AND OTHER BEARING SURFACES TO TRANSFER LOAD OVER ENTIRE CROSS SECTION.

THE OMISSION OF ANY MATERIAL THAT WAS SHOWN ON THE CONTRACT DRAWINGS SHALL NOT RELIEVE THE CONTRACTOR OF PROVIDING THE SAME.

### CONNECTIONS / FIELD ASSEMBLY:

BOLTED CONNECTIONS: UNLESS OTHERWISE NOTED, ALL JOINTS ARE SLIP CRITICAL TYPE, REQUIRING 5/8" & 3/4" DIA. A325-N & A490-X BOLTS, A563 NUTS AND F436 WASHERS, ALL GALVANIZED. BEVELED WASHERS SHALL BE USED ON BEAM FLANGES HAVING A SLOPE GREATER THAN 1:20.

STRUCTURE IS DESIGNED TO BE LEVEL AND PLUMB, SELF-SUPPORTING AND STABLE AFTER WORK IS COMPLETED.

COMMENCEMENT OF WORK WITHOUT NOTIFYING THE ENGINEER OF ANY DISCREPANCIES WILL BE CONSIDERED ACCEPTANCE OF PRECEDING WORK.

### INSPECTIONS:

SPECIAL INSPECTIONS ARE REQUIRED PER THE CODE FOR STRUCTURAL STEEL WORK.

OWNER WILL SUPPLY THE SERVICES OF A SPECIAL INSPECTOR AND TESTING AGENTS AS REQUIRED. CONTRACTOR SHALL COORDINATE INSPECTIONS OF FABRICATOR'S AND ERECTOR'S WORK AND MATERIALS TO MEET THE REQUIREMENTS OF THE STATEMENT OF SPECIAL INSPECTIONS FOR THIS PROJECT.

COPIES OF TESTING AND INSPECTION REPORTS WILL BE PROVIDED TO THE OWNER, BUILDING OFFICIAL, ENGINEER OF RECORD AND CONTRACTOR.



PROJECT NO.  
60537397  
Designed by:  
MCD  
Drawn by:  
GAT  
Checked by:  
ICA  
Approved by:  
RAS

**AECOM**  
500 ENTERPRISE DRIVE  
ROCKY HILL, CONNECTICUT  
(860)-529-8882

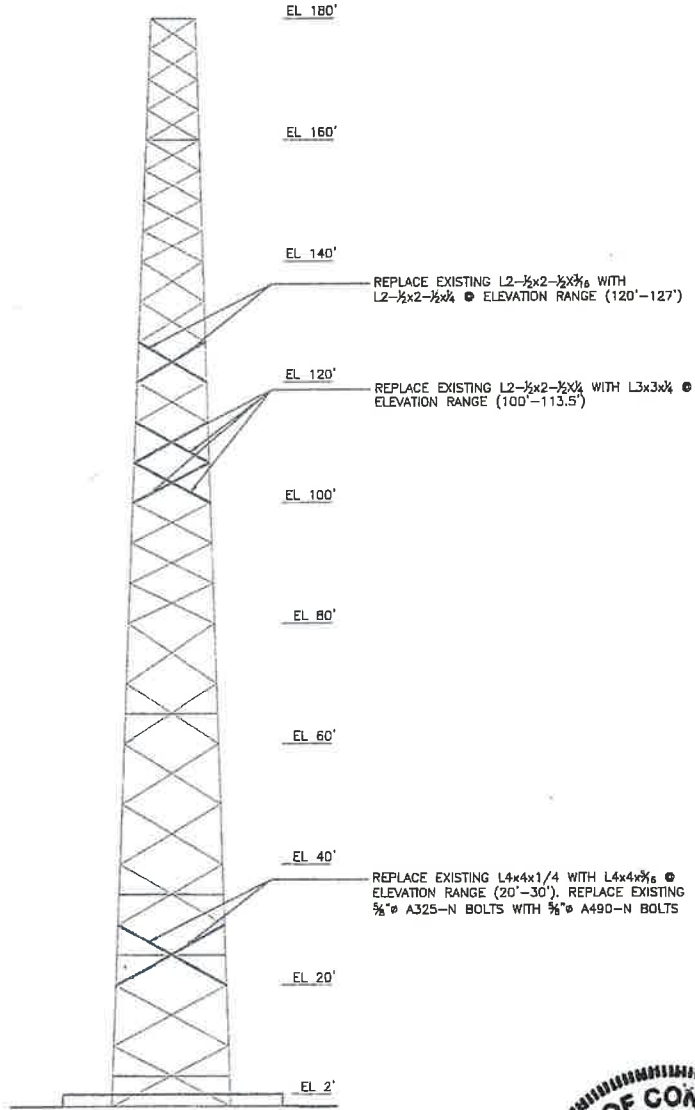


SITE ADDRESS: BUTTERNUT HOLLOW ROAD  
GREENWICH, CONNECTICUT 06831

4	07/31/19	RE-ISSUED/NO CHANGE	Dwg. No.
3	10/11/18	RE-ISSUED	SK-1
2	10/03/18	RE-ISSUED	
REV.	DATE:	DESCRIPTION	
Scale:	AS NOTED	Date:	03/20/18
Job No.		File No.	Dwg. 1 of 5

**NOTES:**

1. REFER TO STRUCTURAL NOTES ON SK-1 FOR STEEL GRADE REQUIREMENTS FOR REPLACEMENT MEMBERS.
2. REINFORCEMENT OF TOWER IS REQUIRED FOR ALL 3 SIDES OF EXISTING EXTERIOR TOWER STRUCTURE.
3. CONNECTION BOLTS THAT ARE REMOVED DURING MEMBER REPLACEMENT SHALL BE REPLACED IN KIND, UNLESS NOTED OTHERWISE. EXISTING BOLTS SHALL NOT BE RE-USED FOR CONNECTING REPLACEMENT MEMBERS.
4. CONTRACTOR SHALL COORDINATE WITH ROHN INC. FOR INDICATED TOWER REPLACEMENT MEMBERS AS SHOWN.
5. CONTRACTOR SHALL VERIFY INFORMATION SHOWN ON THIS SHEET PRIOR TO ORDERING MATERIALS.
6. THE BOTTOM 2 FEET OF THE TOWER'S LEGS AND DIAGONAL MEMBERS ARE ENCASED IN CONCRETE, PART OF A PREVIOUS FOUNDATION MODIFICATION.



**1 TOWER ELEVATION - EXTERIOR TOWER**  
 SK-2 SCALE: 1" = 30'-0" (INTERIOR TOWER NOT SHOWN FOR CLARITY)



PROJECT NO.  
60537397  
 Designed by:  
MCD  
 Drawn by:  
GAT  
 Checked by:  
JCA  
 Approved by:  
RAS

**AECOM**  
 500 ENTERPRISE DRIVE  
 ROCKY HILL, CONNECTICUT  
 (860)-528-8882

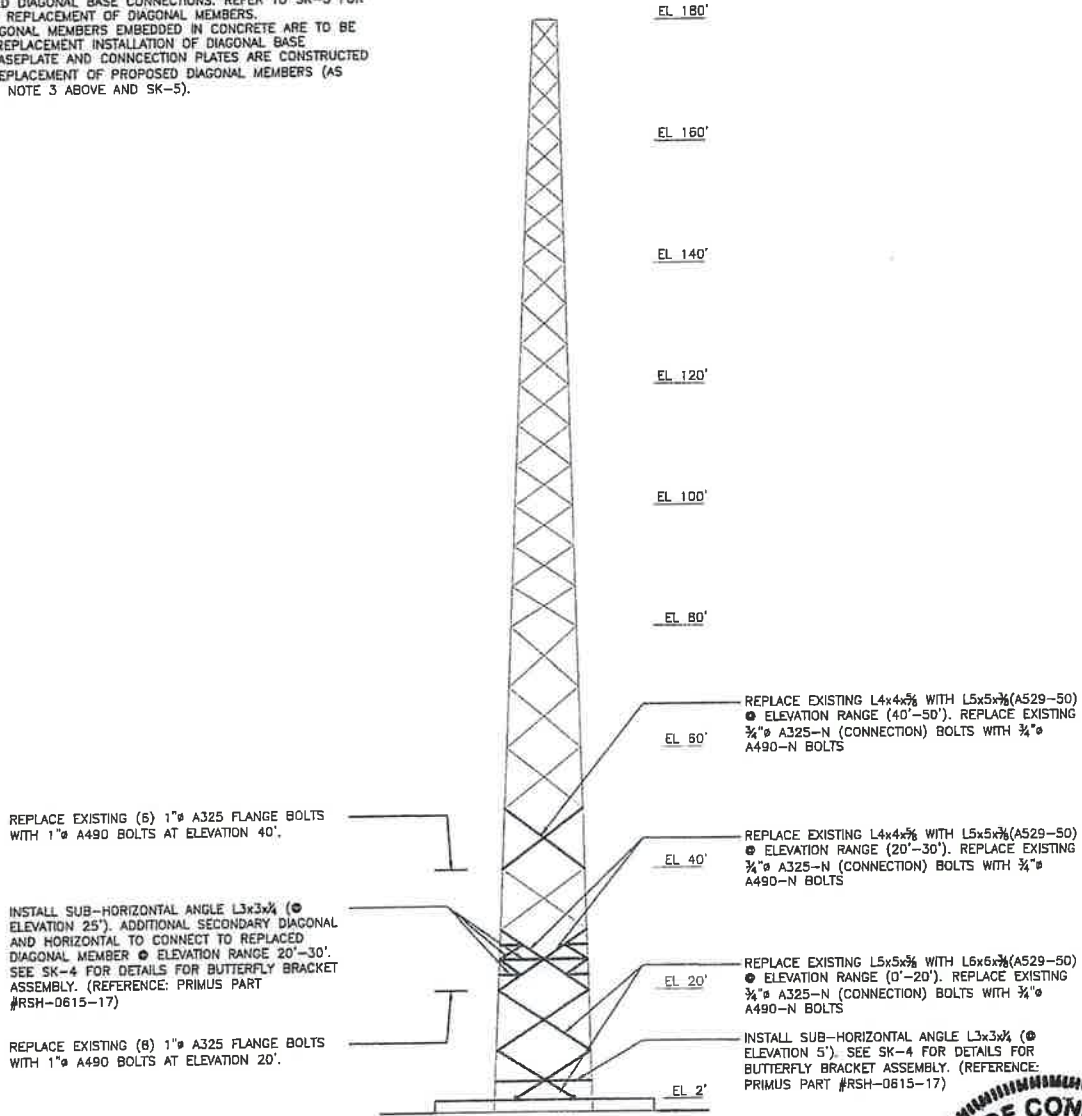
SITE ADDRESS: BUTTERNUT HOLLOW ROAD  
 GREENWICH, CONNECTICUT 06831

4	07/31/19	RE-ISSUED/NO CHANGE
3	10/11/18	RE-ISSUED
2	10/03/18	RE-ISSUED
REV.	DATE:	DESCRIPTION
Scale: AS NOTED		Date: 03/20/18
Job No.	File No.	Dwg. 2 of 5

Dwg. No.  
**SK-2**

**NOTES:**

1. REFER TO STRUCTURAL NOTES ON SK-1 FOR STEEL GRADE REQUIREMENTS FOR REPLACEMENT MEMBERS.
2. REINFORCEMENT OF TOWER IS REQUIRED FOR ALL 3 SIDES OF EXISTING INTERIOR TOWER STRUCTURE.
3. CONNECTION BOLTS THAT ARE REMOVED DURING MEMBER REPLACEMENT SHALL BE REPLACED IN KIND, UNLESS NOTED OTHERWISE. EXISTING BOLTS SHALL NOT BE RE-USED FOR CONNECTING REPLACEMENT MEMBERS.
4. CONTRACTOR SHALL VERIFY INFORMATION SHOWN ON THIS SHEET PRIOR TO ORDERING MATERIALS.
5. THE BOTTOM 2 FEET OF THE TOWER'S LEGS AND DIAGONAL MEMBERS ARE ENCASED IN CONCRETE, PART OF A PREVIOUS FOUNDATION MODIFICATION.
6. EXISTING TOWER DIAGONAL MEMBERS AT ELEVATION 0'-2" RANGE ARE ENCASED IN CONCRETE. CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT OF TOWER STRUCTURE DURING CONSTRUCTION OF PROPOSED DIAGONAL BASE CONNECTIONS. REFER TO SK-5 FOR DETAILS FOR REPLACEMENT OF DIAGONAL MEMBERS.
7. EXISTING DIAGONAL MEMBERS EMBEDDED IN CONCRETE ARE TO BE CUT AFTER REPLACEMENT INSTALLATION OF DIAGONAL BASE ANCHORS, BASEPLATE AND CONNECTION PLATES ARE CONSTRUCTED TO ALLOW REPLACEMENT OF PROPOSED DIAGONAL MEMBERS (AS INDICATED IN NOTE 3 ABOVE AND SK-5).



**1** TOWER ELEVATION - INTERIOR TOWER  
 SK-3 SCALE: 1" = 30'-0" (EXTERIOR TOWER NOT SHOWN FOR CLARITY)



PROJECT NO:  
60537397  
 Designed by:  
MCD  
 Drawn by:  
GAT  
 Checked by:  
ICA  
 Approved by:  
RAS

**AECOM**  
 500 ENTERPRISE DRIVE  
 ROCKY HILL, CONNECTICUT  
 (860)-529-8682

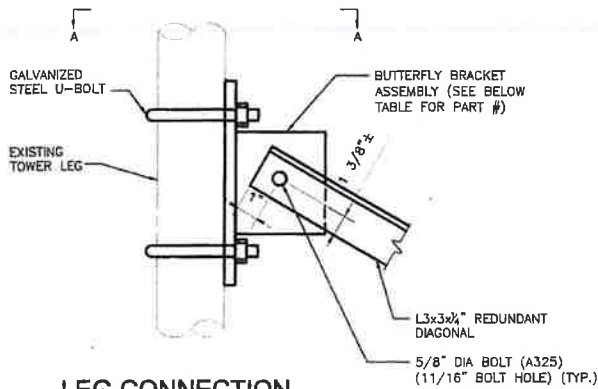


SITE ADDRESS: BUTTERNUT HOLLOW ROAD  
 GREENWICH, CONNECTICUT 06831

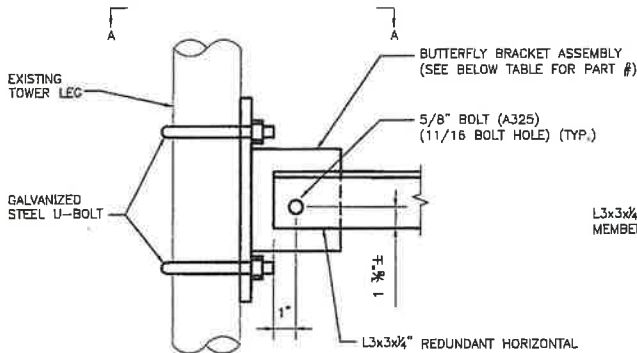
4	07/31/19	RE-ISSUED/NO CHANGE
3	10/11/18	RE-ISSUED
2	10/03/18	RE-ISSUED
REV.	DATE:	DESCRIPTION
Scale: AS NOTED		Date: 03/20/18
Job No.	File No.	Dwg. No. 3 of 5

Dwg. No.  
**SK-3**

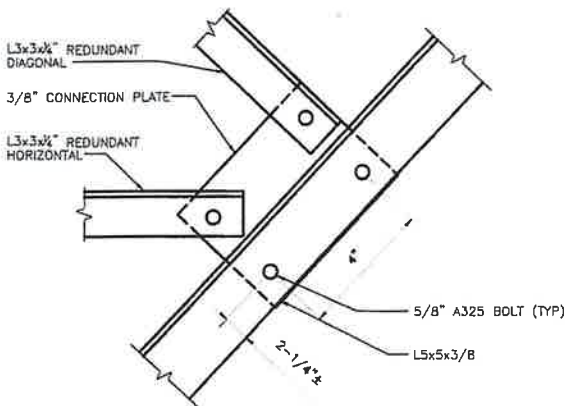




**3**  
SK-4  
**LEG CONNECTION REDUNDANT DIAGONAL**  
SCALE: 1-1/2"=1'-0"



**2**  
SK-4  
**LEG CONNECTION REDUNDANT HORIZONTAL**  
SCALE: 1-1/2"=1'-0"



**1**  
SK-4  
**REDUNDANT MEMBER CONNECTION**  
SCALE: 1-1/2"=1'-0"

ELEVATION	LEG BUTTERFLY BRACKET #
2'-10"	RSH-0500-00
20'-30"	RSH-0500-00

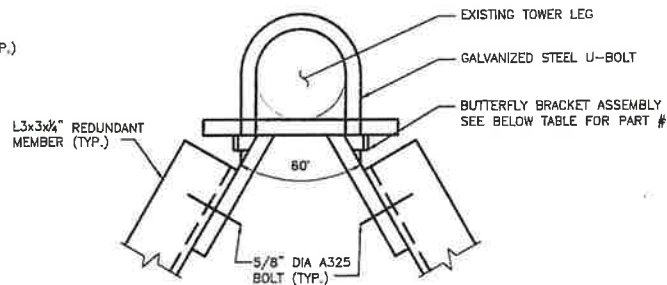
NOTE: LEG BUTTERFLY BRACKET ASSEMBLY INFORMATION FROM PRIMUS ELECTRONICS CORPORATION. CONTRACTOR SHALL USE PRODUCTS SIMILAR TO OR EXCEEDING IN QUALITY FOR CONSTRUCTION.

**NOTE:**

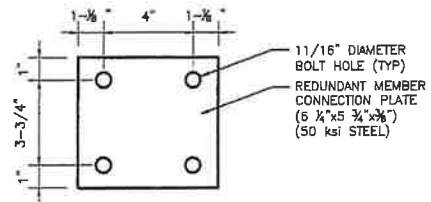
1. DETAILS 2 & 3 ABOVE INDICATE CONNECTIONS OF DIAGONAL AND HORIZONTAL MEMBERS TO TOWER LEGS. BUTTERFLY BRACKET ASSEMBLIES USED FOR CONNECTION TO EXISTING LEGS SHALL BE INSTALLED AS CLOSE TO EXISTING ADJOINING HORIZONTAL MEMBER AS POSSIBLE.

**NOTES:**

- REFER TO SK-1 FOR STRUCTURAL NOTES. COORDINATE SHEET WITH SK-3 FOR SECONDARY HORIZONTAL/DIAGONAL CONNECTION MEMBERS.
- CONTRACTOR SHALL FIELD VERIFY DIMENSIONS SHOWN PRIOR TO ORDERING SUPPLIES.
- U-BOLTED CONNECTION ASSEMBLIES CONNECTING THE EXTERIOR AND INTERIOR TOWERS ARE PERMITTED TO BE ADJUSTED ONE UNIT AT A TIME TO ALLOW THE INSTALLATION OF THE PROPOSED BUTTERFLY BRACKET ASSEMBLIES INDICATED HERE AND ON SHEET SK-3.



**5**  
SK-4  
**SECTION A**  
SCALE: N.T.S.



**4**  
SK-4  
**CONNECTION PLATE**  
SCALE: 1-1/2"=1'-0"

PROJECT NO.  
60537397  
Designed by:  
MCD  
Drawn by:  
GAT  
Checked by:  
ICA  
Approved by:  
RAS

**AECOM**  
500 ENTERPRISE DRIVE  
ROCKY HILL, CONNECTICUT  
(860)-529-8882



SITE ADDRESS: BUTTERNUT HOLLOW ROAD  
GREENWICH, CONNECTICUT 06831

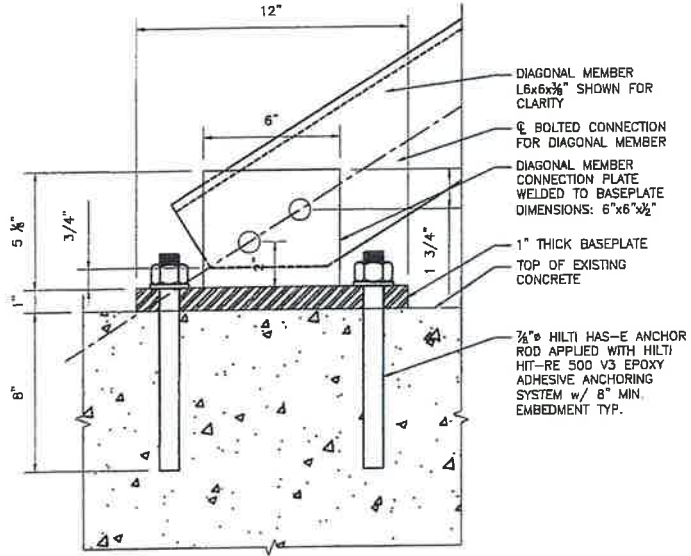
REV.	DATE	DESCRIPTION
4	07/31/19	RE-ISSUED/NO CHANGE
3	10/11/18	RE-ISSUED
2	10/03/18	RE-ISSUED

Dwg. No.

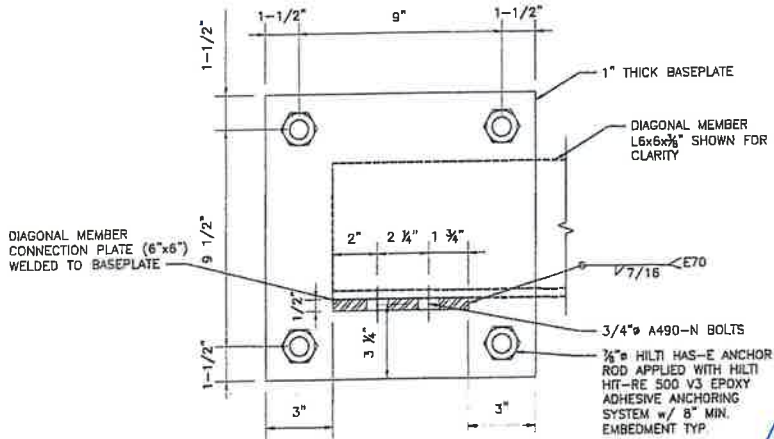
SK-4

Scale: AS NOTED Date: 03/20/18

Job No. File No. Dwg. 4 of 5



**2** DIAGONAL BASE ANCHOR - ELEVATION VIEW  
 SK-5 SCALE: 1-1/2"=1'-0"



**1** DIAGONAL BASE ANCHOR - PLAN VIEW  
 SK-5 SCALE: 1-1/2"=1'-0"



PROJECT NO.  
60537397  
 Designed by:  
MCD  
 Drawn by:  
GAT  
 Checked by:  
ICA  
 Approved by:  
RAS

**AECOM**  
 500 ENTERPRISE DRIVE  
 ROCKY HILL, CONNECTICUT  
 (860)-528-8882

AT&T | Sprint | T-Mobile | verizon  
 SITE ADDRESS: BUTTERNUT HOLLOW ROAD  
 GREENWICH, CONNECTICUT 06831

4	07/31/19	RE-ISSUED/NO CHANGE
3	10/11/18	RE-ISSUED
2	10/03/18	RE-ISSUED
REV.	DATE:	DESCRIPTION
Scale: AS NOTED		Date: 03/20/18
Job No.	File No.	Dwg. 5 of 5

Dwg. No.  
**SK-5**





## **CALCULATIONS COVER PAGE**

## A Note Regarding the Tower Calculations included herein:

The computer program utilized for the structural analysis contained in this report was "PLS-Tower", Version 10.62. This program does not apply multiple wind attack angles to greatest stress. As a result, multiple analyses with different wind attack angles were run in order to arrive at the controlling condition causing the greatest stress. This report includes only the TIA-222-G load case and wind attack angle that causes the greatest stress to the tower members in order to minimize the size of this report. The analyses conducted but not included with this report are available upon request.

## **PLS-TOWER INPUT / OUTPUT SUMMARY**

Project Name : Multi-Carrier Analysis
Project Notes : Bottleneck Hollow
Project File : p:\projects\telcom\structuralsbylocation\connecticut\greenwichcsp#74\14-vzw adds to # 13\_pls\_g\pls-tower\_wind\_0\4-carir.tow
Date run : 3:01:51 PM Wednesday, July 31, 2019
by : Tower Version 10.62
Licensed to : URS Connecticut

Successfully performed nonlinear analysis

Unusual number of fixed joints found: 6. Towers normally have from between 1 and 4 fixed joints. ??
Linear appurtenance "DNK1-7/8" @ 56" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "DNK2-7/8" @ 54" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "DNK3-7/8" @ 60" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "DNK4-7/8" @ 65" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "DNK5-1-5/8" @ 82" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "DNK6-Hybridflex Cables @ Sprint" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "DNK7-7/8" @ 110" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "DNK8-7/8" @ 122" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "DNK9-7/8" @ 122" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "DNK10-1-5/8" @ VZW" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "DNK11-1-5/8" @ 130" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "DNK12-7/8" @ 135" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "DNK13, 14-1-5/8" @ T-Mobile" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "DNK15-7/8" @ 137" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "DNK16, 17, 18-1-5/8" @ ATW" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "DNK16, 17, 18-Optic Fiber Cable @ ATW" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "DNK16, 17, 18-DC Cable @ ATW" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "DNK19-7/8" @ 159" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "DNK20-7/8" @ 159.5" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "CSF70, 71, 72-1-5/8" @ 160 (3)" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "CSF73-1/2" @ 160" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "DNK21-Elliptical @ 160" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "DNK22-7/8" @ 165" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "DNK23A-1-5/8" @ 168" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "DNK23B-1/2" @ 168" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "DNK26B-1-5/8" @ 175" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "DNK26A-7/8" @ 175" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "DNK27-B-1-5/8" @ 175" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "DNK27A-7/8" @ 175" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "DNK27C-3/8" @ 175" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "DNK28A-1-5/8" @ 175" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "DNK28B-1-5/8" @ 175" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "DNK28C-1-5/8" @ 175" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "DNK28D-7/8" @ 175" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "GZW-1-Elliptical @ 172" (DNK25)" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "GZW-(1) Hybridflex Cables" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "Hybridflex 6x12 Cables @ T-Mobile" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
Linear appurtenance "Hybridflex 9x18 Cables @ T-Mobile" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??
The model has 40 warnings. ??

Member check option: ANSI/TIA 222-G-1
Connection rupture check: ANSI/TIA 222-G-1
Crossing diagonal check: ANSI/TIA 222-G-1 [Alternate Unsupported RLOUT = 1]
Loads from file: p:\projects\telcom\structuralsbylocation\connecticut\greenwichcsp#74\14-vzw adds to # 13\_pls\_g\pls-tower\_wind\_0\4-carir.eia

\*\*\* Analysis Results:

Maximum element usage is 97.93% for Angle "SNB-LH2P" in load case "1: 1.2D + 1.0Dg + 1.6Wc"

Summary of Joint Support Reactions For All Load Cases:

Table with 7 columns: Load Case, Label, Force (kips), Tran. Moment (ft-k), Vert. Moment (ft-k), Long. Moment (ft-k), Bending Moment (ft-k). Row 1: 1.2D + 1.0Dg + 1.6Wc RohnUP -28.86, 0.10, 347.98, 28.86, -0.05, -5.40, -0.01, 5.40, 0.00

URS Connecticut - 4-carir

Load Case	Support	Origin	Joint	Member	Leg Dir.	Perpendicular	To Leg	Horizontal	Residual Shear	Horizontal	Residual Shear	Horizontal	Force	Total	Total
							(kips)	(kips)	(kips)	(kips)	(kips)	(kips)	(kips)	(kips)	(kips)
1:	1.2D + 1.0Dg + 1.6Wc	SNB-JP	-49.71	0.00	500.22	49.71	0.00	-13.12	0.00	13.12	0.00	0.00	0.00	13.12	0.00
1:	1.2D + 1.0Dg + 1.6Wc	RohnJ1	-9.19	-9.74	-148.29	13.39	1.86	-1.36	0.00	2.31	0.00	0.00	0.00	2.31	0.00
1:	1.2D + 1.0Dg + 1.6Wc	RohnJ2	-9.38	9.66	-144.59	13.46	-1.81	-1.46	0.00	2.33	0.00	0.00	0.00	2.33	0.00
1:	1.2D + 1.0Dg + 1.6Wc	SNB-J1	-16.94	-18.22	-222.16	24.88	5.30	-2.55	-0.04	5.89	0.00	0.00	0.00	5.89	0.00
1:	1.2D + 1.0Dg + 1.6Wc	SNB-J2	-16.96	18.25	-222.63	24.91	-5.31	-2.56	0.04	5.90	0.00	0.00	0.00	5.90	0.00
2:	0.9D + 1.0Dg + 1.6Wc	RohnJP	-28.59	0.10	342.58	28.59	-0.05	-5.32	0.01	5.32	0.00	0.00	0.00	5.32	0.00
2:	0.9D + 1.0Dg + 1.6Wc	SNB-JP	-49.56	0.00	495.02	49.56	0.00	-13.00	0.00	13.00	0.00	0.00	0.00	13.00	0.00
2:	0.9D + 1.0Dg + 1.6Wc	RohnJ1	-9.33	-9.95	-148.99	13.65	1.92	-1.40	0.00	2.37	0.00	0.00	0.00	2.37	0.00
2:	0.9D + 1.0Dg + 1.6Wc	RohnJ2	-9.51	9.88	-149.32	13.72	-1.87	-1.50	0.01	2.39	0.00	0.00	0.00	2.39	0.00
2:	0.9D + 1.0Dg + 1.6Wc	SNB-J1	-17.01	-18.33	-226.45	25.01	5.40	-2.62	-0.04	6.00	0.00	0.00	0.00	6.00	0.00
2:	0.9D + 1.0Dg + 1.6Wc	SNB-J2	-17.03	18.36	-226.95	25.04	-5.40	-2.63	0.04	6.01	0.00	0.00	0.00	6.01	0.00
4:	1.2D + 1.0Dg + 1.0E	RohnJP	-2.52	0.00	41.46	2.52	-0.00	-0.56	0.00	0.56	0.00	0.00	0.00	0.56	0.00
4:	1.2D + 1.0Dg + 1.0E	SNB-JP	-3.04	0.00	49.20	3.04	0.00	-1.17	-0.00	1.17	0.00	0.00	0.00	1.17	0.00
4:	1.2D + 1.0Dg + 1.0E	RohnJ1	0.11	0.32	8.90	0.34	-0.09	0.11	0.00	0.14	0.00	0.00	0.00	0.14	0.00
4:	1.2D + 1.0Dg + 1.0E	RohnJ2	0.10	-0.33	8.99	0.34	0.10	0.10	0.00	0.14	0.00	0.00	0.00	0.14	0.00
4:	1.2D + 1.0Dg + 1.0E	SNB-J1	-0.46	-0.54	2.94	0.71	-0.03	0.20	-0.01	0.20	0.00	0.00	0.00	0.20	0.00
4:	1.2D + 1.0Dg + 1.0E	SNB-J2	-0.45	0.54	3.04	0.71	0.03	0.20	0.01	0.20	0.00	0.00	0.00	0.20	0.00
5:	0.9D + 1.0Dg + 1.0E	RohnJP	-2.25	0.00	36.46	2.25	-0.00	-0.49	0.00	0.49	0.00	0.00	0.00	0.49	0.00
5:	0.9D + 1.0Dg + 1.0E	SNB-JP	-2.90	0.00	44.53	2.90	0.00	-1.05	-0.00	1.05	0.00	0.00	0.00	1.05	0.00
5:	0.9D + 1.0Dg + 1.0E	RohnJ1	-0.03	0.09	4.00	0.10	-0.04	0.07	-0.00	0.08	0.00	0.00	0.00	0.08	0.00
5:	0.9D + 1.0Dg + 1.0E	RohnJ2	-0.03	-0.10	4.06	0.10	0.04	0.07	0.00	0.08	0.00	0.00	0.00	0.08	0.00
5:	0.9D + 1.0Dg + 1.0E	SNB-J1	-0.52	-0.66	-1.61	0.84	-0.07	0.14	-0.01	0.15	0.00	0.00	0.00	0.15	0.00
5:	0.9D + 1.0Dg + 1.0E	SNB-J2	-0.52	0.66	-1.54	0.84	-0.07	0.14	0.01	0.16	0.00	0.00	0.00	0.16	0.00
6:	Service	1.0D + 1.0Dg + 1.0 We	RohnJP	-7.13	0.02	89.82	7.13	-0.01	-1.38	0.00	1.38	0.00	0.00	1.38	0.00
6:	Service	1.0D + 1.0Dg + 1.0 We	SNB-JP	-11.50	0.00	122.99	11.50	-0.00	-3.24	0.00	3.24	0.00	0.00	3.24	0.00
6:	Service	1.0D + 1.0Dg + 1.0 We	RohnJ1	-1.72	-1.60	-20.19	2.35	-0.00	-0.21	0.00	0.21	0.00	0.00	0.21	0.00
6:	Service	1.0D + 1.0Dg + 1.0 We	RohnJ2	-1.76	1.58	-20.19	2.37	-0.27	-0.23	0.00	0.35	0.00	0.00	0.35	0.00
6:	Service	1.0D + 1.0Dg + 1.0 We	SNB-J1	-3.62	-3.77	-38.48	5.22	0.95	-0.41	-0.01	1.03	0.00	0.00	1.03	0.00
6:	Service	1.0D + 1.0Dg + 1.0 We	SNB-J2	-3.62	3.77	-38.52	5.23	-0.95	-0.41	0.01	1.03	0.00	0.00	1.03	0.00
1.2*DL	SNB-JP	-1.07	0.00	19.88	1.07	-0.00	-0.28	-0.00	0.00	0.28	0.00	0.00	0.00	0.28	0.00
1.2*DL	SNB-JP	-0.55	0.00	18.52	0.55	-0.00	-0.48	-0.00	0.00	0.48	0.00	0.00	0.00	0.48	0.00
1.2*DL	RohnJ1	0.53	0.92	19.69	1.06	0.24	0.14	-0.00	0.27	0.00	0.00	0.00	0.27	0.00	
1.2*DL	RohnJ2	0.53	-0.92	19.78	1.06	0.24	0.14	0.00	0.27	0.00	0.00	0.00	0.27	0.00	
1.2*DL	SNB-J1	0.27	0.47	18.28	0.55	-0.41	0.24	-0.00	0.47	0.00	0.00	0.00	0.47	0.00	
1.2*DL	SNB-J2	0.28	-0.47	18.38	0.55	-0.41	0.24	0.00	0.47	0.00	0.00	0.00	0.47	0.00	
0.9DL	RohnJP	-0.80	0.00	14.92	0.80	-0.00	-0.21	-0.00	0.21	0.00	0.00	0.00	0.21	0.00	
0.9DL	SNB-JP	-0.41	0.00	13.89	0.41	-0.00	-0.36	-0.00	0.36	0.00	0.00	0.00	0.36	0.00	
0.9DL	RohnJ1	0.40	0.69	14.77	0.80	0.18	0.10	-0.00	0.21	0.00	0.00	0.00	0.21	0.00	
0.9DL	RohnJ2	0.40	-0.69	14.84	0.80	0.18	0.10	0.00	0.21	0.00	0.00	0.00	0.21	0.00	
0.9DL	SNB-J1	0.21	0.35	13.71	0.41	-0.31	0.18	-0.00	0.35	0.00	0.00	0.00	0.35	0.00	
0.9DL	SNB-J2	0.21	-0.35	13.78	0.41	-0.31	0.18	0.00	0.35	0.00	0.00	0.00	0.35	0.00	

Summary of Joint Support Reactions For All Load Cases in Direction of Leg:

Member	Leg Dir.	Perpendicular	To Leg	Horizontal	Residual Shear	Horizontal	Force	Total	Total
			(kips)	(kips)	(kips)	(kips)	(kips)	(kips)	(kips)
1:	1.2D + 1.0Dg + 1.6Wc	RohnJP	348.846	15.102	15.114	-0.098	15.114	-28.86	0.10
1:	1.2D + 1.0Dg + 1.6Wc	SNB-LI2P	501.792	29.999	30.022	49.71	30.022	-49.71	0.00
1:	1.2D + 1.0Dg + 1.6Wc	RohnIa1	-144.691	7.950	6.342	-9.19	6.342	-9.19	-9.74
1:	1.2D + 1.0Dg + 1.6Wc	RohnIa2	-144.993	8.041	6.522	-9.38	6.522	-9.38	9.66
1:	1.2D + 1.0Dg + 1.6Wc	SNB-Ia1	-222.944	16.461	16.472	-16.94	16.472	-16.94	-18.22
1:	1.2D + 1.0Dg + 1.6Wc	SNB-Ia2	-223.417	16.478	16.489	-16.96	16.489	-16.96	18.25
2:	0.9D + 1.0Dg + 1.6Wc	RohnJP	343.443	15.047	15.058	-0.098	15.058	-28.59	0.10
2:	0.9D + 1.0Dg + 1.6Wc	SNB-LI2P	496.589	30.060	30.084	-49.56	30.084	-49.56	0.00
2:	0.9D + 1.0Dg + 1.6Wc	RohnIa1	-149.403	8.023	6.384	-9.33	6.384	-9.33	9.96
2:	0.9D + 1.0Dg + 1.6Wc	RohnIa2	-149.727	8.112	6.564	-9.51	6.564	-9.51	10.49
2:	0.9D + 1.0Dg + 1.6Wc	SNB-Ia1	-227.234	16.428	16.439	-17.01	16.439	-17.01	-18.33
2:	0.9D + 1.0Dg + 1.6Wc	SNB-Ia2	-227.731	16.444	16.456	-17.03	16.456	-17.03	18.36
4:	1.2D + 1.0Dg + 1.0E	RohnJP	49.282	1.100	0.883	-0.026	0.883	-0.026	0.00
4:	1.2D + 1.0Dg + 1.0E	SNB-LI2P	49.282	1.100	1.101	-3.04	1.101	-3.04	0.00
4:	1.2D + 1.0Dg + 1.0E	RohnJ1	8.905	0.071	0.071	0.019	0.071	0.11	0.32
4:	1.2D + 1.0Dg + 1.0E	RohnJ2	8.996	0.076	0.076	0.076	0.076	0.10	-0.33
4:	1.2D + 1.0Dg + 1.0E	SNB-J1	2.908	0.824	0.824	-0.644	0.824	-0.46	0.54
4:	1.2D + 1.0Dg + 1.0E	SNB-J2	3.009	0.826	0.826	-0.647	0.826	-0.45	0.54
5:	0.9D + 1.0Dg + 1.0E	RohnJP	36.518	0.814	0.814	-0.003	0.814	-2.25	0.00
5:	0.9D + 1.0Dg + 1.0E	SNB-LI2P	44.607	1.148	1.148	-2.90	1.148	-2.90	0.00

Section Label	Top Z (ft)	Bottom Z (ft)	Joint Z (ft)	Member Count	Top Width (ft)	Bottom Width (ft)	Gross Area (ft <sup>2</sup> )	Face Adjust Factor	Face Ar Adjust Factor	Dead Load Factor	
A	180.000	160.000		36	111	7.50	8.87	163.75	0.9000	0.9000	1.000
B	160.000	140.000		33	93	8.57	10.23	191.05	0.9000	0.9000	1.000
C	140.000	120.000		27	72	10.23	11.60	218.31	0.9000	0.9000	1.000
D	120.000	100.000		27	72	11.60	12.96	245.54	0.9000	0.9000	1.000
E	100.000	80.000		27	72	12.96	14.32	272.78	0.9000	0.9000	1.000
F	80.000	60.000		21	51	14.32	15.68	300.04	0.9000	0.9000	1.000
G	60.000	40.000		21	51	15.68	17.05	327.29	0.9000	0.9000	1.000
H	40.000	20.000		21	51	17.05	18.41	354.57	0.9000	0.9000	1.000
I	20.000	0.000		18	39	18.41	19.78	381.92	0.9000	0.9000	1.000

Group Label	Group Desc.	Angle Type	Steel Strength (ksi)	Max Usage %	Max Comp. %	Comp. Control Member	Force (kips)	Control Load Case	Comp. Capacity (kips)	I/R Capacity (kips)	Comp. Shear Capacity (kips)	Comp. Rearing Capacity (kips)	RLX Capacity (kips)	RLZ Capacity (kips)	I/R Length Member (ft)	Curve No.	No. Bolts	Comp.
Rohn-D1	Diagonal 1	SAE	1.75X1.75X0.1875	36.0	39.87	39.87	-1.9241	1.2D +	4.825	13.050	12.433	13.050	0.500	0.500	170.38	9.740	4	1
Rohn-D2	Diagonal 2	SAE	2.5X2.5X0.1875	36.0	84.67	84.67	-4.8991	1.2D +	5.786	13.050	12.433	13.050	0.500	0.500	166.50	10.934	4	1
Rohn-D3	Diagonal 3	SAE	2.5X2.5X0.1875	36.0	79.74	79.74	-6.7521	1.2D +	8.468	13.050	12.433	13.050	0.500	0.500	155.13	12.798	4	1
Rohn-D4	Diagonal 4	SAE	2.5X2.5X0.25	36.0	84.74	84.74	-8.2851	1.2D +	9.776	17.400	12.433	17.400	0.500	0.500	165.83	13.570	4	1
Rohn-D5	Diagonal 5	SAE	3X3X0.25	50.0	76.24	76.24	-9.4791	1.2D +	13.033	19.500	12.433	19.500	0.500	0.500	157.99	15.589	4	1
Rohn-D6	Diagonal 6	SAE	3.5X3.5X0.25	50.0	91.97	91.97	-11.4341	1.2D +	15.227	19.500	12.433	19.500	0.500	0.500	158.34	18.315	4	1
Rohn-D7	Diagonal 7	SAE	4X4X0.25	50.0	80.02	80.02	-9.9501	1.2D +	19.124	19.500	12.433	19.500	0.500	0.500	151.38	20.058	4	1
Rohn-L1	Leg 1	Pipe	Pipe3EH	50.0	10.72	10.72	-11.1471	1.2D +	103.968	0.000	0.000	0.000	1.000	1.000	52.67	5.004	0	0
Rohn-L2	Leg 2	Pipe	Pipe3.5EH	50.0	28.98	28.98	-38.4671	1.2D +	132.756	0.000	0.000	0.000	1.000	1.000	45.84	5.004	0	0
Rohn-L3	Leg 3	Pipe	Pipe4EH	50.0	50.76	50.76	-76.3891	1.2D +	150.478	0.000	0.000	0.000	1.000	1.000	54.04	6.665	1	0
Rohn-L4	Leg 4	Pipe	Pipe5STD	50.0	80.43	80.43	-127.7781	1.2D +	158.870	0.000	0.000	0.000	1.000	1.000	42.54	6.665	1	0
Rohn-L5	Leg 5	Pipe	Pipe5EH	50.0	76.59	76.59	-171.9681	1.2D +	224.520	0.000	0.000	0.000	1.000	1.000	43.23	6.665	1	0
Rohn-L6	Leg 6	Pipe	Pipe6EH	50.0	78.92	78.92	-192.3891	1.2D +	243.786	0.000	0.000	0.000	1.000	1.000	54.10	10.008	1	0
Rohn-L7	Leg 7	Pipe	Pipe6EH	50.0	91.06	91.06	-259.6901	1.2D +	285.178	0.000	0.000	0.000	1.000	1.000	54.59	10.008	1	0
Rohn-L8	Leg 8	Pipe	Pipe6EH	50.0	81.91	81.91	-322.2241	1.2D +	393.385	0.000	0.000	0.000	1.000	1.000	40.57	10.008	1	0
Rohn-H1	Horizontal 1	SAE	1.75X1.75X0.1875	36.0	2.54	2.54	-0.2061	1.2D +	8.108	0.000	0.000	0.000	0.500	0.500	131.28	7.505	4	0
SNB-D1	Diagonal 1	SAE	2X2X0.3125	36.0	11.96	11.81	-1.4681	1.2D +	19.391	21.750	12.433	21.750	0.500	0.500	111.38	7.240	1	1

Printed capacities do not include the strength factor entered for each load case. The Group Summary reports on the member and load case that resulted in maximum usage which may not necessarily be the same as that which produces maximum force.

Group Summary (Compression Portion):

Section Label	Top Z (ft)	Bottom Z (ft)	Joint Z (ft)	Member Count	Top Width (ft)	Bottom Width (ft)	Gross Area (ft <sup>2</sup> )	Face Adjust Factor	Face Ar Adjust Factor	Dead Load Factor	
A	180.000	160.000		36	111	7.50	8.87	163.75	0.9000	0.9000	1.000
B	160.000	140.000		33	93	8.57	10.23	191.05	0.9000	0.9000	1.000
C	140.000	120.000		27	72	10.23	11.60	218.31	0.9000	0.9000	1.000
D	120.000	100.000		27	72	11.60	12.96	245.54	0.9000	0.9000	1.000
E	100.000	80.000		27	72	12.96	14.32	272.78	0.9000	0.9000	1.000
F	80.000	60.000		21	51	14.32	15.68	300.04	0.9000	0.9000	1.000
G	60.000	40.000		21	51	15.68	17.05	327.29	0.9000	0.9000	1.000
H	40.000	20.000		21	51	17.05	18.41	354.57	0.9000	0.9000	1.000
I	20.000	0.000		18	39	18.41	19.78	381.92	0.9000	0.9000	1.000

Group Label	Group Desc.	Group Angle Type	Angle Size	Steel Strength	Max Usage	Max In Tens.	Tension Force	Tension Control Member	Tension Control Load Case	Section Capacity	Net Tens. Capacity	Conn. Rupture Capacity	Conn. Tens. Capacity	Length Member	No. Of Bolts	Hole Diameter		
Group Summary (Tension Portion):																		
Rohn-D1	SAE	1.75X1.75X0.1875	36.0 39.87	23.73	1,839.2	0.9D +	16,022	13,050	7,750	10,034	1,000	0.6875	17,400	0.500	0.500	127.05	8.279	
Rohn-D2	SAE	2X2X0.1875	36.0 84.67	52.01	4,561.2	0.9D +	18,958	13,050	8,770	11,238	1,000	0.6875	21,750	0.500	0.500	140.03	11.412	
Rohn-D3	SAE	2.5X2.5X0.1875	36.0 79.74	57.60	5,637.1	1.2D +	25,222	12,433	9,787	12,798	1,000	0.6875	41,760	0.500	0.500	121.07	11.784	
Rohn-D4	SAE	2.5X2.5X0.25	36.0 84.74	53.74	6,682.2	0.9D +	33,216	12,433	17,400	13,050	1,000	0.6875	41,760	0.500	0.500	119.15	15.529	
Rohn-D5	SAE	3X3X0.25	50.0 76.24	69.10	8,592.2	0.9D +	46,366	12,433	19,500	14,625	15,589	1,000	0.6875	52,200	0.500	0.500	132.03	17.142
Rohn-D6	SAE	3.5X3.5X0.25	50.0 91.97	81.58	10,143.2	0.9D +	55,506	12,433	19,500	14,625	17,748	1,000	0.6875	52,200	0.500	0.500	132.03	17.142
Rohn-D7	SAE	4X4X0.25	50.0 80.02	75.46	9,382.2	0.9D +	64,647	12,433	19,500	14,625	20,058	1,000	0.6875	52,200	0.500	0.500	132.03	17.142
Rohn-L1	Pipe	Pipe3EH	50.0 10.72	3.32	4,232.2	0.9D +	127,350	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Rohn-L2	Pipe	Pipe3.5EH	50.0 28.98	9.78	15,143.2	0.9D +	154,800	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Rohn-L3	Pipe	Pipe4EH	50.0 50.76	16.31	30,377.2	0.9D +	186,300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Rohn-L4	Pipe	Pipe5STD	50.0 80.43	29.36	53,238.2	0.9D +	257,400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Rohn-L5	Pipe	Pipe6EH	50.0 76.59	28.45	73,233.2	0.9D +	301,950	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Rohn-L6	Pipe	Pipe6EHS	50.0 78.92	30.78	82,945.2	0.9D +	354,599	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Rohn-L7	Pipe	Pipe6EH	50.0 91.06	36.86	130,693.2	0.9D +	443,699	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Rohn-L8	Pipe	Pipe8EHS	50.0 81.91	32.91	146,031.2	0.9D +	302,088	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Rohn-L9	Pipe	Pipe8EH	50.0 2.54	1.11	0.224.2	0.9D +	20,088	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Rohn-L10	Pipe	Pipe8EH	36.0 11.96	11.96	3,487.1	1.2D +	30,509	12,433	21,750	14,616	7,240	1,000	0.6875	41,760	0.500	0.500	121.07	11.784
Rohn-L11	SAE	2X2X0.3125	36.0 28.50	28.18	3,495.1	1.2D +	25,060	12,433	17,400	16,312	8,011	1,000	0.6875	41,760	0.500	0.500	121.07	11.784
Rohn-L12	SAE	2.5X2.5X0.3125	36.0 70.13	71.52	6,892.1	1.2D +	40,623	12,433	17,901	16,312	11,059	1,000	0.6875	41,760	0.500	0.500	121.07	11.784
Rohn-L13	SAE	3X3X0.5	36.0 67.44	64.97	11,631.1	1.2D +	76,465	17,901	41,760	31,494	12,172	1,000	0.8125	52,200	0.500	0.500	132.03	17.142
Rohn-L14	SAE	4X4X0.5	36.0 67.44	62.83	11,247.1	1.2D +	109,090	17,901	41,760	31,494	15,014	1,000	0.8125	52,200	0.500	0.500	132.03	17.142
Rohn-L15	SAE	4X4X0.625	36.0 88.18	73.74	13,200.1	1.2D +	133,834	17,901	52,200	39,367	17,142	1,000	0.8125	52,200	0.500	0.500	132.03	17.142
Rohn-L16	SAE	5X5X0.625	36.0 0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Rohn-L17	Pipe	P3-437	36.0 7.62	2.32	3,156.2	0.9D +	136,080	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Rohn-L18	Pipe	P4-494	36.0 45.68	17.17	34,546.2	0.9D +	201,204	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Rohn-L19	Pipe	Pipe5EH	36.0 81.20	33.44	61,971.2	0.9D +	185,328	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Rohn-L20	Pipe	P6-56Z	36.0 90.37	35.22	122,064.2	0.9D +	346,679	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Rohn-L21	Pipe	Pipe8XS	36.0 97.93	44.26	183,554.2	0.9D +	414,719	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000



Case	Member	Usage %	Max	Min	Max	Min	Max	Min	Max	Max	Min	Max	Min	Max	Max	Min	Max	Min	Max
SNB-I6	Pipe	36.0	93.12	41.63	SNB-LI22	217.1712:	0.9D +	521.639	0.000	10.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Connect	Connect Towers	36.0	0.03	0.03	Connect IP	6.9881:	1.2D +	25919.960	0.000	2.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SNB-H1	Pipe	36.0	2.13	1.30	SNB-H4EP	1.9891:	1.2D +	133.002	0.000	4.066	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SNB-H2	Pipe	36.0	3.85	1.81	SNB-H9EP	3.6851:	1.2D +	201.204	0.000	7.472	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Rohn-B8	Rohn Diagonal	36.0	0.00	0.00		0.0000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WLAC-1	Wind Lacing	36.0	1.64	1.46	SNB-WL-D3P	0.4431:	1.2D +	30.456	0.000	4.066	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WLAC-2	Wind Lacing	36.0	3.19	1.32	SNB-WL-I3P	0.6251:	1.2D +	47.304	0.000	7.472	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
R-D1-MOD	MODIFICATION - L1.75X1.75X3/16	50.0	0.00	0.00		0.0000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
R-D2-MOD	MODIFICATION - L2.5X2.5X3/16	50.0	85.12	63.22	Rohn-DC5P	7.8602:	0.9D +	37.225	12.433	13.177	19.500	14.625	13.177	19.500	14.625	13.177	19.500	14.625	13.177
R-D3-MOD	MODIFICATION - L2.5X2.5X1/4	50.0	79.91	77.26	Rohn-DD3P	9.6061:	1.2D +	46.366	12.433	13.977	19.500	14.625	13.977	19.500	14.625	13.977	19.500	14.625	13.977
R-D4-MOD	MODIFICATION - L3X3X1/4	50.0	0.00	0.00		0.0000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
R-D5-MOD	MODIFICATION - L3X3X1/4	50.0	0.00	0.00		0.0000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
R-D6-MOD	MODIFICATION - L3.5X3.5X5/16	50.0	0.00	0.00		0.0000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
R-D7-MOD	MODIFICATION - L4X4X5/16	50.0	77.10	69.41	Rohn-DH4P	10.7892:	0.9D +	79.895	15.542	20.653	24.375	18.281	20.653	24.375	18.281	20.653	24.375	18.281	20.653
S-D1-MOD	MODIFICATION - L2X2X1/4	50.0	0.00	0.00		0.0000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
S-D2-MOD	MODIFICATION - L2X2X1/4	50.0	0.00	0.00		0.0000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
S-D3-MOD	MODIFICATION - L2.5X2.5X5/16	50.0	0.00	0.00		0.0000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
S-D4-MOD	MODIFICATION - L3.5X3.5X3/8	50.0	0.00	0.00		0.0000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
S-D5-MOD	MODIFICATION - L4X4X0.5	50.0	0.00	0.00		0.0000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
S-D6-MOD	MODIFICATION - L5X5X3/8	50.0	64.45	57.78	SNB-DG4P	12.9291:	1.2D +	120.850	22.376	16.594	35.100	26.471	16.594	35.100	26.471	16.594	35.100	26.471	16.594
S-D7-MOD	MODIFICATION - L6X6X3/8	50.0	88.55	76.56	SNB-DI4P	17.1321:	1.2D +	148.272	22.376	18.841	35.100	26.471	18.841	35.100	26.471	18.841	35.100	26.471	18.841

\*\*\* Maximum Stress Summary for Each Load Case

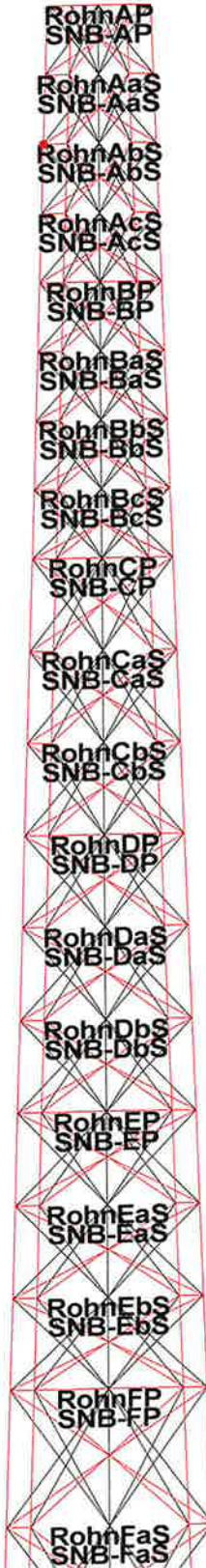
Summary of Maximum Usages by Load Case:

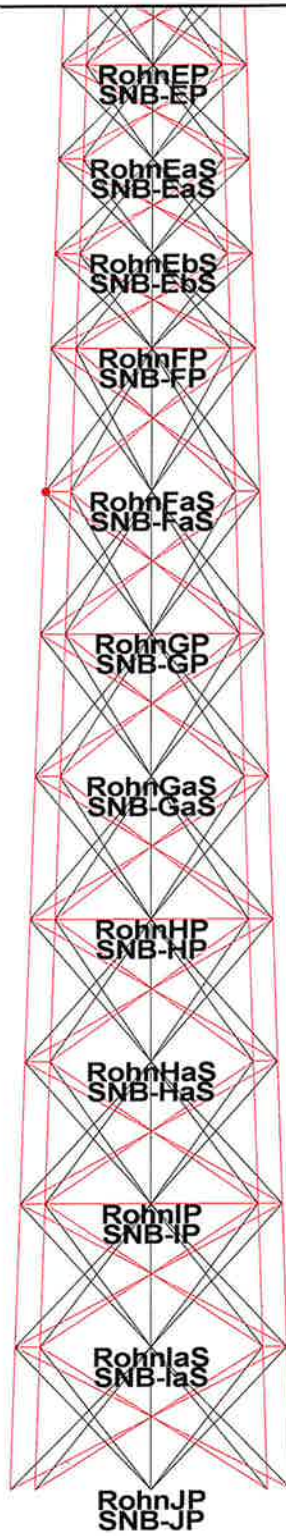
Load Case	Maximum Usage %	Element Label	Element Type
1: 1.2D + 1.0Dg + 1.6Wo	97.93	SNB-LH2P	Angle
2: 0.9D + 1.0Dg + 1.6Wo	96.89	SNB-LH2P	Angle
4: 1.2D + 1.0Dg + 1.0E	12.42	Rohn-LD3P	Angle
5: 0.9D + 1.0Dg + 1.0E	11.00	Rohn-LD3P	Angle
6: Service 1.0D + 1.0Dg + 1.0Wo	24.09	SNB-LH1P	Angle
1.2*DL	5.66	Rohn-LD3P	Angle
0.9DL	4.25	Rohn-LD3P	Angle

\*\*\* Weight of structure (lbs): 61800.0  
 Weight of Angles\*Section DLF: 12631.6  
 Weight of Equipment: 74431.6  
 Total:

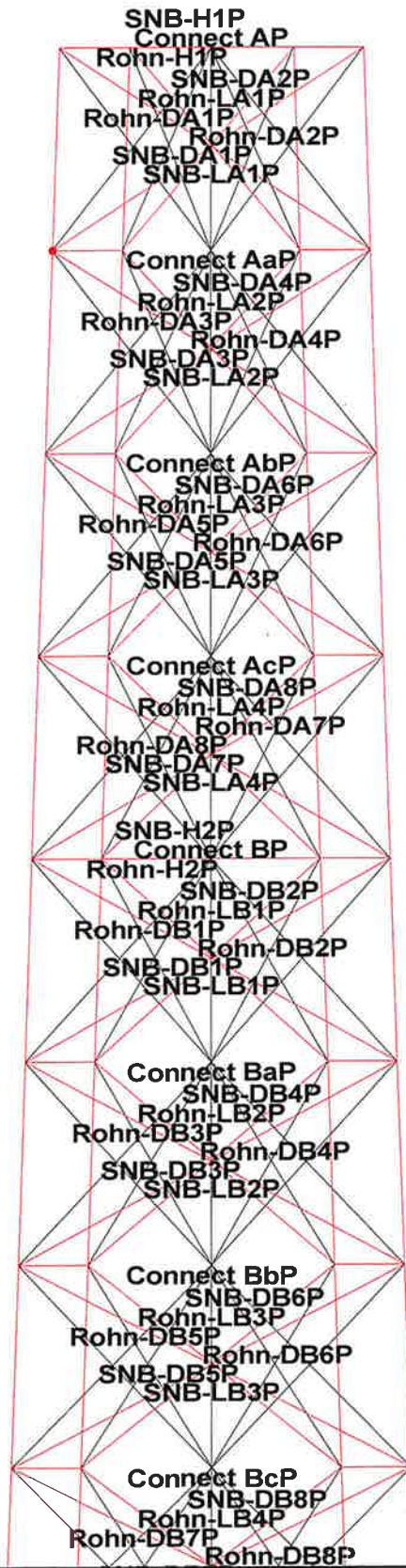
\*\*\* End of Report

## PLS-TOWER NODE LOCATIONS

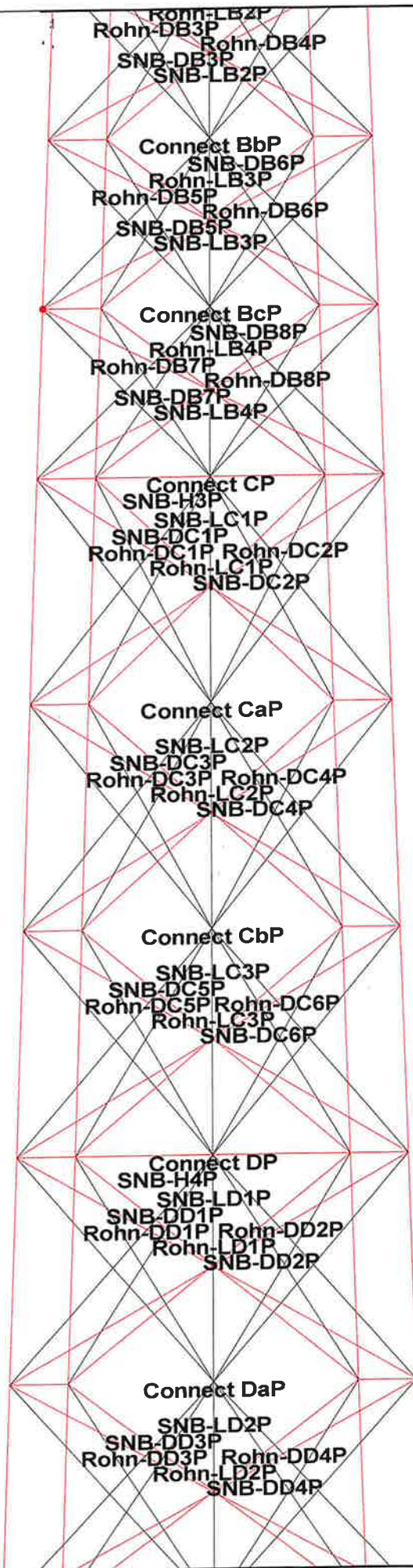


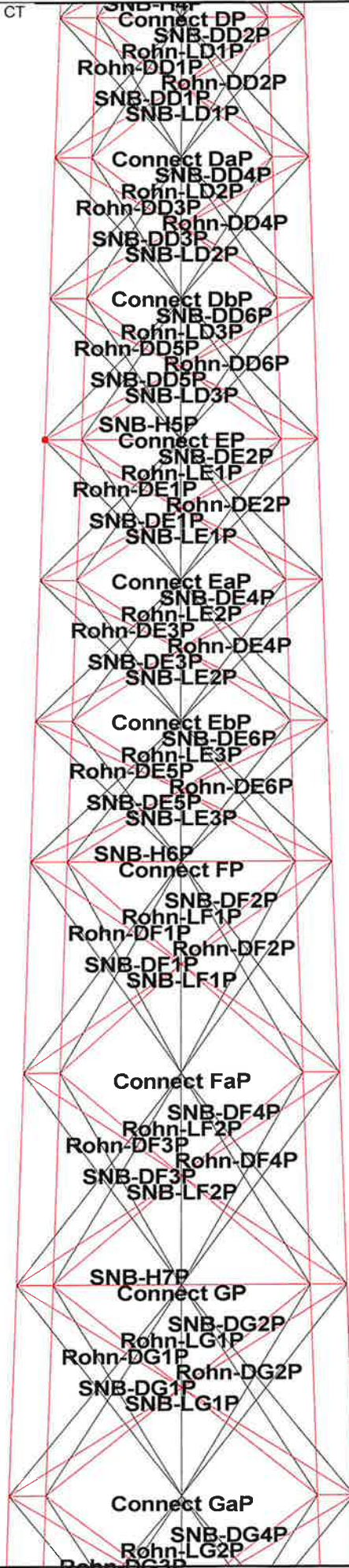


## PLS-TOWER MEMBER LOCATIONS

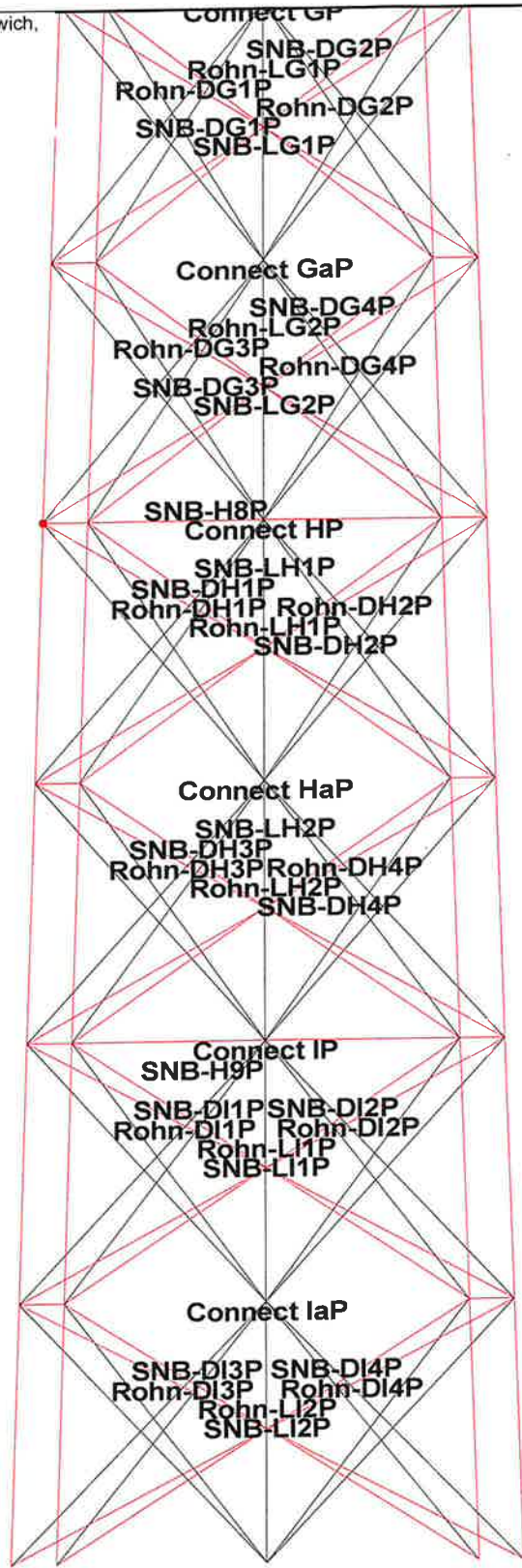












## PLS-TOWER DETAILED OUTPUT

\* TOWER - Analysis and Design - Copyright Power Line Systems, Inc. 1986-2006 \*  
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Project Name : Multi-Carrier Analysis  
Project Notes : Butternut Hollow  
Project File : P:\projects\telcom\structuralsbylocation\connecticut\greenwichcsp#74\14-vzw adds to # 13\_pls\_g\pls-tower\_wind\_0\4-carir.tow  
Date run : 3:01:51 PM Wednesday, July 31, 2019  
By : Lower Version 10.6z  
Licensed to : URS Connecticut

Successfully performed nonlinear analysis

Unusual number of fixed joints found: 6. Towers normally have from between 1 and 4 fixed joints. ??  
Linear appurtenance "DNK1-7/8" @ 56" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "DNK2-7/8" @ 54" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "DNK3-7/8" @ 60" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "DNK4-7/8" @ 65" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "DNK5-1-5/8" @ 82" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "DNK6-Hybridflex Cables @ Sprint" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "DNK7-7/8" @ 110" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "DNK8-7/8" @ 122" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "DNK9-7/8" @ 122" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "DNK10-1-5/8" @ 130" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "DNK11-5/8" @ 135" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "DNK12-7/8" @ 135" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "DNK13,14-1-5/8" @ T-Mobile" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "DNK15-7/8" @ 137" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "DNK16,17,18-1-5/8" @ ATW" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "DNK16,17,18-Optic Fiber Cable @ ATW" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "DNK19-7/8" @ 159" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "DNK20-7/8" @ 159.5" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "CSF70,71,72-1-5/8" @ 160 (3)" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "CSF73-1/2" @ 160" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "DNK21-Elliptical @ 160" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "DNK22-7/8" @ 165" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "DNK23A-1-5/8" @ 168" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "DNK23B-1/2" @ 168" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "DNK26-B-1-5/8" @ 175" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "DNK26A-7/8" @ 175" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "DNK26C-1/2" @ 175" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "DNK27-B-1-5/8" @ 175" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "DNK27A-7/8" @ 175" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "DNK27C-3/8" @ 175" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "DNK28A-1-5/8" @ 175" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "DNK28B-1-5/8" @ 175" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "DNK28C-1-5/8" @ 175" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "DNK28D-7/8" @ 175" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "GRN-1-Elliptical @ 172 (DNK25)" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "VZW-(1) Hybridflex Cables" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "Hybridflex 6x12 Cables @ T-Mobile" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
Linear appurtenance "Hybridflex 9x18 Cables @ T-Mobile" is included in the face zone (face solidity ratio for Rev. F), but does not contribute to wind load: this is nonsensical ??  
The model has 40 warnings. ??

Nonlinear convergence parameters: Use Standard Parameters  
Member check option: ANSI/TIA 222-G-1  
Connection rupture check: ANSI/TIA 222-G-1  
Crossing diagonal check: ANSI/TIA 222-G-1 [Alternate Unsupported RLOUT = 1]

Joints Geometry:

Joint Label	Symmetry Code	X Coord. (ft)	Y Coord. (ft)	Z Coord. (ft)	Disp. Rest.	X Rot. Rest.	Y Rot. Rest.	Z Rot. Rest.
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URS Connecticut - 4-carir

Joint Label	Symmetry Code	Origin Joint	End Joint	Elevation (ft)	Disp. Rest.	X Disp. Rest.	Y Disp. Rest.	Z Disp. Rest.	X Rot. Rest.	Y Rot. Rest.	Z Rot. Rest.
RohnAP	Tri-Symmetry	4.333	0	180	Free	Free	Free	Free	Free	Free	Free
RohnBP	Tri-Symmetry	5.121	0	160	Free	Free	Free	Free	Free	Free	Free
RohnCP	Tri-Symmetry	5.909	0	140	Free	Free	Free	Free	Free	Free	Free
RohnDP	Tri-Symmetry	6.695	0	120	Free	Free	Free	Free	Free	Free	Free
RohnEP	Tri-Symmetry	7.481	0	100	Free	Free	Free	Free	Free	Free	Free
RohnFP	Tri-Symmetry	8.268	0	80	Free	Free	Free	Free	Free	Free	Free
RohnGP	Tri-Symmetry	9.055	0	60	Free	Free	Free	Free	Free	Free	Free
RohnHP	Tri-Symmetry	9.841	0	40	Free	Free	Free	Free	Free	Free	Free
RohnIP	Tri-Symmetry	10.63	0	20	Free	Free	Free	Free	Free	Free	Free
RohnJP	Tri-Symmetry	11.42	0	0	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
RohnAP	Tri-Symmetry	2.333	0	180	Free	Free	Free	Free	Free	Free	Free
RohnBP	Tri-Symmetry	3.121	0	160	Free	Free	Free	Free	Free	Free	Free
RohnCP	Tri-Symmetry	3.908	0	140	Free	Free	Free	Free	Free	Free	Free
RohnDP	Tri-Symmetry	4.695	0	120	Free	Free	Free	Free	Free	Free	Free
RohnEP	Tri-Symmetry	5.481	0	100	Free	Free	Free	Free	Free	Free	Free
RohnFP	Tri-Symmetry	6.268	0	80	Free	Free	Free	Free	Free	Free	Free
RohnGP	Tri-Symmetry	7.055	0	60	Free	Free	Free	Free	Free	Free	Free
RohnHP	Tri-Symmetry	7.841	0	40	Free	Free	Free	Free	Free	Free	Free
RohnIP	Tri-Symmetry	8.628	0	20	Free	Free	Free	Free	Free	Free	Free
RohnJP	Tri-Symmetry	9.415	0	0	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
RohnA1	Tri-Gen 1	-2.167	-3.732	180	Free	Free	Free	Free	Free	Free	Free
RohnA2	Tri-Gen 2	-2.167	3.732	180	Free	Free	Free	Free	Free	Free	Free
RohnB1	Tri-Gen 1	-2.561	-4.435	160	Free	Free	Free	Free	Free	Free	Free
RohnB2	Tri-Gen 2	-2.561	4.435	160	Free	Free	Free	Free	Free	Free	Free
RohnC1	Tri-Gen 1	-2.954	-5.117	140	Free	Free	Free	Free	Free	Free	Free
RohnC2	Tri-Gen 2	-2.954	5.117	140	Free	Free	Free	Free	Free	Free	Free
RohnD1	Tri-Gen 1	-3.348	-5.798	120	Free	Free	Free	Free	Free	Free	Free
RohnD2	Tri-Gen 2	-3.348	5.798	120	Free	Free	Free	Free	Free	Free	Free
RohnE1	Tri-Gen 1	-3.741	-6.479	100	Free	Free	Free	Free	Free	Free	Free
RohnE2	Tri-Gen 2	-3.741	6.479	100	Free	Free	Free	Free	Free	Free	Free
RohnF1	Tri-Gen 1	-4.134	-7.16	80	Free	Free	Free	Free	Free	Free	Free
RohnF2	Tri-Gen 2	-4.134	7.16	80	Free	Free	Free	Free	Free	Free	Free
RohnG1	Tri-Gen 1	-4.527	-7.842	60	Free	Free	Free	Free	Free	Free	Free
RohnG2	Tri-Gen 2	-4.527	7.842	60	Free	Free	Free	Free	Free	Free	Free
RohnH1	Tri-Gen 1	-4.921	-8.523	40	Free	Free	Free	Free	Free	Free	Free
RohnH2	Tri-Gen 2	-4.921	8.523	40	Free	Free	Free	Free	Free	Free	Free
RohnI1	Tri-Gen 1	-5.315	-9.206	20	Free	Free	Free	Free	Free	Free	Free
RohnI2	Tri-Gen 2	-5.315	9.206	20	Free	Free	Free	Free	Free	Free	Free
RohnJ1	Tri-Gen 1	-5.71	-9.89	0	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
RohnJ2	Tri-Gen 2	-5.71	9.89	0	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
RohnA1	Tri-Gen 1	-1.167	-2.02	180	Free	Free	Free	Free	Free	Free	Free
RohnA2	Tri-Gen 2	-1.167	2.02	180	Free	Free	Free	Free	Free	Free	Free
RohnB1	Tri-Gen 1	-1.561	-2.703	160	Free	Free	Free	Free	Free	Free	Free
RohnB2	Tri-Gen 2	-1.561	2.703	160	Free	Free	Free	Free	Free	Free	Free
RohnC1	Tri-Gen 1	-1.954	-3.384	140	Free	Free	Free	Free	Free	Free	Free
RohnC2	Tri-Gen 2	-1.954	3.384	140	Free	Free	Free	Free	Free	Free	Free
RohnD1	Tri-Gen 1	-2.348	-4.066	120	Free	Free	Free	Free	Free	Free	Free
RohnD2	Tri-Gen 2	-2.348	4.066	120	Free	Free	Free	Free	Free	Free	Free
RohnE1	Tri-Gen 1	-2.74	-4.747	100	Free	Free	Free	Free	Free	Free	Free
RohnE2	Tri-Gen 2	-2.74	4.747	100	Free	Free	Free	Free	Free	Free	Free
RohnF1	Tri-Gen 1	-3.134	-5.428	80	Free	Free	Free	Free	Free	Free	Free
RohnF2	Tri-Gen 2	-3.134	5.428	80	Free	Free	Free	Free	Free	Free	Free
RohnG1	Tri-Gen 1	-3.528	-6.11	60	Free	Free	Free	Free	Free	Free	Free
RohnG2	Tri-Gen 2	-3.528	6.11	60	Free	Free	Free	Free	Free	Free	Free
RohnH1	Tri-Gen 1	-3.921	-6.791	40	Free	Free	Free	Free	Free	Free	Free
RohnH2	Tri-Gen 2	-3.921	6.791	40	Free	Free	Free	Free	Free	Free	Free
RohnI1	Tri-Gen 1	-4.314	-7.472	20	Free	Free	Free	Free	Free	Free	Free
RohnI2	Tri-Gen 2	-4.314	7.472	20	Free	Free	Free	Free	Free	Free	Free
RohnJ1	Tri-Gen 1	-4.708	-8.154	0	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
RohnJ2	Tri-Gen 2	-4.708	8.154	0	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed

Secondary Joints:

Joint Label	Symmetry Code	Origin Joint	End Joint	Elevation (ft)	Disp. Rest.	X Disp. Rest.	Y Disp. Rest.	Z Disp. Rest.	X Rot. Rest.	Y Rot. Rest.	Z Rot. Rest.
RohnAbs Tri-Symmetry		RohnAP	RohnBP	0.25	Free	Free	Free	Free	Free	Free	Free
RohnAbs Tri-Symmetry		RohnAP	RohnBP	0.5	Free	Free	Free	Free	Free	Free	Free



Member Label	Member Type	Modulus of Elasticity (ksi)	Yield Stress (ksi)	Ultimate Stress (ksi)	All. Stress (ksi)	Member Stress (ksi)	Member Rupture (ksi)	Member Bearing (ksi)	Member Bearing (ksi)	Member Bearing (ksi)	Member Bearing (ksi)
RohnC1	Tri-Gen 1	36	58	65	0	0	0	0	0	0	0
RohnC2	Tri-Gen 2	36	58	65	0	0	0	0	0	0	0
RohnCb1	Tri-Gen 1	50	65	0	0	0	0	0	0	0	0
RohnCb2	Tri-Gen 2	50	65	0	0	0	0	0	0	0	0
RohnDa1	Tri-Gen 1	36	58	65	0	0	0	0	0	0	0
RohnDa2	Tri-Gen 2	36	58	65	0	0	0	0	0	0	0
RohnDb1	Tri-Gen 1	36	58	65	0	0	0	0	0	0	0
RohnDb2	Tri-Gen 2	36	58	65	0	0	0	0	0	0	0
RohnEa1	Tri-Gen 1	36	58	65	0	0	0	0	0	0	0
RohnEa2	Tri-Gen 2	36	58	65	0	0	0	0	0	0	0
RohnEb1	Tri-Gen 1	36	58	65	0	0	0	0	0	0	0
RohnEb2	Tri-Gen 2	36	58	65	0	0	0	0	0	0	0
RohnFa1	Tri-Gen 1	36	58	65	0	0	0	0	0	0	0
RohnFa2	Tri-Gen 2	36	58	65	0	0	0	0	0	0	0
RohnGa1	Tri-Gen 1	36	58	65	0	0	0	0	0	0	0
RohnGa2	Tri-Gen 2	36	58	65	0	0	0	0	0	0	0
RohnHa1	Tri-Gen 1	36	58	65	0	0	0	0	0	0	0
RohnHa2	Tri-Gen 2	36	58	65	0	0	0	0	0	0	0
RohnIa1	Tri-Gen 1	36	58	65	0	0	0	0	0	0	0
RohnIa2	Tri-Gen 2	36	58	65	0	0	0	0	0	0	0
RohnAa1	Tri-Gen 1	36	58	65	0	0	0	0	0	0	0
RohnAa2	Tri-Gen 2	36	58	65	0	0	0	0	0	0	0
RohnAb1	Tri-Gen 1	36	58	65	0	0	0	0	0	0	0
RohnAb2	Tri-Gen 2	36	58	65	0	0	0	0	0	0	0
RohnAc1	Tri-Gen 1	36	58	65	0	0	0	0	0	0	0
RohnAc2	Tri-Gen 2	36	58	65	0	0	0	0	0	0	0
RohnBa1	Tri-Gen 1	36	58	65	0	0	0	0	0	0	0
RohnBa2	Tri-Gen 2	36	58	65	0	0	0	0	0	0	0
RohnBb1	Tri-Gen 1	36	58	65	0	0	0	0	0	0	0
RohnBb2	Tri-Gen 2	36	58	65	0	0	0	0	0	0	0
RohnBc1	Tri-Gen 1	36	58	65	0	0	0	0	0	0	0
RohnBc2	Tri-Gen 2	36	58	65	0	0	0	0	0	0	0
RohnCa1	Tri-Gen 1	36	58	65	0	0	0	0	0	0	0
RohnCa2	Tri-Gen 2	36	58	65	0	0	0	0	0	0	0
RohnCb1	Tri-Gen 1	36	58	65	0	0	0	0	0	0	0
RohnCb2	Tri-Gen 2	36	58	65	0	0	0	0	0	0	0
RohnDc1	Tri-Gen 1	36	58	65	0	0	0	0	0	0	0
RohnDc2	Tri-Gen 2	36	58	65	0	0	0	0	0	0	0
RohnDd1	Tri-Gen 1	36	58	65	0	0	0	0	0	0	0
RohnDd2	Tri-Gen 2	36	58	65	0	0	0	0	0	0	0
RohnEe1	Tri-Gen 1	36	58	65	0	0	0	0	0	0	0
RohnEe2	Tri-Gen 2	36	58	65	0	0	0	0	0	0	0
RohnFf1	Tri-Gen 1	36	58	65	0	0	0	0	0	0	0
RohnFf2	Tri-Gen 2	36	58	65	0	0	0	0	0	0	0
RohnGg1	Tri-Gen 1	36	58	65	0	0	0	0	0	0	0
RohnGg2	Tri-Gen 2	36	58	65	0	0	0	0	0	0	0
RohnHh1	Tri-Gen 1	36	58	65	0	0	0	0	0	0	0
RohnHh2	Tri-Gen 2	36	58	65	0	0	0	0	0	0	0
RohnIi1	Tri-Gen 1	36	58	65	0	0	0	0	0	0	0
RohnIi2	Tri-Gen 2	36	58	65	0	0	0	0	0	0	0
RohnJj1	Tri-Gen 1	36	58	65	0	0	0	0	0	0	0
RohnJj2	Tri-Gen 2	36	58	65	0	0	0	0	0	0	0

The model contains 60 primary and 123 secondary joints for a total of 183 joints.

Steel Material Properties:

Material Label	Modulus of Elasticity (ksi)	Yield Stress (ksi)	Ultimate Stress (ksi)	All. Stress (ksi)	Member Stress (ksi)	Member Rupture (ksi)	Member Bearing (ksi)	Member Bearing (ksi)	Member Bearing (ksi)	Member Bearing (ksi)
A 36	2.9e+004	36	58	65	0	0	0	0	0	0
A572-50	2.9e+004	50	65	0	0	0	0	0	0	0

Bolt Properties:

Bolt Label	Bolt Diameter	Hole Diameter	Ultimate Shear	Default End	Default Bolt Capacity	Shear Capacity
A 36	0.75	0.875	58	0	0	0
A572-50	0.75	0.875	65	0	0	0

	(in)	(kips)	(in)	(kips)	Hyp. 1	Hyp. 2
	Capacity	Distance	Spacing	(kips)	(kips)	(kips)
	(in)	(kips)	(in)	(kips)	(kips)	(kips)
5/8 A325-N	0.625	0.6875	16.58	1.125	0	0
3/4 A325-N	0.75	0.8125	23.87	1.35	0	0
5/8 A490-N	0.625	0.6875	20.72	1.125	0	0
3/4 A490-N	0.75	0.8125	29.83	1.35	0	0

Number Bolts Used By Type:

Bolt Number	Type	Bolts
5/8 A325-N	228	6
5/8 A490-N	42	24
3/4 A325-N	24	
3/4 A490-N		

Angle Properties:

Angle Type	Angle Size	Long Leg	Short Leg	Thick. Leg	Unit Weight	Gross Area	w/t Ratio	Radius of Gyration	Rx (in)	Ry (in)	Rz (in)	Number of Angles	Wind Width	Short Edge Dist.	Long Edge Dist.	Optimize Factor	Allow. Add. Angle Width For Optimize (in)
SAE	6X6X0.375	6	6	0.375	14.9	4.36	13.67	1.88	1.88	1.88	1.19	1	6	3	0	1.0000	0
SAE	5X5X0.625	5	5	0.625	20	5.86	6.2	1.52	1.52	1.52	0.978	1	5	2.5	0	1.0000	0
SAE	5X5X0.375	5	5	0.375	12.3	3.61	11	1.56	1.56	1.56	0.99	1	5	2.5	0	1.0000	0
SAE	4X4X0.625	4	4	0.625	15.7	4.61	4.8	1.2	1.2	1.2	0.779	1	4	2	0	1.0000	0
SAE	4X4X0.5	4	4	0.5	12.8	3.75	6.25	1.22	1.22	1.22	0.782	1	4	2	0	1.0000	0
SAE	4X4X0.3125	4	4	0.3125	8.2	2.4	10.6	1.24	1.24	1.24	0.791	1	4	2	0	1.0000	0
SAE	4X4X0.25	4	4	0.25	6.6	1.94	13.5	1.25	1.25	1.25	0.795	1	4	2	0	1.0000	0
SAE	3.5X3.5X0.375	3.5	3.5	0.375	8.5	2.48	7.33	1.07	1.07	1.07	0.687	1	3.5	1.75	0	1.0000	0
SAE	3.5X3.5X0.3125	3.5	3.5	0.3125	7.2	2.09	9.1	1.08	1.08	1.08	0.69	1	3.5	1.75	0	1.0000	0
SAE	3.5X3.5X0.25	3.5	3.5	0.25	5.8	1.69	11.5	1.09	1.09	1.09	0.694	1	3.5	1.75	0	1.0000	0
SAE	3X3X0.5	3	3	0.5	9.4	2.75	4.38	0.898	0.898	0.898	0.584	1	3	1.5	0	1.0000	0
SAE	3X3X0.25	3	3	0.25	4.9	1.44	9.75	0.93	0.93	0.93	0.592	1	3	1.5	0	1.0000	0
SAE	2.5X2.5X0.3125	2.5	2.5	0.3125	5	1.46	6	0.761	0.761	0.761	0.489	1	2.5	1.25	0	1.0000	0
SAE	2.5X2.5X0.25	2.5	2.5	0.25	4.1	1.19	7.75	0.769	0.769	0.769	0.491	1	2.5	1.25	0	1.0000	0
SAE	2.5X2.5X0.1875	2.5	2.5	0.1875	3.07	0.902	10.67	0.778	0.778	0.778	0.495	1	2.5	1.25	0	1.0000	0
SAE	2X2X0.375	2	2	0.375	4.7	1.36	3	0.594	0.594	0.594	0.39	1	2	1	0	1.0000	0
SAE	2X2X0.3125	2	2	0.3125	3.92	1.15	3.8	0.601	0.601	0.601	0.39	1	2	1	0	1.0000	0
SAE	2X2X0.25	2	2	0.25	3.19	0.94	5	0.609	0.609	0.609	0.391	1	2	1	0	1.0000	0
SAE	2X2X0.1875	2	2	0.1875	2.44	0.71	8	0.617	0.617	0.617	0.394	1	2	1	0	1.0000	0
SAE	1.75X1.75X0.1875	1.75	1.75	0.1875	2.12	0.62	6	0.537	0.537	0.537	0.343	1	1.75	0.875	0	1.0000	0
BIG	0.1X0.1X1	0.1	0.1	1	0	800	2.17	9.99	9.99	9.99	9.99	1	0.1	0.05	0	1.0000	0
Pipe	Pipe3EH	3.5	2.9	0	10.3	2.83	1	1.14	1.14	1.14	1.14	1	0	0	0	0.0000	0
Pipe	Pipe4EH	4.5	3.826	0	15	4.14	1	1.48	1.48	1.48	1.48	1	0	0	0	0.0000	0
Pipe	Pipe5STD	5.563	5.047	0	14.6	4.03	1	1.88	1.88	1.88	1.88	1	0	0	0	0.0000	0
Pipe	Pipe5EH	5.563	4.813	0	20.8	5.72	1	1.85	1.85	1.85	1.85	1	0	0	0	0.0000	0
Pipe	Pipe6EH	6.625	5.761	0	28.6	7.88	1	2.2	2.2	2.2	2.2	1	0	0	0	0.0000	0
Pipe	Pipe6EHS	8.625	8	0	35.78	9.86	1	2.96	2.96	2.96	2.96	1	0	0	0	0.0000	0
Pipe	Pipe3.5EH	4	3.364	0	12.5	3.44	1	1.31	1.31	1.31	1.31	1	0	0	0	0.0000	0
Pipe	Pipe6EHS	6.625	5.96	0	24.38	6.71	1	2.22	2.22	2.22	2.22	1	0	0	0	0.0000	0
Pipe	P3-437	3.5	2.626	0	15	4.2	1	1.09	1.09	1.09	1.09	1	0	0	0	0.0000	0
Pipe	P4-494	4.5	3.512	0	21.4	6.21	1	1.42	1.42	1.42	1.42	1	0	0	0	0.0000	0
Pipe	P6-562	6.625	5.5	0	36.6	10.7	1	2.15	2.15	2.15	2.15	1	0	0	0	0.0000	0
Pipe	Pipe8XS	8.625	7.625	0	43.39	12.8	1	2.88	2.88	2.88	2.88	1	0	0	0	0.0000	0
Pipe	Pipe10XS	10.75	9.75	0	54.74	16.1	1	3.63	3.63	3.63	3.63	1	0	0	0	0.0000	0
Pipe	P3-425	3.5	2.65	0	15	4.105	1	1.097	1.097	1.097	1.097	1	0	0	0	0.0000	0

Angle Groups:

Group Label	Description	Angle Type	Material Type	Element Type	Group Type	Optimize Group	Allow. Add. Angle Width For Optimize (in)

Angle Type	Angle Size	Material	Total Length (ft)	Total Surface Area (ft <sup>2</sup> )	Total Weight (lbs)	Other	None	0.000
Rohn-D1	Rohn Diagonal 1	SAE 1.75X1.75X0.1875	A 36			Truss	None	0.000
Rohn-D2	Rohn Diagonal 2	SAE 2X2X0.1875	A 36			Truss	None	0.000
Rohn-D3	Rohn Diagonal 3	SAE 2.5X2.5X0.1875	A 36			Truss	None	0.000
Rohn-D4	Rohn Diagonal 4	SAE 3X3X0.25	A 36			Truss	None	0.000
Rohn-D5	Rohn Diagonal 5	SAE 3.5X3.5X0.25	A 36			Truss	None	0.000
Rohn-D6	Rohn Diagonal 6	SAE 4X4X0.25	A 36			Truss	None	0.000
Rohn-D7	Rohn Diagonal 7	SAE 4X4X0.25	A 36			Truss	None	0.000
Rohn-L1	Rohn Leg 1	Pipe Pipe3EH	A572-50			Beam	None	0.000
Rohn-L2	Rohn Leg 2	Pipe Pipe3.5EH	A572-50			Beam	None	0.000
Rohn-L3	Rohn Leg 3	Pipe Pipe4EH	A572-50			Beam	None	0.000
Rohn-L4	Rohn Leg 4	Pipe Pipe5STD	A572-50			Beam	None	0.000
Rohn-L5	Rohn Leg 5	Pipe Pipe5EH	A572-50			Beam	None	0.000
Rohn-L6	Rohn Leg 6	Pipe Pipe6EH	A572-50			Beam	None	0.000
Rohn-L7	Rohn Leg 7	Pipe Pipe6EH	A572-50			Beam	None	0.000
Rohn-L8	Rohn Leg 8	Pipe Pipe6EH	A572-50			Beam	None	0.000
Rohn-H1	Rohn Horizontal 1	SAE 1.75X1.75X0.1875	A 36			Beam	None	0.000
Rohn-D1	SNB Diagonal 1	SAE 2X2X0.1875	A 36			Truss	None	0.000
Rohn-D2	SNB Diagonal 2	SAE 2X2X0.25	A 36			Truss	None	0.000
Rohn-D3	SNB Diagonal 3	SAE 2.5X2.5X0.3125	A 36			Truss	None	0.000
Rohn-D4	SNB Diagonal 4	SAE 3X3X0.5	A 36			Truss	None	0.000
Rohn-D5	SNB Diagonal 5	SAE 4X4X0.5	A 36			Truss	None	0.000
Rohn-D6	SNB Diagonal 6	SAE 4X4X0.625	A 36			Truss	None	0.000
Rohn-D7	SNB Diagonal 7	SAE 5X5X0.625	A 36			Truss	None	0.000
Rohn-L1	SNB Leg 1	Pipe P3-437	A 36			Beam	None	0.000
Rohn-L2	SNB Leg 2	Pipe P4-494	A 36			Beam	None	0.000
Rohn-L3	SNB Leg 3	Pipe Pipe5EH	A 36			Beam	None	0.000
Rohn-L4	SNB Leg 4	Pipe P6-562	A 36			Beam	None	0.000
Rohn-L5	SNB Leg 5	Pipe Pipe8XS	A 36			Beam	None	0.000
Rohn-L6	SNB Leg 6	Pipe Pipe10XS	A 36			Beam	None	0.000
Connect	Connect Towers	Big 0.1X0.1X1	A 36			Beam	None	0.000
Rohn-H1	SNB Horizontal 1	Pipe P3-425	A 36			Beam	None	0.000
Rohn-H2	SNB Horizontal 2	Pipe P4-494	A 36			Beam	None	0.000
Rohn-D8	Rohn Diagonal 8	SAE 2X2X0.375	A 36			Truss	None	0.000
WLAC-1	Wind Lacing 1	SAE 2X2X0.25	A 36			Truss	None	0.000
WLAC-2	Wind Lacing 2	SAE 2.5X2.5X0.3125	A 36			Truss	None	0.000
R-D2-MOD	MODIFICATION - L1.75X1.75X3/16	SAE 1.75X1.75X0.1875	A572-50			Truss	None	0.000
R-D3-MOD	MODIFICATION - L2X2X3/16	SAE 2X2X0.1875	A572-50			Truss	None	0.000
R-D4-MOD	MODIFICATION - L2.5X2.5X1/4	SAE 2.5X2.5X0.25	A572-50			Truss	None	0.000
R-D5-MOD	MODIFICATION - L3X3X1/4	SAE 3X3X0.25	A572-50			Truss	None	0.000
R-D6-MOD	MODIFICATION - L3.5X3.5X5/16	SAE 3.5X3.5X0.3125	A572-50			Truss	None	0.000
R-D7-MOD	MODIFICATION - L4X4X5/16	SAE 4X4X0.3125	A572-50			Truss	None	0.000
S-D1-MOD	MODIFICATION - L2X2X5/16	SAE 2X2X0.3125	A572-50			Truss	None	0.000
S-D2-MOD	MODIFICATION - L2X2X1/4	SAE 2X2X0.25	A572-50			Truss	None	0.000
S-D3-MOD	MODIFICATION - L2.5X2.5X5/16	SAE 2.5X2.5X0.3125	A572-50			Truss	None	0.000
S-D4-MOD	MODIFICATION - L3.5X3.5X3/8	SAE 3.5X3.5X0.375	A572-50			Truss	None	0.000
S-D5-MOD	MODIFICATION - L4X4X0.5	SAE 4X4X0.5	A572-50			Truss	None	0.000
S-D6-MOD	MODIFICATION - L5X5X3/8	SAE 5X5X0.375	A572-50			Truss	None	0.000
S-D7-MOD	MODIFICATION - L6X6X3/8	SAE 6X6X0.375	A572-50			Truss	None	0.000

Aggregate Angle Information:

Note: Estimate of surface area reported for painting purposes, not wind loading.

Angle Type	Angle Size	Material	Total Length (ft)	Total Surface Area (ft <sup>2</sup> )	Total Weight (lbs)
SAE 1.75X1.75X0.1875	A 36	279.43	163.00	592.39	
SAE 2X2X0.1875	A 36	258.81	172.54	631.49	
SAE 2.5X2.5X0.1875	A 36	151.20	126.00	464.18	
SAE 3X3X0.25	A572-50	79.06	65.89	324.16	
SAE 3.5X3.5X0.25	A 36	81.42	67.85	333.83	
SAE 4X4X0.25	A572-50	443.36	443.36	2172.46	
SAE 4X4X0.25	A572-50	446.34	520.96	2589.91	
SAE 4X4X0.3125	A572-50	379.04	505.38	2501.65	
Pipe Pipe3EH	A572-50	123.32	165.23	1016.15	
Pipe Pipe3EH	A572-50	60.05	64.05	618.48	



Section Label	Joint Defining Section	Dead Load Factor	Transverse Longitudinal Drag x Area Factor	Area Factor (CD From Code)	Transverse Longitudinal Drag x Area Factor (CD From Code)	AF Flat Ar Round Factor	Transverse Longitudinal Drag x Area Factor (EIA Only)	Longitudinal Drag x Area Factor (EIA Only)	SAPS Angle Drag x Area Factor	SAPS Round Force Drag x Area Factor	SAPS Solid Force Drag x Area Factor
Pipe	Pipe3.5EH	A572-50	60.05	73.70	750.58						
Pipe	Pipe4EH	A572-50	60.05	83.32	900.69						
Pipe	Pipe5STD	A572-50	60.05	106.18	876.68						
Pipe	Pipe5EH	A572-50	60.05	103.84	1248.97						
Pipe	Pipe6EHS	A572-50	60.05	125.95	1463.93						
Pipe	Pipe6EH	A572-50	60.05	247.91	3434.66						
Pipe	Pipe8EHS	A572-50	60.05	166.38	2148.47						
SAE	2X2X0.3125	A 36 165.23	110.15	647.69							
SAE	2.5X2.5X0.3125	A 36 225.63	150.46	719.94							
SAE	3X3X0.5	A 36 219.00	219.00	2058.63							
SAE	4X4X0.5	A 36 183.26	244.34	2345.69							
SAE	4X4X0.625	A 36 199.19	265.58	3127.26							
SAE	5X5X0.375	A572-50 205.76	342.94	2550.90							
SAE	6X6X0.375	A572-50 222.64	445.29	3317.38							
Pipe	P3-437	A 36 60.05	61.31	900.70							
Pipe	P4-494	A 36 303.38	405.11	6492.26							
Pipe	Pipe5EH	A 36 60.05	103.84	1248.96							
Pipe	P6-562	A 36 120.09	242.69	4395.40							
Pipe	Pipe8XS	A 36 120.09	325.25	5210.82							
Pipe	Pipe10XS	A 36 60.05	205.16	3286.94							
BIG	0.1X0.1X1	A 36 150.03	5.00	0.00							
Pipe	P3-425	A 36 73.04	74.67	1095.63							

Sections:  
The adjustment factors below only apply to dead load and wind areas that are calculated for members in the model.  
They do not apply to equipment or to manually input dead load and drag areas.

Section Label	Joint Defining Section	Bottom Factor	For Face	Transverse Longitudinal Drag x Area Factor	Area Factor (CD From Code)	AF Flat Ar Round Factor	Transverse Longitudinal Drag x Area Factor (EIA Only)	Longitudinal Drag x Area Factor (EIA Only)	SAPS Angle Drag x Area Factor	SAPS Round Force Drag x Area Factor	SAPS Solid Force Drag x Area Factor
A	RohnBP	1.000	0.000	0.000	0.000	0.900	0.900	0.900	0.000	0.000	0.000
B	RohnCP	1.000	0.000	0.000	0.000	0.900	0.900	0.900	0.000	0.000	0.000
C	RohnDP	1.000	0.000	0.000	0.000	0.900	0.900	0.900	0.000	0.000	0.000
D	RohnEP	1.000	0.000	0.000	0.000	0.900	0.900	0.900	0.000	0.000	0.000
E	RohnFP	1.000	0.000	0.000	0.000	0.900	0.900	0.900	0.000	0.000	0.000
F	RohnGP	1.000	0.000	0.000	0.000	0.900	0.900	0.900	0.000	0.000	0.000
G	RohnHP	1.000	0.000	0.000	0.000	0.900	0.900	0.900	0.000	0.000	0.000
H	RohnIP	1.000	0.000	0.000	0.000	0.900	0.900	0.900	0.000	0.000	0.000
I	RohnJP	1.000	0.000	0.000	0.000	0.900	0.900	0.900	0.000	0.000	0.000

Angle Member Connectivity:

Member Label	Group Label	Section Label	Symmetry Code	Origin Joint	End Ecc. Joint	Rest. Code	Ratio R1X	Ratio R1Y	Ratio R1Z	Bolt Type	# Bolts	# Shear Holes	Connect Leg	Short Edge Dist.	Long Edge Dist.	End Spacing	Rest. Coef.
Rohn-DA1P	Rohn-D1		Tri-Symmetry	RohnAP	RohnA1	1	4	0.5	0.5	0.5	5/8	A325-N	1	Long only	0	0	0
Rohn-DA11	Rohn-D1		Tri-Gen 1	RohnA1	RohnA2	1	4	0.5	0.5	0.5	5/8	A325-N	1	Long only	0	0	0
Rohn-DA12	Rohn-D1		Tri-Gen 2	RohnA2	RohnA3	1	4	0.5	0.5	0.5	5/8	A325-N	1	Long only	0	0	0
Rohn-DA2P	Rohn-D1		Tri-Symmetry	RohnAP	RohnA2	1	4	0.5	0.5	0.5	5/8	A325-N	1	Long only	0	0	0
Rohn-DA21	Rohn-D1		Tri-Gen 1	RohnA1	RohnA3	1	4	0.5	0.5	0.5	5/8	A325-N	1	Long only	0	0	0
Rohn-DA22	Rohn-D1		Tri-Gen 2	RohnA2	RohnA4	1	4	0.5	0.5	0.5	5/8	A325-N	1	Long only	0	0	0
Rohn-DA3P	Rohn-D1		Tri-Symmetry	RohnAP	RohnA3	1	4	0.5	0.5	0.5	5/8	A325-N	1	Long only	0	0	0
Rohn-DA31	Rohn-D1		Tri-Gen 1	RohnA1	RohnA4	1	4	0.5	0.5	0.5	5/8	A325-N	1	Long only	0	0	0
Rohn-DA32	Rohn-D1		Tri-Gen 2	RohnA2	RohnA5	1	4	0.5	0.5	0.5	5/8	A325-N	1	Long only	0	0	0
Rohn-DA4P	Rohn-D1		Tri-Symmetry	RohnAP	RohnA4	1	4	0.5	0.5	0.5	5/8	A325-N	1	Long only	0	0	0
Rohn-DA41	Rohn-D1		Tri-Gen 1	RohnA1	RohnA6	1	4	0.5	0.5	0.5	5/8	A325-N	1	Long only	0	0	0
Rohn-DA42	Rohn-D1		Tri-Gen 2	RohnA2	RohnA7	1	4	0.5	0.5	0.5	5/8	A325-N	1	Long only	0	0	0
Rohn-DA5P	Rohn-D1		Tri-Symmetry	RohnAP	RohnA5	1	4	0.5	0.5	0.5	5/8	A325-N	1	Long only	0	0	0
Rohn-DA51	Rohn-D1		Tri-Gen 1	RohnA1	RohnA8	1	4	0.5	0.5	0.5	5/8	A325-N	1	Long only	0	0	0
Rohn-DA52	Rohn-D1		Tri-Gen 2	RohnA2	RohnA9	1	4	0.5	0.5	0.5	5/8	A325-N	1	Long only	0	0	0
Rohn-DA6P	Rohn-D1		Tri-Symmetry	RohnAP	RohnA6	1	4	0.5	0.5	0.5	5/8	A325-N	1	Long only	0	0	0
Rohn-DA61	Rohn-D1		Tri-Gen 1	RohnA1	RohnA10	1	4	0.5	0.5	0.5	5/8	A325-N	1	Long only	0	0	0
Rohn-DA62	Rohn-D1		Tri-Gen 2	RohnA2	RohnA11	1	4	0.5	0.5	0.5	5/8	A325-N	1	Long only	0	0	0
Rohn-DA7P	Rohn-D1		Tri-Symmetry	RohnAP	RohnA7	1	4	0.5	0.5	0.5	5/8	A325-N	1	Long only	0	0	0







































Section Label	Joint Label	Joint Elevation (ft)
SNB-H7BP	201.204	174.858
SNB-H2	Net Sect 52	6.11
SNB-H7BP	L/F	174.858
SNB-H2	Net Sect 52	6.11
SNB-H7BP	L/F	174.858
SNB-H2	Net Sect 52	6.11
SNB-H7BP	L/F	174.858
SNB-H2	Net Sect 57	6.79
SNB-H7BP	L/F	169.180
SNB-H2	Net Sect 57	6.79
SNB-H7BP	L/F	169.180
SNB-H2	Net Sect 57	6.79
SNB-H7BP	L/F	169.180
SNB-H2	Net Sect 57	6.79
SNB-H7BP	L/F	169.180
SNB-H2	Net Sect 57	6.79
SNB-H7BP	L/F	169.180
SNB-H2	Net Sect 63	7.47
SNB-H7BP	L/F	163.108
SNB-H2	Net Sect 63	7.47
SNB-H7BP	L/F	163.108
SNB-H2	Net Sect 63	7.47
SNB-H7BP	L/F	163.108
SNB-H2	Net Sect 62	2.02
SNB-H7BP	L/F	24.875
SNB-H2	Net Sect 62	2.02
SNB-H7BP	L/F	24.875
SNB-H2	Net Sect 83	2.70
SNB-H7BP	L/F	21.201
SNB-H2	Net Sect 83	2.70
SNB-H7BP	L/F	21.201
SNB-H2	Net Sect 83	2.70
SNB-H7BP	L/F	21.201
SNB-H2	Net Sect 104	3.38
SNB-H7BP	L/F	17.258
SNB-H2	Net Sect 104	3.38
SNB-H7BP	L/F	17.258
SNB-H2	Net Sect 104	3.38
SNB-H7BP	L/F	17.258
SNB-H2	Net Sect 125	4.07
SNB-H7BP	L/F	13.417
SNB-H2	Net Sect 125	4.07
SNB-H7BP	L/F	13.417
SNB-H2	Net Sect 125	4.07
SNB-H7BP	L/F	13.417
SNB-H2	Net Sect 116	4.75
SNB-H7BP	L/F	47.304
SNB-H2	Net Sect 116	4.75
SNB-H7BP	L/F	47.304
SNB-H2	Net Sect 116	4.75
SNB-H7BP	L/F	47.304
SNB-H2	Net Sect 133	5.43
SNB-H7BP	L/F	18.587
SNB-H2	Net Sect 133	5.43
SNB-H7BP	L/F	18.587
SNB-H2	Net Sect 133	5.43
SNB-H7BP	L/F	18.587
SNB-H2	Net Sect 150	6.11
SNB-H7BP	L/F	14.672
SNB-H2	Net Sect 150	6.11
SNB-H7BP	L/F	14.672
SNB-H2	Net Sect 150	6.11
SNB-H7BP	L/F	14.672
SNB-H2	Net Sect 167	6.79
SNB-H7BP	L/F	11.878
SNB-H2	Net Sect 167	6.79
SNB-H7BP	L/F	11.878
SNB-H2	Net Sect 167	6.79
SNB-H7BP	L/F	11.878
SNB-H2	Net Sect 183	7.47
SNB-H7BP	L/F	9.810
SNB-H2	Net Sect 183	7.47
SNB-H7BP	L/F	9.810
SNB-H2	Net Sect 183	7.47
SNB-H7BP	L/F	9.810

The model contains 612 angle members.

Section Joint Information:

Section Label	Joint Label	Joint Elevation (ft)
A	RohnAP	180.000
A	RohnA1	175.000
A	RohnA1	180.000
A	RohnA2	175.000
A	RohnA2	180.000
A	RohnA3	175.000
A	RohnA3	180.000
A	RohnA4	170.000
A	RohnA4	180.000
A	RohnA5	170.000
A	RohnA5	180.000
A	RohnA6	165.000
A	RohnA6	180.000
A	RohnA7	165.000
A	RohnA7	180.000
A	RohnB1	160.000
A	RohnB1	180.000
A	RohnBP	160.000
A	RohnBP	180.000
A	RohnB1	160.000
A	RohnBP	180.000

URS Connecticut - 4-carir

A	SNB-Aa1	175.000
A	SNB-A1	180.000
A	SNB-Aa2	175.000
A	SNB-A2	180.000
A	SNB-Aa3	175.000
A	SNB-A3	170.000
A	SNB-Ab1	170.000
A	SNB-Ab2	170.000
A	SNB-Ab3	170.000
A	SNB-Ac1	165.000
A	SNB-Ac2	165.000
A	SNB-Ac3	165.000
A	SNB-B1	160.000
A	SNB-B2	160.000
A	SNB-B3	160.000
A	SNB-WL-A1S	180.000
A	SNB-WL-A2S	180.000
A	SNB-WL-A3S	180.000
A	SNB-WL-B1S	160.000
A	SNB-WL-B2S	160.000
A	SNB-WL-B3S	160.000
B	RohnB1	160.000
B	RohnB2	155.000
B	RohnB3	160.000
B	RohnBa1	160.000
B	RohnBa2	155.000
B	RohnBa3	160.000
B	RohnBb1	155.000
B	RohnBb2	150.000
B	RohnBb3	150.000
B	RohnBc1	145.000
B	RohnBc2	145.000
B	RohnBc3	145.000
B	RohnC1	140.000
B	RohnC2	140.000
B	RohnC3	140.000
B	SNB-Ba1	155.000
B	SNB-B1	160.000
B	SNB-Ba2	155.000
B	SNB-B2	160.000
B	SNB-Ba3	155.000
B	SNB-Bb1	150.000
B	SNB-Bb2	150.000
B	SNB-Bb3	150.000
B	SNB-Bc1	145.000
B	SNB-Bc2	145.000
B	SNB-Bc3	145.000
B	SNB-C1	140.000
B	SNB-C2	140.000
B	SNB-CP	140.000
B	SNB-WL-C1S	140.000
B	SNB-WL-C2S	140.000
B	SNB-WL-C3S	140.000
C	RohnCa1	133.340
C	RohnCa2	133.340
C	RohnCa3	133.340
C	RohnCb1	126.660
C	RohnCb2	126.660
C	RohnCb3	126.660
C	RohnD1	120.000
C	RohnD2	120.000
C	RohnD3	120.000
C	SNB-CP	140.000
C	SNB-Ca1	133.340
C	SNB-C1	140.000
C	SNB-Ca2	133.340

C	SNB-C2	140.000
C	SNB-CaS	133.340
C	SNB-Cb1	126.660
C	SNB-Cb2	126.660
C	SNB-CbS	126.660
C	SNB-D1	120.000
C	SNB-D2	120.000
C	SNB-DP	120.000
C	SNB-WL-D1S	120.000
C	SNB-WL-D2S	120.000
C	SNB-WL-D3S	120.000
D	RohnDP	120.000
D	RohnDa1	113.340
D	RohnD1	120.000
D	RohnDa2	113.340
D	RohnD2	120.000
D	RohnDaS	113.340
D	RohnDb1	106.660
D	RohnDb2	106.660
D	RohnDbS	106.660
D	RohnE1	100.000
D	RohnE2	100.000
D	RohnEP	100.000
D	SNB-DP	120.000
D	SNB-Da1	113.340
D	SNB-D1	120.000
D	SNB-Da2	113.340
D	SNB-D2	120.000
D	SNB-DaS	113.340
D	SNB-Db1	106.660
D	SNB-Db2	106.660
D	SNB-DbS	106.660
D	SNB-E1	100.000
D	SNB-E2	100.000
D	SNB-EP	100.000
D	SNB-WL-E1S	100.000
D	SNB-WL-E2S	100.000
D	SNB-WL-E3S	100.000
E	RohnEP	100.000
E	RohnEa1	93.340
E	RohnE1	100.000
E	RohnEa2	93.340
E	RohnE2	100.000
E	RohnEaS	93.340
E	RohnEb1	86.660
E	RohnEb2	86.660
E	RohnEbS	86.660
E	RohnF1	80.000
E	RohnF2	80.000
E	RohnEP	80.000
E	SNB-EP	100.000
E	SNB-Ea1	93.340
E	SNB-E1	100.000
E	SNB-Ea2	93.340
E	SNB-E2	100.000
E	SNB-EaS	93.340
E	SNB-Ed1	86.660
E	SNB-Ed2	86.660
E	SNB-EdS	86.660
E	SNB-E1	80.000
E	SNB-E2	80.000
E	SNB-EP	80.000
E	SNB-WL-F1S	80.000
E	SNB-WL-E2S	80.000
E	SNB-WL-F3S	80.000
F	RohnFP	80.000
F	RohnFa1	70.000
F	RohnF1	80.000
F	RohnFa2	70.000

F	RohnF2	80.000
F	RohnFas	70.000
F	RohnG1	60.000
F	RohnG2	60.000
F	RohnGP	60.000
F	SNB-PP	80.000
F	SNB-Pa1	70.000
F	SNB-P1	80.000
F	SNB-Pa2	70.000
F	SNB-P2	80.000
F	SNB-Pa5	70.000
F	SNB-G1	60.000
F	SNB-G2	60.000
F	SNB-GP	60.000
F	SNB-WL-G1S	60.000
F	SNB-WL-G2S	60.000
F	SNB-WL-G3S	60.000
G	RohnGP	60.000
G	RohnGa1	50.000
G	RohnG1	60.000
G	RohnGaz	50.000
G	RohnG2	60.000
G	RohnGas	50.000
G	RohnH1	40.000
G	RohnH2	40.000
G	RohnHP	40.000
G	SNB-GP	60.000
G	SNB-Ga1	50.000
G	SNB-G1	60.000
G	SNB-Ga2	50.000
G	SNB-G2	60.000
G	SNB-Ga5	50.000
G	SNB-H1	40.000
G	SNB-H2	40.000
G	SNB-HP	40.000
G	SNB-WL-H1S	40.000
G	SNB-WL-H2S	40.000
G	SNB-WL-H3S	40.000
H	RohnHP	40.000
H	RohnHa1	30.000
H	RohnH1	40.000
H	RohnHa2	30.000
H	RohnH2	40.000
H	RohnHa5	30.000
H	RohnI1	20.000
H	RohnI2	20.000
H	RohnIP	20.000
H	SNB-HP	40.000
H	SNB-Ha1	30.000
H	SNB-H1	40.000
H	SNB-Ha2	30.000
H	SNB-H2	40.000
H	SNB-Ha5	30.000
H	SNB-I1	20.000
H	SNB-I2	20.000
H	SNB-IP	20.000
H	SNB-WL-I1S	20.000
H	SNB-WL-I2S	20.000
H	SNB-WL-I3S	20.000
I	RohnIP	20.000
I	RohnIa1	10.000
I	RohnI1	20.000
I	RohnIa2	10.000
I	RohnI2	20.000
I	RohnIa5	10.000
I	RohnI1	0.000
I	RohnI2	0.000
I	RohnIP	0.000
I	SNB-IP	20.000



- I SNB-Ia1 10.000
- I SNB-I1 20.000
- I SNB-Ia2 10.000
- I SNB-I2 20.000
- I SNB-Ia5 10.000
- I SNB-J1 0.000
- I SNB-J2 0.000
- I SNB-JP 0.000

EIA Sections Information:

Section Label	Top Z (ft)	Bottom Z (ft)	Joint Count	Member Count	Top Width (ft)	Bottom Width (ft)	Gross Area (ft <sup>2</sup> )	Face Area (ft <sup>2</sup> )	Adjust Factor	Load Factor	Dead Load
A	180.000	160.000	36	111	7.50	8.87	163.75	0.9000	0.9000	0.9000	1.000
B	160.000	140.000	33	93	8.87	10.23	191.05	0.9000	0.9000	0.9000	1.000
C	140.000	120.000	27	72	10.23	11.60	218.31	0.9000	0.9000	0.9000	1.000
D	120.000	100.000	27	72	11.60	12.96	245.54	0.9000	0.9000	0.9000	1.000
E	100.000	80.000	27	72	12.96	14.32	272.78	0.9000	0.9000	0.9000	1.000
F	80.000	60.000	21	51	14.32	15.68	300.04	0.9000	0.9000	0.9000	1.000
G	60.000	40.000	21	51	15.68	17.05	327.29	0.9000	0.9000	0.9000	1.000
H	40.000	20.000	21	51	17.05	18.41	354.57	0.9000	0.9000	0.9000	1.000
I	20.000	0.000	18	39	18.41	19.78	381.92	0.9000	0.9000	0.9000	1.000

Equipment Library:

Property Label	Equipment Label	Stock Number	Weight (lbs)	Wind Area (ft <sup>2</sup> )	Ice Area (ft <sup>2</sup> )	EIA Antenna Type	Shape of Drag Diameter	Height (ft)	Coef.
RES PD1142 w/ ice	Omni		10.0	1.32	0.00		Circle	1.00	0.00
Andrew DB-583 w/ ice	Omni		6.3	0.54	0.00		Circle	1.00	0.00
12' T-Arm Mount	Mount		465.0	13.60	0.00		Square	1.00	0.00
3' Stand-Off Dipole	Dipole		50.0	2.72	0.00		Square	1.00	0.00
TMA	TMA		46.0	9.17	0.00		Circle	1.00	0.00
GPS	GPS		15.0	1.29	0.00		Square	1.00	0.00
Powerwave 7770	Panel		10.0	1.00	0.00		Circle	1.00	0.00
Raycap Surge Suppressor	Other		35.0	5.88	0.00		Square	1.00	0.00
4' Dipole	Dipole		27.0	1.79	0.00		Circle	1.00	0.00
DB586-Y	Omni		40.0	3.70	0.00		Circle	1.00	0.00
5' Dipole	Dipole		50.0	3.95	0.00		Circle	1.00	0.00
8' Omni	Omni		5.0	2.00	0.00		Circle	1.00	0.00
12' Omni	Omni		55.0	4.00	0.00		Circle	1.00	0.00
Boom Gate	Mount		471.0	13.60	0.00		Square	1.00	0.00
Scala Ogr9-806 w/ ice	Omni		18.5	2.27	0.00		Circle	1.00	0.00
Sinclair SC479-HFLDF w/ ice	Omni		34.0	5.06	0.00		Circle	1.00	0.00
RTS APXVSP18-C w/ ice	Panel		90.0	8.26	0.00		Square	1.00	0.00
ALU RRH	RRH		60.0	6.90	0.00		Square	1.00	0.00
6' Stand-Off	Mount		140.0	10.60	0.00		Square	1.00	0.00
Decibel DB844H80-XY w/ ice	Panel		10.0	3.97	0.00		Square	1.00	0.00
Raycap DB-R1-6Z-8RB-02 Dist. Box	Panel		45.0	5.60	0.00		Square	1.00	0.00
Ericsson AIR E2A/B4P	Panel		110.0	6.53	0.00		Square	1.00	0.00
Decibel PD-420 2 bay - Dipole	Dipole		10.0	1.64	0.00		Square	1.00	0.00
RRHU-11 RRH Unit	RRH		50.0	2.99	0.00		Square	1.00	0.00
4' x1' Panel	Panel		46.0	9.17	0.00		Square	1.00	0.00
DT465B-2XR-V2	Panel		30.0	6.53	0.00		Square	1.00	0.00
800 Mhz RRH Unit	RRH		88.4	9.65	0.00		Square	1.00	0.00
TD-RRH 8x20-25 RRH Unit	RRH		66.1	4.72	0.00		Square	1.00	0.00
JANH-65B-R3B Panel	Panel		126.3	9.66	0.00		Square	1.00	0.00
BSAMT-SBS-2-2 Mount for JANH Antenna	Mount		116.0	3.78	0.00		Square	1.00	0.00
Ericsson 4478 (B71) RRH Unit	RRH		60.0	1.26	0.00		Square	1.00	0.00
AIR32 B66/B2A	Panel		132.2	5.84	0.00		Square	1.00	0.00
APXVAA24 43-U-A20 (RFS)	Panel		150.0	22.38	0.00		Square	1.00	0.00
Twin TMA Unit - Generic	Other		25.0	1.12	0.00		Square	1.00	0.00
Diplexer Unit - Generic	Other		25.0	0.72	0.00		Square	1.00	0.00
TMA Unit (LGP24101)	Other		14.1	1.29	0.00		Square	1.00	0.00

OPA-65-LCUU-H6	Panel	64.0	10.12	0.00	0.00	0.00	0.00	0.00	0.00
RRUS-32	RRH Unit	80.0	3.86	0.00	0.00	0.00	0.00	0.00	0.00
	4' Dish	120.0	13.10	0.00	0.00	0.00	0.00	0.00	0.00
	Dish	560.0	51.32	0.00	0.00	0.00	0.00	0.00	0.00
B' Dish with Radome	Panel	116.0	3.13	0.00	0.00	0.00	0.00	0.00	0.00
RRH B2/B66A (RFV01U-D2A)	Panel	98.5	3.13	0.00	0.00	0.00	0.00	0.00	0.00
RRH B5B/BB13 (RFV01U-D2A)	Panel	15.7	0.83	0.00	0.00	0.00	0.00	0.00	0.00
CBC78T-DS-43-2X	Other								

Equipment Connectivity:

Equipment Label	Attach Label	Equipment Property	EIA Set	Antenna Orientation	Antenna Angle (deg)
DNK-1	RohnCP	5' Dipole			0.00
MT-DNK1	RohnGP	3' Stand-Off			0.00
DNK2-GPS68	RohnG1	GPS			120.00
MT-DNK2	RohnG1	3' Stand-Off			120.00
DNK3-GPS69	RohnG2	GPS			240.00
MT-DNK3	RohnG2	3' Stand-Off			240.00
DNK4-DOT56	RohnG2	10' Dipole			240.00
MT-DNK4	RohnG2	3' Stand-Off			240.00
DNK5-NEU16	RohnF2	8' Omni			240.00
MT-DNK5	RohnF2	6' Stand-Off			240.00
DNK9-DEP54	RohnD1	RFS PD1142 w/ ice			120.00
MT-DNK9	RohnD1	3' Stand-Off			120.00
DNK9-CSP66	RohnD1	RFS PD1142 w/ ice			120.00
DNK7-NEU17	RohnDAs	12' Omni			0.00
MT-DNK7	RohnDAs	3' Stand-Off			0.00
Sprint-A	RohnDAs	12' T-Arm			0.00
Sprint-B	RohnDAl	12' T-Arm			120.00
Sprint-C	RohnDAs	12' T-Arm			240.00
Sprint-1	RohnDAs	RFS APXVSP18-C w/ ice			0.00
Sprint-2	RohnDAs	ALU RRH			0.00
Sprint-3	RohnDAs	ALU RRH			0.00
Sprint-4	RohnDAl	RFS APXVSP18-C w/ ice			120.00
Sprint-5	RohnDAl	ALU RRH			120.00
Sprint-6	RohnDAl	ALU RRH			120.00
Sprint-7	RohnDAs	RFS APXVSP18-C w/ ice			240.00
Sprint-8	RohnDAs	ALU RRH			240.00
Sprint-9	RohnDAs	ALU RRH			240.00
Sprint-10	RohnDAs	DT465B-2XR-V2			0.00
Sprint-11	RohnDAl	DT465B-2XR-V2			120.00
Sprint-12	RohnDAs	DT465B-2XR-V2			240.00
Sprint-13	RohnDAs	800 Mhz RRH Unit			0.00
Sprint-14	RohnDAl	800 Mhz RRH Unit			120.00
Sprint-15	RohnDAs	800 Mhz RRH Unit			240.00
Sprint-16	RohnDAs	TD-RRH 8x20-25 RRH Unit			0.00
Sprint-17	RohnDAl	TD-RRH 8x20-25 RRH Unit			120.00
Sprint-18	RohnDAs	TD-RRH 8x20-25 RRH Unit			240.00
Verizon-A	RohnCbs	Boom Gate			0.00
Verizon-B	RohnCbl	Boom Gate			120.00
Verizon-C	RohnCb2	Boom Gate			240.00
Verizon-1	RohnCbs	Decibel DB844H80-XY w/ ice			0.00
Verizon-2	RohnCbs	Decibel DB844H80-XY w/ ice			0.00
Verizon-3	RohnCbl	Decibel DB844H80-XY w/ ice			120.00
Verizon-4	RohnCbl	Decibel DB844H80-XY w/ ice			120.00
Verizon-5	RohnCb2	Decibel DB844H80-XY w/ ice			240.00
Verizon-6	RohnCb2	Decibel DB844H80-XY w/ ice			240.00
Verizon-7	RohnCbs	JAHH-65B-R3B Panel			0.00
Verizon-8	RohnCbs	JAHH-65B-R3B Panel			0.00
Verizon-9	RohnCbl	JAHH-65B-R3B Panel			120.00
Verizon-10	RohnCbl	JAHH-65B-R3B Panel			120.00
Verizon-11	RohnCb2	JAHH-65B-R3B Panel			240.00
Verizon-12	RohnCb2	JAHH-65B-R3B Panel			240.00
Verizon-D	RohnCbs	ESAMNT-SBS-2-2 Mount for JAHH Antenna			0.00
Verizon-E	RohnCbl	ESAMNT-SBS-2-2 Mount for JAHH Antenna			120.00
Verizon-F	RohnCb2	ESAMNT-SBS-2-2 Mount for JAHH Antenna			240.00

Verizon-22 RohnCBS		0.00
NEU-18 RohnCBS		0.00
DNK15-CSP21 RohnCal	RFS PDL142 w/ ice	120.00
MT-DNK15 RohnCal	3' Stand-Off	120.00
DNK-12 RohnCa2	5' Dipole	240.00
MT-DNK12 RohnCa2	3' Stand-Off	240.00
T-Mobile-1 RohnCaS	Ericsson AIR B2A/B4P	0.00
T-Mobile-2 RohnCaS	AIR32 B66/B2A	0.00
T-Mobile-3 RohnCaS	APXVAR24 43-U-A20 (RFS)	120.00
T-Mobile-4 RohnCa1	Ericsson AIR B2A/B4P	120.00
T-Mobile-5 RohnCa1	AIR32 B66/B2A	120.00
T-Mobile-6 RohnCa1	APXVAR24 43-U-A20 (RFS)	120.00
T-Mobile-7 RohnCa2	Ericsson AIR B2A/B4P	240.00
T-Mobile-8 RohnCa2	AIR32 B66/B2A	240.00
T-Mobile-9 RohnCa2	APXVAR24 43-U-A20 (RFS)	0.00
T-Mobile-10 RohnCaS	Twin TMA Unit - Generic	120.00
T-Mobile-11 RohnCa1	Twin TMA Unit - Generic	240.00
T-Mobile-12 RohnCa2	RRHU-11 RRH Unit	0.00
T-Mobile-13 RohnCaS	RRHU-11 RRH Unit	120.00
T-Mobile-14 RohnCa1	RRHU-11 RRH Unit	240.00
T-Mobile-15 RohnCa2	Ericsson 4478 (B71) RRH Unit	0.00
T-Mobile-16 RohnCaS	Ericsson 4478 (B71) RRH Unit	120.00
T-Mobile-17 RohnCa1	Ericsson 4478 (B71) RRH Unit	240.00
T-Mobile-18 RohnCa2	Diplexer Unit - Generic	0.00
T-Mobile-19 RohnCaS	Diplexer Unit - Generic	120.00
T-Mobile-20 RohnCa1	Diplexer Unit - Generic	240.00
T-Mobile-21 RohnCa2	Diplexer Unit - Generic	0.00
ATT-A RohnBBS	12' T-Arm	120.00
ATT-B RohnBBS	12' T-Arm	120.00
ATT-C RohnBBS	12' T-Arm	240.00
ATT-A1 RohnBBS	Powerwave 7770	0.00
ATT-A2 RohnBBS	Powerwave 7770	0.00
ATT-A3 RohnBBS	RRHU-11 RRH Unit	0.00
ATT-A4 RohnBBS	TMA Unit (LGP24101)	0.00
ATT-A5 RohnBBS	TMA Unit (LGP24101)	0.00
ATT-A6 RohnBBS	Raycap Surge Suppressor	0.00
ATT-A7 RohnBBS	OPA-65-ICUU-H6 Panel	0.00
ATT-A8 RohnBBS	RRUS-32 RRH Unit	0.00
ATT-B1 RohnBBS	RRHU-11 RRH Unit	120.00
ATT-B2 RohnBBS	TMA Unit (LGP24101)	120.00
ATT-B3 RohnBBS	TMA Unit (LGP24101)	120.00
ATT-B4 RohnBBS	OPA-65-LCOU-H6 Panel	120.00
ATT-B5 RohnBBS	RRUS-32 RRH Unit	120.00
ATT-C1 RohnBBS	RRHU-11 RRH Unit	240.00
ATT-C2 RohnBBS	TMA Unit (LGP24101)	240.00
ATT-C3 RohnBBS	TMA Unit (LGP24101)	240.00
ATT-C4 RohnBBS	OPA-65-ICUU-H6 Panel	240.00
ATT-C5 RohnBBS	RRUS-32 RRH Unit	240.00
CSP-70 RohnBP	Sinclair SC479-HFILDF w/ ice	0.00
CSP-71 RohnB1	Sinclair SC479-HFILDF w/ ice	120.00
CSP-72 RohnB2	Sinclair SC479-HFILDF w/ ice	240.00
CSP-73 RohnB2	TMA	240.00
DNK21-SPD9 RohnBP	8' Dish with Radome	0.00
DNK20-UNKOWN RohnBP	4'x1' Panel	240.00
DNK19-STAM63 RohnB1	4'x1' Panel	120.00
159-A RohnBP	3' Stand-Off	0.00
159-B RohnB1	3' Stand-Off	120.00
160 RohnBP	3' Stand-Off	240.00
DNK22-TOG-6 RohnACS	4'x1' Panel	0.00
DNK23-STAM64 RohnACS	DBS66-f	0.00
DNK23-STAM65 RohnACS	TMA	0.00
GRN-1 (DNK25) RohnA1	4' Dish	120.00
DNK26CSP-67 RohnAAS	Dipole	0.00
DNK26HNEU-20 RohnA1	4' Dipole	0.00
DNK27A-CSP4 RohnA2	Sinclair SC479-HFILDF w/ ice	240.00
DNK27B-CSP2 RohnA2	Scala OCT9-806 w/ ice	120.00
DNK27C-CSP74 RohnA1	Scala OCT9-806 w/ ice	120.00
DNK28A-CSE1 RohnA1	Scala OCT9-806 w/ ice	120.00
DNK28B-CSE3 RohnA2	Sinclair SC479-HFILDF w/ ice	240.00

DNK28C-TOG5 RohnAa5 Andrew DB-583 w/ ice 0.00  
 DNK28D-NEU55 RohnAa2 Decibel PD-420 2 Bay - Dipole 240.00  
 Top-A RohnA6 6. Stand-Off 0.00  
 Top-B RohnA1 6. Stand-Off 120.00  
 Top-C1 RohnA2 6. Stand-Off 260.00  
 Top-C2 RohnA2 6. Stand-Off 220.00  
 ATT-B7 RohnBb1 Powerwave 7770 120.00  
 ATT-B8 RohnBb1 Powerwave 7770 120.00  
 ATT-C7 RohnBb2 Powerwave 7770 240.00  
 ATT-C8 RohnBb2 Powerwave 7770 240.00  
 Verizon-25 RohnCb5 RRH B2/B66A (RFV01U-DIA) 0.00  
 Verizon-26 RohnCb1 RRH B2/B66A (RFV01U-DIA) 120.00  
 Verizon-27 RohnCb2 RRH B2/B66A (RFV01U-DIA) 240.00  
 Verizon-28 RohnCb5 RRH B5B/BB13 (RFV01U-DZA) 0.00  
 Verizon-29 RohnCb1 RRH B5B/BB13 (RFV01U-DZA) 120.00  
 Verizon-30 RohnCb2 RRH B5B/BB13 (RFV01U-DZA) 240.00  
 Verizon-31 RohnCb5 CBC78T-DS-43-2X 0.00  
 Verizon-32 RohnCb1 CBC78T-DS-43-2X 120.00  
 Verizon-33 RohnCb2 CBC78T-DS-43-2X 240.00

Linear Appurtenances:

	Description	From (ft)	To (ft)	Quantity	Shape	Width or Diameter (in)	Perimeter (in)	Unit Weight (lbs/ft)	Face Zone	In Wind Load
Full Cable Tray 2-150 (wind only)		2	150	2	Flat	24	0	0	Yes	Yes
Full Cable Tray 150-top (wind only)		150	180	1	Flat	24	0	0	Yes	Yes
DNK1-7/8" @ 56'		2	180	1	Round	0	0	1.30128	Yes	No
DNK2-7/8" @ 54'		2	180	1	Round	0	0	1.30128	Yes	No
DNK3-7/8" @ 60'		2	180	1	Round	0	0	1.30128	Yes	No
DNK4-7/8" @ 65'		2	180	1	Round	0	0	1.30128	Yes	No
DNK5-1-5/8" @ 82'		2	180	1	Round	0	0	2.33495	Yes	No
DNK6-Hybridflex Cables @ Sprint		2	180	4	Round	0	0	0.9	Yes	No
DNK7-7/8" @ 110'		2	180	1	Round	0	0	1.30128	Yes	No
DNK8-7/8" @ 122'		2	180	1	Round	0	0	1.30128	Yes	No
DNK9-7/8" @ 122'		2	180	1	Round	0	0	1.30128	Yes	No
DNK10-1-5/8" @ VZW		2	180	6	Round	0	0	2.33495	Yes	No
DNK11-1-5/8" @ 130'		2	180	1	Round	0	0	1.30128	Yes	No
DNK12-7/8" @ 135'		2	180	1	Round	0	0	1.30128	Yes	No
DNK13, 14-1-5/8" @ T-Mobile		2	180	6	Round	0	0	2.33495	Yes	No
DNK15-7/8" @ 137'		2	180	1	Round	0	0	1.30128	Yes	No
DNK16, 17, 18-Optic Fiber Cable @ ATT		2	180	12	Round	0	0	2.33495	Yes	No
DNK16, 17, 18-OC Cable @ ATT		2	180	1	Round	0	0	1.3	Yes	No
DNK19-7/8" @ 159.5'		2	180	2	Round	0	0	0.3	Yes	No
DNK20-7/8" @ 159.5'		2	180	1	Round	0	0	1.30128	Yes	No
CSPT70, 71, 72-1-5/8" @ 160. (3)		2	180	3	Round	0	0	1.30128	Yes	No
CSPT73-1/2" @ 160'		2	180	1	Round	0	0	0.840278	Yes	No
DNK21-Elliptical @ 160'		2	180	1	Round	0	0	1.24804	Yes	No
DNK22-7/8" @ 165'		2	180	1	Round	0	0	1.30128	Yes	No
DNK23A-1-5/8" @ 168'		2	180	1	Round	0	0	2.33495	Yes	No
DNK23B-1/2" @ 168'		2	180	1	Round	0	0	2.33495	Yes	No
DNK26-B-1-5/8" @ 175'		2	180	1	Round	0	0	0.840278	Yes	No
DNK26A-7/8" @ 175'		2	180	1	Round	0	0	2.33495	Yes	No
DNK26C-1/2" @ 175'		2	180	2	Round	0	0	0.840278	Yes	No
DNK27-B-1-5/8" @ 175'		2	180	1	Round	0	0	2.33495	Yes	No
DNK27A-7/8" @ 175'		2	180	1	Round	0	0	1.30128	Yes	No
DNK27C-3/8" @ 175'		2	180	1	Round	0	0	0.654213	Yes	No
DNK28A-1-5/8" @ 175'		2	180	1	Round	0	0	2.33495	Yes	No
DNK28B-1-5/8" @ 175'		2	180	1	Round	0	0	2.33495	Yes	No
DNK28C-1-5/8" @ 175'		2	180	1	Round	0	0	2.33495	Yes	No
DNK28D-7/8" @ 175'		2	180	1	Round	0	0	1.30128	Yes	No
GRN-1-Elliptical @ 172' (DNK25)		2	180	1	Round	0	0	1.24804	Yes	No
VZW-(1) Hybridflex Cables		2	180	1	Round	0	0	1.3	Yes	No
Hybridflex 6x12 Cables @ T-Mobile		2	180	2	Round	0	0	1.7	Yes	No
Hybridflex 9x18 Cables @ T-Mobile		2	180	1	Round	0	0	0.9	Yes	No

Loads from File: p:\projects\telcom\structurals\bylocation\connecticut\greenwich\sp#74\14-vzw adds to # 13\pls\_g\pls-tower\_wind\_04-carir.eia

Structure Height Summary (used for calculating wind/ice adjust with height):

Structure height above ground 180.00 (ft)  
 Elevation of structure bottom for wind height adjustment: 0.00 (ft)  
 Structure height for structure gust response factor: 180.00 (ft)  
 Structure gust response factor, Gh: 0.8500  
 Mean wind conversion factor, m: 0.6000  
 Wind direction probability factor, Kd, for structures: 0.85, for appurtenances: 0.85  
 Structure fundamental frequency, f1: 2.0199 (Hz)  
 Guy installation temperature: 60.00 (deg F)  
 Tower Type: Triangular Latticed

ANSI/TIA 222-G Load Options:

Structure Class 3  
 Exposure Category C Open terrain  
 Topographic Category 3 (kzt calculated based on crest height, H, of 36.00 (ft))  
 Spectral Response SDS 0.276  
 Spectral Response Sd1 0.112

EIA Rev. G Load Cases:

Load Case Description	Factor	Wind Load Factor	Strength Factor	Ice Thickness (in)	Total Area (ft^2)	Wind Incidence Angle (deg)	222-G CA	222-G CS	222-G CM	Ice Density (lbs/ft^3)	Ice Temperature (deg F)	Point Loads	Joint Displ.	Antenna		
														Antenna Side Load (lbs)	Antenna Side Moment (ft-lbs)	Antenna Moment (ft-lbs)
1: 1.2D + 1.0Dg + 1.6W	1.2000	1.6000	1.0000	Regular	94.000	0	0.00	0.00	0.0000	0.0000	60.0					
2: 0.9D + 1.0Dg + 1.6W	0.9000	1.6000	1.0000	Regular	94.000	0	0.00	0.00	0.0000	0.0000	60.0					
4: 1.2D + 1.0Dg + 1.0E	1.2000	1.0000	1.0000	Earthquake	0.000	0	0.00	0.00	0.0000	0.0000	60.0					
5: 0.9D + 1.0Dg + 1.0E	0.9000	1.0000	1.0000	Earthquake	0.000	0	0.00	0.00	0.0000	0.0000	60.0					
6: Service 1.0D + 1.0Dg + 1.0W	1.0000	1.0000	1.0000	Service	60.000	0	0.00	0.00	0.0000	0.0000	60.0					
1.2*DL	1.2000	1.0000	1.0000	Regular	0.000	0	0.00	0.00	0.0000	0.0000	60.0					
0.9DL	0.9000	1.0000	1.0000	Regular	0.000	0	0.00	0.00	0.0000	0.0000	60.0					

Equipment Load Case Information for "1: 1.2D + 1.0Dg + 1.6W":

Equipment Label	Property Set	Equipment Elevation Above Ground (ft)	Ice Thickness (in)	Total Area (ft^2)	Wind Incidence Angle (deg)	222-G CA	222-G CS	222-G CM	Antenna Axial Load (lbs)	Antenna Side Load (lbs)	Antenna Side Moment (ft-lbs)	Antenna Moment (ft-lbs)	Long. Trans. Load (lbs)	Vert. Load (lbs)
DNK-1	5' Dipole	60.00	35.46	0.00	3.95	0.00							140.22	0.00
MT-DNK1	3' Stand-Off	60.00	35.46	0.00	2.72	120.00							96.46	0.00
DNK2-GPS68	GPS	60.00	35.46	0.00	1.00	120.00							35.46	0.00
MT-DNK2	3' Stand-Off	60.00	35.46	0.00	2.72	120.00							96.46	0.00
DNK3-GPS69	GPS	60.00	35.46	0.00	1.00	240.00							35.46	0.00
MT-DNK3	3' Stand-Off	60.00	35.46	0.00	2.72	240.00							96.46	0.00
DNK4-DOT56	10' Dipole	60.00	35.46	0.00	9.17	240.00							323.08	0.00
MT-DNK4	3' Stand-Off	60.00	35.46	0.00	2.72	240.00							96.46	0.00
DNK5-NEU16	8' Omni	80.00	36.75	0.00	2.00	240.00							73.49	0.00
MT-DNK5	6' Stand-Off	80.00	36.75	0.00	10.60	240.00							389.50	0.00
DNK9-DEP54	RFS PD1142 w/ ice	120.00	39.58	0.00	1.32	120.00							52.09	0.00
MT-DNK9	3' Stand-Off	120.00	39.58	0.00	2.72	120.00							107.66	0.00
DNK8-CSP66	RFS PD1142 w/ ice	120.00	39.58	0.00	1.32	120.00							52.09	0.00
MT-DNK8	12' Omni	113.34	39.13	0.00	4.00	120.00							156.52	0.00
DNK7-NEU17	3' Stand-Off	113.34	39.13	0.00	2.72	0.00							106.43	0.00
Sprint-A	12' T-Arm	113.34	39.13	0.00	13.60	0.00							532.17	0.00
Sprint-B	12' T-Arm	113.34	39.13	0.00	13.60	120.00							532.17	0.00
Sprint-C	12' T-Arm	113.34	39.13	0.00	13.60	240.00							532.17	0.00
Sprint-1	RFS APXVSP18-C w/ ice	113.34	39.13	0.00	8.26	0.00							323.21	0.00
Sprint-2	ALU RRR	113.34	39.13	0.00	6.90	0.00							269.87	0.00
Sprint-3	ALU RRR	113.34	39.13	0.00	6.90	0.00							269.87	0.00

Sprint-4	RFS APXVSP18-C w/ ice	113.34 39.13	0.00	8.26	120.00	323.21	0.00	108.00
Sprint-5	ALU RRH	113.34 39.13	0.00	6.90	120.00	269.87	0.00	72.00
Sprint-6	ALU RRH	113.34 39.13	0.00	6.90	120.00	269.87	0.00	72.00
Sprint-7	RFS APXVSP18-C w/ ice	113.34 39.13	0.00	8.26	240.00	323.21	0.00	108.00
Sprint-8	ALU RRH	113.34 39.13	0.00	6.90	240.00	269.87	0.00	72.00
Sprint-9	ALU RRH	113.34 39.13	0.00	6.90	240.00	269.87	0.00	72.00
Sprint-10	DR465B-2XR-V2	113.34 39.13	0.00	9.65	0.00	377.47	0.00	106.08
Sprint-11	DR465B-2XR-V2	113.34 39.13	0.00	9.65	120.00	377.47	0.00	106.08
Sprint-12	DR465B-2XR-V2	113.34 39.13	0.00	9.65	240.00	377.47	0.00	106.08
Sprint-13	800 MHz RRH Unit	113.34 39.13	0.00	6.90	0.00	269.87	0.00	72.00
Sprint-14	800 MHz RRH Unit	113.34 39.13	0.00	6.90	120.00	269.87	0.00	72.00
Sprint-15	800 MHz RRH Unit	113.34 39.13	0.00	6.90	240.00	269.87	0.00	72.00
Sprint-16	TD-RRH 8x20-25 RRH Unit	113.34 39.13	0.00	4.72	0.00	184.68	0.00	79.36
Sprint-17	TD-RRH 8x20-25 RRH Unit	113.34 39.13	0.00	4.72	120.00	184.68	0.00	79.36
Sprint-18	TD-RRH 8x20-25 RRH Unit	113.34 39.13	0.00	4.72	240.00	184.68	0.00	79.36
Verizon-A	Boom Gate	126.66 40.02	0.00	13.60	0.00	544.21	0.00	565.20
Verizon-B	Boom Gate	126.66 40.02	0.00	13.60	120.00	544.21	0.00	565.20
Verizon-C	Boom Gate	126.66 40.02	0.00	13.60	240.00	544.21	0.00	565.20
Verizon-1	Decibel DB844H80-XY w/ ice	126.66 40.02	0.00	3.97	0.00	158.73	0.00	12.00
Verizon-2	Decibel DB844H80-XY w/ ice	126.66 40.02	0.00	3.97	0.00	158.73	0.00	12.00
Verizon-3	Decibel DB844H80-XY w/ ice	126.66 40.02	0.00	3.97	120.00	158.73	0.00	12.00
Verizon-4	Decibel DB844H80-XY w/ ice	126.66 40.02	0.00	3.97	240.00	158.73	0.00	12.00
Verizon-5	Decibel DB844H80-XY w/ ice	126.66 40.02	0.00	3.97	240.00	158.73	0.00	12.00
Verizon-6	Decibel DB844H80-XY w/ ice	126.66 40.02	0.00	3.97	240.00	158.73	0.00	12.00
Verizon-7	JAHH-65B-R3B Panel	126.66 40.02	0.00	9.66	0.00	386.55	0.00	151.56
Verizon-8	JAHH-65B-R3B Panel	126.66 40.02	0.00	9.66	0.00	386.55	0.00	151.56
Verizon-9	JAHH-65B-R3B Panel	126.66 40.02	0.00	9.66	120.00	386.55	0.00	151.56
Verizon-10	JAHH-65B-R3B Panel	126.66 40.02	0.00	9.66	240.00	386.55	0.00	151.56
Verizon-11	JAHH-65B-R3B Panel	126.66 40.02	0.00	9.66	240.00	386.55	0.00	151.56
Verizon-12	JAHH-65B-R3B Panel	126.66 40.02	0.00	9.66	240.00	386.55	0.00	151.56
Verizon-D	BSMMT-SBS-2.2 Mount for JAHH Antenna	126.66 40.02	0.00	3.78	0.00	151.42	0.00	139.20
Verizon-E	BSMMT-SBS-2.2 Mount for JAHH Antenna	126.66 40.02	0.00	3.78	120.00	151.42	0.00	139.20
Verizon-F	BSMMT-SBS-2.2 Mount for JAHH Antenna	126.66 40.02	0.00	3.78	240.00	151.42	0.00	139.20
Verizon-22	Raycap DB-T1-6Z-8AB-02 Dist. Box	126.66 40.02	0.00	5.60	0.00	224.08	0.00	54.00
Verizon-28	RFPS PD1142 w/ ice	133.34 40.44	0.00	4.00	0.00	160.06	0.00	66.00
Verizon-29	RFPS PD1142 w/ ice	133.34 40.44	0.00	4.00	120.00	160.06	0.00	66.00
Verizon-30	RFPS PD1142 w/ ice	133.34 40.44	0.00	4.00	240.00	160.06	0.00	66.00
Verizon-31	3' Stand-Off	133.34 40.44	0.00	2.72	0.00	53.29	0.00	12.00
Verizon-32	3' Stand-Off	133.34 40.44	0.00	2.72	120.00	53.29	0.00	12.00
Verizon-33	3' Stand-Off	133.34 40.44	0.00	2.72	240.00	53.29	0.00	12.00
Verizon-34	Ericsson AIR B2A/B4P	133.34 40.44	0.00	6.53	0.00	264.20	0.00	132.02
Verizon-35	Ericsson AIR B2A/B4P	133.34 40.44	0.00	6.53	0.00	264.20	0.00	132.02
Verizon-36	Ericsson AIR B2A/B4P	133.34 40.44	0.00	6.53	120.00	264.20	0.00	132.02
Verizon-37	Ericsson AIR B2A/B4P	133.34 40.44	0.00	6.53	240.00	264.20	0.00	132.02
Verizon-38	APXVA24 43-U-A20 (RES)	133.34 40.44	0.00	5.84	0.00	904.89	0.00	180.00
Verizon-39	APXVA24 43-U-A20 (RES)	133.34 40.44	0.00	5.84	120.00	904.89	0.00	180.00
Verizon-40	APXVA24 43-U-A20 (RES)	133.34 40.44	0.00	5.84	240.00	904.89	0.00	180.00
Verizon-41	Twin TMA Unit - Generic	133.34 40.44	0.00	1.12	0.00	45.46	0.00	30.00
Verizon-42	Twin TMA Unit - Generic	133.34 40.44	0.00	1.12	120.00	45.46	0.00	30.00
Verizon-43	Twin TMA Unit - Generic	133.34 40.44	0.00	1.12	240.00	45.46	0.00	30.00
Verizon-44	RRHU-11 RRH Unit	133.34 40.44	0.00	2.99	0.00	121.07	0.00	60.00
Verizon-45	RRHU-11 RRH Unit	133.34 40.44	0.00	2.99	120.00	121.07	0.00	60.00
Verizon-46	RRHU-11 RRH Unit	133.34 40.44	0.00	2.99	240.00	121.07	0.00	60.00
Verizon-47	Ericsson 4478 (B71) RRH Unit	133.34 40.44	0.00	1.26	0.00	51.09	0.00	72.00
Verizon-48	Ericsson 4478 (B71) RRH Unit	133.34 40.44	0.00	1.26	120.00	51.09	0.00	72.00
Verizon-49	Ericsson 4478 (B71) RRH Unit	133.34 40.44	0.00	1.26	240.00	51.09	0.00	72.00
Verizon-50	Diplexer Unit - Generic	133.34 40.44	0.00	0.72	0.00	29.31	0.00	30.00
Verizon-51	Diplexer Unit - Generic	133.34 40.44	0.00	0.72	120.00	29.31	0.00	30.00
Verizon-52	Diplexer Unit - Generic	133.34 40.44	0.00	0.72	240.00	29.31	0.00	30.00
Verizon-53	12' T-Arm	150.00 41.44	0.00	13.60	0.00	563.55	0.00	558.00
Verizon-54	12' T-Arm	150.00 41.44	0.00	13.60	120.00	563.55	0.00	558.00
Verizon-55	12' T-Arm	150.00 41.44	0.00	13.60	240.00	563.55	0.00	558.00
Verizon-56	Powerwave 7770	150.00 41.44	0.00	5.88	0.00	243.65	0.00	42.00
Verizon-57	Powerwave 7770	150.00 41.44	0.00	5.88	0.00	243.65	0.00	42.00
Verizon-58	Powerwave 7770	150.00 41.44	0.00	5.88	120.00	243.65	0.00	42.00
Verizon-59	Powerwave 7770	150.00 41.44	0.00	5.88	240.00	243.65	0.00	42.00
Verizon-60	RRHU-11 RRH Unit	150.00 41.44	0.00	2.99	0.00	124.06	0.00	60.00
Verizon-61	RRHU-11 RRH Unit	150.00 41.44	0.00	2.99	120.00	124.06	0.00	60.00
Verizon-62	RRHU-11 RRH Unit	150.00 41.44	0.00	2.99	240.00	124.06	0.00	60.00
Verizon-63	TMA Unit (LGP24101)	150.00 41.44	0.00	1.29	0.00	53.37	0.00	16.92
Verizon-64	TMA Unit (LGP24101)	150.00 41.44	0.00	1.29	120.00	53.37	0.00	16.92
Verizon-65	TMA Unit (LGP24101)	150.00 41.44	0.00	1.29	240.00	53.37	0.00	16.92
Verizon-66	Raycap Surge Suppressor	150.00 41.44	0.00	1.79	0.00	74.04	0.00	32.40
Verizon-67	Raycap Surge Suppressor	150.00 41.44	0.00	1.79	120.00	74.04	0.00	32.40
Verizon-68	Raycap Surge Suppressor	150.00 41.44	0.00	1.79	240.00	74.04	0.00	32.40





Equipment Load Case Information for "2: 0.9D + 1.0Dg + 1.6Wo":

Equipment Label	Equipment Property Set	Equipment Elevation (ft)	Ground Above (ft)	qzGh (psf)	Ice Thick. (in)	Ice Area (ft^2)	Total Wind Area (ft^2)	Wind Incidence Angle (deg)	222-G CA	222-G CS	222-G CM	Antenna Axial Load (lbs)	Antenna Side Load (lbs)	Antenna Moment (ft-lbs)	Long. Trans. Load (lbs)	Vert. Load (lbs)	
G 60.00	5' Dipole	50.37	60.00	35.46	0.00	3.95	3.95	0.00	67.9	5575	80.00	0.00	0.00	0.00	5612	11187	14075
H 40.00	3' Stand-Off	42.28	60.00	35.46	0.00	2.72	2.72	0.00	73.7	6200	80.00	0.00	0.00	0.00	5716	11916	14983
I 20.00	GPS	48.05	60.00	35.46	0.00	2.72	2.72	120.00	89.2	8616	72.00	0.00	0.00	0.00	6256	15073	15101
	3' Stand-Off	50.37	60.00	35.46	0.00	2.72	2.72	240.00									
	GPS	58.17	60.00	35.46	0.00	2.72	2.72	240.00									
	10' Dipole	59.30	60.00	35.46	0.00	9.17	9.17	240.00									
	3' Stand-Off	59.30	60.00	35.46	0.00	2.72	2.72	240.00									
	8' Omni	59.30	60.00	36.75	0.00	2.00	2.00	240.00									
	6' Stand-Off	50.37	80.00	36.75	0.00	10.60	10.60	240.00									
	RFS PD1142 w/ ice	50.37	120.00	39.58	0.00	1.32	1.32	120.00									
	3' Stand-Off	50.37	120.00	39.58	0.00	2.72	2.72	120.00									
	RFS PD1142 w/ ice	50.37	120.00	39.58	0.00	1.32	1.32	120.00									
	12' Omni	50.37	113.34	39.13	0.00	4.00	4.00	0.00									
	3' Stand-Off	50.37	113.34	39.13	0.00	2.72	2.72	0.00									
	12' T-Arm	50.37	113.34	39.13	0.00	13.60	13.60	0.00									
	12' T-Arm	50.37	113.34	39.13	0.00	13.60	13.60	120.00									
	RFS APXVSP18-C w/ ice	50.37	113.34	39.13	0.00	8.26	8.26	0.00									
	ALU RRH	50.37	113.34	39.13	0.00	6.90	6.90	0.00									
	ALU RRH	50.37	113.34	39.13	0.00	6.90	6.90	120.00									
	RFS APXVSP18-C w/ ice	50.37	113.34	39.13	0.00	8.26	8.26	0.00									
	ALU RRH	50.37	113.34	39.13	0.00	6.90	6.90	120.00									
	ALU RRH	50.37	113.34	39.13	0.00	6.90	6.90	240.00									
	RFS APXVSP18-C w/ ice	50.37	113.34	39.13	0.00	8.26	8.26	0.00									
	ALU RRH	50.37	113.34	39.13	0.00	6.90	6.90	240.00									
	ALU RRH	50.37	113.34	39.13	0.00	6.90	6.90	240.00									
	DT465B-2XR-V2	50.37	113.34	39.13	0.00	9.65	9.65	0.00									
	DT465B-2XR-V2	50.37	113.34	39.13	0.00	9.65	9.65	120.00									
	DT465B-2XR-V2	50.37	113.34	39.13	0.00	9.65	9.65	240.00									
	800 MHz RRH Unit	50.37	113.34	39.13	0.00	6.90	6.90	0.00									
	800 MHz RRH Unit	50.37	113.34	39.13	0.00	6.90	6.90	120.00									
	800 MHz RRH Unit	50.37	113.34	39.13	0.00	6.90	6.90	240.00									
	TD-RRH 8x20-25 RRH Unit	50.37	113.34	39.13	0.00	4.72	4.72	0.00									
	TD-RRH 8x20-25 RRH Unit	50.37	113.34	39.13	0.00	4.72	4.72	120.00									
	TD-RRH 8x20-25 RRH Unit	50.37	113.34	39.13	0.00	4.72	4.72	240.00									
	Boom Gate	50.37	126.66	40.02	0.00	13.60	13.60	0.00									
	Boom Gate	50.37	126.66	40.02	0.00	13.60	13.60	120.00									
	Boom Gate	50.37	126.66	40.02	0.00	13.60	13.60	240.00									
	Decibel DB844H80-XY w/ ice	50.37	126.66	40.02	0.00	3.97	3.97	0.00									
	Decibel DB844H80-XY w/ ice	50.37	126.66	40.02	0.00	3.97	3.97	120.00									
	Decibel DB844H80-XY w/ ice	50.37	126.66	40.02	0.00	3.97	3.97	240.00									
	Decibel DB844H80-XY w/ ice	50.37	126.66	40.02	0.00	3.97	3.97	0.00									
	Decibel DB844H80-XY w/ ice	50.37	126.66	40.02	0.00	3.97	3.97	120.00									
	Decibel DB844H80-XY w/ ice	50.37	126.66	40.02	0.00	3.97	3.97	240.00									
	JAHH-65B-R3B Panel	50.37	126.66	40.02	0.00	9.66	9.66	0.00									
	JAHH-65B-R3B Panel	50.37	126.66	40.02	0.00	9.66	9.66	120.00									
	JAHH-65B-R3B Panel	50.37	126.66	40.02	0.00	9.66	9.66	240.00									
	JAHH-65B-R3B Panel	50.37	126.66	40.02	0.00	9.66	9.66	0.00									
	JAHH-65B-R3B Panel	50.37	126.66	40.02	0.00	9.66	9.66	120.00									
	JAHH-65B-R3B Panel	50.37	126.66	40.02	0.00	9.66	9.66	240.00									
	BSAMNT-SBS-2-2 Mount for JAHH Antenna	50.37	126.66	40.02	0.00	3.78	3.78	0.00									
	BSAMNT-SBS-2-2 Mount for JAHH Antenna	50.37	126.66	40.02	0.00	3.78	3.78	120.00									
	BSAMNT-SBS-2-2 Mount for JAHH Antenna	50.37	126.66	40.02	0.00	3.78	3.78	240.00									
	Raycap DB-T1-62-6AB-02 Dist. Box	50.37	126.66	40.02	0.00	4.60	4.60	0.00									
	12' Omni	50.37	126.66	40.02	0.00	5.60	5.60	0.00									
	RFS PD1142 w/ ice	50.37	133.34	40.44	0.00	1.32	1.32	120.00									
	3' Stand-Off	50.37	133.34	40.44	0.00	2.72	2.72	120.00									

DNK-12	5` Dipole	133.34	40.44	0.00	3.95	240.00	159.89	0.00	45.00
MT-DNK12	3` Stand-Off	133.34	40.44	0.00	2.72	240.00	109.99	0.00	99.00
T-Mobile-1	Ericsson AIR B2A/B4P	133.34	40.44	0.00	6.53	0.00	264.20	0.00	45.00
T-Mobile-2	AIR32 B66/B2A	133.34	40.44	0.00	5.84	0.00	236.34	0.00	118.98
T-Mobile-3	APXAA24 43-U-A20 (RFS)	133.34	40.44	0.00	22.38	0.00	904.89	0.00	135.00
T-Mobile-4	Ericsson AIR B2A/B4P	133.34	40.44	0.00	6.53	120.00	264.20	0.00	99.00
T-Mobile-5	AIR32 B66/B2A	133.34	40.44	0.00	5.84	120.00	236.34	0.00	118.98
T-Mobile-6	APXAA24 43-U-A20 (RFS)	133.34	40.44	0.00	22.38	120.00	904.89	0.00	135.00
T-Mobile-7	Ericsson AIR B2A/B4P	133.34	40.44	0.00	6.53	240.00	264.20	0.00	99.00
T-Mobile-8	AIR32 B66/B2A	133.34	40.44	0.00	5.84	240.00	236.34	0.00	118.98
T-Mobile-9	APXAA24 43-U-A20 (RFS)	133.34	40.44	0.00	22.38	240.00	904.89	0.00	135.00
T-Mobile-10	Twin TMA Unit - Generic	133.34	40.44	0.00	1.12	0.00	45.46	0.00	22.50
T-Mobile-11	Twin TMA Unit - Generic	133.34	40.44	0.00	1.12	120.00	45.46	0.00	22.50
T-Mobile-12	Twin TMA Unit - Generic	133.34	40.44	0.00	1.12	240.00	121.07	0.00	45.00
T-Mobile-13	RRHU-11 RRH Unit	133.34	40.44	0.00	2.99	0.00	121.07	0.00	45.00
T-Mobile-14	RRHU-11 RRH Unit	133.34	40.44	0.00	2.99	120.00	121.07	0.00	45.00
T-Mobile-15	RRHU-11 RRH Unit	133.34	40.44	0.00	1.26	0.00	51.09	0.00	54.00
T-Mobile-16	Ericsson 4478 (B71) RRH Unit	133.34	40.44	0.00	1.26	120.00	51.09	0.00	54.00
T-Mobile-17	Ericsson 4478 (B71) RRH Unit	133.34	40.44	0.00	1.26	240.00	29.31	0.00	22.50
T-Mobile-18	Diplexer Unit - Generic	133.34	40.44	0.00	0.72	0.00	29.31	0.00	22.50
T-Mobile-19	Diplexer Unit - Generic	133.34	40.44	0.00	0.72	120.00	29.31	0.00	22.50
T-Mobile-20	Diplexer Unit - Generic	133.34	40.44	0.00	0.72	240.00	563.55	0.00	418.50
T-Mobile-21	Diplexer Unit - Generic	133.34	40.44	0.00	13.60	0.00	563.55	0.00	418.50
ATT-A	12` T-Arm	150.00	41.44	0.00	13.60	120.00	243.65	0.00	31.50
ATT-B	12` T-Arm	150.00	41.44	0.00	5.88	240.00	124.06	0.00	45.00
ATT-C	Powerwave 7770	150.00	41.44	0.00	5.88	0.00	124.06	0.00	45.00
ATT-A1	Powerwave 7770	150.00	41.44	0.00	2.99	0.00	53.37	0.00	12.69
ATT-A2	RRHU-11 RRH Unit	150.00	41.44	0.00	1.29	0.00	53.37	0.00	12.69
ATT-A3	TMA Unit (LGP24101)	150.00	41.44	0.00	1.29	0.00	74.04	0.00	24.30
ATT-A4	TMA Unit (LGP24101)	150.00	41.44	0.00	10.12	0.00	419.44	0.00	57.60
ATT-A5	Raycap Surge Suppressor	150.00	41.44	0.00	3.88	0.00	160.74	0.00	72.00
ATT-A6	OPA-65-LCUU-H6 Panel	150.00	41.44	0.00	2.99	120.00	124.06	0.00	45.00
ATT-A7	RRUS-32 RRH Unit	150.00	41.44	0.00	1.29	120.00	53.37	0.00	12.69
ATT-A8	RRHU-11 RRH Unit	150.00	41.44	0.00	1.29	120.00	53.37	0.00	12.69
ATT-B1	TMA Unit (LGP24101)	150.00	41.44	0.00	10.12	120.00	419.44	0.00	57.60
ATT-B2	TMA Unit (LGP24101)	150.00	41.44	0.00	3.88	240.00	160.74	0.00	72.00
ATT-B3	OPA-65-LCUU-H6 Panel	150.00	41.44	0.00	2.99	120.00	124.06	0.00	45.00
ATT-B4	RRUS-32 RRH Unit	150.00	41.44	0.00	1.29	120.00	53.37	0.00	12.69
ATT-B5	RRHU-11 RRH Unit	150.00	41.44	0.00	1.29	120.00	53.37	0.00	12.69
ATT-C1	TMA Unit (LGP24101)	150.00	41.44	0.00	10.12	240.00	419.44	0.00	57.60
ATT-C2	TMA Unit (LGP24101)	150.00	41.44	0.00	3.88	240.00	160.74	0.00	72.00
ATT-C3	OPA-65-LCUU-H6 Panel	150.00	41.44	0.00	2.99	120.00	124.06	0.00	45.00
ATT-C4	RRUS-32 RRH Unit	150.00	41.44	0.00	1.29	120.00	53.37	0.00	12.69
ATT-C5	RRHU-11 RRH Unit	150.00	41.44	0.00	1.29	120.00	53.37	0.00	12.69
CSP-70	Sinclair SC479-HFLDF w/ ice	160.00	42.00	0.00	5.06	0.00	212.41	0.00	30.60
CSP-71	Sinclair SC479-HFLDF w/ ice	160.00	42.00	0.00	5.06	120.00	212.41	0.00	30.60
CSP-72	Sinclair SC479-HFLDF w/ ice	160.00	42.00	0.00	5.06	240.00	212.41	0.00	30.60
CSP-73	TMA	160.00	42.00	0.00	1.29	240.00	54.10	0.00	13.50
DNK21-SPD9	8` Dish with Radome	160.00	42.00	0.00	51.52	0.00	1860.78	0.00	504.00
DNK20-UNKNOM	4` x1` Panel	160.00	42.00	0.00	6.53	240.00	274.26	0.00	27.00
DNK19-STAM63	4` x1` Panel	160.00	42.00	0.00	6.53	120.00	274.26	0.00	27.00
159-A	3` Stand-Off	160.00	42.00	0.00	2.72	0.00	114.24	0.00	45.00
159-B	3` Stand-Off	160.00	42.00	0.00	2.72	120.00	114.24	0.00	45.00
160	3` Stand-Off	160.00	42.00	0.00	2.72	240.00	114.24	0.00	45.00
DNK22-TOG-6	DB586-Y	165.00	42.27	0.00	1.01	0.00	42.88	0.00	7.42
DNK23-STAM64	4` x1` Panel	165.00	42.27	0.00	6.53	0.00	276.03	0.00	27.00
DNK26aCSP-67	TMA	165.00	42.27	0.00	1.29	0.00	54.85	0.00	13.50
DNK27B-CSF4	4` Dish	170.00	42.54	0.00	13.10	50.00	927.29	-50.04	106.00
DNK27B-CSF2	Dipole	175.00	42.80	0.00	3.70	0.00	392.30	0.00	41.40
DNK27C-CSF74	4` Dipole	175.00	42.80	0.00	3.70	0.00	158.21	0.00	36.00
DNK28A-CSP14	Sinclair SC479-HFLDF w/ ice	175.00	42.80	0.00	5.06	240.00	216.44	0.00	30.60
DNK28B-CSP14	Scala OGT9-806 w/ ice	175.00	42.80	0.00	2.27	120.00	97.29	0.00	16.65
DNK28C-CSP14	TMA	175.00	42.80	0.00	1.29	120.00	55.12	0.00	13.50
DNK28D-NEU95	Scala OGT9-806 w/ ice	175.00	42.80	0.00	2.27	120.00	97.29	0.00	16.65
Top-A	Sinclair SC479-HFLDF w/ ice	175.00	42.80	0.00	5.06	240.00	216.44	0.00	30.60
Top-B	Argaw DB-583 w/ ice	175.00	42.80	0.00	0.54	0.00	22.99	0.00	5.63
Top-C	Decibel PD-420 2 bay - Dipole	180.00	43.05	0.00	1.64	240.00	70.32	0.00	9.00
Top-D	6` Stand-Off	180.00	43.05	0.00	10.60	0.00	456.33	0.00	126.00
Top-E	6` Stand-Off	180.00	43.05	0.00	10.60	120.00	456.33	0.00	126.00

Top-C1	180.00	43.05	0.00	10.60	260.00	456.33	0.00	126.00
Top-C2	180.00	43.05	0.00	10.60	220.00	456.33	0.00	126.00
ATT-B7	150.00	41.44	0.00	5.88	120.00	243.65	0.00	31.50
ATT-B8	150.00	41.44	0.00	5.88	120.00	243.65	0.00	31.50
ATT-C7	150.00	41.44	0.00	5.88	240.00	243.65	0.00	31.50
ATT-C8	150.00	41.44	0.00	5.88	240.00	243.65	0.00	31.50
Verizon-25	RRH B2/B66A (RFV01U-D1A)	126.66	40.02	0.00	3.13	125.05	0.00	104.40
Verizon-26	RRH B2/B66A (RFV01U-D1A)	126.66	40.02	0.00	3.13	125.05	0.00	104.40
Verizon-27	RRH B2/B66A (RFV01U-D1A)	126.66	40.02	0.00	3.13	125.05	0.00	104.40
Verizon-28	RRH B5B/BB13 (RFV01U-D2A)	126.66	40.02	0.00	3.13	125.05	0.00	88.65
Verizon-29	RRH B5B/BB13 (RFV01U-D2A)	126.66	40.02	0.00	3.13	125.05	0.00	88.65
Verizon-30	RRH B5B/BB13 (RFV01U-D2A)	126.66	40.02	0.00	3.13	125.05	0.00	88.65
Verizon-31	CBC78T-DS-43-2X	126.66	40.02	0.00	0.83	33.29	0.00	14.09
Verizon-32	CBC78T-DS-43-2X	126.66	40.02	0.00	0.83	33.29	0.00	14.09
Verizon-33	CBC78T-DS-43-2X	126.66	40.02	0.00	0.83	33.29	0.00	14.09

EIA Section Load Case Information for "2: 0.9D + 1.0Dg + 1.6W6":

Note: qzGh (adjusted wind pressure) includes: Velocity Pressure Coefficient (Kz), Topographic Factor (Kzt), Gust Effect Factor (Gh), Wind direction Probability Factor (Rd), Wind Importance Factor (Table 2-3), Wind load Factor (from Loads/EIA Loads)

Face RR is the minimum round reduction factor for all round angles and appurtenances in the section

Section Label	Z of Top (ft)	Z of Bottom (ft)	Elev. Above Gnd. (ft)	qzGh (psf)	Ice Thick. (in)	Face AF (ft^2)	Face AR (ft^2)	Face RR*AR (ft^2)	Face AG (ft^2)	Face Face (ft^2)	Face DR (ft^2)	Face RR (ft^2)	Face CF (ft^2)	Face AE (ft^2)	Face WF (ft^2)	Face Face (lbs)	NotF AAF (ft^2)	NotF CAF (ft^2)	NotF AAR*CAF (ft^2)	NotF CAR*CAF (ft^2)	NotF AAR*CAR (ft^2)	NotF WA (lbs)	Total Weight (lbs)	
A	180.00	160.00	170.00	42.54	0.00	20.58	21.02	12.12	163.7	0.25	1.00	1.00	0.58	2.43	32.7	3374	40.00	2.00	0.00	0.60	0.00	3403	6777	5031
B	160.00	140.00	150.00	41.44	0.00	22.52	27.30	15.20	191.0	0.26	1.00	1.00	0.55	2.41	37.7	3760	60.00	2.00	0.00	0.60	0.00	4973	8732	5371
C	140.00	120.00	130.00	40.23	0.00	25.73	29.16	15.99	218.3	0.25	1.00	1.00	0.55	2.43	41.7	4084	80.00	2.00	0.00	0.60	0.00	6437	10521	5975
D	120.00	100.00	110.00	38.90	0.00	30.37	36.61	19.30	245.5	0.27	1.00	1.00	0.52	2.37	49.7	4581	80.00	2.00	0.00	0.60	0.00	6224	10805	6596
E	100.00	80.00	90.00	37.47	0.00	37.01	40.26	20.96	272.8	0.28	1.00	1.00	0.50	2.34	58.0	5086	80.00	2.00	0.00	0.60	0.00	5995	11081	8985
F	80.00	60.00	70.00	36.06	0.00	37.32	43.90	22.14	300.0	0.27	1.00	1.00	0.50	2.38	59.5	5095	80.00	2.00	0.00	0.60	0.00	5769	10864	9449
G	60.00	40.00	50.00	35.08	0.00	42.28	50.37	25.59	327.3	0.28	1.00	1.00	0.50	2.34	67.9	5575	80.00	2.00	0.00	0.60	0.00	5612	11187	10556
H	40.00	20.00	30.00	35.73	0.00	48.05	50.83	25.68	354.6	0.28	1.00	1.00	0.49	2.35	73.7	6200	80.00	2.00	0.00	0.60	0.00	5716	11916	11237
I	20.00	0.00	10.00	43.45	0.00	59.30	58.17	29.86	391.9	0.31	1.00	1.00	0.51	2.28	89.2	8816	72.00	2.00	0.00	0.60	0.00	6256	15073	11326

Equipment Load Case Information for "4: 1.2D + 1.0Dg + 1.0E":

Equipment Label	Equipment Property Set	Elevation (ft)	Above Ground (ft)	qzGh (psf)	Ice Thick. (in)	Total Area (ft^2)	Wind Incidence (deg)	222-G CA	222-G CS	222-G CM	Antenna Axial Load (lbs)	Antenna Side Load (lbs)	Antenna Moment (ft-lbs)	Antenna Long. Trans. Load (lbs)	Vert. Load (lbs)
DNK-1	5' Dipole	60.00	0.00	0.00	0.00	3.95	0.00							0.00	60.00
MT-DNK1	3' Stand-Off	60.00	0.00	0.00	0.00	2.72	0.00							0.00	60.00
DNK2-GPS68	GPS	60.00	0.00	0.00	0.00	1.00	120.00							0.00	12.00
MT-DNK2	3' Stand-Off	60.00	0.00	0.00	0.00	2.72	120.00							0.00	60.00
DNK3-GPS69	GPS	60.00	0.00	0.00	0.00	1.00	240.00							0.00	12.00
MT-DNK3	3' Stand-Off	60.00	0.00	0.00	0.00	2.72	240.00							0.00	60.00
DNK4-DOT56	10' Dipole	60.00	0.00	0.00	0.00	9.17	240.00							0.00	55.20
MT-DNK4	3' Stand-Off	60.00	0.00	0.00	0.00	2.72	240.00							0.00	60.00
DNK5-NEU16	8' Omni	80.00	0.00	0.00	0.00	2.00	240.00							0.00	6.00
MT-DNK5	6' Stand-Off	80.00	0.00	0.00	0.00	10.60	240.00							0.00	168.00
DNK9-DEP34	RFS PD1142 w/ ice	120.00	0.00	0.00	0.00	1.52	120.00							0.00	12.00
MT-DNK9	3' Stand-Off	120.00	0.00	0.00	0.00	2.72	120.00							0.00	60.00
DNK8-CSP66	RFS PD1142 w/ ice	120.00	0.00	0.00	0.00	1.32	120.00							0.00	12.00
DNK7-NEU17	12' Omni	113.34	0.00	0.00	0.00	4.00	0.00							0.00	66.00
MT-DNK7	3' Stand-Off	113.34	0.00	0.00	0.00	2.72	0.00							0.00	60.00
Sprint-A	Sprint-A	113.34	0.00	0.00	0.00	13.60	0.00							0.00	558.00
Sprint-B	12' T-Arm	113.34	0.00	0.00	0.00	13.60	120.00							0.00	558.00
Sprint-C	12' T-Arm	113.34	0.00	0.00	0.00	13.60	240.00							0.00	558.00
Sprint-1	RFS APXVSP18-C w/ ice	113.34	0.00	0.00	0.00	8.26	0.00							0.00	108.00
Sprint-2	ALU RRH	113.34	0.00	0.00	0.00	6.90	0.00							0.00	72.00
Sprint-3	ALU RRH	113.34	0.00	0.00	0.00	6.90	0.00							0.00	72.00
Sprint-4	RFS APXVSP18-C w/ ice	113.34	0.00	0.00	0.00	8.26	120.00							0.00	108.00
Sprint-5	ALU RRH	113.34	0.00	0.00	0.00	6.90	120.00							0.00	72.00
Sprint-6	ALU RRH	113.34	0.00	0.00	0.00	6.90	120.00							0.00	72.00
Sprint-7	RFS APXVSP18-C w/ ice	113.34	0.00	0.00	0.00	8.26	240.00							0.00	108.00
Sprint-8	ALU RRH	113.34	0.00	0.00	0.00	6.90	240.00							0.00	72.00

Sprint-9	ALU RRH	113.34	0.00	0.00	6.90	240.00	0.00	72.00
Sprint-10	DT465B-2XR-V2	113.34	0.00	0.00	9.65	0.00	0.00	106.08
Sprint-11	DT465B-2XR-V2	113.34	0.00	0.00	9.65	120.00	0.00	106.08
Sprint-12	DT465B-2XR-V2	113.34	0.00	0.00	9.65	240.00	0.00	106.08
Sprint-13	800 Mhz RRH Unit	113.34	0.00	0.00	6.90	0.00	0.00	72.00
Sprint-14	800 Mhz RRH Unit	113.34	0.00	0.00	6.90	120.00	0.00	72.00
Sprint-15	800 Mhz RRH Unit	113.34	0.00	0.00	6.90	240.00	0.00	72.00
Sprint-16	TD-RRH 8x20-25 RRH Unit	113.34	0.00	0.00	4.72	0.00	0.00	79.36
Sprint-17	TD-RRH 8x20-25 RRH Unit	113.34	0.00	0.00	4.72	120.00	0.00	79.36
Sprint-18	TD-RRH 8x20-25 RRH Unit	113.34	0.00	0.00	4.72	240.00	0.00	79.36
Verizon-A	Boom Gate	126.66	0.00	0.00	13.60	0.00	0.00	565.20
Verizon-B	Boom Gate	126.66	0.00	0.00	13.60	120.00	0.00	565.20
Verizon-C	Boom Gate	126.66	0.00	0.00	13.60	240.00	0.00	565.20
Verizon-1	Decibel DB844H80-XY w/ ice	126.66	0.00	0.00	3.97	0.00	0.00	12.00
Verizon-2	Decibel DB844H80-XY w/ ice	126.66	0.00	0.00	3.97	0.00	0.00	12.00
Verizon-3	Decibel DB844H80-XY w/ ice	126.66	0.00	0.00	3.97	120.00	0.00	12.00
Verizon-4	Decibel DB844H80-XY w/ ice	126.66	0.00	0.00	3.97	120.00	0.00	12.00
Verizon-5	Decibel DB844H80-XY w/ ice	126.66	0.00	0.00	3.97	240.00	0.00	12.00
Verizon-6	Decibel DB844H80-XY w/ ice	126.66	0.00	0.00	3.97	240.00	0.00	12.00
Verizon-7	JAHH-65B-R3B Panel	126.66	0.00	0.00	9.66	0.00	0.00	151.56
Verizon-8	JAHH-65B-R3B Panel	126.66	0.00	0.00	9.66	0.00	0.00	151.56
Verizon-9	JAHH-65B-R3B Panel	126.66	0.00	0.00	9.66	120.00	0.00	151.56
Verizon-10	JAHH-65B-R3B Panel	126.66	0.00	0.00	9.66	240.00	0.00	151.56
Verizon-11	JAHH-65B-R3B Panel	126.66	0.00	0.00	9.66	240.00	0.00	151.56
Verizon-12	JAHH-65B-R3B Panel	126.66	0.00	0.00	9.66	240.00	0.00	151.56
Verizon-D	BSAMNT-SBS-2-2 Mount for JAHH Antenna	126.66	0.00	0.00	3.78	0.00	0.00	139.20
Verizon-E	BSAMNT-SBS-2-2 Mount for JAHH Antenna	126.66	0.00	0.00	3.78	0.00	0.00	139.20
Verizon-F	BSAMNT-SBS-2-2 Mount for JAHH Antenna	126.66	0.00	0.00	3.78	120.00	0.00	139.20
Verizon-G	BSAMNT-SBS-2-2 Mount for JAHH Antenna	126.66	0.00	0.00	3.78	240.00	0.00	139.20
Verizon-22	Raycap DB-T1-62-8AB-02 Dist. Box	126.66	0.00	0.00	5.60	0.00	0.00	54.00
Verizon-22	12' Omni	126.66	0.00	0.00	4.00	0.00	0.00	66.00
NEU-18	RFS PD1142 w/ ice	133.34	0.00	0.00	1.32	120.00	0.00	12.00
DNK15-CSF21	3 Stand-Off	133.34	0.00	0.00	2.72	120.00	0.00	60.00
MT-DNK15	5 Dipole	133.34	0.00	0.00	3.95	240.00	0.00	60.00
MT-DNK12	3 Stand-Off	133.34	0.00	0.00	2.72	240.00	0.00	60.00
T-Mobile-1	Ericsson AIR B2A/B4P	133.34	0.00	0.00	6.53	0.00	0.00	132.02
T-Mobile-2	AIR32 B66/B2A	133.34	0.00	0.00	5.84	0.00	0.00	158.64
T-Mobile-3	APXVAA24_43-U-A20 (RFS)	133.34	0.00	0.00	22.38	0.00	0.00	180.00
T-Mobile-4	Ericsson AIR B2A/B4P	133.34	0.00	0.00	6.53	120.00	0.00	132.02
T-Mobile-5	AIR32 B66/B2A	133.34	0.00	0.00	5.84	120.00	0.00	158.64
T-Mobile-6	APXVAA24_43-U-A20 (RFS)	133.34	0.00	0.00	22.38	120.00	0.00	180.00
T-Mobile-7	Ericsson AIR B2A/B4P	133.34	0.00	0.00	6.53	240.00	0.00	132.02
T-Mobile-8	AIR32 B66/B2A	133.34	0.00	0.00	5.84	240.00	0.00	158.64
T-Mobile-9	APXVAA24_43-U-A20 (RFS)	133.34	0.00	0.00	22.38	240.00	0.00	180.00
T-Mobile-10	Twin TMA Unit - Generic	133.34	0.00	0.00	1.12	0.00	0.00	30.00
T-Mobile-11	Twin TMA Unit - Generic	133.34	0.00	0.00	1.12	120.00	0.00	30.00
T-Mobile-12	Twin TMA Unit - Generic	133.34	0.00	0.00	1.12	240.00	0.00	30.00
T-Mobile-13	RRHU-11 RRH Unit	133.34	0.00	0.00	2.99	0.00	0.00	60.00
T-Mobile-14	RRHU-11 RRH Unit	133.34	0.00	0.00	2.99	120.00	0.00	60.00
T-Mobile-15	RRHU-11 RRH Unit	133.34	0.00	0.00	2.99	240.00	0.00	60.00
T-Mobile-16	Ericsson 4478 (871) RRH Unit	133.34	0.00	0.00	1.26	0.00	0.00	72.00
T-Mobile-17	Ericsson 4478 (871) RRH Unit	133.34	0.00	0.00	1.26	120.00	0.00	72.00
T-Mobile-18	Ericsson 4478 (871) RRH Unit	133.34	0.00	0.00	1.26	240.00	0.00	72.00
T-Mobile-19	Diplexer Unit - Generic	133.34	0.00	0.00	0.72	0.00	0.00	30.00
T-Mobile-20	Diplexer Unit - Generic	133.34	0.00	0.00	0.72	120.00	0.00	30.00
T-Mobile-21	Diplexer Unit - Generic	133.34	0.00	0.00	0.72	240.00	0.00	30.00
ATT-A	12' T-Arm	150.00	0.00	0.00	13.60	0.00	0.00	558.00
ATT-B	12' T-Arm	150.00	0.00	0.00	13.60	120.00	0.00	558.00
ATT-C	12' T-Arm	150.00	0.00	0.00	13.60	240.00	0.00	558.00
ATT-R1	Powerwave 7770	150.00	0.00	0.00	5.88	0.00	0.00	42.00
ATT-R2	Powerwave 7770	150.00	0.00	0.00	5.88	0.00	0.00	42.00
ATT-R3	RRHU-11 RRH Unit	150.00	0.00	0.00	1.29	0.00	0.00	60.00
ATT-R4	TMA Unit (LGP24101)	150.00	0.00	0.00	1.29	0.00	0.00	16.92
ATT-R5	TMA Unit (LGP24101)	150.00	0.00	0.00	1.29	0.00	0.00	16.92
ATT-R6	Raycap Surge Suppressor	150.00	0.00	0.00	10.12	0.00	0.00	32.40
ATT-R7	OPA-65-ICUU-H6 Panel	150.00	0.00	0.00	3.88	0.00	0.00	76.80
ATT-R8	RRUS-32 RRH Unit	150.00	0.00	0.00	2.99	0.00	0.00	96.00
ATT-R9	RRHU-11 RRH Unit	150.00	0.00	0.00	2.99	120.00	0.00	96.00
ATT-B1	TMA Unit (LGP24101)	150.00	0.00	0.00	1.29	120.00	0.00	16.92
ATT-B2	TMA Unit (LGP24101)	150.00	0.00	0.00	1.29	240.00	0.00	16.92
ATT-B3	TMA Unit (LGP24101)	150.00	0.00	0.00	1.29	240.00	0.00	16.92



Equipment Label	Equipment Property Set	Elevation Above Ground (ft)	Ice Thick. (in)	Total Wind Area (ft <sup>2</sup> )	Wind Incidence Angle (deg)	222-G CA	222-G CS	222-G CM	Antenna Axial Load FSW (lbs)	Antenna Side Load FSW (lbs)	Antenna Moment MM (ft-lbs)	Antenna Long. Load (lbs)	Trans. Load (lbs)	Vert. Load (lbs)
DNK-1	5' Dipole	60.00	0.00	3.95	0.00				0.00	0.00	0.00	0.00	0.00	45.00
MT-DNK1	3' Stand-Off	60.00	0.00	2.72	0.00				0.00	0.00	0.00	0.00	0.00	45.00
DNK2-GPS68	GPS	60.00	0.00	1.00	120.00				0.00	0.00	0.00	0.00	0.00	9.00
MT-DNK2	3' Stand-Off	60.00	0.00	2.72	120.00				0.00	0.00	0.00	0.00	0.00	45.00
DNK3-GPS69	GPS	60.00	0.00	1.00	240.00				0.00	0.00	0.00	0.00	0.00	9.00
MT-DNK3	3' Stand-Off	60.00	0.00	2.72	240.00				0.00	0.00	0.00	0.00	0.00	45.00
DNK4-DOT56	10' Dipole	60.00	0.00	9.17	240.00				0.00	0.00	0.00	0.00	0.00	41.40
MT-DNK4	3' Stand-Off	60.00	0.00	2.72	240.00				0.00	0.00	0.00	0.00	0.00	45.00
DNK5-NEU16	8' Omni	80.00	0.00	2.00	240.00				0.00	0.00	0.00	0.00	0.00	4.50
MT-DNK5	6' Stand-Off	80.00	0.00	10.60	240.00				0.00	0.00	0.00	0.00	0.00	126.00
DNK9-DEP54	RFS PD1142 w/ ice	120.00	0.00	0.00	1.32	120.00			0.00	0.00	0.00	0.00	0.00	9.00
MT-DNK9	3' Stand-Off	120.00	0.00	2.72	120.00				0.00	0.00	0.00	0.00	0.00	45.00
DNK8-CSF66	RFS PD1142 w/ ice	120.00	0.00	0.00	1.32	120.00			0.00	0.00	0.00	0.00	0.00	9.00
DNK7-NEU17	12' Omni	113.34	0.00	4.00	0.00				0.00	0.00	0.00	0.00	0.00	49.50
MT-DNK7	3' Stand-Off	113.34	0.00	2.72	0.00				0.00	0.00	0.00	0.00	0.00	45.00
Sprint-A	12' T-Arm	113.34	0.00	13.60	0.00				0.00	0.00	0.00	0.00	0.00	418.50
Sprint-B	12' T-Arm	113.34	0.00	13.60	120.00				0.00	0.00	0.00	0.00	0.00	418.50
Sprint-C	12' T-Arm	113.34	0.00	13.60	240.00				0.00	0.00	0.00	0.00	0.00	418.50
Sprint-1	RFS APXVSP18-C w/ ice	113.34	0.00	8.26	0.00				0.00	0.00	0.00	0.00	0.00	81.00
Sprint-2	ALU RRH	113.34	0.00	6.90	0.00				0.00	0.00	0.00	0.00	0.00	54.00
Sprint-3	ALU RRH	113.34	0.00	6.90	0.00				0.00	0.00	0.00	0.00	0.00	54.00
Sprint-4	RFS APXVSP18-C w/ ice	113.34	0.00	8.26	120.00				0.00	0.00	0.00	0.00	0.00	81.00
Sprint-5	ALU RRH	113.34	0.00	6.90	120.00				0.00	0.00	0.00	0.00	0.00	54.00
Sprint-6	ALU RRH	113.34	0.00	6.90	120.00				0.00	0.00	0.00	0.00	0.00	54.00
Sprint-7	RFS APXVSP18-C w/ ice	113.34	0.00	8.26	240.00				0.00	0.00	0.00	0.00	0.00	81.00
Sprint-8	ALU RRH	113.34	0.00	6.90	240.00				0.00	0.00	0.00	0.00	0.00	54.00
Sprint-9	ALU RRH	113.34	0.00	6.90	240.00				0.00	0.00	0.00	0.00	0.00	54.00
Sprint-10	DT465B-2XR-V2	113.34	0.00	9.65	0.00				0.00	0.00	0.00	0.00	0.00	79.56
Sprint-11	DT465B-2XR-V2	113.34	0.00	9.65	120.00				0.00	0.00	0.00	0.00	0.00	79.56
Sprint-12	DT465B-2XR-V2	113.34	0.00	9.65	240.00				0.00	0.00	0.00	0.00	0.00	79.56
Sprint-13	800 MHz RRH Unit	113.34	0.00	6.90	0.00				0.00	0.00	0.00	0.00	0.00	54.00
Sprint-14	800 MHz RRH Unit	113.34	0.00	6.90	120.00				0.00	0.00	0.00	0.00	0.00	54.00
Sprint-15	800 MHz RRH Unit	113.34	0.00	6.90	240.00				0.00	0.00	0.00	0.00	0.00	54.00
Sprint-16	TD-RRH 8x20-25 RRH Unit	113.34	0.00	4.72	0.00				0.00	0.00	0.00	0.00	0.00	59.52
Sprint-17	TD-RRH 8x20-25 RRH Unit	113.34	0.00	4.72	120.00				0.00	0.00	0.00	0.00	0.00	59.52
Sprint-18	TD-RRH 8x20-25 RRH Unit	113.34	0.00	4.72	240.00				0.00	0.00	0.00	0.00	0.00	59.52
Verizon-A	Boom Gate	126.66	0.00	13.60	0.00				0.00	0.00	0.00	0.00	0.00	423.90
Verizon-B	Boom Gate	126.66	0.00	13.60	120.00				0.00	0.00	0.00	0.00	0.00	423.90
Verizon-C	Boom Gate	126.66	0.00	13.60	240.00				0.00	0.00	0.00	0.00	0.00	423.90
Verizon-1	Decibel DB844H80-XY w/ ice	126.66	0.00	3.97	0.00				0.00	0.00	0.00	0.00	0.00	9.00
Verizon-2	Decibel DB844H80-XY w/ ice	126.66	0.00	3.97	120.00				0.00	0.00	0.00	0.00	0.00	9.00
Verizon-3	Decibel DB844H80-XY w/ ice	126.66	0.00	3.97	240.00				0.00	0.00	0.00	0.00	0.00	9.00
Verizon-4	Decibel DB844H80-XY w/ ice	126.66	0.00	3.97	120.00				0.00	0.00	0.00	0.00	0.00	9.00
Verizon-5	Decibel DB844H80-XY w/ ice	126.66	0.00	3.97	240.00				0.00	0.00	0.00	0.00	0.00	9.00
Verizon-6	Decibel DB844H80-XY w/ ice	126.66	0.00	3.97	240.00				0.00	0.00	0.00	0.00	0.00	9.00
Verizon-7	JAHH-65B-R3B Panel	126.66	0.00	9.66	0.00				0.00	0.00	0.00	0.00	0.00	113.67
Verizon-8	JAHH-65B-R3B Panel	126.66	0.00	9.66	120.00				0.00	0.00	0.00	0.00	0.00	113.67
Verizon-9	JAHH-65B-R3B Panel	126.66	0.00	9.66	240.00				0.00	0.00	0.00	0.00	0.00	113.67
Verizon-10	JAHH-65B-R3B Panel	126.66	0.00	9.66	120.00				0.00	0.00	0.00	0.00	0.00	113.67
Verizon-11	JAHH-65B-R3B Panel	126.66	0.00	9.66	240.00				0.00	0.00	0.00	0.00	0.00	113.67
Verizon-12	JAHH-65B-R3B Panel	126.66	0.00	9.66	240.00				0.00	0.00	0.00	0.00	0.00	113.67
Verizon-D	BSAMNT-SBS-2-2 Mount for JAHH Antenna	126.66	0.00	3.78	0.00				0.00	0.00	0.00	0.00	0.00	104.40
Verizon-E	BSAMNT-SBS-2-2 Mount for JAHH Antenna	126.66	0.00	3.78	120.00				0.00	0.00	0.00	0.00	0.00	104.40
Verizon-F	BSAMNT-SBS-2-2 Mount for JAHH Antenna	126.66	0.00	3.78	240.00				0.00	0.00	0.00	0.00	0.00	104.40
Verizon-22	Raycap DB-T1-62-BAB-02 Dist. Box	126.66	0.00	5.60	0.00				0.00	0.00	0.00	0.00	0.00	40.50
NEU-18	12' Omni	126.66	0.00	4.00	0.00				0.00	0.00	0.00	0.00	0.00	49.50
DNK15-CSP21	RFS PD1142 w/ ice	133.34	0.00	1.32	120.00				0.00	0.00	0.00	0.00	0.00	9.00
MT-DNK15	3' Stand-Off	133.34	0.00	2.72	120.00				0.00	0.00	0.00	0.00	0.00	45.00
DNK-12	5' Dipole	133.34	0.00	3.95	240.00				0.00	0.00	0.00	0.00	0.00	45.00
MT-DNK12	3' Stand-Off	133.34	0.00	2.72	240.00				0.00	0.00	0.00	0.00	0.00	45.00
T-Mobile-1	Ericsson AIR B2A/B4F	133.34	0.00	6.53	0.00				0.00	0.00	0.00	0.00	0.00	99.02
T-Mobile-2	AIR32 B66/B2A	133.34	0.00	5.84	0.00				0.00	0.00	0.00	0.00	0.00	118.98
T-Mobile-3	APXVAA2_43-U-AZ0 (RFS)	133.34	0.00	22.38	0.00				0.00	0.00	0.00	0.00	0.00	135.00

T-Mobile-4	Ericsson AIR B2A/B4P	133.34	0.00	6.53	120.00	0.00	0.00	99.02
T-Mobile-5	AIR32 B66/B2A	133.34	0.00	5.84	120.00	0.00	0.00	118.98
T-Mobile-6	APXVAA24 43-U-A20 (RES)	133.34	0.00	22.38	120.00	0.00	0.00	135.00
T-Mobile-7	Ericsson AIR B2A/B4P	133.34	0.00	6.53	240.00	0.00	0.00	99.02
T-Mobile-8	AIR32 B66/B2A	133.34	0.00	5.84	240.00	0.00	0.00	118.98
T-Mobile-9	APXVAA24 43-U-A20 (RES)	133.34	0.00	22.38	240.00	0.00	0.00	135.00
T-Mobile-10	Twin TMA Unit - Generic	133.34	0.00	1.12	0.00	0.00	0.00	22.50
T-Mobile-11	Twin TMA Unit - Generic	133.34	0.00	1.12	120.00	0.00	0.00	22.50
T-Mobile-12	Twin TMA Unit - Generic	133.34	0.00	1.12	240.00	0.00	0.00	22.50
T-Mobile-13	RRHU-11 RRH Unit	133.34	0.00	2.99	0.00	0.00	0.00	45.00
T-Mobile-14	RRHU-11 RRH Unit	133.34	0.00	2.99	120.00	0.00	0.00	45.00
T-Mobile-15	RRHU-11 RRH Unit	133.34	0.00	2.99	240.00	0.00	0.00	45.00
T-Mobile-16	Ericsson 4478 (B71) RRH Unit	133.34	0.00	1.26	0.00	0.00	0.00	54.00
T-Mobile-17	Ericsson 4478 (B71) RRH Unit	133.34	0.00	1.26	120.00	0.00	0.00	54.00
T-Mobile-18	Ericsson 4478 (B71) RRH Unit	133.34	0.00	1.26	240.00	0.00	0.00	54.00
T-Mobile-19	Diplexer Unit - Generic	133.34	0.00	0.72	0.00	0.00	0.00	22.50
T-Mobile-20	Diplexer Unit - Generic	133.34	0.00	0.72	120.00	0.00	0.00	22.50
T-Mobile-21	Diplexer Unit - Generic	133.34	0.00	0.72	240.00	0.00	0.00	22.50
ATT-A	12' T-Arm	150.00	0.00	13.60	0.00	0.00	0.00	418.50
ATT-B	12' T-Arm	150.00	0.00	13.60	240.00	0.00	0.00	418.50
ATT-C	Powerwave 7770	150.00	0.00	5.88	0.00	0.00	0.00	31.50
ATT-A1	Powerwave 7770	150.00	0.00	5.88	0.00	0.00	0.00	31.50
ATT-A2	Powerwave 7770	150.00	0.00	5.88	0.00	0.00	0.00	31.50
ATT-A3	Powerwave 7770	150.00	0.00	5.88	0.00	0.00	0.00	31.50
ATT-A4	RRHU-11 RRH Unit	150.00	0.00	2.99	0.00	0.00	0.00	45.00
ATT-A5	TMA Unit (LGE24101)	150.00	0.00	1.29	0.00	0.00	0.00	12.69
ATT-A6	TMA Unit (LGE24101)	150.00	0.00	1.29	0.00	0.00	0.00	12.69
ATT-A6	Raycap Surge Suppressor	150.00	0.00	1.79	0.00	0.00	0.00	24.30
ATT-A7	OPA-65-ICUW-H6 Panel	150.00	0.00	10.12	0.00	0.00	0.00	57.60
ATT-A8	RRUS-32 RRH Unit	150.00	0.00	3.88	0.00	0.00	0.00	72.00
ATT-B1	RRHU-11 RRH Unit	150.00	0.00	2.99	0.00	0.00	0.00	45.00
ATT-B2	TMA Unit (LGP24101)	150.00	0.00	1.29	120.00	0.00	0.00	12.69
ATT-B3	TMA Unit (LGP24101)	150.00	0.00	1.29	240.00	0.00	0.00	12.69
ATT-B4	OPA-65-ICUW-H6 Panel	150.00	0.00	10.12	0.00	0.00	0.00	57.60
ATT-B5	RRUS-32 RRH Unit	150.00	0.00	3.88	0.00	0.00	0.00	72.00
ATT-C1	RRHU-11 RRH Unit	150.00	0.00	2.99	0.00	0.00	0.00	45.00
ATT-C2	TMA Unit (LGE24101)	150.00	0.00	1.29	240.00	0.00	0.00	12.69
ATT-C3	TMA Unit (LGE24101)	150.00	0.00	1.29	240.00	0.00	0.00	12.69
ATT-C4	OPA-65-ICUW-H6 Panel	150.00	0.00	10.12	0.00	0.00	0.00	57.60
ATT-C5	RRUS-32 RRH Unit	150.00	0.00	3.88	0.00	0.00	0.00	72.00
CSP-70	Sinclair SC479-HFLDF w/ ice	160.00	0.00	5.06	0.00	0.00	0.00	30.60
CSP-71	Sinclair SC479-HFLDF w/ ice	160.00	0.00	5.06	120.00	0.00	0.00	30.60
CSP-72	Sinclair SC479-HFLDF w/ ice	160.00	0.00	5.06	240.00	0.00	0.00	30.60
CSP-73	TMA	160.00	0.00	1.29	240.00	0.00	0.00	13.50
DNK21-SFD9	8' Dish with Radome	160.00	0.00	51.32	0.00	0.00	0.00	504.00
DNK23-STAM64	4'x1' Panel	160.00	0.00	6.53	240.00	0.00	0.00	27.00
DNK19-STAM63	4'x1' Panel	160.00	0.00	6.53	120.00	0.00	0.00	27.00
159-A	3' Stand-Off	160.00	0.00	2.72	0.00	0.00	0.00	45.00
159-B	3' Stand-Off	160.00	0.00	2.72	120.00	0.00	0.00	45.00
160	3' Stand-Off	160.00	0.00	2.72	240.00	0.00	0.00	45.00
DNK22-TOG-6	DB586-Y	165.00	0.00	1.01	0.00	0.00	0.00	7.42
DNK23-STAM64	4'x1' Panel	165.00	0.00	6.53	0.00	0.00	0.00	27.00
DNK23-STAM65	TMA	165.00	0.00	1.29	0.00	0.00	0.00	13.50
GRN-1 (DNK25)	4' Dish	170.00	0.00	13.10	50.00	1.66410	0.08980	-0.06910
DNK26CSP-67	Dipole	175.00	0.00	9.17	0.00	0.00	0.00	108.00
DNK26BNEU-20	4' Dipole	175.00	0.00	3.70	0.00	0.00	0.00	41.40
DNK27A-CSP4	Sinclair SC479-HFLDF w/ ice	175.00	0.00	5.06	240.00	0.00	0.00	36.00
DNK27B-CSP2	Scala OGT9-806 w/ ice	175.00	0.00	2.27	120.00	0.00	0.00	30.60
DNK27C-CSP74	TMA	175.00	0.00	1.29	120.00	0.00	0.00	16.65
DNK28A-CSP1	Scala OGT9-806 w/ ice	175.00	0.00	2.27	120.00	0.00	0.00	13.50
DNK28B-CSP3	Sinclair SC479-HFLDF w/ ice	175.00	0.00	5.06	0.00	0.00	0.00	16.65
DNK28C-TOG5	Andrew DB-583 w/ ice	175.00	0.00	0.84	0.00	0.00	0.00	30.60
DNK28D-NEU55	Decibel PD-420 2 bay - Dipole	175.00	0.00	1.64	0.00	0.00	0.00	5.63
Top-A	6' Stand-Off	180.00	0.00	10.60	0.00	0.00	0.00	9.00
Top-B	6' Stand-Off	180.00	0.00	10.60	0.00	0.00	0.00	126.00
Top-C1	6' Stand-Off	180.00	0.00	10.60	120.00	0.00	0.00	126.00
Top-C2	6' Stand-Off	180.00	0.00	10.60	240.00	0.00	0.00	126.00
ATT-B7	Powerwave 7770	150.00	0.00	5.88	120.00	0.00	0.00	31.50
ATT-B8	Powerwave 7770	150.00	0.00	5.88	120.00	0.00	0.00	31.50
ATT-C7	Powerwave 7770	150.00	0.00	5.88	240.00	0.00	0.00	31.50





Sprint-14	800 MHz RRH Unit	113.34	8.66	0.00	6.90	120.00	59.76	0.00	60.00
Sprint-15	800 MHz RRH Unit	113.34	8.66	0.00	6.90	240.00	59.76	0.00	60.00
Sprint-16	800 MHz RRH Unit	113.34	8.66	0.00	4.72	0.00	40.89	0.00	66.13
Sprint-17	TD-RRH 8x20-25 RRH Unit	113.34	8.66	0.00	4.72	120.00	40.89	0.00	66.13
Sprint-18	TD-RRH 8x20-25 RRH Unit	113.34	8.66	0.00	4.72	240.00	40.89	0.00	66.13
Verizon-A	Boom Gate	126.66	8.86	0.00	13.60	0.00	120.50	0.00	471.00
Verizon-B	Boom Gate	126.66	8.86	0.00	13.60	120.00	120.50	0.00	471.00
Verizon-C	Boom Gate	126.66	8.86	0.00	3.97	0.00	35.15	0.00	10.00
Verizon-1	Decibel DB844H80-XY w/ ice	126.66	8.86	0.00	3.97	120.00	35.15	0.00	10.00
Verizon-2	Decibel DB844H80-XY w/ ice	126.66	8.86	0.00	3.97	120.00	35.15	0.00	10.00
Verizon-3	Decibel DB844H80-XY w/ ice	126.66	8.86	0.00	3.97	120.00	35.15	0.00	10.00
Verizon-4	Decibel DB844H80-XY w/ ice	126.66	8.86	0.00	3.97	240.00	35.15	0.00	10.00
Verizon-5	Decibel DB844H80-XY w/ ice	126.66	8.86	0.00	3.97	240.00	35.15	0.00	10.00
Verizon-6	Decibel DB844H80-XY w/ ice	126.66	8.86	0.00	3.97	240.00	35.15	0.00	10.00
Verizon-7	JAHH-65B-R3B Panel	126.66	8.86	0.00	9.66	0.00	85.59	0.00	126.30
Verizon-8	JAHH-65B-R3B Panel	126.66	8.86	0.00	9.66	0.00	85.59	0.00	126.30
Verizon-9	JAHH-65B-R3B Panel	126.66	8.86	0.00	9.66	120.00	85.59	0.00	126.30
Verizon-10	JAHH-65B-R3B Panel	126.66	8.86	0.00	9.66	120.00	85.59	0.00	126.30
Verizon-11	JAHH-65B-R3B Panel	126.66	8.86	0.00	9.66	240.00	85.59	0.00	126.30
Verizon-12	JAHH-65B-R3B Panel	126.66	8.86	0.00	9.66	240.00	85.59	0.00	126.30
Verizon-D	BSMNT-SBS-2-2 Mount for JAHH Antenna	126.66	8.86	0.00	3.78	0.00	33.53	0.00	116.00
Verizon-E	BSMNT-SBS-2-2 Mount for JAHH Antenna	126.66	8.86	0.00	3.78	120.00	33.53	0.00	116.00
Verizon-F	BSMNT-SBS-2-2 Mount for JAHH Antenna	126.66	8.86	0.00	3.78	240.00	33.53	0.00	116.00
Verizon-22	Raycap DB-TJ-6Z-8AB-0Z Dist. Box	126.66	8.86	0.00	5.60	0.00	49.62	0.00	45.00
Verizon-18	NEU-18	126.66	8.86	0.00	4.00	0.00	35.44	0.00	55.00
DNK15-CSE21	RFS PD1142 w/ Ice	133.34	8.95	0.00	1.32	120.00	11.78	0.00	10.00
MT-DNK15	3' Stand-Off	133.34	8.95	0.00	2.72	120.00	24.36	0.00	50.00
DNK-12	5' Dipole	133.34	8.95	0.00	3.95	240.00	35.40	0.00	50.00
MT-DNK12	3' Stand-Off	133.34	8.95	0.00	2.72	240.00	24.36	0.00	50.00
T-Mobile-1	Ericsson AIR B2A/B4P	133.34	8.95	0.00	6.53	0.00	58.50	0.00	110.02
T-Mobile-2	Ericsson AIR B2A/B4P	133.34	8.95	0.00	5.84	0.00	52.33	0.00	132.20
T-Mobile-3	APXVAA24_43-U-A20 (RFS)	133.34	8.95	0.00	22.38	0.00	200.37	0.00	150.00
T-Mobile-4	Ericsson AIR B2A/B4P	133.34	8.95	0.00	6.53	120.00	58.50	0.00	110.02
T-Mobile-5	AIR32 B66/B2A	133.34	8.95	0.00	5.84	120.00	52.33	0.00	132.20
T-Mobile-6	APXVAA24_43-U-A20 (RFS)	133.34	8.95	0.00	22.38	120.00	200.37	0.00	150.00
T-Mobile-7	Ericsson AIR B2A/B4P	133.34	8.95	0.00	6.53	240.00	58.50	0.00	110.02
T-Mobile-8	AIR32 B66/B2A	133.34	8.95	0.00	5.84	240.00	52.33	0.00	132.20
T-Mobile-9	APXVAA24_43-U-A20 (RFS)	133.34	8.95	0.00	22.38	240.00	200.37	0.00	150.00
T-Mobile-10	Twin TMA Unit - Generic	133.34	8.95	0.00	1.12	0.00	10.07	0.00	25.00
T-Mobile-11	Twin TMA Unit - Generic	133.34	8.95	0.00	1.12	120.00	10.07	0.00	25.00
T-Mobile-12	RRHU-11 RRH Unit	133.34	8.95	0.00	2.99	0.00	26.81	0.00	50.00
T-Mobile-13	RRHU-11 RRH Unit	133.34	8.95	0.00	2.99	120.00	26.81	0.00	50.00
T-Mobile-14	RRHU-11 RRH Unit	133.34	8.95	0.00	2.99	240.00	26.81	0.00	50.00
T-Mobile-15	RRHU-11 RRH Unit	133.34	8.95	0.00	2.99	240.00	26.81	0.00	50.00
T-Mobile-16	Ericsson 4478 (B71) RRH Unit	133.34	8.95	0.00	1.26	0.00	11.31	0.00	60.00
T-Mobile-17	Ericsson 4478 (B71) RRH Unit	133.34	8.95	0.00	1.26	120.00	11.31	0.00	60.00
T-Mobile-18	Ericsson 4478 (B71) RRH Unit	133.34	8.95	0.00	1.26	240.00	11.31	0.00	60.00
T-Mobile-19	Diplexer Unit - Generic	133.34	8.95	0.00	0.72	0.00	6.49	0.00	25.00
T-Mobile-20	Diplexer Unit - Generic	133.34	8.95	0.00	0.72	120.00	6.49	0.00	25.00
T-Mobile-21	Diplexer Unit - Generic	133.34	8.95	0.00	0.72	240.00	6.49	0.00	25.00
ATT-A	ATT-A	150.00	9.18	0.00	13.60	0.00	124.78	0.00	465.00
ATT-B	12' T-Arm	150.00	9.18	0.00	13.60	120.00	124.78	0.00	465.00
ATT-C	12' T-Arm	150.00	9.18	0.00	13.60	240.00	124.78	0.00	465.00
ATT-A1	Powerwave 7770	150.00	9.18	0.00	5.88	0.00	53.95	0.00	35.00
ATT-A2	Powerwave 7770	150.00	9.18	0.00	5.88	0.00	53.95	0.00	35.00
ATT-A3	RRHU-11 RRH Unit	150.00	9.18	0.00	2.99	0.00	27.47	0.00	50.00
ATT-A4	TMA Unit (LGP24101)	150.00	9.18	0.00	1.29	0.00	11.82	0.00	14.10
ATT-A5	TMA Unit (LGP24101)	150.00	9.18	0.00	1.29	0.00	11.82	0.00	14.10
ATT-A6	Raycap Surge Suppressor	150.00	9.18	0.00	1.79	0.00	16.40	0.00	14.10
ATT-A7	OPA-65-ICUU-H6 Panel	150.00	9.18	0.00	10.12	0.00	92.87	0.00	64.00
ATT-A8	RRUS-32 RRH Unit	150.00	9.18	0.00	3.88	0.00	35.59	0.00	80.00
ATT-B1	RRHU-11 RRH Unit	150.00	9.18	0.00	2.99	120.00	27.47	0.00	50.00
ATT-B2	TMA Unit (LGP24101)	150.00	9.18	0.00	1.29	120.00	11.82	0.00	14.10
ATT-B3	TMA Unit (LGP24101)	150.00	9.18	0.00	1.29	120.00	11.82	0.00	14.10
ATT-B4	OPA-65-ICUU-H6 Panel	150.00	9.18	0.00	10.12	120.00	92.87	0.00	64.00
ATT-B5	RRUS-32 RRH Unit	150.00	9.18	0.00	3.88	120.00	35.59	0.00	80.00
ATT-C1	RRHU-11 RRH Unit	150.00	9.18	0.00	2.99	240.00	27.47	0.00	50.00
ATT-C2	TMA Unit (LGP24101)	150.00	9.18	0.00	1.29	240.00	11.82	0.00	14.10
ATT-C3	TMA Unit (LGP24101)	150.00	9.18	0.00	1.29	240.00	11.82	0.00	14.10





T-Mobile-9	APXVAA24 43-U-R20 (RES)	133.34	0.00	0.00	22.38	240.00	0.00	0.00	180.00
T-Mobile-10	Twin TMA Unit - Generic	133.34	0.00	0.00	1.12	0.00	0.00	0.00	30.00
T-Mobile-11	Twin TMA Unit - Generic	133.34	0.00	0.00	1.12	120.00	0.00	0.00	30.00
T-Mobile-12	Twin TMA Unit - Generic	133.34	0.00	0.00	1.12	240.00	0.00	0.00	30.00
T-Mobile-13	RRHU-11 RRH Unit	133.34	0.00	0.00	2.99	0.00	0.00	0.00	60.00
T-Mobile-14	RRHU-11 RRH Unit	133.34	0.00	0.00	2.99	120.00	0.00	0.00	60.00
T-Mobile-15	RRHU-11 RRH Unit	133.34	0.00	0.00	2.99	240.00	0.00	0.00	60.00
T-Mobile-16	Ericsson 4478 (B71) RRH Unit	133.34	0.00	0.00	1.26	0.00	0.00	0.00	72.00
T-Mobile-17	Ericsson 4478 (B71) RRH Unit	133.34	0.00	0.00	1.26	120.00	0.00	0.00	72.00
T-Mobile-18	Ericsson 4478 (B71) RRH Unit	133.34	0.00	0.00	1.26	240.00	0.00	0.00	72.00
T-Mobile-19	Diplexer Unit - Generic	133.34	0.00	0.00	0.72	0.00	0.00	0.00	30.00
T-Mobile-20	Diplexer Unit - Generic	133.34	0.00	0.00	0.72	120.00	0.00	0.00	30.00
T-Mobile-21	Diplexer Unit - Generic	133.34	0.00	0.00	0.72	240.00	0.00	0.00	30.00
ATT-A	12' T-Arm	150.00	0.00	0.00	13.60	0.00	0.00	0.00	558.00
ATT-B	12' T-Arm	150.00	0.00	0.00	13.60	120.00	0.00	0.00	558.00
ATT-C	12' T-Arm	150.00	0.00	0.00	13.60	240.00	0.00	0.00	558.00
ATT-A1	Powerwave 7770	150.00	0.00	0.00	5.88	0.00	0.00	0.00	42.00
ATT-A2	Powerwave 7770	150.00	0.00	0.00	5.88	0.00	0.00	0.00	42.00
ATT-A3	Powerwave 7770	150.00	0.00	0.00	5.88	120.00	0.00	0.00	42.00
ATT-A4	RRHU-11 RRH Unit	150.00	0.00	0.00	2.99	0.00	0.00	0.00	60.00
ATT-A5	TMA Unit (LGP24101)	150.00	0.00	0.00	1.29	0.00	0.00	0.00	16.92
ATT-A6	TMA Unit (LGP24101)	150.00	0.00	0.00	1.29	0.00	0.00	0.00	16.92
ATT-A7	Raycap Surge Suppressor	150.00	0.00	0.00	1.79	0.00	0.00	0.00	32.40
ATT-A8	OPA-65-LCUU-H6 Panel	150.00	0.00	0.00	10.12	0.00	0.00	0.00	76.80
ATT-B1	RRUS-32 RRH Unit	150.00	0.00	0.00	3.88	0.00	0.00	0.00	96.00
ATT-B2	RRUS-32 RRH Unit	150.00	0.00	0.00	3.88	120.00	0.00	0.00	96.00
ATT-B3	RRUS-32 RRH Unit	150.00	0.00	0.00	3.88	240.00	0.00	0.00	96.00
ATT-B4	TMA Unit (LGP24101)	150.00	0.00	0.00	1.29	0.00	0.00	0.00	16.92
ATT-B5	TMA Unit (LGP24101)	150.00	0.00	0.00	1.29	120.00	0.00	0.00	16.92
ATT-C1	RRHU-11 RRH Unit	150.00	0.00	0.00	2.99	0.00	0.00	0.00	60.00
ATT-C2	RRHU-11 RRH Unit	150.00	0.00	0.00	2.99	120.00	0.00	0.00	60.00
ATT-C3	RRHU-11 RRH Unit	150.00	0.00	0.00	2.99	240.00	0.00	0.00	60.00
ATT-C4	OPA-65-LCUU-H6 Panel	150.00	0.00	0.00	10.12	0.00	0.00	0.00	76.80
ATT-C5	RRUS-32 RRH Unit	150.00	0.00	0.00	3.88	0.00	0.00	0.00	96.00
CSP-70	Sinclair SC479-HFLDIF w/ ice	160.00	0.00	0.00	5.06	0.00	0.00	0.00	40.80
CSP-71	Sinclair SC479-HFLDIF w/ ice	160.00	0.00	0.00	5.06	120.00	0.00	0.00	40.80
CSP-72	Sinclair SC479-HFLDIF w/ ice	160.00	0.00	0.00	5.06	240.00	0.00	0.00	40.80
CSP-73	Sinclair SC479-HFLDIF w/ ice	160.00	0.00	0.00	5.06	0.00	0.00	0.00	18.00
DNK21-SPD9	8' Dish with Radome	160.00	0.00	0.00	51.32	0.00	0.00	0.00	672.00
DNK20-UNKNOWN	4'x1' Panel	160.00	0.00	0.00	6.53	240.00	0.00	0.00	36.00
DNK19-STAM63	4'x1' Panel	160.00	0.00	0.00	6.53	120.00	0.00	0.00	36.00
159-A	3' Stand-Off	160.00	0.00	0.00	2.72	0.00	0.00	0.00	60.00
159-B	3' Stand-Off	160.00	0.00	0.00	2.72	120.00	0.00	0.00	60.00
160	3' Stand-Off	160.00	0.00	0.00	2.72	240.00	0.00	0.00	60.00
DNK22-TOG-6	DB586-Y	165.00	0.00	0.00	1.01	0.00	0.00	0.00	9.90
DNK23-STAM64	4'x1' Panel	165.00	0.00	0.00	6.53	0.00	0.00	0.00	36.00
DNK23-STAM65	TMA	165.00	0.00	0.00	1.29	0.00	0.00	0.00	18.00
GRN-1 (DNK25)	4' Dish	170.00	0.00	0.00	13.10	50.00	0.00	0.00	144.00
DNK26CSP-67	4' Dipole	175.00	0.00	0.00	9.17	0.00	0.00	0.00	55.20
DNK27A-CS24	4' Dipole	175.00	0.00	0.00	3.70	0.00	0.00	0.00	48.00
DNK27B-CS24	4' Dipole	175.00	0.00	0.00	3.70	240.00	0.00	0.00	48.00
DNK27C-CS24	4' Dipole	175.00	0.00	0.00	3.70	0.00	0.00	0.00	48.00
DNK28A-CSP3	Scala OGT9-806 w/ ice	175.00	0.00	0.00	5.06	0.00	0.00	0.00	22.20
DNK28B-CSP3	Scala OGT9-806 w/ ice	175.00	0.00	0.00	5.06	120.00	0.00	0.00	22.20
DNK28C-TOG5	TMA	175.00	0.00	0.00	1.29	0.00	0.00	0.00	18.00
DNK28D-NEU55	Sinclair SC479-HFLDIF w/ ice	175.00	0.00	0.00	5.06	240.00	0.00	0.00	40.80
Top-A	Andrew DB-583 w/ ice	175.00	0.00	0.00	0.54	0.00	0.00	0.00	7.50
Top-B	Decibel PD-420 2 bay - Dipole	180.00	0.00	0.00	1.64	240.00	0.00	0.00	12.00
Top-C1	6' Stand-Off	180.00	0.00	0.00	10.60	0.00	0.00	0.00	168.00
Top-C2	6' Stand-Off	180.00	0.00	0.00	10.60	120.00	0.00	0.00	168.00
ATT-B7	6' Stand-Off	180.00	0.00	0.00	10.60	240.00	0.00	0.00	168.00
ATT-B8	Powerwave 7770	150.00	0.00	0.00	5.88	0.00	0.00	0.00	42.00
ATT-C7	Powerwave 7770	150.00	0.00	0.00	5.88	120.00	0.00	0.00	42.00
ATT-C8	Powerwave 7770	150.00	0.00	0.00	5.88	240.00	0.00	0.00	42.00
Verizon-25	RRH B2/B66A (RFV01U-D1A)	126.66	0.00	0.00	3.13	0.00	0.00	0.00	139.20
Verizon-26	RRH B2/B66A (RFV01U-D1A)	126.66	0.00	0.00	3.13	120.00	0.00	0.00	139.20
Verizon-27	RRH B2/B66A (RFV01U-D1A)	126.66	0.00	0.00	3.13	240.00	0.00	0.00	139.20
Verizon-28	RRH B5B/BB13 (RFV01U-D2A)	126.66	0.00	0.00	3.13	0.00	0.00	0.00	116.20

0.00 1.66410 0.08980 -0.06910

0.00 0.86330

Verizon-29	RRR B5B/BB13 (REV010-D2A)	126.66	0.00	0.00	3.13	120.00	0.00	0.00	118.20
Verizon-30	RRR B5B/BB13 (REV010-D2A)	126.66	0.00	0.00	3.13	240.00	0.00	0.00	118.20
Verizon-31	CBC7RT-DS-43-2X	126.66	0.00	0.00	0.83	0.00	0.00	0.00	18.78
Verizon-32	CBC7RT-DS-43-2X	126.66	0.00	0.00	0.83	120.00	0.00	0.00	18.78
Verizon-33	CBC7RT-DS-43-2X	126.66	0.00	0.00	0.83	240.00	0.00	0.00	18.78

EIA Section Load Case Information for "1.2\*DL1":

Note: qzGh (adjusted wind pressure) includes: Velocity Pressure Coefficient (Kz), Topographic Factor (Kzt), Gust Effect Factor (Gh), Wind Direction Probability Factor (Kd), Wind Importance Factor (Table 2-3), Wind Load Factor (from Loads/EIA Loads)

Face RR is the minimum round reduction factor for all round angles and appurtenances in the section

Section Label	Z of Top Bottom (ft)	Elev. Above Gnd. (ft)	zGh (psf)	Ice Thick. (in)	Face AR (ft^2)	Face RR*AR (ft^2)	Face AG (ft^2)	Face e	DF	DR	RR	CF	Face AE (ft^2)	Face WF (lbs)	NotF AAF (ft^2)	NotF CAF (ft^2)	NotF AAR (ft^2)	NotF CAR (ft^2)	NotF AAR*CAR (ft^2)	NotF WA (lbs)	Total Wind Weight (lbs)		
A	180.00	160.00	170.00	0.00	0.00	20.58	21.02	12.32	163.7	0.25	1.00	1.00	0.59	2.43	32.9	0	24.00	2.00	0.00	1.20	0.00	0	6708
B	160.00	140.00	150.00	0.00	0.00	22.52	27.30	16.04	191.0	0.26	1.00	1.00	0.59	2.41	38.6	0	36.00	2.00	0.00	1.20	0.00	0	7161
C	140.00	120.00	130.00	0.00	0.00	25.73	29.16	17.07	218.3	0.27	1.00	1.00	0.59	2.43	42.8	0	48.00	2.00	0.00	1.20	0.00	0	7967
D	120.00	100.00	110.00	0.00	0.00	30.37	36.61	21.63	245.5	0.27	1.00	1.00	0.59	2.37	52.0	0	48.00	2.00	0.00	1.20	0.00	0	8794
E	100.00	80.00	90.00	0.00	0.00	37.01	40.26	23.91	272.8	0.28	1.00	1.00	0.59	2.34	60.9	0	48.00	2.00	0.00	1.20	0.00	0	11980
F	80.00	60.00	70.00	0.00	0.00	43.90	43.90	25.92	300.0	0.27	1.00	1.00	0.59	2.38	63.2	0	48.00	2.00	0.00	1.20	0.00	0	12598
G	60.00	40.00	50.00	0.00	0.00	42.28	50.37	29.91	327.3	0.28	1.00	1.00	0.59	2.34	72.2	0	48.00	2.00	0.00	1.20	0.00	0	14075
H	40.00	20.00	30.00	0.00	0.00	48.05	50.83	30.12	354.6	0.28	1.00	1.00	0.59	2.35	78.2	0	48.00	2.00	0.00	1.20	0.00	0	14983
I	20.00	0.00	10.00	0.00	0.00	59.30	59.17	34.98	381.9	0.31	1.00	1.00	0.60	2.28	94.3	0	43.20	2.00	0.00	1.20	0.00	0	15101

Equipment Load Case Information for "0.9DL1":

Equipment Label	Equipment Property	Elevation Above Ground (ft)	qzGh (psf)	Ice Thick. (in)	Total Wind Area (ft^2)	Wind Incidence Angle (deg)	222-G CA	222-G CS	222-G CM	Antenna Load FPM (lbs)	Antenna Side Load FSM (lbs)	Antenna Moment (ft-lbs)	Trans. Long. Load (lbs)	Trans. Side Load (lbs)	Vert. Load (lbs)
DNK-1	5' Dipole	60.00	0.00	0.00	3.95	0.00				0.00	0.00	0.00	0.00	0.00	45.00
MT-DNK1	3' Stand-Off	60.00	0.00	0.00	2.72	0.00				0.00	0.00	0.00	0.00	0.00	45.00
DNK2-GFS68	GPS	60.00	0.00	0.00	1.00	120.00				0.00	0.00	0.00	0.00	0.00	9.00
MT-DNK2	3' Stand-Off	60.00	0.00	0.00	2.72	120.00				0.00	0.00	0.00	0.00	0.00	45.00
DNK3-GFS69	GPS	60.00	0.00	0.00	1.00	240.00				0.00	0.00	0.00	0.00	0.00	9.00
MT-DNK3	3' Stand-Off	60.00	0.00	0.00	2.72	240.00				0.00	0.00	0.00	0.00	0.00	45.00
DNK4-DOT56	10' Dipole	60.00	0.00	0.00	9.17	240.00				0.00	0.00	0.00	0.00	0.00	41.40
MT-DNK4	3' Stand-Off	60.00	0.00	0.00	2.72	240.00				0.00	0.00	0.00	0.00	0.00	45.00
DNK5-NEUL6	8' Omni	80.00	0.00	0.00	2.00	240.00				0.00	0.00	0.00	0.00	0.00	4.50
MT-DNK5	6' Stand-Off	80.00	0.00	0.00	10.60	240.00				0.00	0.00	0.00	0.00	0.00	126.00
DNK9-DEP54	RFS ED1142 w/ ice	120.00	0.00	0.00	1.32	120.00				0.00	0.00	0.00	0.00	0.00	9.00
MT-DNK9	3' Stand-Off	120.00	0.00	0.00	2.72	120.00				0.00	0.00	0.00	0.00	0.00	45.00
DNK8-CSP66	RFS ED1142 w/ ice	120.00	0.00	0.00	1.32	120.00				0.00	0.00	0.00	0.00	0.00	9.00
DNK7-NEUL7	12' Omni	113.34	0.00	0.00	4.00	0.00				0.00	0.00	0.00	0.00	0.00	49.50
MT-DNK7	3' Stand-Off	113.34	0.00	0.00	2.72	0.00				0.00	0.00	0.00	0.00	0.00	45.00
Sprint-A	12' T-Arm	113.34	0.00	0.00	13.60	0.00				0.00	0.00	0.00	0.00	0.00	418.50
Sprint-B	12' T-Arm	113.34	0.00	0.00	13.60	120.00				0.00	0.00	0.00	0.00	0.00	418.50
Sprint-C	12' T-Arm	113.34	0.00	0.00	13.60	240.00				0.00	0.00	0.00	0.00	0.00	418.50
Sprint-1	RFS APXVSP18-C w/ ice	113.34	0.00	0.00	8.26	0.00				0.00	0.00	0.00	0.00	0.00	81.00
Sprint-2	ALU RRR	113.34	0.00	0.00	6.90	0.00				0.00	0.00	0.00	0.00	0.00	54.00
Sprint-3	ALU RRR	113.34	0.00	0.00	6.90	0.00				0.00	0.00	0.00	0.00	0.00	54.00
Sprint-4	RFS APXVSP18-C w/ ice	113.34	0.00	0.00	8.26	120.00				0.00	0.00	0.00	0.00	0.00	81.00
Sprint-5	ALU RRR	113.34	0.00	0.00	6.90	120.00				0.00	0.00	0.00	0.00	0.00	54.00
Sprint-6	ALU RRR	113.34	0.00	0.00	6.90	120.00				0.00	0.00	0.00	0.00	0.00	54.00
Sprint-7	RFS APXVSP18-C w/ ice	113.34	0.00	0.00	8.26	240.00				0.00	0.00	0.00	0.00	0.00	81.00
Sprint-8	ALU RRR	113.34	0.00	0.00	6.90	240.00				0.00	0.00	0.00	0.00	0.00	54.00
Sprint-9	ALU RRR	113.34	0.00	0.00	6.90	240.00				0.00	0.00	0.00	0.00	0.00	54.00
Sprint-10	DM465B-2XR-V2	113.34	0.00	0.00	9.65	0.00				0.00	0.00	0.00	0.00	0.00	79.56
Sprint-11	DM465B-2XR-V2	113.34	0.00	0.00	9.65	120.00				0.00	0.00	0.00	0.00	0.00	79.56
Sprint-12	DM465B-2XR-V2	113.34	0.00	0.00	9.65	240.00				0.00	0.00	0.00	0.00	0.00	79.56
Sprint-13	800 MHz RRR Unit	113.34	0.00	0.00	6.90	0.00				0.00	0.00	0.00	0.00	0.00	54.00
Sprint-14	800 MHz RRR Unit	113.34	0.00	0.00	6.90	120.00				0.00	0.00	0.00	0.00	0.00	54.00
Sprint-15	800 MHz RRR Unit	113.34	0.00	0.00	6.90	240.00				0.00	0.00	0.00	0.00	0.00	54.00
Sprint-16	TD-RRR 8x20-25 RRR Unit	113.34	0.00	0.00	4.72	0.00				0.00	0.00	0.00	0.00	0.00	59.52
Sprint-17	TD-RRR 8x20-25 RRR Unit	113.34	0.00	0.00	4.72	120.00				0.00	0.00	0.00	0.00	0.00	59.52
Sprint-18	TD-RRR 8x20-25 RRR Unit	113.34	0.00	0.00	4.72	240.00				0.00	0.00	0.00	0.00	0.00	59.52

Verizon-A	Boom Gate	126.66	0.00	0.00	13.60	0.00	0.00	0.00	423.90
Verizon-B	Boom Gate	126.66	0.00	0.00	13.60	120.00	0.00	0.00	423.90
Verizon-C	Boom Gate	126.66	0.00	0.00	13.60	240.00	0.00	0.00	423.90
Verizon-1	Decibel DB844H80-XY w/ ice	126.66	0.00	0.00	3.97	0.00	0.00	0.00	9.00
Verizon-2	Decibel DB844H80-XY w/ ice	126.66	0.00	0.00	3.97	120.00	0.00	0.00	9.00
Verizon-3	Decibel DB844H80-XY w/ ice	126.66	0.00	0.00	3.97	240.00	0.00	0.00	9.00
Verizon-4	Decibel DB844H80-XY w/ ice	126.66	0.00	0.00	3.97	120.00	0.00	0.00	9.00
Verizon-5	Decibel DB844H80-XY w/ ice	126.66	0.00	0.00	3.97	240.00	0.00	0.00	9.00
Verizon-6	Decibel DB844H80-XY w/ ice	126.66	0.00	0.00	3.97	120.00	0.00	0.00	9.00
Verizon-7	JAHH-65B-R3B Panel	126.66	0.00	0.00	9.66	0.00	0.00	0.00	113.67
Verizon-8	JAHH-65B-R3B Panel	126.66	0.00	0.00	9.66	120.00	0.00	0.00	113.67
Verizon-9	JAHH-65B-R3B Panel	126.66	0.00	0.00	9.66	240.00	0.00	0.00	113.67
Verizon-10	JAHH-65B-R3B Panel	126.66	0.00	0.00	9.66	120.00	0.00	0.00	113.67
Verizon-11	JAHH-65B-R3B Panel	126.66	0.00	0.00	9.66	240.00	0.00	0.00	113.67
Verizon-12	JAHH-65B-R3B Panel	126.66	0.00	0.00	9.66	120.00	0.00	0.00	113.67
Verizon-D	BSAMNT-SBS-2-2 Mount for JAHH Antenna	126.66	0.00	0.00	3.78	0.00	0.00	0.00	104.40
Verizon-E	BSAMNT-SBS-2-2 Mount for JAHH Antenna	126.66	0.00	0.00	3.78	120.00	0.00	0.00	104.40
Verizon-F	BSAMNT-SBS-2-2 Mount for JAHH Antenna	126.66	0.00	0.00	3.78	240.00	0.00	0.00	104.40
Verizon-22	Raycap DB-T1-62-8AB-0Z Dist. Box	126.66	0.00	0.00	5.60	0.00	0.00	0.00	40.50
Verizon-18	NEU-18	126.66	0.00	0.00	4.00	0.00	0.00	0.00	49.50
Verizon-17	RFS PD1142 w/ ice	133.34	0.00	0.00	1.32	120.00	0.00	0.00	9.00
Verizon-16	3 Stand-Off	133.34	0.00	0.00	2.72	120.00	0.00	0.00	45.00
Verizon-15	5 Dipole	133.34	0.00	0.00	3.95	240.00	0.00	0.00	45.00
Verizon-14	3 Stand-Off	133.34	0.00	0.00	2.72	240.00	0.00	0.00	45.00
Verizon-13	Ericsson AIR B2A/B4P	133.34	0.00	0.00	6.53	0.00	0.00	0.00	99.02
Verizon-12	AIR32 B66/B2A	133.34	0.00	0.00	5.84	0.00	0.00	0.00	118.98
Verizon-11	APXVAA24_43-U-A20 (RFS)	133.34	0.00	0.00	22.38	0.00	0.00	0.00	135.00
Verizon-10	Ericsson AIR B2A/B4P	133.34	0.00	0.00	6.53	120.00	0.00	0.00	99.02
Verizon-9	AIR32 B66/B2A	133.34	0.00	0.00	5.84	120.00	0.00	0.00	118.98
Verizon-8	APXVAA24_43-U-A20 (RFS)	133.34	0.00	0.00	22.38	120.00	0.00	0.00	135.00
Verizon-7	Ericsson AIR B2A/B4P	133.34	0.00	0.00	6.53	240.00	0.00	0.00	99.02
Verizon-6	AIR32 B66/B2A	133.34	0.00	0.00	5.84	240.00	0.00	0.00	118.98
Verizon-5	APXVAA24_43-U-A20 (RFS)	133.34	0.00	0.00	22.38	240.00	0.00	0.00	135.00
Verizon-4	Ericsson AIR B2A/B4P	133.34	0.00	0.00	6.53	120.00	0.00	0.00	99.02
Verizon-3	AIR32 B66/B2A	133.34	0.00	0.00	5.84	120.00	0.00	0.00	118.98
Verizon-2	APXVAA24_43-U-A20 (RFS)	133.34	0.00	0.00	22.38	120.00	0.00	0.00	135.00
Verizon-1	Ericsson AIR B2A/B4P	133.34	0.00	0.00	6.53	240.00	0.00	0.00	99.02
Verizon-0	AIR32 B66/B2A	133.34	0.00	0.00	5.84	240.00	0.00	0.00	118.98
Verizon-1	APXVAA24_43-U-A20 (RFS)	133.34	0.00	0.00	22.38	240.00	0.00	0.00	135.00
Verizon-2	Twin TWA Unit - Generic	133.34	0.00	0.00	1.12	0.00	0.00	0.00	22.50
Verizon-3	Twin TWA Unit - Generic	133.34	0.00	0.00	1.12	120.00	0.00	0.00	22.50
Verizon-4	Twin TWA Unit - Generic	133.34	0.00	0.00	1.12	240.00	0.00	0.00	22.50
Verizon-5	RRHU-11 RRH Unit	133.34	0.00	0.00	2.99	0.00	0.00	0.00	45.00
Verizon-6	RRHU-11 RRH Unit	133.34	0.00	0.00	2.99	120.00	0.00	0.00	45.00
Verizon-7	RRHU-11 RRH Unit	133.34	0.00	0.00	2.99	240.00	0.00	0.00	45.00
Verizon-8	Ericsson 4478 (E71) RRH Unit	133.34	0.00	0.00	1.26	0.00	0.00	0.00	54.00
Verizon-9	Ericsson 4478 (E71) RRH Unit	133.34	0.00	0.00	1.26	120.00	0.00	0.00	54.00
Verizon-10	Ericsson 4478 (E71) RRH Unit	133.34	0.00	0.00	1.26	240.00	0.00	0.00	54.00
Verizon-11	Diplexer Unit - Generic	133.34	0.00	0.00	0.72	0.00	0.00	0.00	22.50
Verizon-12	Diplexer Unit - Generic	133.34	0.00	0.00	0.72	120.00	0.00	0.00	22.50
Verizon-13	Diplexer Unit - Generic	133.34	0.00	0.00	0.72	240.00	0.00	0.00	22.50
Verizon-14	Diplexer Unit - Generic	133.34	0.00	0.00	0.72	120.00	0.00	0.00	22.50
Verizon-15	Diplexer Unit - Generic	133.34	0.00	0.00	0.72	240.00	0.00	0.00	22.50
Verizon-16	12' T-Arm	150.00	0.00	0.00	13.60	0.00	0.00	0.00	418.50
Verizon-17	12' T-Arm	150.00	0.00	0.00	13.60	120.00	0.00	0.00	418.50
Verizon-18	12' T-Arm	150.00	0.00	0.00	13.60	240.00	0.00	0.00	418.50
Verizon-19	Powerwave 7770	150.00	0.00	0.00	5.88	0.00	0.00	0.00	31.50
Verizon-20	Powerwave 7770	150.00	0.00	0.00	5.88	0.00	0.00	0.00	31.50
Verizon-21	RRHU-11 RRH Unit	150.00	0.00	0.00	2.99	0.00	0.00	0.00	45.00
Verizon-22	TMA Unit (LGP24101)	150.00	0.00	0.00	1.29	0.00	0.00	0.00	12.69
Verizon-23	TMA Unit (LGP24101)	150.00	0.00	0.00	1.29	120.00	0.00	0.00	12.69
Verizon-24	TMA Unit (LGP24101)	150.00	0.00	0.00	1.29	240.00	0.00	0.00	12.69
Verizon-25	Raycap Surge Suppressor	150.00	0.00	0.00	1.79	0.00	0.00	0.00	24.30
Verizon-26	OPA-65-ICUU-H6 Panel	150.00	0.00	0.00	10.12	0.00	0.00	0.00	57.60
Verizon-27	RRUS-32 RRH Unit	150.00	0.00	0.00	3.88	0.00	0.00	0.00	72.00
Verizon-28	RRHU-11 RRH Unit	150.00	0.00	0.00	2.99	120.00	0.00	0.00	45.00
Verizon-29	TMA Unit (LGP24101)	150.00	0.00	0.00	1.29	120.00	0.00	0.00	12.69
Verizon-30	TMA Unit (LGP24101)	150.00	0.00	0.00	1.29	240.00	0.00	0.00	12.69
Verizon-31	OPA-65-ICUU-H6 Panel	150.00	0.00	0.00	10.12	120.00	0.00	0.00	57.60
Verizon-32	RRUS-32 RRH Unit	150.00	0.00	0.00	3.88	240.00	0.00	0.00	72.00
Verizon-33	Sinclair SC479-HFLDF w/ ice	160.00	0.00	0.00	5.06	0.00	0.00	0.00	30.60
Verizon-34	Sinclair SC479-HFLDF w/ ice	160.00	0.00	0.00	5.06	120.00	0.00	0.00	30.60
Verizon-35	Sinclair SC479-HFLDF w/ ice	160.00	0.00	0.00	5.06	240.00	0.00	0.00	30.60

Section Label	Z of Top (ft)	Z of Bottom (ft)	Elev. (ft)	qzgh (psf)	Ice Thick. (in)	qzgh (psf)	Face AG (ft^2)	Face AR (ft^2)	Face RR (ft^2)	Face DR (ft^2)	Face CF (ft^2)	Face AE (ft^2)	Face WF (ft^2)	Face CAF (ft^2)	NotF AAR (ft^2)	NotF CAR (ft^2)	NotF AAR*CAR (ft^2)	NotF WA (lbs)	Total Wind Weight (lbs)
CSP-73																			
DNK21-SPD9																			
DNK20-UNKNOWN																			
DNK19-STAM63																			
159-A																			
159-B																			
160																			
DNK22-TOG-6																			
DNK23-STAM64																			
DNK23-STAM65																			
GRN-1 (DNK25)																			
DNK26CSP-67																			
DNK26BNEU-20																			
DNK27A-CSP4																			
DNK27B-CSP2																			
DNK27C-CSP74																			
DNK28A-CSP1																			
DNK28B-CSP3																			
DNK28C-TG65																			
DNK28D-NEU55																			
Top-A																			
Top-B																			
Top-C1																			
Top-C2																			
ATT-B7																			
ATT-B8																			
ATT-C7																			
ATT-C8																			
Verizon-25																			
Verizon-26																			
Verizon-27																			
Verizon-28																			
Verizon-29																			
Verizon-30																			
Verizon-31																			
Verizon-32																			
Verizon-33																			

EIA Section Load Case Information for "0.9DL":

Note: qzgh (adjusted wind pressure) includes: Velocity Pressure Coefficient (Kz), Topographic Factor (Kzt), Gust Effect Factor (Gf), Wind Direction Probability Factor (Kd), Wind Importance Factor (Table 2-3), Wind Load Factor (from Loads/EIA Loads)

Face RR is the minimum round reduction factor for all round angles and appurtenances in the section

Section Label	Z of Top (ft)	Z of Bottom (ft)	Elev. (ft)	qzgh (psf)	Ice Thick. (in)	qzgh (psf)	Face AG (ft^2)	Face AR (ft^2)	Face RR (ft^2)	Face DR (ft^2)	Face CF (ft^2)	Face AE (ft^2)	Face WF (ft^2)	Face CAF (ft^2)	NotF AAR (ft^2)	NotF CAR (ft^2)	NotF AAR*CAR (ft^2)	NotF WA (lbs)	Total Wind Weight (lbs)
A	180.00	160.00	170.00	0.00	0.00	20.58	21.02	12.32	163.7	0.25	1.00	1.00	0.59	2.43	32.9	0	0	0	5031
B	160.00	140.00	150.00	0.00	0.00	22.52	27.30	16.04	191.0	0.26	1.00	1.00	0.59	2.41	38.6	0	0	0	5371
C	140.00	120.00	130.00	0.00	0.00	25.73	29.16	17.07	218.3	0.25	1.00	1.00	0.59	2.43	42.8	0	0	0	5975
D	120.00	100.00	110.00	0.00	0.00	30.37	36.61	21.63	245.5	0.27	1.00	1.00	0.59	2.37	52.0	0	0	0	6596
E	100.00	80.00	90.00	0.00	0.00	37.01	40.26	23.81	272.8	0.28	1.00	1.00	0.59	2.34	60.9	0	0	0	8985
F	80.00	60.00	70.00	0.00	0.00	47.32	43.90	25.82	300.0	0.27	1.00	1.00	0.59	2.36	63.2	0	0	0	9449
G	60.00	40.00	50.00	0.00	0.00	42.28	50.37	29.91	327.3	0.28	1.00	1.00	0.59	2.34	72.2	0	0	0	10556
H	40.00	20.00	30.00	0.00	0.00	48.05	50.83	30.12	354.6	0.28	1.00	1.00	0.59	2.35	78.2	0	0	0	11237
I	20.00	0.00	10.00	0.00	0.00	59.30	58.17	34.98	381.9	0.31	1.00	1.00	0.60	2.28	94.3	0	0	0	11326



\*\*\* Analysis Results:

Maximum element usage is 97.93% for Angle "SNB-IH2P" in load case "1: 1.2D + 1.0Dg + 1.6Wo"

Angle Forces For All Load Cases:

Positive for tension - negative for compression

Group Label	Angle Label	Max. Usage For All IC %	Max. Tens. For All IC (kips)	Max. Comp. For All IC (kips)	IC 1 (kips)	IC 2 (kips)	IC 3 (kips)	IC 4 (kips)	IC 5 (kips)	IC 6 (kips)	IC 7 (kips)
Rohn-D1	Rohn-DA1P	11.17	0.865	-0.006	0.865	0.865	0.141	0.144	0.189	-0.006	-0.003
Rohn-D1	Rohn-DA1	1.37	0.107	0.000	-1.400	-1.400	0.011	0.012	0.025	0.001	0.003
Rohn-D1	Rohn-DA12	25.67	0.000	-1.400	-1.400	-1.393	-0.213	-0.209	-0.314	-0.009	-0.005
Rohn-D1	Rohn-DA2P	12.61	0.977	-0.001	0.977	0.976	0.168	0.169	0.217	-0.001	0.001
Rohn-D1	Rohn-DA2	15.15	0.000	-0.826	-0.826	-0.821	-0.165	-0.163	-0.183	-0.003	-0.000
Rohn-D1	Rohn-DA22	4.70	0.364	-0.011	0.360	0.364	0.031	0.035	0.074	-0.011	-0.006
Rohn-D1	Rohn-DA3P	10.44	0.809	-0.019	0.806	0.809	0.155	0.161	0.168	-0.019	-0.013
Rohn-D1	Rohn-DA3	1.22	0.095	-0.007	0.092	0.095	0.009	0.012	0.017	-0.007	-0.004
Rohn-D1	Rohn-DA31	33.28	0.000	-1.706	-1.706	-1.698	-0.254	-0.249	-0.383	-0.011	-0.006
Rohn-D1	Rohn-DA32	17.93	1.390	-0.013	1.389	1.390	0.200	0.205	0.300	-0.013	-0.008
Rohn-D1	Rohn-DA4P	28.69	0.000	-1.471	-1.471	-1.463	-0.229	-0.225	-0.331	-0.011	-0.006
Rohn-D1	Rohn-DA4	8.91	0.690	-0.013	0.686	0.690	0.040	0.045	0.145	-0.013	-0.008
Rohn-D1	Rohn-DA5P	18.70	1.449	-0.024	1.445	1.449	0.191	0.198	0.307	-0.024	-0.016
Rohn-D1	Rohn-DA5	4.03	0.312	-0.009	0.308	0.312	0.001	0.005	0.064	-0.009	-0.005
Rohn-D1	Rohn-DA52	32.95	0.001	-1.590	-1.590	-1.584	-0.244	-0.244	-0.351	-0.000	-0.001
Rohn-D1	Rohn-DA6P	20.85	1.616	-0.024	1.612	1.616	0.213	0.221	0.343	-0.024	-0.016
Rohn-D1	Rohn-DA6	39.87	0.000	-1.324	-1.324	-1.317	-0.241	-0.238	-0.427	-0.003	-0.001
Rohn-D1	Rohn-DA62	0.20	0.015	-0.006	0.003	0.006	0.012	0.015	-0.002	-0.006	-0.003
Rohn-D1	Rohn-DA7P	20.34	1.576	-0.044	1.568	1.576	0.203	0.216	0.321	-0.044	-0.031
Rohn-D1	Rohn-DA7	39.32	0.000	-1.788	-1.788	-1.780	-0.257	-0.253	-0.398	-0.005	-0.002
Rohn-D1	Rohn-DA72	0.41	0.029	-0.018	0.023	0.029	0.007	0.013	0.005	-0.018	-0.012
Rohn-D1	Rohn-DA8P	23.73	1.839	-0.041	1.832	1.839	0.197	0.209	0.382	-0.041	-0.029
Rohn-D1	Rohn-DA8	2.20	0.171	-0.023	0.164	0.171	-0.010	-0.003	0.023	-0.023	-0.016
Rohn-D1	Rohn-DA82	37.00	0.000	-1.682	-1.682	-1.675	-0.268	-0.265	-0.374	-0.004	-0.001
Rohn-D2	Rohn-DB1P	35.39	3.104	-0.054	3.096	3.104	0.299	0.314	0.654	-0.054	-0.039
Rohn-D2	Rohn-DB1	1.45	0.127	-0.030	0.118	0.127	-0.028	-0.019	0.008	-0.030	-0.021
Rohn-D2	Rohn-DB12	42.36	-2.745	-0.056	-2.745	-2.735	-0.364	-0.360	-0.609	-0.004	-0.001
Rohn-D2	Rohn-DB2P	31.98	2.805	-0.056	2.796	2.805	0.302	0.308	0.587	-0.056	-0.040
Rohn-D2	Rohn-DB2	48.51	0.000	-3.143	-3.143	-3.133	-0.364	-0.360	-0.699	-0.006	-0.003
Rohn-D2	Rohn-DB22	4.32	0.000	-0.280	-0.280	-0.272	-0.021	-0.012	-0.077	-0.026	-0.017
Rohn-D2	Rohn-DB3P	30.12	2.642	-0.035	2.638	2.642	0.297	0.307	0.564	-0.035	-0.025
Rohn-D2	Rohn-DB3	9.50	0.833	-0.024	0.827	0.833	0.017	0.024	0.170	-0.024	-0.016
Rohn-D2	Rohn-DB32	48.83	0.004	-2.988	-2.988	-2.979	-0.376	-0.374	-0.660	0.003	0.004
Rohn-D2	Rohn-DB4P	26.01	2.281	-0.038	2.276	2.281	0.298	0.308	0.482	-0.038	-0.027
Rohn-D2	Rohn-DB4	54.33	0.003	-3.325	-3.325	-3.316	-0.373	-0.371	-0.735	0.002	0.003
Rohn-D2	Rohn-DB42	5.32	0.466	-0.021	0.461	0.466	0.023	0.030	0.091	-0.021	-0.014
Rohn-D2	Rohn-DB5P	46.53	4.081	-0.068	4.072	4.081	0.350	0.368	0.863	-0.068	-0.049
Rohn-D2	Rohn-DB5	9.91	0.869	-0.057	0.855	0.869	-0.016	0.000	0.156	-0.057	-0.041
Rohn-D2	Rohn-DB52	78.91	0.000	-4.566	-4.566	-4.543	-0.504	-0.491	-1.037	-0.041	-0.029
Rohn-D2	Rohn-DB6P	42.74	3.749	-0.069	3.740	3.749	0.352	0.370	0.788	-0.069	-0.050
Rohn-D2	Rohn-DB6	84.67	0.000	-4.899	-4.899	-4.876	-0.502	-0.489	-1.111	-0.042	-0.030
Rohn-D2	Rohn-DB62	5.90	0.517	-0.055	0.503	0.517	-0.010	0.005	0.079	-0.055	-0.040
Rohn-D2	Rohn-DB7P	52.01	4.561	-0.070	4.553	4.561	0.379	0.397	0.969	-0.070	-0.051
Rohn-D2	Rohn-DB7	3.89	0.000	-0.213	-0.213	-0.195	-0.081	-0.063	-0.086	-0.063	-0.046
Rohn-D2	Rohn-DB72	73.80	-4.046	-0.046	-4.046	-4.021	-0.488	-0.473	-0.928	-0.052	-0.037
Rohn-D2	Rohn-DB8P	48.45	4.249	-0.070	4.240	4.249	0.382	0.400	0.899	-0.070	-0.051
Rohn-D2	Rohn-DB8	79.75	0.000	-4.368	-4.368	-4.343	-0.486	-0.470	-0.999	-0.052	-0.037
Rohn-D2	Rohn-DB82	9.99	0.000	-0.547	-0.547	-0.529	-0.077	-0.060	-0.160	-0.062	-0.045
Rohn-D3	Rohn-DC1P	46.08	4.510	-0.124	4.488	4.510	0.337	0.369	0.922	-0.124	-0.091
Rohn-D3	Rohn-DC1	10.01	0.980	-0.114	0.951	0.980	0.064	0.034	0.142	-0.114	-0.083
Rohn-D3	Rohn-DC12	59.29	0.000	-5.346	-5.346	-5.305	-0.624	-0.595	-1.250	-0.106	-0.077
Rohn-D3	Rohn-DC2P	42.65	4.174	-0.124	4.153	4.174	0.340	0.372	0.847	-0.124	-0.091
Rohn-D3	Rohn-DC2	62.60	0.000	-5.645	-5.645	-5.603	-0.620	-0.591	-1.317	-0.106	-0.078
Rohn-D3	Rohn-DC22	6.29	0.616	-0.113	0.587	0.616	-0.061	-0.031	0.061	-0.113	-0.083
Rohn-D3	Rohn-DC3P	57.60	5.637	-0.017	5.637	5.630	0.482	0.487	1.244	-0.017	-0.011
Rohn-D3	Rohn-DC3	12.86	1.259	-0.011	1.257	1.259	0.059	0.012	0.272	-0.011	-0.006
Rohn-D3	Rohn-DC32	77.42	0.000	-6.556	-6.556	-6.540	-0.528	-0.526	-1.455	-0.001	-0.000

Rohn-D3	54.73	5.357	-0.017	5.357	5.349	0.486	0.490	1.181	-0.017	-0.012
Rohn-DC4P	79.74	0.000	-6.752	-6.752	-6.736	-0.520	-0.520	-1.499	-0.002	-0.000
Rohn-D3	10.30	1.008	-0.011	1.006	0.015	0.015	0.019	0.217	-0.001	-0.007
Rohn-DC4	63.22	7.860	-0.246	7.814	7.860	0.416	0.416	1.588	-0.246	-0.183
R-D3-MOD	4.15	0.516	-0.236	0.456	0.516	-0.205	-0.144	-0.046	-0.236	-0.175
Rohn-DC5P	82.27	0.000	-8.529	-8.529	-8.452	-0.866	-0.806	-2.031	-0.229	-0.170
R-D3-MOD	61.72	7.673	-0.247	7.628	7.673	0.360	0.422	1.546	-0.247	-0.183
Rohn-DC6P	85.12	0.000	-8.826	-8.826	-8.748	-0.865	-0.804	-2.088	-0.230	-0.171
R-D3-MOD	2.37	0.294	-0.234	0.235	0.294	-0.196	-0.136	-0.093	-0.234	-0.174
Rohn-DC62	53.74	6.682	-0.233	6.636	6.682	0.255	0.314	1.335	-0.233	-0.173
Rohn-DD1P	1.209	1.209	-0.225	1.153	1.209	-0.161	-0.103	0.119	-0.225	-0.167
Rohn-DD11	80.60	0.000	-7.839	-7.839	-7.828	-0.766	-0.710	-1.883	-0.212	-0.157
Rohn-DD12	51.44	6.396	-0.235	6.349	6.396	0.256	0.316	1.270	-0.235	-0.174
Rohn-DD2P	84.74	0.000	-8.285	-8.285	-8.213	-0.768	-0.711	-1.970	-0.214	-0.159
Rohn-D4	6.59	0.819	-0.222	0.765	0.819	-0.156	-0.099	0.035	-0.222	-0.164
Rohn-DD2	77.26	9.606	-0.055	9.606	9.601	0.557	0.562	2.110	-0.055	-0.041
R-D4-MOD	3.21	0.399	-0.078	0.386	0.399	-0.078	-0.065	0.054	-0.047	-0.035
Rohn-DD3P	74.31	0.000	-9.613	-9.613	-9.585	-0.611	-0.600	-2.156	-0.036	-0.026
R-D4-MOD	77.31	0.240	-0.057	0.240	0.236	0.548	0.562	2.028	-0.057	-0.042
Rohn-DD32	74.31	0.000	-9.936	-9.936	-9.908	-0.609	-0.598	-2.227	-0.036	-0.026
R-D4-MOD	79.91	0.000	-0.074	0.042	0.055	-0.074	-0.062	-0.021	-0.045	-0.033
Rohn-DD41	0.60	0.055	-0.311	8.225	8.289	0.184	0.262	1.643	-0.311	-0.232
Rohn-DD42	7.10	0.883	-0.303	0.808	0.883	-0.219	-0.142	-0.010	-0.303	-0.226
R-D4-MOD	76.32	0.000	-9.490	-9.490	-9.399	-0.877	-0.801	-2.285	-0.294	-0.219
Rohn-DD51	64.15	7.976	-0.312	7.912	7.976	0.186	0.264	1.574	-0.312	-0.232
R-D4-MOD	79.01	0.000	-9.823	-9.823	-9.732	-0.875	-0.799	-2.359	-0.294	-0.219
Rohn-DD6P	4.43	0.550	-0.303	0.475	0.550	-0.218	-0.141	-0.085	-0.303	-0.226
R-D4-MOD	53.10	6.602	-0.248	6.549	6.602	0.104	0.166	1.314	-0.248	-0.185
Rohn-DD62	6.22	0.774	-0.239	0.714	0.774	-0.197	-0.136	0.012	-0.239	-0.178
Rohn-DE1	60.50	0.000	-7.522	-7.522	-7.451	-0.630	-0.570	-1.821	-0.234	-0.174
Rohn-DE12	50.48	6.276	-0.247	6.223	6.276	0.106	0.168	1.243	-0.247	-0.184
Rohn-DE2P	7.823	7.823	-0.287	7.823	7.823	-0.287	-0.287	-0.287	-0.287	-0.172
Rohn-DE21	0.460	0.460	-0.243	0.400	0.460	-0.200	-0.138	-0.061	-0.243	-0.181
Rohn-DE22	3.70	8.188	-0.108	8.188	8.203	0.367	0.394	1.766	-0.108	-0.081
Rohn-DE3P	65.97	0.000	-0.686	0.686	0.657	-0.165	-0.139	-0.220	-0.101	-0.075
Rohn-DE31	5.52	0.000	-7.380	-7.380	-7.344	-0.514	-0.488	-1.703	-0.101	-0.075
Rohn-DE32	59.36	7.927	-0.105	7.913	7.927	0.372	0.398	1.707	-0.105	-0.078
Rohn-DE4P	62.06	0.000	-7.716	-7.716	-7.681	-0.509	-0.483	-1.774	-0.096	-0.071
Rohn-DE41	7.93	0.000	-0.986	0.986	0.956	-0.171	-0.143	-0.291	-0.108	-0.081
Rohn-DE42	69.10	8.592	-0.287	8.529	8.592	0.226	0.300	1.724	-0.287	-0.222
Rohn-DE5P	3.33	0.414	-0.287	0.343	0.414	-0.266	-0.194	-0.098	-0.287	-0.215
Rohn-DE51	75.25	0.000	-9.356	-9.356	-9.268	-0.840	-0.764	-2.264	-0.294	-0.220
Rohn-DE52	66.31	8.245	-0.292	8.183	8.245	0.230	0.304	1.650	-0.292	-0.218
Rohn-DE6P	76.24	0.000	-9.479	-9.479	-9.393	-0.830	-0.756	-2.287	-0.288	-0.215
Rohn-DE61	2.40	0.047	-0.299	0.027	0.047	-0.277	-0.202	-0.188	-0.299	-0.223
Rohn-DE62	81.58	10.143	-0.264	10.092	10.143	0.315	0.381	2.113	-0.264	-0.198
Rohn-DF1P	2.09	0.000	-0.260	-0.249	-0.184	-0.260	-0.196	-0.222	-0.250	-0.187
Rohn-DF11	85.79	0.000	-10.667	-10.667	-10.588	-0.842	-0.775	-2.541	-0.263	-0.197
Rohn-DF12	80.75	10.040	-0.257	9.991	10.040	0.327	0.390	2.095	-0.257	-0.192
Rohn-DE2P	85.46	0.000	-10.626	-10.626	-10.550	-0.825	-0.761	-2.525	-0.252	-0.189
Rohn-DE21	2.17	0.000	-0.270	-0.181	-0.112	-0.270	-0.203	-0.218	-0.268	-0.201
Rohn-DE22	79.23	9.851	-0.258	9.798	9.851	0.323	0.367	2.035	-0.258	-0.193
Rohn-DF3P	6.91	0.859	-0.244	0.799	0.859	-0.204	-0.142	0.023	-0.244	-0.183
Rohn-DF31	91.97	0.000	-11.434	-11.434	-11.359	-0.885	-0.820	-2.696	-0.255	-0.191
Rohn-DF32	79.37	9.869	-0.249	9.818	9.869	0.338	0.400	2.045	-0.249	-0.186
Rohn-DF4P	90.85	0.000	-11.296	-11.296	-11.223	-0.872	-0.809	-2.662	-0.248	-0.186
Rohn-DF41	6.15	0.765	-0.260	0.700	0.765	-0.215	-0.150	-0.009	-0.260	-0.195
Rohn-DF42	69.55	8.647	-0.243	8.596	8.647	0.210	0.271	1.798	-0.243	-0.182
Rohn-DG1P	1.90	0.237	-0.230	0.179	0.237	-0.212	-0.154	-0.112	-0.230	-0.177
Rohn-DG11	80.10	0.000	-3.959	-3.959	-3.891	-0.721	-0.661	-2.377	-0.238	-0.179
Rohn-DG12	77.16	8.796	-0.236	8.746	8.796	0.223	0.282	1.836	-0.236	-0.177
Rohn-DG2P	4.65	0.578	-0.244	0.516	0.578	-0.218	-0.164	-0.045	-0.244	-0.183
Rohn-DG21	76.45	9.506	-0.218	9.457	9.506	0.303	0.357	1.988	-0.218	-0.163
Rohn-DG3P	1.68	0.150	-0.208	0.097	0.150	-0.206	-0.153	-0.115	-0.208	-0.156
Rohn-DG31	85.77	0.000	-10.665	-10.665	-10.606	-0.747	-0.693	-2.499	-0.213	-0.159
Rohn-DG32	79.13	9.838	-0.212	9.792	9.838	0.316	0.369	2.065	-0.212	-0.157
Rohn-DG4P	83.64	0.000	-10.400	-10.400	-10.342	-0.737	-0.684	-2.439	-0.209	-0.157
Rohn-DG41	3.12	0.388	-0.218	0.332	0.388	-0.208	-0.153	-0.069	-0.218	-0.163

Rohn-D7	73.38	9.123	-0.240	9.068	9.123	0.200	0.260	1.915	-0.240	-0.180
Rohn-D7	2.33	0.000	-0.290	-0.290	-0.231	-0.236	-0.178	-0.219	-0.232	-0.174
Rohn-D7	80.02	0.000	-9.950	-9.950	-9.887	-0.661	-0.622	-2.375	-0.235	-0.176
Rohn-D7	75.46	9.382	-0.237	-9.328	9.382	0.210	-0.269	1.975	-0.237	-0.177
Rohn-D7	77.78	0.000	-9.671	-9.671	-9.609	-0.671	-0.613	-2.312	-0.231	-0.174
Rohn-D7	1.92	0.018	-0.239	-0.043	0.018	-0.236	-0.177	-0.169	-0.239	-0.179
R-D7-MOD	67.72	10.525	-0.264	10.462	10.525	0.268	0.334	2.192	-0.264	-0.198
R-D7-MOD	2.19	0.340	-0.258	0.273	0.340	-0.254	-0.189	-0.113	-0.258	-0.194
R-D7-MOD	77.10	0.000	-11.983	-11.983	-11.919	-0.805	-0.741	-2.818	-0.259	-0.194
R-D7-MOD	69.41	10.788	-0.261	10.725	10.788	0.278	0.343	2.252	-0.261	-0.196
R-D7-MOD	75.45	0.000	-11.726	-11.726	-11.662	-0.797	-0.733	-2.760	-0.257	-0.193
R-D7-MOD	3.70	0.576	-0.263	0.507	0.576	-0.252	-0.186	-0.064	-0.263	-0.193
Rohn-D7	61.58	7.656	-0.184	7.609	7.656	0.149	0.195	1.620	-0.184	-0.137
Rohn-D7	7.78	0.968	-0.179	0.923	0.968	-0.150	-0.105	0.091	-0.179	-0.134
Rohn-D7	76.55	0.000	-9.518	-9.518	-9.474	-0.551	-0.506	-2.246	-0.179	-0.134
Rohn-D7	63.56	7.903	-0.182	7.856	7.903	0.157	0.203	1.676	-0.182	-0.136
Rohn-D7	74.58	0.000	-9.273	-9.273	-9.229	-0.543	-0.499	-2.191	-0.182	-0.133
Rohn-D7	9.65	1.199	-0.182	1.153	1.199	-0.147	-0.101	0.141	-0.182	-0.137
Rohn-D7	60.27	7.494	-0.175	7.449	7.494	0.135	0.178	1.575	-0.175	-0.131
Rohn-D7	9.09	1.130	-0.171	1.085	1.130	-0.104	-0.061	0.116	-0.171	-0.129
Rohn-D7	75.83	0.000	-9.428	-9.428	-9.390	-0.558	-0.516	-2.198	-0.172	-0.130
Rohn-D7	62.03	7.713	-0.174	7.668	7.713	0.141	0.184	1.624	-0.174	-0.131
Rohn-D7	74.07	0.000	-9.210	-9.210	-9.172	-0.551	-0.509	-2.149	-0.171	-0.129
Rohn-D7	10.76	1.337	-0.173	1.292	1.337	-0.100	-0.057	0.161	-0.173	-0.130
Rohn-L1	1.30	0.000	-1.353	-1.353	-1.264	-0.523	-0.483	-0.517	-0.350	-0.265
Rohn-L1	0.34	0.136	-0.354	0.050	0.136	-0.270	-0.208	-0.208	-0.354	-0.267
Rohn-L1	0.89	0.188	-0.512	0.064	0.188	-0.422	-0.297	-0.303	-0.512	-0.386
Rohn-L1	3.42	0.000	-3.970	-3.970	-3.815	-1.167	-1.021	-1.244	-0.589	-0.444
Rohn-L1	1.05	1.333	-0.829	1.182	1.333	-0.334	-0.179	-0.127	-0.829	-0.473
Rohn-L1	0.86	1.099	-0.802	0.904	1.099	-0.514	-0.316	-0.297	-0.802	-0.603
Rohn-L1	7.12	0.000	-7.406	-7.406	-7.200	-1.817	-1.627	-2.111	-0.762	-0.573
Rohn-L1	2.14	2.721	-0.969	2.489	2.721	-0.438	-0.198	-0.049	-0.969	-0.729
Rohn-L1	2.01	2.558	-0.995	2.320	2.558	-0.470	-0.223	-0.102	-0.995	-0.748
Rohn-L1	10.72	0.000	-11.147	-11.147	-10.881	-2.517	-2.274	-3.070	-0.972	-0.731
Rohn-L1	3.25	4.134	-1.157	3.859	4.134	-0.387	-0.101	0.139	-1.157	-0.870
Rohn-L1	3.32	4.232	-1.188	3.950	4.232	-0.416	-0.122	0.140	-1.188	-0.893
Rohn-L1	12.77	0.000	-16.958	-16.958	-16.374	-4.342	-3.792	-5.114	-2.196	-1.649
Rohn-L1	3.96	6.135	-1.709	5.728	6.135	-0.635	-0.211	0.213	-1.709	-1.284
Rohn-L2	4.02	6.226	-1.669	5.830	6.226	-0.595	-0.182	0.260	-1.669	-1.254
Rohn-L2	16.82	0.000	-22.335	-22.335	-21.692	-5.192	-4.593	-6.421	-2.384	-1.790
Rohn-L2	5.50	8.515	-1.955	8.053	8.515	-0.550	-0.065	0.578	-1.955	-1.468
Rohn-L2	5.60	8.669	-1.920	8.216	8.669	-0.514	-0.038	0.635	-1.920	-1.441
Rohn-L2	22.60	0.000	-30.005	-30.005	-29.072	-7.024	-6.150	-8.797	-3.478	-2.610
Rohn-L2	7.10	10.998	-3.062	10.267	10.998	-1.288	-0.527	0.386	-3.062	-2.298
Rohn-L2	7.21	11.163	-3.031	10.441	11.163	-1.257	-0.504	0.443	-3.031	-2.275
Rohn-L2	28.98	0.000	-38.467	-38.467	-37.467	-8.040	-7.117	-10.792	-3.670	-2.754
Rohn-L2	9.67	14.963	-3.284	14.187	14.963	-1.098	-0.282	1.119	-3.284	-2.465
Rohn-L2	9.78	15.143	-3.255	14.375	15.143	-1.068	-0.260	1.179	-3.255	-2.443
Rohn-L3	31.47	0.000	-47.359	-47.359	-46.232	-9.349	-8.319	-13.027	-4.095	-3.073
Rohn-L3	10.13	18.866	-3.736	17.988	18.866	-1.107	-0.180	1.685	-3.736	-2.805
Rohn-L3	10.25	19.091	-3.708	18.220	19.091	-1.078	-0.158	1.753	-3.708	-2.783
Rohn-L3	39.88	0.000	-59.938	-59.938	-58.521	-11.482	-10.185	-16.470	-5.149	-3.863
Rohn-L3	12.74	23.738	-4.888	22.484	23.738	-1.720	-0.506	1.997	-4.888	-3.667
Rohn-L3	12.87	23.972	-4.908	22.813	23.972	-1.740	-0.520	2.034	-4.908	-3.683
Rohn-L3	50.76	0.000	-76.389	-76.389	-74.570	-14.115	-12.448	-21.032	-6.625	-4.971
Rohn-L3	16.21	30.196	-6.269	28.715	30.196	-2.523	-0.965	2.509	-6.269	-4.705
Rohn-L3	16.31	30.377	-6.283	28.890	30.377	-2.548	-0.984	2.533	-6.283	-4.722
Rohn-L4	58.01	0.000	-92.158	-92.158	-90.153	-15.861	-14.035	-24.316	-7.246	-5.437
Rohn-L4	20.53	37.238	-7.000	35.390	37.238	-2.691	-0.932	3.587	-7.000	-5.253
Rohn-L4	20.68	37.500	-6.944	35.866	37.500	-2.636	-0.911	3.683	-6.944	-5.210
Rohn-L4	69.68	0.000	-110.610	-110.610	-108.151	-18.658	-16.411	-30.052	-8.922	-6.693
Rohn-L4	24.51	44.505	-8.577	42.424	44.505	-3.708	-1.439	4.139	-8.577	-6.435
Rohn-L4	24.69	44.773	-8.525	42.760	44.773	-3.655	-1.426	4.246	-8.525	-6.396
Rohn-L4	80.43	0.000	-127.778	-127.778	-125.272	-19.739	-17.472	-33.912	-6.746	-5.000
Rohn-L4	29.18	52.925	-8.674	50.890	52.925	-3.299	-1.143	5.965	-8.674	-6.508
Rohn-L4	29.36	53.238	-8.623	51.216	53.238	-3.248	-1.105	6.069	-8.623	-6.470
Rohn-L5	63.81	0.000	-143.260	-143.260	-140.528	-21.413	-18.941	-37.858	-9.809	-7.359
Rohn-L5	23.15	59.594	-9.515	57.360	59.594	-3.711	-1.347	6.892	-9.515	-7.139
Rohn-L5	23.28	59.921	-9.461	57.701	59.921	-3.657	-1.306	7.002	-9.461	-7.098

Rohn-L5	0.000	-157.722	-157.722	-154.827	-22.749	-20.135	-41.430	-10.369	-7.779
Rohn-L5	66.118	-10.094	63.751	66.118	-3.902	-1.393	7.966	-10.094	-7.573
Rohn-L5	25.81	-10.032	64.071	66.423	-3.841	-1.347	8.077	-10.032	-7.526
Rohn-L5	66.423	-171.968	-171.968	-168.983	-23.839	-21.154	-44.775	-10.648	-7.988
Rohn-L5	0.000	-10.387	70.383	72.814	-3.790	-1.209	9.265	-10.387	-7.793
Rohn-L5	72.814	-10.313	70.821	73.233	-3.715	-1.153	9.411	-10.313	-7.737
Rohn-L5	73.233	-192.389	-192.389	-189.126	-25.957	-23.020	-49.961	-11.645	-8.736
Rohn-L6	0.000	-11.401	79.102	81.772	-4.110	-1.410	10.602	-11.401	-8.553
Rohn-L6	81.772	-11.478	79.365	82.054	-4.320	-1.467	10.616	-11.478	-8.611
Rohn-L6	82.054	-215.736	-215.736	-212.293	-27.860	-24.768	-55.550	-12.260	-9.197
Rohn-L6	0.000	-12.033	89.420	92.935	-4.232	-1.241	12.611	-12.033	-9.028
Rohn-L6	92.935	-12.084	90.118	92.945	-4.282	-1.279	12.649	-12.084	-9.065
Rohn-L6	92.945	-238.739	-238.739	-234.921	-30.437	-26.991	-61.559	-10.254	-10.662
Rohn-L7	0.000	-13.413	99.190	102.339	-5.027	-1.692	13.872	-13.413	-10.167
Rohn-L7	102.339	-13.453	99.455	102.638	-5.168	-1.797	13.847	-13.453	-10.167
Rohn-L7	102.638	-259.690	-259.690	-255.680	-32.185	-28.563	-66.679	-14.369	-10.779
Rohn-L7	0.000	-14.128	108.639	111.958	-5.129	-1.705	15.554	-14.128	-10.599
Rohn-L7	111.958	-14.251	108.819	112.169	-5.343	-1.798	15.521	-14.251	-10.691
Rohn-L7	112.169	-281.089	-281.089	-276.728	-34.534	-30.571	-72.309	-15.731	-11.800
Rohn-L7	0.000	-15.503	117.243	120.900	-6.100	-2.242	16.650	-15.503	-11.630
Rohn-L7	120.900	-15.613	117.489	121.174	-6.211	-2.326	16.639	-15.613	-11.712
Rohn-L7	121.174	-301.893	-301.893	-297.352	-36.190	-32.054	-77.402	-16.425	-12.321
Rohn-L7	0.000	-16.209	126.575	130.406	-6.325	-2.292	18.318	-16.209	-12.359
Rohn-L7	130.406	-16.311	126.637	130.693	-6.427	-2.368	18.315	-16.311	-12.235
Rohn-L7	130.693	-322.224	-322.224	-317.278	-38.660	-34.117	-82.946	-18.054	-13.543
Rohn-L8	0.000	-17.846	134.250	138.491	-7.542	-3.099	19.043	-17.846	-13.387
Rohn-L8	138.491	-17.942	134.533	138.797	-7.638	-3.172	19.048	-17.942	-13.459
Rohn-L8	138.797	-338.880	-338.880	-333.724	-40.147	-35.390	-87.210	-18.905	-14.181
Rohn-L8	0.000	-18.705	141.255	145.713	-8.084	-3.426	20.103	-18.705	-14.031
Rohn-L8	145.713	-18.797	141.551	146.031	-8.176	-3.495	20.113	-18.797	-14.100
Rohn-L8	146.031	-0.099	-0.099	-0.089	-0.025	-0.015	-0.033	-0.023	-0.013
Rohn-H1	0.000	-0.026	0.213	0.224	-0.004	0.007	0.034	-0.026	-0.015
Rohn-H1	0.224	-0.206	-0.206	-0.195	-0.048	-0.037	-0.059	-0.027	-0.016
Rohn-H1	0.000	-0.110	-0.110	-0.102	-0.016	-0.008	-0.015	-0.011	-0.009
Rohn-H1	0.000	-0.023	0.100	0.107	-0.023	-0.010	0.015	-0.018	-0.010
Rohn-H1	0.045	-0.018	0.037	0.045	-0.010	-0.002	0.010	-0.016	-0.010
Rohn-H1	0.000	-0.090	-0.090	-0.086	-0.014	-0.011	-0.016	0.007	0.003
Rohn-H1	0.014	-0.212	-0.207	-0.212	-0.055	-0.060	-0.038	0.014	0.009
Rohn-H1	0.000	0.000	0.218	0.214	-0.068	-0.064	0.053	0.010	0.005
Rohn-H1	0.011	-0.088	-0.084	-0.088	-0.054	-0.059	-0.013	0.011	0.007
Rohn-H1	0.023	-0.012	-0.006	-0.012	0.023	0.017	0.007	0.015	0.010
Rohn-H1	0.643	0.000	0.693	0.635	0.136	0.129	0.151	0.017	0.010
Rohn-H1	0.111	0.000	0.111	0.107	0.026	0.022	0.027	0.006	0.002
Rohn-H1	0.004	-0.843	-0.842	-0.843	-0.140	-0.143	-0.186	0.004	0.001
Rohn-H1	0.781	0.000	0.781	0.774	0.137	0.131	0.180	0.014	0.008
Rohn-H1	0.006	-0.796	-0.794	-0.796	-0.138	-0.142	-0.174	0.006	0.002
Rohn-H1	0.65	-0.081	-0.076	-0.081	0.023	0.019	-0.014	0.007	0.003
Rohn-H1	1.029	0.000	1.029	1.017	0.216	0.206	0.245	0.031	0.021
Rohn-H1	0.009	-0.119	-0.115	-0.119	0.002	-0.003	-0.021	0.009	0.005
Rohn-H1	0.000	-0.959	-0.959	-0.958	-0.183	-0.184	-0.215	-0.003	-0.004
Rohn-H1	0.31	0.000	1.034	1.021	0.216	0.206	0.247	0.032	0.022
Rohn-H1	0.034	-1.121	-1.121	-1.120	-0.184	-0.186	-0.249	0.001	-0.002
Rohn-H1	0.044	-0.000	0.044	0.041	0.003	-0.000	0.011	0.004	0.001
Rohn-H1	1.487	0.000	1.487	1.478	0.227	0.220	0.338	0.017	0.010
Rohn-H1	0.203	-0.004	-0.004	-0.003	0.029	0.028	0.042	-0.002	-0.004
Rohn-H1	11.81	0.000	-1.468	-1.459	-0.265	-0.259	-0.345	-0.030	-0.025
Rohn-H1	11.04	0.000	1.373	1.363	0.226	0.219	0.315	0.019	0.013
Rohn-H1	10.10	0.000	-1.256	-1.247	-0.256	-0.251	-0.296	-0.027	-0.022
Rohn-H1	0.84	-0.009	0.104	0.104	0.021	0.021	0.016	-0.009	-0.009
Rohn-H1	18.45	0.000	2.158	2.143	0.310	0.301	0.495	0.030	0.021
Rohn-H1	0.092	0.000	0.092	0.085	0.040	0.034	0.031	0.019	0.013
Rohn-H1	17.66	-2.195	-2.195	-2.190	-0.305	-0.305	-0.490	-0.005	-0.005
Rohn-H1	18.39	0.000	2.135	2.135	0.312	0.302	0.495	0.033	0.023
Rohn-H1	17.69	-2.199	-2.199	-2.194	-0.303	-0.304	-0.490	-0.003	-0.004
Rohn-H1	0.099	0.000	0.099	0.094	0.037	0.032	0.030	0.015	0.010
Rohn-H1	24.08	0.000	2.816	2.796	0.375	0.361	0.650	0.045	0.031
Rohn-H1	0.32	-0.027	-0.016	-0.027	0.036	0.025	0.018	0.038	0.026
Rohn-H1	21.71	-2.699	-2.699	-2.699	-0.309	-0.315	-0.587	0.021	0.014

SNB-D2	24.13	2.822	0.000	2.822	2.802	0.377	0.362	0.653	0.046	0.033
SNB-DB4P	21.56	0.022	-2.680	-2.680	-0.307	-0.314	-0.582	0.022	0.014	0.022
SNB-DB41	0.45	0.035	-0.045	-0.056	0.034	0.023	0.010	0.035	0.024	0.024
SNB-DB42	28.09	3.284	0.000	3.284	3.265	0.398	0.385	0.751	0.040	0.028
SNB-DB5P	0.50	0.039	0.062	0.062	0.029	0.018	0.011	0.039	0.027	0.027
SNB-DB51	24.97	0.031	-3.105	-3.105	-0.316	-0.325	-0.670	0.031	0.022	0.022
SNB-DB52	28.18	3.295	0.000	3.295	3.275	0.399	0.386	0.754	0.041	0.029
SNB-DB6P	24.93	0.031	-3.100	-3.100	-0.316	-0.325	-0.669	0.031	0.022	0.022
SNB-DB61	0.65	0.038	0.081	0.070	0.081	0.028	0.017	0.038	0.027	0.027
SNB-DB62	27.86	3.260	0.000	3.260	3.244	0.361	0.352	0.737	0.025	0.017
SNB-DB7P	2.96	0.347	0.000	0.347	0.337	0.068	0.059	0.93	0.028	0.020
SNB-DB71	28.50	0.025	-3.544	-3.544	-0.350	-0.357	-0.771	0.025	0.017	0.017
SNB-DB72	27.94	3.267	0.000	3.267	3.252	0.361	0.358	0.739	0.025	0.016
SNB-DB8P	28.43	0.025	-3.535	-3.535	-0.351	-0.358	-0.769	0.025	0.017	0.017
SNB-DB81	2.79	0.326	0.000	0.326	0.317	0.068	0.059	0.889	0.029	0.020
SNB-DB82	35.12	4.367	0.066	4.362	4.367	0.341	0.355	0.928	-0.066	-0.050
SNB-DB83	4.81	0.598	0.061	0.586	0.598	0.034	0.048	0.92	-0.047	-0.047
SNB-DB84	42.22	0.000	-5.249	-5.249	-0.222	-0.222	-0.553	-1.206	-0.050	-0.050
SNB-DB85	35.10	4.364	-0.066	4.359	4.364	0.340	0.355	0.928	-0.051	-0.051
SNB-DB86	42.25	0.000	-5.253	-5.253	-0.225	-0.225	-0.554	-1.207	-0.066	-0.066
SNB-DB87	0.600	0.600	-0.060	0.588	0.600	0.035	0.049	0.93	-0.060	-0.060
SNB-DB88	4.83	0.600	0.000	6.273	6.211	0.701	0.652	1.505	0.183	0.135
SNB-DB89	5.63	0.178	0.000	0.655	-0.700	0.092	0.045	-0.038	0.178	0.132
SNB-DB90	41.20	0.181	-5.122	-5.087	-0.251	-0.297	-1.018	0.181	0.134	0.134
SNB-DB91	50.41	6.268	0.000	6.268	6.207	0.701	0.652	1.504	0.182	0.135
SNB-DB92	41.00	0.183	-5.098	-5.062	-0.249	-0.296	-1.011	0.183	0.135	0.135
SNB-DB93	5.82	0.177	0.000	0.724	0.724	0.090	0.044	-0.044	0.177	0.131
SNB-DB94	42.46	5.280	0.000	5.280	5.266	0.376	0.373	1.174	0.003	0.001
SNB-DB95	9.42	1.171	0.000	1.171	1.165	0.134	0.130	0.264	0.010	0.006
SNB-DB96	40.87	0.003	-6.324	-6.324	-0.313	-0.490	-1.389	0.003	0.001	0.001
SNB-DB97	42.64	5.302	0.000	5.302	5.289	0.378	0.374	1.180	0.005	0.002
SNB-DB98	50.70	0.005	-6.304	-6.304	-0.293	-0.488	-1.393	0.005	0.003	0.003
SNB-DB99	9.04	1.124	0.000	1.124	1.118	0.127	0.127	0.252	0.007	0.004
SNB-DBD1P	57.73	7.177	-0.026	7.177	7.168	0.458	0.462	1.582	-0.026	-0.021
SNB-DBD11	14.10	1.753	-0.022	1.753	1.752	0.145	0.150	0.376	-0.022	-0.017
SNB-DBD12	72.32	0.000	-8.992	-8.992	-0.682	-0.674	-2.017	-0.032	-0.025	-0.025
SNB-DBD2P	57.58	7.160	-0.025	7.160	7.150	0.459	0.463	1.579	-0.025	-0.020
SNB-DBD21	0.000	-8.996	-0.025	-8.996	-0.682	-0.673	-2.018	-0.031	-0.024	-0.024
SNB-DBD3	14.23	1.769	0.000	1.769	1.769	0.144	0.149	0.379	-0.024	-0.019
SNB-DBD31	71.52	8.892	0.000	8.892	8.795	0.916	0.835	2.174	0.312	0.233
SNB-DBD32	8.34	0.308	-0.036	0.308	0.306	0.181	0.102	-0.308	0.308	0.230
SNB-DBD33	57.04	0.310	-0.092	0.310	0.306	0.165	0.243	1.365	0.310	0.231
SNB-DBD34	71.50	8.890	0.000	8.890	8.793	0.917	0.835	2.174	0.313	0.233
SNB-DBD4P	56.86	0.310	-0.070	0.310	0.306	0.165	0.243	1.361	0.310	0.231
SNB-DBD41	8.54	0.308	-1.062	-0.987	-1.062	0.180	0.102	-0.308	0.308	0.229
SNB-DBD42	64.76	8.052	0.000	8.052	8.033	0.513	0.509	1.799	0.007	0.005
SNB-DBD5P	10.24	1.273	0.000	1.273	1.268	0.134	0.131	0.283	0.010	0.007
SNB-DBD51	75.40	0.006	-9.375	-9.375	-0.623	-0.623	-2.072	0.007	0.004	0.004
SNB-DBD52	64.91	8.071	0.000	8.071	8.053	0.513	0.509	1.803	0.007	0.004
SNB-DBD6P	75.48	0.006	-9.385	-9.385	-0.626	-0.626	-2.075	0.006	0.004	0.004
SNB-DBD61	10.13	1.260	0.000	1.260	1.254	0.137	0.133	0.281	0.013	0.009
SNB-DBD62	59.58	10.665	0.000	10.665	10.631	0.739	0.721	2.417	0.060	0.044
SNB-DBD63	11.28	2.019	0.000	2.019	1.999	0.232	0.216	0.486	0.062	0.046
SNB-DBE11	70.13	0.063	-12.554	-12.554	-0.785	-0.785	-2.752	0.063	0.047	0.047
SNB-DBE12	59.51	10.653	0.000	10.653	10.620	0.736	0.719	2.413	0.058	0.043
SNB-DBE2P	70.00	0.059	-12.531	-12.531	-0.789	-0.789	-2.750	0.059	0.044	0.044
SNB-DBE21	11.19	2.004	0.000	2.004	1.982	0.239	0.220	0.486	0.068	0.051
SNB-DBE22	64.80	11.601	0.000	11.601	11.493	1.070	0.980	2.805	0.346	0.258
SNB-DBE3P	3.96	0.342	-0.708	-0.625	-0.708	0.255	0.168	0.664	0.342	0.255
SNB-DBE31	56.36	0.355	-10.089	-10.017	-10.089	-0.282	-0.371	-2.006	0.355	0.265
SNB-DBE32	64.97	11.631	0.000	11.631	11.524	1.067	0.978	2.810	0.342	0.255
SNB-DBE4P	56.39	0.349	-10.095	-10.024	-10.095	-0.289	-0.376	-2.012	0.349	0.260
SNB-DBE41	4.12	0.352	-0.738	-0.651	-0.738	0.265	0.175	0.664	0.352	0.263
SNB-DBE42	46.26	8.281	-0.077	8.275	8.281	0.397	0.415	1.806	-0.077	-0.058
SNB-DBE5P	13.80	2.470	-0.076	2.457	2.470	0.127	0.146	0.498	-0.076	-0.058
SNB-DBE51	61.99	0.000	-11.024	-11.024	-0.990	-0.741	-0.724	-2.490	-0.064	-0.048
SNB-DBE52	46.17	8.266	-0.083	8.266	8.266	0.390	0.410	1.799	-0.064	-0.062
SNB-DBE6P	62.00	0.000	-11.099	-11.099	-0.749	-0.731	-2.511	-0.071	-0.054	-0.054
SNB-DBE61	14.28	2.557	-0.063	2.547	2.557	0.142	0.157	0.526	-0.063	-0.048
SNB-DBE62										

SNB-D5	62.25	11.144	0.000	11.144	11.080	0.830	2.636	0.195	0.145
SNB-DE1P		1.336	0.000	1.336	1.288	0.288	0.391	0.207	0.155
SNB-DE11		0.207	-12.059	-12.022	-12.059	-0.525	-2.541	0.187	0.140
SNB-DE12		11.247	-12.058	-12.023	-12.058	0.824	2.654	0.139	0.149
SNB-DE2P		0.199	0.000	1.185	0.533	-0.583	-2.546	0.208	0.155
SNB-DE21		1.232	0.000	1.180	0.303	0.250	0.378	0.220	0.160
SNB-DE22		1.173	0.000	1.101	0.839	0.783	2.653	0.214	0.160
SNB-DE3P		7.02	0.000	1.256	0.272	0.218	0.392	0.212	0.159
SNB-DE31		0.230	-11.966	-11.966	-0.448	-0.505	-2.500	0.224	0.168
SNB-DE32		11.169	0.000	11.924	11.100	0.831	2.648	0.224	0.168
SNB-DE4P		0.224	-12.073	-12.033	-12.073	-0.455	-2.528	0.228	0.171
SNB-DE41		1.371	0.000	1.371	0.267	0.230	0.426	0.139	0.104
SNB-DE42		12.820	0.000	12.820	12.775	0.816	2.986	0.139	0.104
SNB-DE6P		2.141	0.000	2.141	2.105	0.291	0.536	0.109	0.109
SNB-DG11		1.146	-14.728	-14.703	-14.728	-0.683	-3.179	0.146	0.100
SNB-DG12		12.884	0.000	12.884	12.840	0.811	2.997	0.134	0.100
SNB-DG2P		1.197	-14.701	-14.676	-14.701	-0.685	-3.174	0.144	0.107
SNB-DG21		82.112	0.000	2.051	2.013	0.298	0.521	0.147	0.110
SNB-DG22		11.46	0.000	12.906	12.850	0.840	3.020	0.172	0.129
S-D6-MOD		57.68	0.000	12.906	12.850	0.797	3.020	0.172	0.129
SNB-DG31		7.43	0.000	1.662	1.620	0.213	0.458	0.173	0.130
SNB-DG32		63.59	-14.230	-14.198	-14.230	-0.574	-3.049	0.170	0.127
S-D6-MOD		57.78	0.000	12.929	12.873	0.838	3.024	0.178	0.133
SNB-DG4P		63.79	-14.273	-14.241	-14.273	-0.575	-3.059	0.178	0.133
SNB-DG41		0.178	0.000	1.685	1.642	0.260	0.466	0.176	0.132
SNB-DG42		7.53	0.000	13.195	13.152	0.790	3.097	0.160	0.120
SNB-D6		73.71	0.000	2.822	2.781	0.342	0.699	0.163	0.122
SNB-DH1P		15.76	-15.785	-15.747	-15.785	-0.647	-3.401	0.164	0.123
SNB-DH11		88.18	0.000	13.200	13.157	0.789	3.087	0.158	0.118
SNB-DH12		73.74	0.000	15.778	15.778	-0.646	-3.399	0.165	0.124
SNB-DH2P		88.14	0.000	2.812	2.771	0.344	0.698	0.164	0.123
SNB-DH21		15.71	0.000	12.747	12.696	0.771	3.001	0.181	0.136
SNB-DH22		56.97	0.000	2.003	1.959	0.235	0.536	0.185	0.139
S-D6-MOD		8.95	-14.422	-14.380	-14.422	-0.501	-3.005	0.187	0.140
SNB-DH31		64.45	0.000	12.754	12.703	0.771	3.002	0.181	0.136
S-D6-MOD		57.00	-14.422	-14.380	-14.422	-0.500	-3.005	0.187	0.141
SNB-DH4P		64.45	0.000	1.998	1.955	0.281	0.535	0.184	0.138
SNB-DH41		8.93	0.000	16.422	16.403	0.793	3.792	0.114	0.086
SNB-DH42		73.39	0.000	1.303	1.273	0.209	0.480	0.120	0.091
S-D7-MOD		5.82	0.000	17.606	17.641	-0.652	-3.852	0.119	0.090
SNB-DI11		78.84	0.000	16.430	16.410	0.794	3.793	0.114	0.086
SNB-DI12		73.42	-17.635	-17.599	-17.635	-0.650	-3.850	0.121	0.092
S-D7-MOD		78.81	0.000	1.293	1.263	0.207	0.479	0.117	0.089
SNB-DI21		5.78	0.000	17.122	17.090	0.831	3.956	0.145	0.108
SNB-DI22		76.52	0.000	2.925	2.889	0.313	0.714	0.151	0.112
S-D7-MOD		13.07	-19.813	-19.770	-19.813	-0.699	-4.309	0.150	0.112
SNB-DI3P		88.55	0.000	17.132	17.099	0.832	3.959	0.146	0.109
SNB-DI32		76.56	0.000	2.912	2.876	0.311	0.710	0.148	0.110
S-D7-MOD		88.52	0.000	0.855	0.825	-0.487	-3.394	-0.292	-0.288
SNB-DI41		13.01	-0.397	-0.204	-0.103	-0.349	-0.287	-0.397	-0.295
SNB-DI42		0.74	-2.316	-2.163	-2.163	-0.938	-0.868	-0.583	-0.434
SNB-LA1P		0.33	0.000	0.542	0.542	0.368	0.225	-0.557	-0.415
SNB-LA11		0.34	0.000	0.395	0.385	-0.237	-0.266	-0.578	-0.430
SNB-LA2P		2.00	-5.184	-5.184	-4.970	-1.659	-1.641	-0.807	-0.602
SNB-LA21		0.48	0.000	1.522	1.522	0.306	0.112	-0.733	-0.547
SNB-LA22		4.47	-0.733	-0.733	-0.733	-0.321	-0.321	-0.751	-0.560
SNB-LA3P		1.25	0.000	1.711	1.711	0.321	0.321	-1.021	-0.763
SNB-LA31		1.26	-0.835	-0.835	-0.835	-2.422	-2.581	-1.021	-0.763
SNB-LA32		1.26	0.000	2.832	2.832	0.044	0.091	-0.881	-0.654
SNB-LA4P		7.62	-0.881	-0.881	-0.881	-0.184	0.038	-0.881	-0.658
SNB-LA41		2.24	-14.238	-14.238	-13.781	-3.798	-4.192	-1.693	-1.268
SNB-LA42		2.32	0.000	4.788	5.143	-0.051	0.157	-1.472	-1.101
SNB-LB1P		7.77	-1.467	-1.467	-1.467	-4.014	-4.047	-1.467	-1.098
SNB-LB11		2.56	0.000	4.880	5.234	-4.906	-5.868	-1.974	-1.477
SNB-LB12		2.60	-21.028	-21.028	-20.484	-4.906	-4.067	-1.696	-1.269
SNB-LB2P		11.48	-1.686	-1.686	-1.686	-8.228	-8.228	-1.686	-1.269
SNB-LB21		4.09	0.000	7.939	8.339	0.218	0.724	-1.685	-1.261
SNB-LB22		4.14	-28.824	-28.824	-28.202	-6.018	-5.456	-2.212	-1.657
SNB-LB2P		15.74	0.000	11.369	11.614	-0.002	0.474	-1.905	-1.426
SNB-LB31		5.87	-1.905	-1.905	-1.905	0.012	0.484	-1.891	-1.415
SNB-LB32		5.95	-1.891	-1.891	-1.891	0.012	0.484	-1.891	-1.415

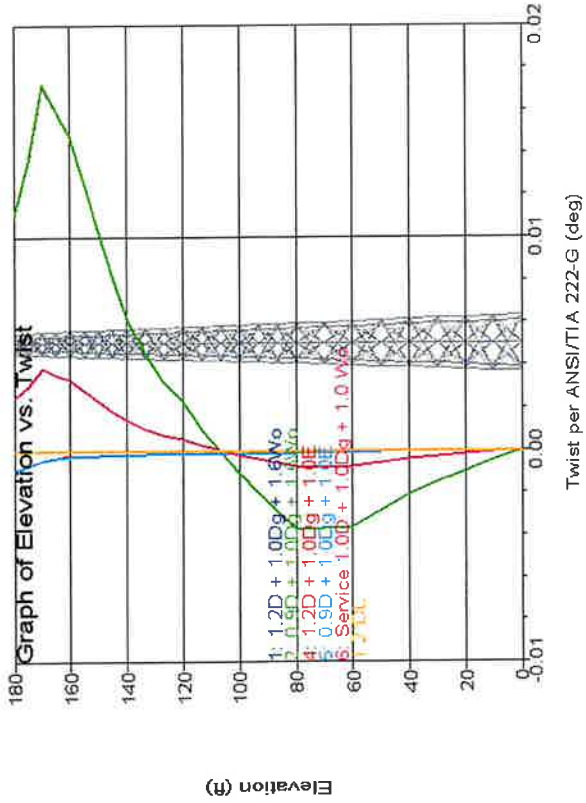
SNB-L2	20.13	0.000	-36.863	-36.863	-7.069	-6.453	-9.657	-2.424	-1.816
SNB-LB4P	15.575	15.575	15.089	15.089	0.215	0.741	2.048	-2.109	-1.580
SNB-LB41	7.74	15.760	15.277	15.760	0.230	0.752	2.100	-2.094	-1.568
SNB-L2	7.83	0.000	-47.958	-47.958	-8.700	-7.930	-12.493	-3.032	-2.272
SNB-LC1P	28.17	20.427	-2.718	19.801	20.427	0.119	0.796	2.720	-2.718
SNB-L2	10.15	20.625	-2.704	20.002	20.625	0.132	0.806	2.773	-2.704
SNB-LC11	10.25	0.000	-63.874	-63.874	-10.716	-9.785	-16.415	-3.660	-2.026
SNB-LC2P	37.55	27.512	-3.340	26.747	27.512	0.189	1.021	3.881	-3.340
SNB-L2	13.67	27.739	-3.326	26.978	27.739	0.203	1.032	3.941	-3.326
SNB-LC21	13.75	0.000	-77.774	-77.774	-11.834	-10.887	-19.536	-3.720	-2.491
SNB-LC3P	45.68	34.263	-3.408	33.498	34.263	0.648	1.495	5.337	-3.408
SNB-L2	17.03	34.546	-3.390	33.785	34.546	0.666	1.508	5.412	-3.390
SNB-LC31	17.17	0.000	-95.848	-95.848	-13.960	-12.790	-24.091	-4.601	-3.448
SNB-LD1P	57.07	42.247	-4.286	41.281	42.247	0.393	1.458	6.525	-3.213
SNB-LD11	22.98	42.560	-4.264	41.600	42.560	0.416	1.475	6.610	-3.196
SNB-L2	22.96	0.000	-118.136	-118.136	-16.242	-14.888	-29.503	-5.342	-4.003
SNB-LD2P	70.38	52.473	-5.015	51.347	52.473	0.435	1.681	8.317	-3.758
SNB-L3	28.31	52.794	-4.991	51.674	52.794	0.460	1.700	8.405	-3.740
SNB-LD22	81.49	0.000	-136.379	-136.379	-17.371	-16.019	-33.532	-5.305	-3.976
SNB-LD3P	88.20	61.634	-4.979	60.535	61.634	1.056	2.290	10.383	-4.979
SNB-L2	33.26	61.971	-4.957	60.878	61.971	1.078	2.307	10.473	-3.732
SNB-LD31	33.44	0.000	-160.650	-160.650	-20.043	-18.398	-39.636	-6.462	-4.844
SNB-L4	49.84	72.272	-6.134	70.906	72.272	0.657	2.179	11.982	-6.134
SNB-LE11	20.85	72.652	-6.120	71.290	72.652	0.672	2.190	12.076	-6.120
SNB-L4	20.96	0.000	-188.038	-188.038	-22.546	-20.710	-46.198	-7.211	-5.405
SNB-LE12	58.36	85.003	-6.881	83.473	85.003	0.788	2.496	14.326	-6.881
SNB-L4	24.52	85.400	-6.880	83.871	85.400	0.789	2.496	14.415	-6.880
SNB-LE22	64.62	0.000	-208.298	-208.298	-23.731	-21.898	-50.699	-7.192	-5.391
SNB-L4	24.62	95.135	-6.872	93.625	95.135	1.399	3.102	16.595	-6.872
SNB-LE31	27.44	95.480	-6.869	93.965	95.480	1.381	3.089	16.661	-6.869
SNB-LE32	27.54	0.000	-236.539	-236.539	-27.113	-24.824	-58.135	-9.001	-6.748
SNB-LF1P	80.41	106.996	-8.690	105.050	106.996	0.367	2.524	18.043	-8.690
SNB-L4	30.86	107.361	-8.734	105.404	107.361	0.322	2.491	18.095	-8.734
SNB-LF11	30.97	0.000	-267.602	-267.602	-29.501	-27.056	-65.450	-9.614	-7.208
SNB-LF2P	90.90	121.718	-9.308	119.638	121.718	0.636	2.946	20.926	-9.308
SNB-L4	35.11	122.084	-9.382	119.986	122.084	0.563	2.891	20.958	-9.382
SNB-LF22	35.22	0.000	-300.956	-300.956	-32.967	-30.083	-73.982	-11.361	-8.518
SNB-L5	79.52	136.169	-11.066	133.666	136.169	0.263	2.486	22.997	-11.066
SNB-LG11	32.83	136.537	-11.160	134.011	136.537	0.257	2.445	22.916	-11.160
SNB-LG12	32.92	0.000	-335.569	-335.569	-33.190	-30.509	-82.156	-12.063	-8.368
SNB-L5	88.67	152.509	-11.775	149.844	152.509	0.051	2.873	26.191	-11.775
SNB-LG21	36.77	152.936	-11.880	150.245	152.936	0.156	2.794	26.216	-11.880
SNB-L5	36.88	0.000	-370.233	-370.233	-39.175	-35.608	-91.172	-14.084	-10.560
SNB-LH1P	97.83	167.299	-13.807	164.135	167.299	-1.260	2.172	28.164	-13.807
SNB-LH11	40.34	167.738	-13.916	164.547	167.738	-1.370	2.090	28.188	-13.916
SNB-LH12	40.45	0.000	-403.818	-403.818	-41.525	-37.774	-99.146	-14.816	-10.435
SNB-LH2P	97.93	183.104	-14.548	179.759	183.104	-1.193	2.424	31.224	-14.548
SNB-LH21	44.15	183.554	-14.658	180.182	183.554	-1.303	2.341	31.249	-14.658
SNB-LH22	44.26	0.000	-440.372	-440.372	-45.224	-40.930	-105.678	-16.994	-12.744
SNB-L11P	89.43	198.637	-16.738	194.744	198.637	-2.623	1.541	33.253	-16.738
SNB-L111	38.08	199.102	-16.845	195.183	199.102	-2.730	1.461	33.285	-16.845
SNB-L112	38.17	0.000	-478.792	-478.792	-47.349	-43.153	-117.819	-17.856	-13.389
SNB-L12P	93.12	216.687	-17.611	212.568	216.687	-2.708	1.677	36.735	-17.611
SNB-L121	41.54	217.171	-17.715	213.027	217.171	-2.812	1.599	36.772	-17.715
SNB-L122	41.63	0.000	-479.000	-479.000	-48.080	-44.080	-109.088	-13.283	-10.435
Connect AP	0.00	0.099	0.000	0.099	0.082	0.077	0.060	0.033	0.017
Connect A1	0.00	0.190	0.000	0.190	0.169	0.169	0.067	0.050	0.021
Connect A2	0.00	0.520	0.000	0.520	0.510	0.510	0.040	0.020	0.010
Connect Aa1	0.00	0.012	-0.110	-0.103	-0.110	-0.003	-0.011	-0.019	-0.004
Connect Aa2	0.00	0.003	-0.415	-0.410	-0.415	-0.017	-0.022	-0.003	-0.003
Connect AbP	0.00	0.167	0.000	0.167	0.150	0.078	0.061	0.063	0.049
Connect Ab1	0.00	0.023	-0.376	-0.366	-0.376	-0.002	-0.013	-0.070	-0.023
Connect Ab2	0.00	0.035	-0.006	0.035	0.026	0.003	-0.006	0.014	0.007
Connect AcP	0.00	0.496	0.000	0.496	0.478	0.077	0.059	0.138	0.052
Connect Ac1	0.00	0.078	0.000	0.075	0.063	0.027	0.014	0.032	0.018
Connect Ac2	0.00	0.025	-0.243	-0.232	-0.243	0.015	-0.002	-0.038	0.016
Connect B1	0.00	1.079	0.000	1.079	1.048	0.102	0.070	0.280	0.081
Connect B2	0.00	0.565	0.000	0.565	0.530	0.129	0.095	0.143	0.055
Connect B2	0.00	0.000	0.000	0.000	0.136	0.102	0.173	0.091	0.057

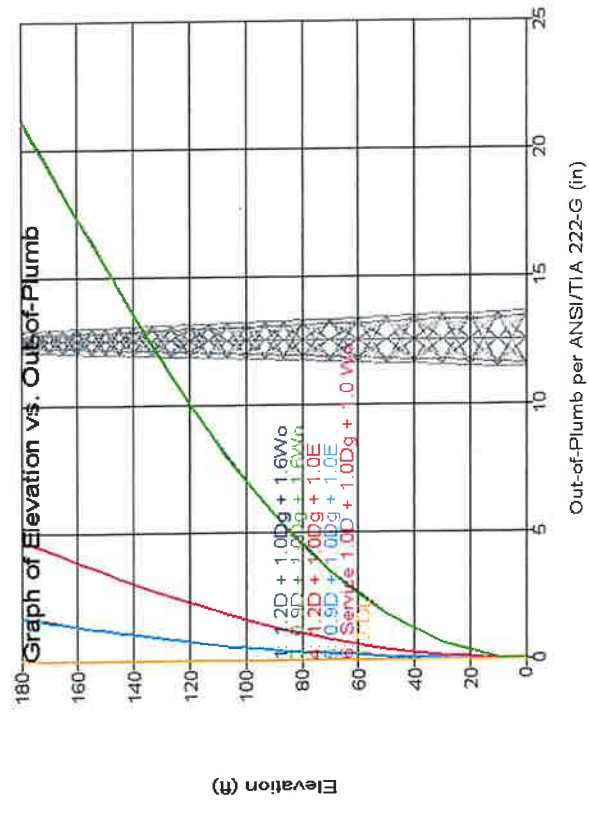
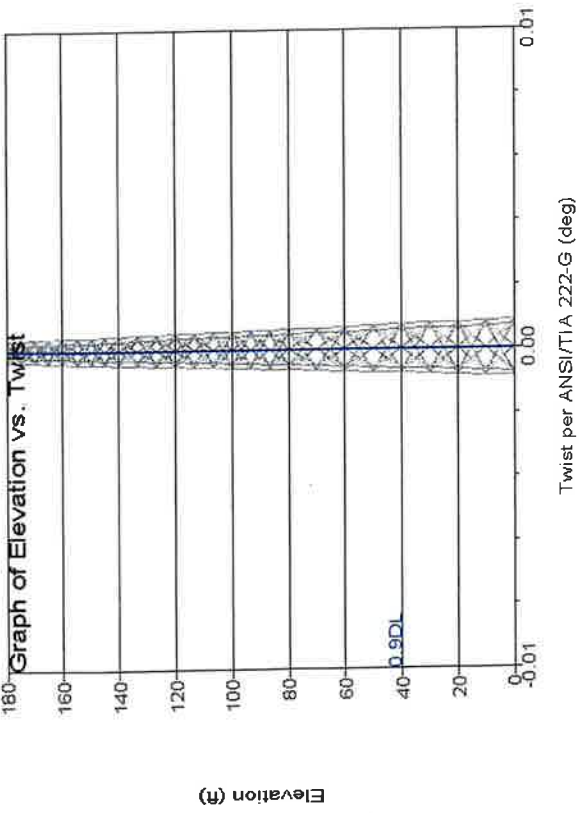
0.00	Connect	Connect BaP	0.799	0.000	0.799	0.781	0.089	0.072	0.202	0.047	0.030
0.00	Connect	Connect Ba1	0.059	-0.316	-0.297	-0.316	0.039	0.019	-0.033	0.039	0.059
0.00	Connect	Connect Ba2	0.061	-0.364	-0.345	-0.364	0.038	0.018	-0.043	0.061	0.061
0.00	Connect	Connect BBP	0.810	0.810	0.810	0.787	0.114	0.092	0.217	0.068	0.046
0.00	Connect	Connect Bb1	0.085	-0.269	-0.269	-0.295	0.063	0.037	-0.011	0.085	0.059
0.00	Connect	Connect Bb2	0.087	-0.286	-0.286	-0.286	0.066	0.039	-0.007	0.087	0.061
0.00	Connect	Connect BcP	0.440	0.000	0.440	0.397	0.159	0.116	0.188	0.154	0.110
0.00	Connect	Connect Bc1	0.165	-0.029	0.016	-0.029	0.162	0.102	0.102	0.165	0.119
0.00	Connect	Connect Bc2	0.166	-0.033	0.013	-0.033	0.163	0.107	0.102	0.166	0.120
0.00	Connect	Connect CP	0.636	0.000	0.636	0.568	0.275	0.206	0.293	0.253	0.185
0.00	Connect	Connect C1	0.253	0.000	0.083	0.015	0.243	0.174	0.171	0.253	0.184
0.00	Connect	Connect C2	0.254	0.000	0.114	0.046	0.245	0.176	0.178	0.254	0.185
0.01	Connect	Connect CaP	1.555	0.000	1.555	1.514	0.192	0.153	0.426	0.137	0.099
0.00	Connect	Connect Ca1	0.138	-0.663	-0.626	-0.663	0.109	0.070	-0.056	0.138	0.099
0.00	Connect	Connect Ca2	0.135	-0.697	-0.661	-0.697	0.105	0.067	-0.065	0.135	0.097
0.00	Connect	Connect CBP	0.614	0.000	0.614	0.534	0.257	0.176	0.317	0.304	0.224
0.00	Connect	Connect Cb1	0.333	0.000	0.260	0.179	0.333	0.252	0.245	0.306	0.225
0.00	Connect	Connect Cb2	0.329	0.000	0.225	0.145	0.329	0.249	0.235	0.304	0.223
0.01	Connect	Connect DP	3.440	0.000	3.440	3.259	0.896	0.720	1.180	0.681	0.505
0.00	Connect	Connect D1	0.672	-1.097	-0.843	-1.097	0.559	0.386	0.204	0.672	0.498
0.00	Connect	Connect D2	0.673	-1.013	-0.843	-1.013	0.562	0.389	0.223	0.673	0.499
0.00	Connect	Connect DaP	0.340	0.000	0.209	0.122	0.310	0.222	0.249	0.340	0.251
0.00	Connect	Connect Da1	0.495	0.000	0.495	0.404	0.360	0.271	0.320	0.343	0.254
0.00	Connect	Connect Da2	0.437	0.000	0.437	0.346	0.361	0.271	0.309	0.346	0.255
0.01	Connect	Connect DbP	2.193	0.000	2.193	2.057	0.607	0.474	0.804	0.516	0.384
0.00	Connect	Connect Db1	0.517	-0.478	-0.348	-0.478	0.471	0.339	0.238	0.517	0.384
0.00	Connect	Connect Db2	0.521	-0.464	-0.333	-0.464	0.476	0.342	0.244	0.521	0.388
0.02	Connect	Connect EP	5.296	0.000	5.296	5.081	1.187	0.977	1.682	0.820	0.611
0.01	Connect	Connect E1	0.820	-1.681	-1.476	-1.681	0.637	0.428	0.182	0.820	0.611
0.01	Connect	Connect E2	0.826	-1.688	-1.481	-1.688	0.642	0.432	0.184	0.826	0.615
0.00	Connect	Connect EaP	0.495	-0.942	-0.818	-0.942	0.358	0.231	0.124	0.495	0.368
0.00	Connect	Connect Ea1	1.137	0.000	1.137	1.007	0.570	0.441	0.559	0.501	0.373
0.00	Connect	Connect Ea2	1.119	0.000	1.119	0.998	0.576	0.446	0.559	0.508	0.378
0.01	Connect	Connect Ebp	0.590	-1.735	-1.589	-1.735	0.399	0.249	0.011	0.590	0.440
0.01	Connect	Connect Eb1	1.569	0.000	1.569	1.416	0.689	0.537	0.713	0.595	0.443
0.01	Connect	Connect Eb2	1.743	0.000	1.743	1.588	0.697	0.544	0.755	0.601	0.448
0.00	Connect	Connect Fp	0.858	0.000	0.710	0.508	0.858	0.652	0.659	0.819	0.612
0.00	Connect	Connect F1	0.815	0.000	0.793	0.585	0.795	0.589	0.689	0.815	0.610
0.00	Connect	Connect F2	0.817	0.000	0.520	0.312	0.794	0.587	0.631	0.817	0.611
0.00	Connect	Connect FaP	0.670	0.000	0.429	0.258	0.613	0.444	0.524	0.670	0.502
0.00	Connect	Connect Fa1	0.993	0.000	0.603	0.435	0.698	0.530	0.462	0.672	0.503
0.00	Connect	Connect Fa2	0.993	0.000	0.893	0.725	0.701	0.533	0.605	0.671	0.502
0.02	Connect	Connect Gp	4.349	0.000	4.349	4.174	0.973	0.795	1.405	0.712	0.534
0.01	Connect	Connect G1	0.712	-1.362	-1.183	-1.362	0.582	0.403	0.197	0.712	0.533
0.01	Connect	Connect G2	0.704	-1.459	-1.459	-1.636	0.572	0.395	0.132	0.704	0.528
0.00	Connect	Connect GaP	0.583	-0.703	-0.553	-0.703	0.469	0.323	0.261	0.583	0.437
0.00	Connect	Connect Ga1	1.024	0.000	1.024	0.879	0.642	0.495	0.581	0.586	0.439
0.00	Connect	Connect Ga2	1.178	0.000	1.178	1.034	0.638	0.492	0.611	0.435	0.306
0.01	Connect	Connect Hp	2.239	0.000	2.239	2.078	0.810	0.642	0.910	0.581	0.435
0.00	Connect	Connect H1	0.674	-0.450	-0.278	-0.450	0.605	0.437	0.382	0.674	0.506
0.00	Connect	Connect H2	0.671	-0.496	-0.325	-0.496	0.602	0.434	0.370	0.671	0.506
0.01	Connect	Connect HaP	0.654	-2.222	-2.055	-2.222	0.462	0.298	-0.030	0.654	0.490
0.01	Connect	Connect Ha1	1.958	0.000	1.958	1.796	0.752	0.588	0.830	0.656	0.492
0.01	Connect	Connect Ha2	1.965	0.000	1.965	1.804	0.749	0.586	0.830	0.653	0.490
0.03	Connect	Connect IP	6.988	0.000	6.988	6.825	1.012	0.840	1.979	0.688	0.515
0.01	Connect	Connect I1	0.689	-2.805	-2.628	-2.805	0.526	0.353	-0.137	0.689	0.516
0.01	Connect	Connect I2	0.687	-2.814	-2.639	-2.814	0.524	0.351	-0.141	0.687	0.515
0.01	Connect	Connect IaP	2.023	0.000	2.023	1.920	0.438	0.336	0.726	0.407	0.306
0.00	Connect	Connect Ia1	0.410	-0.558	-0.457	-0.558	0.394	0.292	0.145	0.410	0.307
0.00	Connect	Connect Ia2	0.408	-0.561	-0.460	-0.561	0.392	0.291	0.144	0.408	0.306
0.36	SNB-H1	SNB-H1aP	0.000	-0.467	-0.466	-0.467	-0.086	-0.108	-0.009	-0.011	-0.011
0.08	SNB-H1	SNB-H1bP	0.000	-0.108	-0.106	-0.108	-0.000	-0.003	-0.036	-0.009	-0.011
0.16	SNB-H1	SNB-H1cP	0.211	-0.009	0.211	0.207	0.048	0.045	0.039	-0.006	-0.009
0.16	SNB-H1	SNB-H1dP	0.212	-0.009	0.212	0.208	0.048	0.045	0.039	-0.006	-0.009
0.01	SNB-H1	SNB-H1eP	0.020	-0.008	0.020	0.017	0.006	0.003	-0.006	-0.005	-0.008
0.26	SNB-H1	SNB-H1fP	0.000	-0.343	-0.341	-0.343	-0.080	-0.083	-0.078	-0.005	-0.008
0.06	SNB-H1	SNB-H2aP	0.086	0.000	0.086	0.076	0.018	0.018	0.034	0.025	0.015
0.33	SNB-H1	SNB-H2bP	0.434	0.000	0.434	0.423	0.068	0.057	0.106	0.025	0.015
0.22	SNB-H1	SNB-H2cP	0.298	0.000	0.298	0.287	0.040	0.030	0.079	0.025	0.015

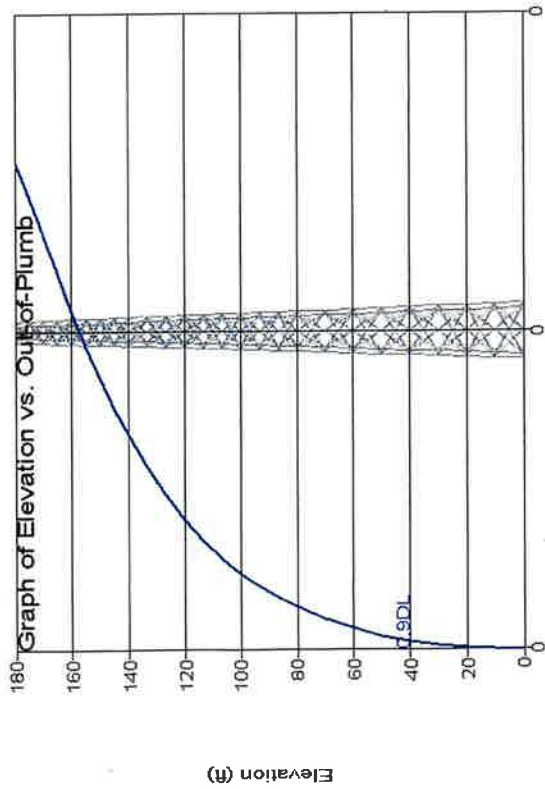


SNB-H1	0.22	0.299	0.000	0.299	0.288	0.040	0.030	0.079	0.025	0.015
SNB-H2	0.43	0.570	0.000	0.570	0.559	0.073	0.062	0.137	0.026	0.016
SNB-H3	0.17	0.222	0.000	0.222	0.212	0.023	0.013	0.064	0.026	0.016
SNB-H4	0.19	0.255	0.000	0.255	0.211	0.206	0.162	0.165	0.175	0.130
SNB-H5	0.54	0.725	0.000	0.725	0.679	0.239	0.194	0.267	0.175	0.130
SNB-H6	0.32	0.393	-0.393	-0.393	-0.393	0.075	0.032	0.026	0.167	0.124
SNB-H7	0.32	0.394	-0.394	-0.394	-0.394	0.075	0.032	0.026	0.167	0.124
SNB-H8	0.55	0.732	0.000	0.732	0.686	0.240	0.195	0.269	0.175	0.130
SNB-H9	0.20	0.263	0.000	0.263	0.218	0.207	0.162	0.167	0.175	0.130
SNB-H10	0.97	1.289	0.000	1.289	1.189	0.508	0.410	0.523	0.386	0.288
SNB-H11	1.47	1.962	0.000	1.962	1.861	0.538	0.440	0.672	0.386	0.288
SNB-H12	2.13	0.375	-2.550	-2.461	-2.550	0.091	-0.003	-0.316	0.375	0.280
SNB-H13	0.375	-2.550	-2.550	-2.461	-2.550	0.091	-0.003	-0.316	0.375	0.280
SNB-H14	1.989	0.000	0.000	1.989	1.887	0.539	0.441	0.678	0.386	0.288
SNB-H15	1.316	0.000	0.000	1.316	1.216	0.509	0.411	0.529	0.386	0.288
SNB-H16	1.906	0.000	0.000	1.906	1.807	0.547	0.450	0.662	0.381	0.285
SNB-H17	2.593	0.000	0.000	2.593	2.493	0.573	0.476	0.815	0.381	0.285
SNB-H18	0.373	-3.539	-3.539	-3.452	-3.539	0.016	-0.078	-0.529	0.373	0.279
SNB-H19	0.373	-3.539	-3.539	-3.452	-3.539	0.016	-0.078	-0.529	0.373	0.279
SNB-H20	2.592	0.000	0.000	2.592	2.492	0.573	0.476	0.815	0.381	0.285
SNB-H21	1.904	0.000	0.000	1.904	1.806	0.547	0.450	0.661	0.381	0.285
SNB-H22	1.722	0.000	0.000	1.722	1.612	0.570	0.462	0.647	0.433	0.325
SNB-H23	2.430	0.000	0.000	2.430	2.319	0.600	0.491	0.806	0.433	0.325
SNB-H24	0.426	-3.128	-3.128	-3.023	-3.128	0.122	0.015	-0.382	0.426	0.319
SNB-H25	0.426	-3.128	-3.128	-3.023	-3.128	0.122	0.015	-0.382	0.426	0.319
SNB-H26	1.74	2.292	0.000	2.292	2.182	0.598	0.489	0.776	0.433	0.325
SNB-H27	1.14	1.584	0.000	1.584	1.476	0.569	0.460	0.617	0.433	0.325
SNB-H28	0.90	1.814	0.000	1.814	1.785	0.274	0.244	0.474	0.121	0.091
SNB-H29	1.584	0.000	0.000	1.584	1.476	0.569	0.460	0.617	0.433	0.325
SNB-H30	2.704	0.000	0.000	2.704	2.674	0.303	0.273	0.675	0.121	0.091
SNB-H31	4.390	-4.390	-4.390	-4.390	-4.390	-0.218	-0.247	-0.847	0.117	0.088
SNB-H32	4.391	-4.391	-4.391	-4.391	-4.391	-0.218	-0.247	-0.847	0.117	0.088
SNB-H33	2.574	0.000	0.000	2.574	2.431	0.302	0.272	0.647	0.122	0.091
SNB-H34	1.684	0.000	0.000	1.684	1.656	0.273	0.243	0.445	0.122	0.091
SNB-H35	2.239	0.000	0.000	2.239	2.202	0.339	0.301	0.595	0.135	0.116
SNB-H36	3.149	0.000	0.000	3.149	3.111	0.360	0.321	0.800	0.135	0.116
SNB-H37	5.250	-5.250	-5.250	-5.250	-5.250	-0.278	-1.021	-1.021	0.152	0.114
SNB-H38	0.152	-5.250	-5.250	-5.250	-5.250	-0.278	-1.021	-1.021	0.152	0.114
SNB-H39	3.111	0.000	0.000	3.111	3.073	0.361	0.322	0.793	0.156	0.117
SNB-H40	2.201	0.000	0.000	2.201	2.164	0.341	0.302	0.587	0.156	0.117
SNB-H41	2.683	0.000	0.000	2.683	2.649	0.346	0.310	0.684	0.138	0.102
SNB-H42	3.645	0.000	0.000	3.645	3.610	0.359	0.323	0.902	0.138	0.102
SNB-H43	-6.244	-6.244	-6.244	-6.244	-6.244	-0.296	-0.331	-1.262	0.135	0.100
SNB-H44	-6.244	-6.244	-6.244	-6.244	-6.244	-0.296	-0.331	-1.262	0.135	0.100
SNB-H45	0.000	0.000	0.000	0.000	0.000	0.360	0.324	0.901	0.135	0.100
SNB-H46	2.675	0.000	0.000	2.675	2.640	0.347	0.311	0.683	0.139	0.103
SNB-H47	0.130	-0.130	-0.130	-0.130	-0.130	-0.027	-0.027	-0.024	-0.000	-0.000
SNB-H48	0.132	-0.132	-0.132	-0.132	-0.132	-0.027	-0.027	-0.024	-0.000	-0.000
SNB-H49	0.258	0.258	0.258	0.258	0.258	0.054	0.054	0.046	-0.000	-0.000
SNB-H50	-0.119	-0.119	-0.119	-0.119	-0.119	-0.016	-0.016	-0.023	0.000	0.000
SNB-H51	0.420	0.420	0.420	0.420	0.420	0.016	0.016	0.023	0.000	0.000
SNB-H52	0.245	0.245	0.245	0.245	0.245	0.032	0.032	0.048	0.000	0.000
SNB-H53	-0.157	-0.157	-0.157	-0.157	-0.157	-0.010	-0.010	-0.033	0.001	0.001
SNB-H54	-0.157	-0.157	-0.157	-0.157	-0.157	-0.010	-0.010	-0.033	0.001	0.001
SNB-H55	0.318	0.318	0.318	0.318	0.317	0.022	0.022	0.068	0.001	0.001
SNB-H56	-0.220	-0.220	-0.220	-0.220	-0.220	-0.008	-0.008	-0.047	0.002	0.001
SNB-H57	0.443	0.443	0.443	0.443	0.442	0.021	0.020	0.098	0.001	0.001
SNB-H58	-0.224	-0.224	-0.224	-0.224	-0.224	-0.006	-0.006	-0.048	0.002	0.001
SNB-H59	0.451	0.451	0.451	0.451	0.451	0.018	0.018	0.101	0.002	0.001
SNB-H60	-0.233	-0.233	-0.233	-0.233	-0.233	-0.008	-0.008	-0.051	0.002	0.001
SNB-H61	-0.232	-0.232	-0.232	-0.232	-0.232	-0.008	-0.008	-0.051	0.002	0.001
SNB-H62	0.466	0.466	0.466	0.466	0.465	0.020	0.020	0.105	0.002	0.001
SNB-H63	-0.293	-0.293	-0.293	-0.293	-0.293	-0.009	-0.009	-0.066	0.000	0.000
SNB-H64	-0.293	-0.293	-0.293	-0.293	-0.293	-0.009	-0.009	-0.066	0.000	0.000
SNB-H65	0.585	0.585	0.585	0.585	0.584	0.019	0.019	0.133	0.000	0.000
SNB-H66	-0.298	-0.298	-0.298	-0.298	-0.298	-0.006	-0.006	-0.067	0.000	0.000
SNB-H67	-0.298	-0.298	-0.298	-0.298	-0.298	-0.006	-0.006	-0.067	0.000	0.000
SNB-H68	0.595	0.595	0.595	0.595	0.594	0.013	0.013	0.135	0.000	0.000
SNB-H69	0.595	0.595	0.595	0.595	0.594	0.013	0.013	0.135	0.000	0.000

WLAC-2	SNB-WL-I1P	3.19	0.000	-0.313	-0.313	-0.004	-0.071	0.000	0.000
WLAC-2	SNB-WL-I2P	3.19	0.000	-0.313	-0.313	-0.004	-0.071	0.000	0.000
WLAC-2	SNB-WL-I3P	1.32	0.625	0.000	0.625	0.008	0.142	0.000	0.000







Twist and Out-of-Plumb for "1: 1.2D + 1.0Dg + 1.6Wc":

Elevation (ft)	Twist (deg)	Sway (deg)	Out of Plumb (in)
0.00	0.00	0.00	0.00
10.00	-0.00	0.05	0.06
20.00	-0.00	0.11	0.33
30.00	-0.00	0.16	0.63
40.00	-0.00	0.25	1.18
50.00	-0.00	0.30	1.78
60.00	-0.00	0.37	2.59
70.00	-0.00	0.42	3.45
80.00	-0.00	0.50	4.53
86.66	-0.00	0.55	5.29
93.34	-0.00	0.59	6.12
100.00	-0.00	0.63	7.02
106.66	-0.00	0.68	7.95
113.34	0.00	0.74	8.99
120.00	0.00	0.77	10.07
126.66	0.00	0.81	11.20
133.34	0.00	0.84	12.39
140.00	0.01	0.86	13.57
145.00	0.01	0.88	14.50
150.00	0.01	0.90	15.45
155.00	0.01	0.89	16.38
160.00	0.01	0.91	17.33
165.00	0.02	0.90	18.28
170.00	0.02	0.91	19.23
175.00	0.01	0.91	20.19
180.00	0.01	0.91	21.14

Twist and Out-of-Plumb for "2: 0.9D + 1.0Dg + 1.6Wo":

Elevation	Twist	Sway	Out of Plumb
(ft)	(deg)	(deg)	(in)
0.00	0.00	0.00	0.00
10.00	-0.00	0.05	0.06
20.00	-0.00	0.11	0.33
30.00	-0.00	0.16	0.63
40.00	-0.00	0.25	1.18
50.00	-0.00	0.30	1.78
60.00	-0.00	0.37	2.59
70.00	-0.00	0.42	3.44
80.00	-0.00	0.50	4.52
86.66	-0.00	0.55	5.29
93.34	-0.00	0.59	6.11
100.00	-0.00	0.63	7.01
106.66	-0.00	0.68	7.93
113.34	0.00	0.74	8.98
120.00	0.00	0.77	10.05
126.66	0.00	0.81	11.18
133.34	0.00	0.84	12.36
140.00	0.01	0.85	13.55
145.00	0.01	0.88	14.47
150.00	0.01	0.90	15.42
155.00	0.01	0.89	16.35
160.00	0.01	0.91	17.30
165.00	0.02	0.90	18.24
170.00	0.02	0.91	19.20
175.00	0.01	0.91	20.15
180.00	0.01	0.91	21.09

Twist and Out-of-Plumb for "4: 1.2D + 1.0Dg + 1.0E":

Elevation	Twist	Sway	Out of Plumb
(ft)	(deg)	(deg)	(in)
0.00	0.00	0.00	0.00
10.00	-0.00	0.00	0.00
20.00	-0.00	0.01	0.02
30.00	-0.00	0.01	0.04
40.00	-0.00	0.02	0.08
50.00	-0.00	0.03	0.12
60.00	-0.00	0.03	0.17
70.00	-0.00	0.04	0.23
80.00	-0.00	0.04	0.31
86.66	-0.00	0.04	0.37
93.34	-0.00	0.04	0.43
100.00	-0.00	0.05	0.49
106.66	-0.00	0.05	0.56
113.34	-0.00	0.06	0.64
120.00	-0.00	0.06	0.73
126.66	-0.00	0.07	0.82
133.34	-0.00	0.07	0.92
140.00	-0.00	0.07	1.01
145.00	-0.00	0.07	1.09
150.00	-0.00	0.08	1.17
155.00	-0.00	0.08	1.25
160.00	-0.00	0.08	1.34
165.00	-0.00	0.08	1.42
170.00	-0.00	0.08	1.51
175.00	-0.00	0.08	1.59
180.00	-0.00	0.08	1.67

Twist and Out-of-Plumb for "5: 0.9D + 1.0Dg + 1.0E":

URS Connecticut - 4-Carir

Elevation (ft)	Twist (deg)	Sway (deg)	Out of Plumb (in)
0.00	0.00	0.00	0.00
10.00	-0.00	0.00	0.00
20.00	-0.00	0.01	0.02
30.00	-0.00	0.01	0.04
40.00	-0.00	0.02	0.08
50.00	-0.00	0.02	0.12
60.00	-0.00	0.03	0.17
70.00	-0.00	0.03	0.23
80.00	-0.00	0.04	0.31
86.66	-0.00	0.04	0.36
93.34	-0.00	0.04	0.43
100.00	-0.00	0.05	0.49
106.66	-0.00	0.05	0.56
113.34	-0.00	0.06	0.64
120.00	-0.00	0.06	0.73
126.66	-0.00	0.06	0.82
133.34	-0.00	0.07	0.91
140.00	-0.00	0.07	1.01
145.00	-0.00	0.07	1.09
150.00	-0.00	0.08	1.17
155.00	-0.00	0.08	1.25
160.00	-0.00	0.08	1.33
165.00	-0.00	0.08	1.41
170.00	-0.00	0.08	1.50
175.00	-0.00	0.08	1.58
180.00	-0.00	0.08	1.67

Twist and Out-of-Plumb for "6: Service 1.0D + 1.0Dg + 1.0 Wo":

Elevation (ft)	Twist (deg)	Sway (deg)	Out of Plumb (in)
0.00	0.00	0.00	0.00
10.00	-0.00	0.01	0.01
20.00	-0.00	0.03	0.07
30.00	-0.00	0.04	0.14
40.00	-0.00	0.06	0.26
50.00	-0.00	0.07	0.40
60.00	-0.00	0.08	0.58
70.00	-0.00	0.09	0.77
80.00	-0.00	0.11	1.01
86.66	-0.00	0.12	1.18
93.34	-0.00	0.13	1.37
100.00	-0.00	0.14	1.57
106.66	-0.00	0.15	1.77
113.34	0.00	0.16	2.01
120.00	0.00	0.17	2.25
126.66	0.00	0.18	2.50
133.34	0.00	0.19	2.76
140.00	0.00	0.19	3.03
145.00	0.00	0.20	3.24
150.00	0.00	0.20	3.45
155.00	0.00	0.20	3.66
160.00	0.00	0.20	3.87
165.00	0.00	0.20	4.08
170.00	0.00	0.20	4.29
175.00	0.00	0.20	4.51
180.00	0.00	0.20	4.72

Twist and Out-of-Plumb for "1.2\*DL":

Elevation Twist Sway Out of Plumb

(ft)	(deg)	(deg)	(in)
0.00	0.00	0.00	0.00
10.00	-0.00	0.00	0.00
20.00	-0.00	-0.00	0.00
30.00	-0.00	0.00	0.00
40.00	-0.00	-0.00	0.00
50.00	-0.00	0.00	0.00
60.00	-0.00	-0.00	0.00
70.00	0.00	0.00	0.00
80.00	0.00	-0.00	0.00
86.66	0.00	0.00	0.00
93.34	0.00	0.00	0.00
100.00	0.00	0.00	0.00
106.66	0.00	0.00	0.00
113.34	0.00	0.00	0.00
120.00	0.00	0.00	0.01
126.66	0.00	0.00	0.01
133.34	0.00	0.00	0.01
140.00	0.00	0.00	0.01
145.00	0.00	0.00	0.01
150.00	0.00	0.00	0.01
155.00	0.00	0.00	0.01
160.00	0.00	0.00	0.01
165.00	0.00	0.00	0.02
170.00	0.00	0.00	0.02
175.00	0.00	0.00	0.02
180.00	-0.00	0.00	0.02

Twist and Out-of-Plumb for "0.9DL":

Elevation Twist Sway Out of Plumb

(ft)	(deg)	(deg)	(in)
0.00	0.00	0.00	0.00
10.00	-0.00	0.00	0.00
20.00	-0.00	-0.00	0.00
30.00	-0.00	0.00	0.00
40.00	-0.00	-0.00	0.00
50.00	-0.00	0.00	0.00
60.00	-0.00	-0.00	0.00
70.00	0.00	0.00	0.00
80.00	0.00	-0.00	0.00
86.66	0.00	0.00	0.00
93.34	0.00	0.00	0.00
100.00	0.00	0.00	0.00
106.66	0.00	0.00	0.00
113.34	0.00	0.00	0.00
120.00	0.00	0.00	0.00
126.66	0.00	0.00	0.00
133.34	0.00	0.00	0.01
140.00	0.00	0.00	0.01
145.00	0.00	0.00	0.01
150.00	0.00	0.00	0.01
155.00	0.00	0.00	0.01
160.00	0.00	0.00	0.01
165.00	0.00	0.00	0.01
170.00	0.00	0.00	0.01
175.00	0.00	0.00	0.01
180.00	-0.00	0.00	0.02

Equilibrium Joint Positions and Rotations for Load Case "1: 1.2D + 1.0Dg + 1.5Wo"

Joint Label	X-Displ (ft)	Y-Displ (ft)	Z-Displ (ft)	X-Rot (deg)	Y-Rot (deg)	Z-Rot (deg)	X-Pos (ft)	Y-Pos (ft)	Z-Pos (ft)
RohnAP	1.76	-0.0008174	-0.08818	0.0062	0.9062	0.0112	6.093	-0.0008174	179.9
RohnBP	1.443	-1.386e-005	-0.0967	-0.0012	0.9042	0.0110	6.564	-1.386e-005	159.9
RohnCP	1.131	-0.0002756	-0.1012	-0.0007	0.9113	-0.0073	7.94	-0.0002756	139.9
RohnDP	0.8392	-0.0003763	-0.1003	-0.0002	0.7904	-0.0048	7.534	-0.0003763	119.9
RohnEP	0.5845	-0.0005223	-0.08979	-0.0005	0.6511	-0.0032	8.666	-0.0005223	99.91
RohnFP	0.378	-0.0006876	-0.07781	-0.0004	0.5158	-0.0021	8.646	-0.0006876	79.92
RohnGP	0.2163	-0.0006235	-0.06031	-0.0004	0.3919	-0.0015	9.271	-0.0006235	59.94
RohnHP	0.0923	-0.0004123	-0.04494	-0.0010	0.2685	-0.0009	9.94	-0.0004123	39.96
RohnIP	0.02797	-0.0002049	-0.02207	-0.0006	0.1219	-0.0003	10.66	-0.0002049	19.98
RohnJP	0	0	0	0.0000	0.0000	0.0000	11.42	0	0
SNB-AP	1.761	-0.001686	-0.05231	0.0020	0.9012	-0.0000	4.094	-0.001686	179.9
SNB-BP	1.444	-0.001294	-0.06158	0.0009	0.8974	-0.0000	4.565	-0.001284	159.9
SNB-CP	1.131	-0.0009115	-0.06863	0.0009	0.8642	-0.0000	5.039	-0.0009115	139.9
SNB-DP	0.8394	-0.0006028	-0.07095	0.0008	0.7790	-0.0000	5.534	-0.0006028	119.9
SNB-EP	0.5847	-0.0003821	-0.06524	0.0006	0.6358	-0.0000	6.066	-0.0003821	99.93
SNB-FP	0.3781	-0.0002342	-0.06031	0.0004	0.5149	-0.0000	6.646	-0.0002342	79.94
SNB-GP	0.2164	-0.0001288	-0.04975	0.0002	0.3726	-0.0000	7.271	-0.0001288	59.95
SNB-HP	0.0925	-5.514e-005	-0.03684	0.0002	0.2588	-0.0000	7.94	-5.514e-005	39.96
SNB-IP	0.02797	-1.448e-005	-0.01864	0.0001	0.1176	-0.0000	8.656	-1.448e-005	19.98
SNB-JP	0	0	0	0.0000	0.0000	0.0000	9.415	0	0
RohnA1	1.762	-0.002143	0.01387	0.0009	0.9091	0.0044	-0.4044	-3.755	180
RohnA2	1.761	-0.002054	0.01402	0.0007	0.9081	0.0178	-0.4059	3.75	180
RohnB1	1.446	-0.001979	0.02214	0.0060	0.9108	-0.0000	-1.115	-4.437	160
RohnB2	1.443	-0.00193	0.02235	-0.0015	0.9089	-0.0222	-1.117	4.433	160
RohnC1	1.132	-0.0009304	0.02883	-0.0016	0.8655	-0.0089	-1.823	-5.118	140
RohnC2	1.131	-0.001544	0.02901	-0.0061	0.8620	-0.0234	-1.824	5.116	140
RohnD1	0.8393	-0.000197	0.03284	-0.0021	0.7863	-0.0132	-2.508	-5.798	120
RohnD2	0.8388	-0.001298	0.033	0.0053	0.7838	0.0228	-2.509	5.797	120
RohnE1	0.5848	-0.0001561	0.0321	-0.0002	0.6503	-0.0131	-3.156	-6.479	100
RohnE2	0.585	-0.0004637	0.03221	0.0027	0.6479	0.0195	-3.155	6.478	100
RohnF1	0.3771	-0.0005297	0.02953	0.0107	0.5383	-0.0128	-3.757	-7.16	80.03
RohnF2	0.3782	-0.0004219	0.0296	-0.0093	0.5372	0.0170	-3.756	7.16	80.03
RohnG1	0.2157	-0.0003675	0.02468	0.0032	0.3982	-0.0097	-4.312	-7.842	60.02
RohnG2	0.2168	-8.469e-006	0.02472	-0.0029	0.3984	0.0126	-4.311	7.842	60.02
RohnH1	0.09855	-0.0004185	0.01822	0.0031	0.2748	-0.0072	-4.822	-8.522	40.02
RohnH2	0.09918	-0.0001655	0.01826	-0.0033	0.2756	0.0089	-4.821	8.522	40.02
RohnI1	0.02765	-0.000187	0.009073	0.0057	0.1350	-0.0041	-5.287	-9.206	20.01
RohnI2	0.02798	-2.594e-005	0.009091	-0.0061	0.1357	0.0046	-5.287	9.206	20.01
RohnJ1	0	0	0	0.0000	0.0000	0.0000	-5.71	-9.89	0
RohnJ2	0	0	0	0.0000	0.0000	0.0000	-5.71	9.89	0
SNB-A1	1.761	-0.001692	0.0031	-0.0043	0.9130	-0.0018	0.5947	-2.022	180
SNB-A2	1.761	-0.001685	0.003181	0.0063	0.9124	0.0020	0.5947	2.019	180
SNB-B1	1.444	-0.001293	0.01166	-0.0008	0.9064	-0.0021	-0.1162	-2.704	160
SNB-B2	1.444	-0.00128	0.01176	0.0031	0.9066	0.0023	-0.1162	2.702	160
SNB-C1	1.132	-0.0009054	0.01915	-0.0013	0.8741	-0.0030	-0.8222	-3.385	140
SNB-C2	1.132	-0.0009254	0.01926	0.0033	0.8742	0.0030	-0.8222	3.384	140
SNB-D1	0.8398	-0.0005201	0.02404	-0.0038	0.7948	-0.0050	-1.508	-4.067	120
SNB-D2	0.8398	-0.0006885	0.02415	0.0053	0.7947	0.0051	-1.508	4.065	120
SNB-E1	0.585	-0.000291	0.02451	-0.0020	0.6459	-0.0041	-2.156	-4.747	100
SNB-E2	0.585	-0.0004731	0.02459	0.0030	0.6458	0.0040	-2.156	4.746	100
SNB-F1	0.3783	-0.0001459	0.02431	0.0026	0.5417	-0.0039	-2.756	-5.428	80.02
SNB-F2	0.3783	-0.0003284	0.02437	-0.0019	0.5417	0.0038	-2.756	5.428	80.02
SNB-G1	0.2163	1.655e-005	0.0209	0.0006	0.4029	-0.0047	-3.311	-6.11	60.02
SNB-G2	0.2164	-0.0002802	0.02095	-0.0001	0.4029	0.0046	-3.311	6.11	60.02
SNB-H1	0.09902	-0.0001436	0.00159	-0.0046	0.2766	-0.0046	-3.821	-6.79	40.02
SNB-H2	0.09903	-0.0002544	0.001594	0.0049	0.2766	0.0045	-3.821	6.79	40.02
SNB-I1	0.02755	-0.0002465	0.008161	0.0014	0.1410	-0.0042	-4.286	-7.472	20.01
SNB-I2	0.02755	-0.0002749	0.00818	-0.0012	0.1410	0.0042	-4.286	7.472	20.01
SNB-J1	0	0	0	0.0000	0.0000	0.0000	-4.708	-8.154	0
SNB-J2	0	0	0	0.0000	0.0000	0.0000	-4.708	8.154	0



RohnAa5	1.681	-0.0003848	-0.09059	0.0014	0.9106	0.0111	6.211	-0.0003848	174.9
RohnAb5	1.602	-0.0003518	-0.09285	0.0027	0.9090	0.0111	6.329	-0.0003518	169.9
RohnAc5	1.523	-2.473e-005	-0.09489	0.0021	0.9065	0.0111	6.447	7.629e-005	164.9
RohnBa5	1.365	-2.473e-005	-0.09833	0.0003	0.9028	0.0101	6.683	-2.473e-005	154.9
RohnBb5	1.208	-0.0001092	-0.09969	-0.0010	0.8963	0.0091	6.801	-0.0001092	149.9
RohnBc5	1.208	-0.0001835	-0.1006	-0.0010	0.8895	0.0082	6.92	-0.0001835	144.9
RohnCa5	1.031	-0.0003015	-0.1017	-0.0001	0.8464	0.0064	7.202	-0.0003015	133.2
RohnCb5	0.9335	-0.0003332	-0.1015	-0.0004	0.8263	0.0056	7.367	-0.0003332	126.6
RohnCs5	0.7494	-0.0003921	-0.09795	-0.0004	0.7482	0.0043	7.706	-0.0003921	113.2
RohnDa5	0.6645	-0.0004614	-0.09441	-0.0007	0.7099	0.0038	7.884	-0.0004614	106.6
RohnEa5	0.5118	-0.0005953	-0.08649	-0.0010	0.6038	0.0028	8.255	-0.0005953	93.25
RohnEb5	0.4427	-0.0007022	-0.08249	-0.0003	0.5795	0.0025	8.449	-0.0007022	86.58
RohnFa5	0.2834	-0.0007078	-0.07088	-0.0002	0.4651	0.0018	8.955	-0.0007078	69.93
RohnGa5	0.1544	-0.0005827	-0.0543	0.0005	0.3350	0.0012	9.602	-0.0005827	49.95
RohnHa5	0.05973	-0.0002961	-0.0341	0.0005	0.2047	0.0006	10.3	-0.0002961	29.97
RohnIa5	0.01067	-9.419e-005	-0.01145	0.0007	0.0858	0.0002	11.04	-9.419e-005	9.989
RohnAa1	1.682	-0.001542	-0.05477	0.0005	0.9121	-0.0000	4.212	-0.001542	174.9
RohnAb1	1.602	-0.001542	-0.05717	0.0012	0.9082	-0.0000	4.329	-0.001542	169.9
RohnAc1	1.523	-0.001542	-0.05945	0.0017	0.9086	-0.0000	4.447	-0.001542	164.9
RohnBa1	1.365	-0.001183	-0.06366	0.0012	0.9050	0.0000	4.683	-0.001183	154.9
RohnBb1	1.208	-0.001094	-0.06556	0.0010	0.8956	0.0000	4.801	-0.001094	149.9
RohnBc1	1.208	-0.0009975	-0.06721	0.0011	0.8920	0.0000	4.92	-0.0009975	144.9
RohnCa1	1.031	-0.000801	-0.07003	0.0009	0.8478	0.0000	5.201	-0.000801	133.3
RohnCb1	0.9338	-0.0006961	-0.07079	0.0008	0.8293	0.0000	5.367	-0.0006961	126.6
RohnDab1	0.7496	-0.000514	-0.07002	0.0007	0.7508	-0.0000	5.706	-0.000514	113.3
RohnDba1	0.6647	-0.0004464	-0.06806	0.0005	0.7139	-0.0000	5.884	-0.0004464	106.6
RohnEa1	0.512	-0.0003199	-0.06425	0.0004	0.6087	0.0000	6.255	-0.0003199	93.28
RohnEba1	0.4428	-0.0002812	-0.06256	0.0004	0.5797	0.0000	6.449	-0.0002812	86.6
RohnFa1	0.2934	-0.000018	-0.05585	0.0003	0.4709	0.0000	6.955	-0.000018	69.94
RohnGa1	0.1544	-9.034e-005	-0.04388	0.0002	0.3429	0.0000	7.602	-9.034e-005	49.96
RohnHa1	0.05974	-2.884e-005	-0.02833	0.0001	0.2089	0.0000	8.294	-2.884e-005	29.97
RohnIa1	0.01067	-1.725e-006	-0.009856	0.0000	0.0874	0.0000	9.032	-1.725e-006	9.99
RohnAa1S	1.761	-0.001696	-0.02479	-0.0011	0.9068	-0.0039	2.344	-1.012	180
RohnAb1S	1.761	-0.001677	-0.02474	0.0042	0.9068	-0.0039	2.344	-0.001688	180
RohnAc1S	1.523	-0.001296	-0.02522	0.0031	0.8965	-0.0040	2.224	-1.353	160
RohnBa1S	1.444	-0.001296	-0.02522	0.0031	0.8965	-0.0040	2.224	-0.001286	160
RohnBb1S	1.444	-0.001271	-0.02517	0.0012	0.8965	0.0041	2.224	-1.35	160
RohnBc1S	1.132	-0.000933	-0.02524	0.0068	0.8570	-0.0038	2.109	-1.693	140
RohnCb1S	1.132	-0.0009154	-0.01878	0.0010	0.8741	0.0000	2.109	-0.0009154	140
RohnCc1S	1.132	-0.0008936	-0.02518	-0.0049	0.8570	0.0039	2.109	1.691	140
RohnDab1S	0.8397	-0.0006361	-0.02456	0.0079	0.7706	-0.0039	2.013	-2.034	120
RohnDba1S	0.84	-0.0006042	-0.0231	0.0008	0.7948	0.0000	2.013	-0.0006042	120
RohnEa1S	0.8397	-0.00057	-0.02451	-0.0063	0.7706	-0.0039	2.013	2.032	120
RohnEb1S	0.5849	-0.0004074	-0.02115	0.0094	0.6234	-0.0029	1.955	-2.374	99.98
RohnFa1S	0.5852	-0.000382	-0.02387	0.0005	0.6459	0.0000	2.155	-0.000382	100
RohnGa1S	0.5849	-0.0003568	-0.0211	0.0083	0.6234	0.0029	1.955	-2.373	99.98
RohnHa1S	0.3782	-0.0002675	-0.0197	0.0088	0.5156	-0.0020	1.945	-2.714	79.98
RohnIa1S	0.3782	-0.0002371	-0.02326	0.0004	0.5417	-0.0000	2.756	-0.0002371	80.02
RohnAa1	0.3782	-0.0002078	-0.01967	0.0081	0.5156	0.0020	1.945	-2.714	79.98
RohnAb1	0.2164	-0.0001746	-0.01739	0.0035	0.3824	-0.0015	1.98	-3.055	59.98
RohnBc1	0.2166	-0.0001318	-0.01866	0.0002	0.4029	0.0000	3.311	-0.0001318	60.02
RohnCb1	0.2164	-9.029e-005	-0.01736	-0.0030	0.3824	0.0015	1.98	3.055	59.98
RohnDab1	0.09922	-0.0001037	-0.01447	0.0056	0.2543	-0.0014	2.059	-3.395	39.99
RohnDba1	0.09937	-5.539e-005	-0.01212	0.0022	0.2766	-0.0000	3.821	-5.539e-005	40.01
RohnEa1	0.0922	-8.275e-006	-0.01445	-0.0052	0.2543	0.0014	2.059	-3.395	39.99
RohnEb1	0.02788	-6.967e-005	-0.01079	0.0073	0.1178	-0.0016	2.185	-3.736	19.99
RohnFa1	0.02799	-1.417e-005	0.003249	0.0001	0.1410	-0.0000	4.286	-1.417e-005	20
RohnGa1	0.02788	4.07e-005	-0.01078	-0.0072	0.1178	0.0016	2.185	3.736	19.99
RohnHb1	1.683	-0.002209	0.01605	-0.0016	0.9022	0.0037	-0.5821	-3.925	175
RohnIb1	1.681	-0.002018	0.01621	-0.0003	0.9119	0.0190	-0.5838	-3.921	175
RohnAa2	1.604	-0.002341	0.01816	0.0030	0.9118	0.0021	-0.7593	-4.096	170
RohnBa2	1.601	-0.002131	0.01836	-0.0018	0.9143	0.0202	-0.762	-4.092	170
RohnCa2	1.524	-0.001973	0.02021	0.0019	0.9084	-0.0013	-0.9378	-4.266	165
RohnDab2	1.522	-0.002171	0.02041	-0.0027	0.9037	0.0208	-0.94	-4.262	165
RohnDb2	1.366	-0.001531	0.02404	-0.0007	0.8984	-0.0020	-1.293	-4.607	155
RohnEa2	1.364	-0.002005	0.02424	0.0065	0.8935	0.0222	-1.295	-4.604	155
RohnEb2	1.288	-0.001995	0.02578	0.0025	0.8976	-0.0048	-1.469	-4.778	150
RohnBb2	1.287	-0.001918	0.02598	0.0026	0.8940	0.0231	-1.471	-4.775	150

Joint Label	X Force Usage (kips)	Y Force Usage (kips)	Z Comp. Usage (%)	Uplift Usage (%)	Result. Force Usage (kips)	Usage % (kips)	X Moment Usage (ft-k)	Y Moment Usage (ft-k)	Z Moment Usage (ft-k)	X-M. Usage % (ft-k)	Y-M. Usage % (ft-k)	Z-M. Usage % (ft-k)	Max. Usage %
RohnBc1	1.209	-0.001129	0.02743	0.0102	0.9040	-0.0080	-1.647	-4.948	1.45				
RohnBc2	1.208	-0.001692	0.02762	-0.0050	0.8999	0.0243	-1.648	4.945	1.45				
RohnCa1	1.032	-0.00115	0.03053	0.0013	0.8496	-0.108	-2.053	-5.345	133.4				
RohnCa2	1.032	-0.0009345	0.0307	0.0025	0.8468	0.0237	-2.054	5.343	133.4				
RohnCb1	0.934	-0.0006412	0.03192	-0.0041	0.8346	-0.128	-2.283	-5.572	126.7				
RohnCb2	0.9334	-0.001121	0.03208	0.0011	0.8333	0.0241	-2.283	5.57	126.7				
RohnDa1	0.7496	-0.0004217	0.03318	0.0066	0.7619	-0.141	-2.729	-6.024	113.4				
RohnDa2	0.7494	-0.0007376	0.03333	-0.0035	0.7591	0.0226	-2.729	6.024	113.4				
RohnDb1	0.6229	-0.0006647	0.03298	0.0011	0.7074	-0.136	-2.947	-6.251	106.7				
RohnDb2	0.6229	-0.001545	0.03311	0.0015	0.7055	0.0211	-2.947	6.251	106.7				
RohnEa1	0.3105	0.0006174	0.03164	0.0073	0.6182	-0.133	-3.361	-6.705	93.37				
RohnEa2	0.311	-0.0009955	0.03174	-0.0055	0.6164	0.0190	-3.361	6.705	93.37				
RohnEb1	0.4413	-0.0007236	0.03078	-0.0042	0.5686	-0.123	-3.562	-6.933	86.69				
RohnEb2	0.442	-0.0008668	0.03087	0.0067	0.5656	0.0172	-3.561	6.932	86.69				
RohnFa1	0.2881	0.002255	0.02754	-0.0032	0.4580	-0.107	-4.043	-7.499	70.03				
RohnFa2	0.289	-0.002343	0.0276	0.0040	0.4578	0.0142	-4.042	7.499	70.03				
RohnGa1	0.1491	-0.002565	0.02178	-0.0003	0.3341	-0.0083	-4.575	-8.18	50.02				
RohnGa2	0.1499	-0.002272	0.02183	-0.0001	0.3356	0.0107	-4.574	8.18	50.02				
RohnHa1	0.05375	0.002887	0.01398	-0.0018	0.2009	-0.0054	-5.064	-8.861	30.01				
RohnHa2	0.05421	-0.002682	0.01401	0.0016	0.2018	0.0065	-5.064	8.862	30.01				
RohnIa1	0.06279	-0.002036	0.004752	-0.0009	0.0840	-0.0026	-5.506	-9.546	10				
RohnIa2	0.06441	-0.001953	0.004762	0.0003	0.0852	0.0029	-5.506	9.546	10				
SNB-Aa1	1.682	-0.001594	0.005301	0.0029	0.9074	-0.0020	0.4168	-2.193	175				
SNB-Aa2	1.682	-0.001608	0.005385	-0.0003	0.9082	0.0022	0.4169	2.189	175				
SNB-Ab1	1.603	-0.001468	0.007468	0.0015	0.9112	-0.0022	0.2391	-2.363	170				
SNB-Ab2	1.603	-0.001479	0.007566	0.0009	0.9112	0.0024	0.239	2.36	170				
SNB-Ac1	1.523	-0.001326	0.009601	0.0017	0.9068	-0.0021	0.06107	-2.534	165				
SNB-Ac2	1.523	-0.00147	0.009699	0.0004	0.9060	0.0023	0.06112	2.531	165				
SNB-Ba1	1.365	-0.001099	0.0137	0.0028	0.9040	-0.0027	-0.2937	-2.874	155				
SNB-Ba2	1.365	-0.001289	0.01381	0.0007	0.9039	0.0028	-0.2937	2.872	155				
SNB-Bb1	1.287	-0.0009955	0.01564	0.0019	0.8986	-0.0029	-0.4706	-3.045	150				
SNB-Bb2	1.287	-0.001199	0.01575	0.0003	0.8996	0.0031	-0.4706	3.042	150				
SNB-Bc1	1.209	-0.0008271	0.01747	0.0012	0.8975	-0.0030	-0.6471	-3.215	145				
SNB-Bc2	1.209	-0.001182	0.01758	0.0009	0.8875	0.0031	-0.6471	3.213	145				
SNB-Ca1	1.031	-0.0002847	0.02114	0.0066	0.8876	-0.0043	-1.054	-3.612	133.4				
SNB-Ca2	1.031	-0.001332	0.02125	-0.0048	0.8575	0.0044	-1.054	3.61	133.4				
SNB-Cb1	0.933	-0.000119	0.02279	-0.0013	0.8177	-0.0043	-1.283	-3.839	126.7				
SNB-Cb2	0.933	-0.001289	0.0228	0.0031	0.8178	0.0043	-1.283	3.838	126.7				
SNB-De1	0.7486	0.0001678	0.02478	0.0112	0.7670	-0.0059	-1.73	-4.292	113.4				
SNB-De2	0.7486	-0.001216	0.02488	-0.0099	0.7669	0.0060	-1.73	4.291	113.4				
SNB-Db1	0.6627	0.0007688	0.02493	-0.0041	0.6998	-0.0045	-1.947	-4.519	106.7				
SNB-Db2	0.6627	-0.001663	0.02502	0.0053	0.6998	0.0045	-1.947	4.518	106.7				
SNB-Ea1	0.511	-0.0002826	0.02483	0.0069	0.6191	-0.0045	-2.36	-4.973	93.36				
SNB-Ea2	0.5111	-0.0009336	0.02491	-0.0059	0.6192	0.0045	-2.36	4.973	93.36				
SNB-Eb1	0.4418	-0.0004217	0.02475	-0.0042	0.5644	-0.0034	-2.561	-5.201	86.68				
SNB-Eb2	0.4418	-0.0009682	0.02482	0.0049	0.5644	0.0033	-2.561	5.2	86.68				
SNB-Fa1	0.288	0.002618	0.02301	0.0010	0.4589	-0.0038	-3.043	-5.766	70.02				
SNB-Fa2	0.288	-0.002956	0.02307	-0.0004	0.4589	0.0038	-3.043	5.766	70.02				
SNB-Ga1	0.1494	-0.002383	0.01875	0.0026	0.3333	-0.0046	-3.575	-6.448	50.02				
SNB-Ga2	0.1494	-0.002554	0.0188	-0.0021	0.3334	0.0045	-3.575	6.448	50.02				
SNB-Ha1	0.05429	0.00257	0.01237	0.0025	0.2017	-0.0043	-4.063	-7.129	30.01				
SNB-Ha2	0.0543	-0.002632	0.0124	-0.0022	0.2017	0.0043	-4.063	7.129	30.01				
SNB-Ia1	0.005833	0.002293	0.004365	-0.0002	0.0822	-0.0025	-4.505	-7.811	10				
SNB-Ia2	0.005837	-0.002302	0.004375	0.0003	0.0822	0.0025	-4.505	7.811	10				

Joint Support Reactions for Load Case "1: 1.2D + 1.0Dg + 1.6Wg":

Joint Label	X Force Usage (kips)	Y Force Usage (kips)	Z Comp. Usage (%)	Uplift Usage (%)	Result. Force Usage (kips)	Usage % (kips)	X Moment Usage (ft-k)	Y Moment Usage (ft-k)	Z Moment Usage (ft-k)	X-M. Usage % (ft-k)	Y-M. Usage % (ft-k)	Z-M. Usage % (ft-k)	Max. Usage %
RohnJP	-28.86	0.0	0.10	0.0	347.98	0.0	0.0	349.17	0.0	-0.05	0.0	-0.01	0.0
SNB-JP	-49.71	0.0	0.00	0.0	500.22	0.0	0.0	502.69	0.0	0.00	0.0	0.00	0.0
RohnT1	-9.19	0.0	-9.74	0.0	-144.29	0.0	0.0	-144.91	0.0	1.86	0.0	0.00	0.0
RohnJ2	-9.38	0.0	9.66	0.0	-144.59	0.0	0.0	-145.22	0.0	-1.81	0.0	-0.01	0.0
SNB-J1	-16.94	0.0	-18.22	0.0	-222.16	0.0	0.0	-223.55	0.0	5.30	0.0	-0.04	0.0
SNB-J2	-16.94	0.0	18.25	0.0	-222.63	0.0	0.0	-224.02	0.0	-5.31	0.0	0.04	0.0

Joint Displacements, Loads and Member Forces on Joints for Load Case "1: 1.2D + 1.0Dg + 1.6Wo":

Joint Label	X External Load (kips)	Y External Load (kips)	Z External Load (kips)	X Member Force (kips)	Y Member Force (kips)	Z Member Force (kips)	X Disp. (ft)	Y Disp. (ft)	Z Disp. (ft)
RohnAP	0.6446	0.0000	-0.3543	-0.6446	-0.0000	0.3543	1.7604	-0.0008	-0.0882
RohnBP	3.0288	0.0000	-1.2721	-3.0288	-0.0000	1.2721	1.4434	-0.0000	-0.0967
RohnCP	0.6543	0.0000	-0.5121	-0.6543	0.0000	0.5121	1.1309	-0.0003	-0.1012
RohnDP	0.7898	0.0000	-0.6208	-0.7898	0.0000	0.6208	0.8392	-0.0004	-0.1003
RohnEP	0.8106	0.0000	-0.7694	-0.8106	0.0000	0.7694	0.5845	-0.0005	-0.0898
RohnFP	0.9277	0.0000	-1.0436	-0.9277	-0.0000	1.0436	0.3780	-0.0007	-0.0778
RohnGP	1.2867	0.0000	-1.3901	-1.2867	-0.0000	1.3901	0.2163	-0.0006	-0.0625
RohnHP	1.1001	0.0000	-1.1001	-1.1001	-0.0000	1.1001	0.0992	-0.0004	-0.0449
RohnIP	1.4048	0.0000	-1.5524	-1.4048	-0.0000	1.5524	0.0280	-0.0002	-0.0221
RohnJP	0.8374	0.0000	-0.8390	28.0213	-0.0984	-347.1394	0.0000	0.0000	0.0000
RohnKP	0.1882	0.0000	-0.1863	-0.1882	0.0000	0.1863	1.7608	-0.0017	-0.0523
RohnLP	0.4529	0.0000	-0.4033	-0.4529	0.0000	0.4033	1.4437	-0.0013	-0.0616
RohnMP	0.6543	0.0000	-0.5121	-0.6543	0.0000	0.5121	1.1312	-0.0009	-0.0686
RohnNP	0.7898	0.0000	-0.7694	-0.7898	0.0000	0.7694	0.8394	-0.0006	-0.0710
RohnOP	0.8106	0.0000	-0.8106	-0.8106	0.0000	0.8106	0.5847	-0.0004	-0.0652
RohnPP	0.9277	0.0000	-1.0436	-0.9277	-0.0000	1.0436	0.3781	-0.0002	-0.0603
RohnQP	1.2867	0.0000	-1.3901	-1.2867	-0.0000	1.3901	0.2164	-0.0001	-0.0498
RohnRP	1.0500	0.0000	-1.2701	-1.0500	0.0000	1.2701	0.0993	-0.0001	-0.0368
RohnSP	1.1001	0.0000	-1.1001	-1.1001	0.0000	1.1001	0.0280	-0.0000	-0.0186
RohnTP	1.4048	0.0000	-1.5524	-1.4048	0.0000	1.5524	0.0000	0.0000	0.0000
RohnUP	0.8374	0.0000	-0.8390	48.8689	-0.0017	-499.3854	0.0000	0.0000	0.0000
RohnVP	0.6446	0.0000	-0.3543	-0.6446	-0.0000	0.3543	1.7621	-0.0021	-0.0139
RohnW1	1.1009	0.0000	-0.5223	-1.1009	-0.0000	0.5223	1.7606	-0.0021	-0.0140
RohnX1	1.0538	0.0000	-0.5401	-1.0538	-0.0000	0.5401	1.4455	-0.0020	-0.0221
RohnY1	0.7194	0.0000	-0.4621	-0.7194	-0.0000	0.4621	1.4432	-0.0019	-0.0224
RohnZ1	0.6543	0.0000	-0.5121	-0.6543	0.0000	0.5121	1.1308	-0.0015	-0.0290
RohnC1	0.6543	0.0000	-0.5121	-0.6543	0.0000	0.5121	1.1308	-0.0015	-0.0290
RohnD1	1.0017	0.0000	-0.7048	-1.0017	0.0000	0.7048	0.8393	-0.0002	-0.0328
RohnE1	0.7898	0.0000	-0.6208	-0.7898	0.0000	0.6208	0.8388	-0.0013	-0.0330
RohnF1	0.8106	0.0000	-0.7694	-0.8106	0.0000	0.7694	0.5848	-0.0002	-0.0321
RohnG1	0.9277	0.0000	-1.0436	-0.9277	-0.0000	1.0436	0.3771	-0.0005	-0.0322
RohnH1	1.3907	0.0000	-1.2176	-1.3907	-0.0000	1.2176	0.2163	-0.0004	-0.0296
RohnI1	1.1820	0.0000	-1.3421	-1.1820	-0.0000	1.3421	0.2157	-0.0004	-0.0247
RohnJ1	1.6035	0.0000	-1.4573	-1.6035	-0.0000	1.4573	0.2168	-0.0000	-0.0247
RohnK1	1.1001	0.0000	-1.3837	-1.1001	-0.0000	1.3837	0.0985	-0.0004	-0.0182
RohnL1	1.3837	0.0000	-1.3837	-1.3837	-0.0000	1.3837	0.0992	-0.0002	-0.0183
RohnM1	1.4048	0.0000	-1.5524	-1.4048	0.0000	1.5524	0.0277	-0.0002	-0.0091
RohnN1	1.4048	0.0000	-1.5524	-1.4048	0.0000	1.5524	0.0280	-0.0000	0.0091
RohnO1	0.8374	0.0000	-0.8390	8.3545	9.7391	145.4284	0.0000	0.0000	0.0000
RohnP1	0.8374	0.0000	-0.8390	8.5404	9.6575	145.4297	0.0000	0.0000	0.0000
RohnQ1	0.1882	0.0000	-0.1863	-0.1882	0.0000	0.1863	1.7612	-0.0017	-0.0031
RohnR1	0.1882	0.0000	-0.1863	-0.1882	0.0000	0.1863	1.7612	-0.0017	-0.0032
RohnS1	0.4529	0.0000	-0.4033	-0.4529	-0.0000	0.4033	1.4443	-0.0013	-0.0117
RohnT1	0.4529	0.0000	-0.4033	-0.4529	-0.0000	0.4033	1.4443	-0.0013	-0.0118
RohnU1	0.6543	0.0000	-0.5121	-0.6543	0.0000	0.5121	1.1318	-0.0009	-0.0191
RohnV1	0.6543	0.0000	-0.5121	-0.6543	0.0000	0.5121	1.1318	-0.0009	-0.0193
RohnW1	0.7898	0.0000	-0.6208	-0.7898	0.0000	0.6208	0.8398	-0.0003	-0.0240
RohnX1	0.7898	0.0000	-0.6208	-0.7898	0.0000	0.6208	0.8398	-0.0003	-0.0242
RohnY1	0.8106	0.0000	-0.7694	-0.8106	-0.0000	0.7694	0.5850	-0.0003	-0.0245
RohnZ1	0.8106	0.0000	-0.7694	-0.8106	-0.0000	0.7694	0.5850	-0.0005	-0.0246
RohnA2	0.9277	0.0000	-1.0436	-0.9277	-0.0000	1.0436	0.3783	-0.0001	-0.0243
RohnB2	0.9277	0.0000	-1.0436	-0.9277	0.0000	1.0436	0.3783	-0.0003	-0.0244
RohnC2	1.0500	0.0000	-1.2701	-1.0500	-0.0000	1.2701	0.2163	-0.0000	-0.0209
RohnD2	1.0500	0.0000	-1.2701	-1.0500	0.0000	1.2701	0.2164	-0.0003	-0.0210
RohnE2	1.1001	0.0000	-1.3837	-1.1001	-0.0000	1.3837	0.0990	-0.0001	-0.0159
RohnF2	1.1001	0.0000	-1.3837	-1.1001	0.0000	1.3837	0.0990	-0.0003	-0.0159
RohnG2	1.4048	0.0000	-1.5524	-1.4048	-0.0000	1.5524	0.0275	-0.0002	-0.0082
RohnH2	1.4048	0.0000	-1.5524	-1.4048	0.0000	1.5524	0.0276	-0.0003	-0.0082
RohnI2	0.8374	0.0000	-0.8390	16.1032	18.2168	223.0017	0.0000	0.0000	0.0000
RohnJ2	0.8374	0.0000	-0.8390	16.1215	18.2483	223.4730	0.0000	0.0000	0.0000
RohnK2	0.6035	0.0000	-0.2490	-0.6035	0.0000	0.2490	1.6812	-0.0004	-0.0906
RohnL2	0.1882	0.0000	-0.1863	-0.1882	0.0000	0.1863	1.6017	-0.0004	-0.0928
RohnM2	0.5616	0.0000	-0.2502	-0.5616	0.0000	0.2502	1.5225	-0.0001	-0.0949

RohnB8S	0.2646	0.0000	0.0000	-0.2170	-0.2646	0.0000	0.0000	0.2170	1.3646	-0.0000	-0.0983
RohnB8S	2.2052	0.0000	0.0000	-1.1580	-2.2052	0.0000	0.0000	1.1580	1.2859	-0.0001	-0.0997
RohnB8S	0.2646	0.0000	0.0000	-0.2170	-0.2646	0.0000	0.0000	0.2170	1.2081	-0.0002	-0.1006
RohnCaS	2.0420	0.0000	0.0000	-0.9577	-2.0420	0.0000	0.0000	0.9577	1.0311	-0.0003	-0.1017
RohnCaS	2.8434	0.0000	0.0000	-1.7228	-2.8434	0.0000	0.0000	1.7228	0.9335	-0.0003	-0.1015
RohnDaS	2.8903	0.0000	0.0000	-1.5191	-2.8903	0.0000	0.0000	1.5191	0.7494	-0.0004	-0.0979
RohnDbS	0.4002	0.0000	0.0000	-0.3257	-0.4002	0.0000	0.0000	0.3257	0.6645	-0.0005	-0.0944
RohnEaS	0.4104	0.0000	0.0000	-0.4437	-0.4104	0.0000	0.0000	0.4437	0.5118	-0.0006	-0.0865
RohnEaS	0.4104	0.0000	0.0000	-0.4437	-0.4104	0.0000	0.0000	0.4437	0.4427	-0.0007	-0.0825
RohnFaS	0.5173	0.0000	0.0000	-0.5999	-0.5173	0.0000	0.0000	0.5999	0.2934	-0.0008	-0.0709
RohnGaS	0.5327	0.0000	0.0000	-0.6702	-0.5327	0.0000	0.0000	0.6702	0.1544	-0.0006	-0.0543
RohnHaS	0.5674	0.0000	0.0000	-0.7135	-0.5674	0.0000	0.0000	0.7135	0.0597	-0.0003	-0.0341
RohnIaS	0.8374	0.0000	0.0000	-0.8390	-0.8374	0.0000	0.0000	0.8390	0.0107	-0.0001	-0.0115
RohnJaS	0.1882	0.0000	0.0000	-0.1863	-0.1882	0.0000	0.0000	0.1863	1.6815	-0.0015	-0.0548
RohnKaS	0.1882	0.0000	0.0000	-0.1863	-0.1882	0.0000	0.0000	0.1863	1.6020	-0.0015	-0.0572
RohnLaS	0.1882	0.0000	0.0000	-0.1863	-0.1882	0.0000	0.0000	0.1863	1.5229	-0.0013	-0.0595
RohnMaS	0.2646	0.0000	0.0000	-0.2170	-0.2646	0.0000	0.0000	0.2170	1.3649	-0.0012	-0.0637
RohnNaS	0.2646	0.0000	0.0000	-0.2170	-0.2646	0.0000	0.0000	0.2170	1.2862	-0.0011	-0.0656
RohnPaS	0.2646	0.0000	0.0000	-0.2170	-0.2646	0.0000	0.0000	0.2170	1.2083	-0.0010	-0.0672
RohnQaS	0.3897	0.0000	0.0000	-0.2951	-0.3896	0.0000	0.0000	0.2951	1.0314	-0.0008	-0.0700
RohnRaS	0.3897	0.0000	0.0000	-0.2951	-0.3896	0.0000	0.0000	0.2951	0.9338	-0.0007	-0.0708
RohnSaS	0.4002	0.0000	0.0000	-0.3257	-0.4002	0.0000	0.0000	0.3257	0.7496	-0.0005	-0.0700
RohnTaS	0.4002	0.0000	0.0000	-0.3257	-0.4002	0.0000	0.0000	0.3257	0.6647	-0.0004	-0.0681
RohnUaS	0.4104	0.0000	0.0000	-0.4437	-0.4104	0.0000	0.0000	0.4437	0.5120	-0.0003	-0.0642
RohnVaS	0.4104	0.0000	0.0000	-0.4437	-0.4104	0.0000	0.0000	0.4437	0.4428	-0.0003	-0.0626
RohnWaS	0.5173	0.0000	0.0000	-0.5999	-0.5173	0.0000	0.0000	0.5999	0.2934	-0.0002	-0.0557
RohnXaS	0.5327	0.0000	0.0000	-0.6702	-0.5327	0.0000	0.0000	0.6702	0.1544	-0.0001	-0.0439
RohnYaS	0.5674	0.0000	0.0000	-0.7135	-0.5674	0.0000	0.0000	0.7135	0.0597	-0.0000	-0.0283
RohnZaS	0.8374	0.0000	0.0000	-0.8390	-0.8374	0.0000	0.0000	0.8390	0.0107	-0.0000	-0.0099
RohnAa1	0.1882	0.0000	0.0000	-0.1863	-0.1882	0.0000	0.0000	0.1863	1.7610	-0.0017	-0.0248
RohnBa1	0.1882	0.0000	0.0000	-0.1863	-0.1882	0.0000	0.0000	0.1863	1.7610	-0.0017	-0.0248
RohnCa1	0.1882	0.0000	0.0000	-0.1863	-0.1882	0.0000	0.0000	0.1863	1.4440	-0.0013	-0.0252
RohnDa1	0.1882	0.0000	0.0000	-0.1863	-0.1882	0.0000	0.0000	0.1863	1.4443	-0.0013	-0.0115
RohnEa1	0.1882	0.0000	0.0000	-0.1863	-0.1882	0.0000	0.0000	0.1863	1.4443	-0.0013	-0.0115
RohnFa1	0.2646	0.0000	0.0000	-0.2170	-0.2646	0.0000	0.0000	0.2170	1.3649	-0.0013	-0.0252
RohnGa1	0.2646	0.0000	0.0000	-0.2170	-0.2646	0.0000	0.0000	0.2170	1.3649	-0.0013	-0.0252
RohnHa1	0.2646	0.0000	0.0000	-0.2170	-0.2646	0.0000	0.0000	0.2170	1.3649	-0.0013	-0.0252
RohnIa1	0.2646	0.0000	0.0000	-0.2170	-0.2646	0.0000	0.0000	0.2170	1.3649	-0.0013	-0.0252
RohnJa1	0.2646	0.0000	0.0000	-0.2170	-0.2646	0.0000	0.0000	0.2170	1.3649	-0.0013	-0.0252
RohnKa1	0.2646	0.0000	0.0000	-0.2170	-0.2646	0.0000	0.0000	0.2170	1.3649	-0.0013	-0.0252
RohnLa1	0.2646	0.0000	0.0000	-0.2170	-0.2646	0.0000	0.0000	0.2170	1.3649	-0.0013	-0.0252
RohnMa1	0.2646	0.0000	0.0000	-0.2170	-0.2646	0.0000	0.0000	0.2170	1.3649	-0.0013	-0.0252
RohnNa1	0.2646	0.0000	0.0000	-0.2170	-0.2646	0.0000	0.0000	0.2170	1.3649	-0.0013	-0.0252
RohnOa1	0.2646	0.0000	0.0000	-0.2170	-0.2646	0.0000	0.0000	0.2170	1.3649	-0.0013	-0.0252
RohnPa1	0.2646	0.0000	0.0000	-0.2170	-0.2646	0.0000	0.0000	0.2170	1.3649	-0.0013	-0.0252
RohnQa1	0.2646	0.0000	0.0000	-0.2170	-0.2646	0.0000	0.0000	0.2170	1.3649	-0.0013	-0.0252
RohnRa1	0.2646	0.0000	0.0000	-0.2170	-0.2646	0.0000	0.0000	0.2170	1.3649	-0.0013	-0.0252
RohnSa1	0.2646	0.0000	0.0000	-0.2170	-0.2646	0.0000	0.0000	0.2170	1.3649	-0.0013	-0.0252
RohnTa1	0.2646	0.0000	0.0000	-0.2170	-0.2646	0.0000	0.0000	0.2170	1.3649	-0.0013	-0.0252
RohnUa1	0.2646	0.0000	0.0000	-0.2170	-0.2646	0.0000	0.0000	0.2170	1.3649	-0.0013	-0.0252
RohnVa1	0.2646	0.0000	0.0000	-0.2170	-0.2646	0.0000	0.0000	0.2170	1.3649	-0.0013	-0.0252
RohnWa1	0.2646	0.0000	0.0000	-0.2170	-0.2646	0.0000	0.0000	0.2170	1.3649	-0.0013	-0.0252
RohnXa1	0.2646	0.0000	0.0000	-0.2170	-0.2646	0.0000	0.0000	0.2170	1.3649	-0.0013	-0.0252
RohnYa1	0.2646	0.0000	0.0000	-0.2170	-0.2646	0.0000	0.0000	0.2170	1.3649	-0.0013	-0.0252
RohnZa1	0.2646	0.0000	0.0000	-0.2170	-0.2646	0.0000	0.0000	0.2170	1.3649	-0.0013	-0.0252
RohnAa2	1.1155	-0.0500	0.0000	-0.3021	-0.7887	0.0000	0.0000	0.3021	1.6812	-0.0020	0.0162
RohnBa2	1.1155	-0.0500	0.0000	-0.3021	-0.7887	0.0000	0.0000	0.3021	1.6812	-0.0020	0.0162
RohnCa2	0.1882	0.0000	0.0000	-0.1863	-0.1882	0.0000	0.0000	0.1863	1.6015	-0.0021	0.0184
RohnDa2	0.1882	0.0000	0.0000	-0.1863	-0.1882	0.0000	0.0000	0.1863	1.5242	-0.0020	0.0202
RohnEa2	0.1882	0.0000	0.0000	-0.1863	-0.1882	0.0000	0.0000	0.1863	1.5220	-0.0022	0.0204
RohnFa2	0.2646	0.0000	0.0000	-0.2170	-0.2646	0.0000	0.0000	0.2170	1.3660	-0.0015	0.0240
RohnGa2	0.2646	0.0000	0.0000	-0.2170	-0.2646	0.0000	0.0000	0.2170	1.3660	-0.0015	0.0240
RohnHa2	2.1265	0.0000	0.0000	-1.1256	-2.1265	0.0000	0.0000	1.1256	1.2884	-0.0020	0.0242
RohnIa2	2.1265	0.0000	0.0000	-1.1256	-2.1265	0.0000	0.0000	1.1256	1.2884	-0.0020	0.0242
RohnJa2	0.2646	0.0000	0.0000	-0.2170	-0.2646	0.0000	0.0000	0.2170	1.2091	-0.0011	0.0274
RohnKa2	0.2646	0.0000	0.0000	-0.2170	-0.2646	0.0000	0.0000	0.2170	1.2091	-0.0011	0.0274
RohnLa2	2.2052	0.0000	0.0000	-1.0297	-2.2052	0.0000	0.0000	1.0297	1.0325	-0.0011	0.0305

Label	Angle Torsion (ft-lbs)	Origin X Moment (ft-lbs)	Origin Y Moment (ft-lbs)	Origin Z Moment (ft-lbs)	End X Moment (ft-lbs)	End Y Moment (ft-lbs)	End Z Moment (ft-lbs)	Shear (lbs)	X Shear (lbs)	Y Shear (lbs)
RohnCa2	2.3119	0.0000	-1.0777	-2.3119	-0.0000	1.0777	1.0317	-0.0009	0.0307	0.0307
RohnCb1	2.4592	0.0000	-1.6028	-2.4592	0.0000	1.6028	0.9340	-0.0006	0.0319	0.0319
RohnCb2	2.4592	0.0000	-1.6028	-2.4592	0.0000	1.6028	0.9340	-0.0011	0.0321	0.0321
RohnDa1	2.6273	0.0000	-1.3931	-2.6273	0.0000	1.3931	0.7496	-0.0004	0.0332	0.0332
RohnDa2	2.6273	0.0000	-1.3931	-2.6273	0.0000	1.3931	0.7496	-0.0007	0.0333	0.0333
RohnDb1	0.4002	0.0000	-0.3257	-0.4002	0.0000	0.3257	0.6629	-0.0015	0.0331	0.0331
RohnDb2	0.4002	0.0000	-0.3257	-0.4002	0.0000	0.3257	0.6629	-0.0015	0.0331	0.0331
RohnEa1	0.4104	0.0000	-0.4437	-0.4104	0.0000	0.4437	0.5105	-0.0010	0.0316	0.0316
RohnEa2	0.4104	0.0000	-0.4437	-0.4104	0.0000	0.4437	0.5110	-0.0010	0.0317	0.0317
RohnEb1	0.4104	0.0000	-0.4437	-0.4104	0.0000	0.4437	0.4413	-0.0007	0.0308	0.0308
RohnEb2	0.4104	0.0000	-0.4437	-0.4104	0.0000	0.4437	0.4420	-0.0009	0.0309	0.0309
RohnFa1	0.5173	0.0000	-0.5999	-0.5173	0.0000	0.5999	0.2881	-0.0026	0.0275	0.0275
RohnFa2	0.5173	0.0000	-0.5999	-0.5173	0.0000	0.5999	0.2890	-0.0023	0.0276	0.0276
RohnGa1	0.5327	0.0000	-0.6702	-0.5327	0.0000	0.6702	0.1491	-0.0026	0.0218	0.0218
RohnGa2	0.5327	0.0000	-0.6702	-0.5327	0.0000	0.6702	0.1499	-0.0023	0.0218	0.0218
RohnHa1	0.5674	0.0000	-0.7135	-0.5674	0.0000	0.7135	0.0537	-0.0029	0.0140	0.0140
RohnHa2	0.5674	0.0000	-0.7135	-0.5674	0.0000	0.7135	0.0542	-0.0027	0.0140	0.0140
RohnIa1	0.8374	0.0000	-0.8390	-0.8374	0.0000	0.8390	0.0063	-0.0020	0.0048	0.0048
RohnIa2	0.8374	0.0000	-0.8390	-0.8374	0.0000	0.8390	0.0064	-0.0020	0.0048	0.0048
SNB-Aa1	0.1882	0.0000	-0.1863	-0.1882	0.0000	0.1863	1.6818	-0.0016	0.0054	0.0054
SNB-Aa2	0.1882	0.0000	-0.1863	-0.1882	0.0000	0.1863	1.6819	-0.0016	0.0054	0.0054
SNB-Ab1	0.1882	0.0000	-0.1863	-0.1882	0.0000	0.1863	1.6026	-0.0015	0.0075	0.0075
SNB-Ab2	0.1882	0.0000	-0.1863	-0.1882	0.0000	0.1863	1.6025	-0.0015	0.0076	0.0076
SNB-Ac1	0.1882	0.0000	-0.1863	-0.1882	0.0000	0.1863	1.5231	-0.0013	0.0096	0.0096
SNB-Ac2	0.1882	0.0000	-0.1863	-0.1882	0.0000	0.1863	1.5231	-0.0015	0.0097	0.0097
SNB-Ba1	0.2646	0.0000	-0.2170	-0.2646	0.0000	0.2170	1.3652	-0.0011	0.0137	0.0137
SNB-Ba2	0.2646	0.0000	-0.2170	-0.2646	0.0000	0.2170	1.3652	-0.0013	0.0138	0.0138
SNB-Bb1	0.2646	0.0000	-0.2170	-0.2646	0.0000	0.2170	1.2866	-0.0010	0.0156	0.0156
SNB-Bb2	0.2646	0.0000	-0.2170	-0.2646	0.0000	0.2170	1.2866	-0.0012	0.0158	0.0158
SNB-Bc1	0.2646	0.0000	-0.2170	-0.2646	0.0000	0.2170	1.2085	-0.0008	0.0175	0.0175
SNB-Bc2	0.2646	0.0000	-0.2170	-0.2646	0.0000	0.2170	1.2085	-0.0012	0.0176	0.0176
SNB-Ca1	0.3897	0.0000	-0.2951	-0.3896	0.0000	0.2951	1.0309	-0.0003	0.0211	0.0211
SNB-Ca2	0.3897	0.0000	-0.2951	-0.3896	0.0000	0.2951	1.0310	-0.0013	0.0213	0.0213
SNB-Cb1	0.3897	0.0000	-0.2951	-0.3896	0.0000	0.2951	0.9330	-0.0001	0.0228	0.0228
SNB-Cb2	0.3897	0.0000	-0.2951	-0.3896	0.0000	0.2951	0.9330	-0.0013	0.0229	0.0229
SNB-Da1	0.4002	0.0000	-0.3257	-0.4002	0.0000	0.3257	0.7486	-0.0002	0.0248	0.0248
SNB-Da2	0.4002	0.0000	-0.3257	-0.4002	0.0000	0.3257	0.7486	-0.0012	0.0249	0.0249
SNB-Db1	0.4002	0.0000	-0.3257	-0.4002	0.0000	0.3257	0.6627	-0.0008	0.0249	0.0249
SNB-Db2	0.4002	0.0000	-0.3257	-0.4002	0.0000	0.3257	0.6627	-0.0017	0.0250	0.0250
SNB-Ea1	0.4104	0.0000	-0.4437	-0.4104	0.0000	0.4437	0.5110	-0.0003	0.0248	0.0248
SNB-Ea2	0.4104	0.0000	-0.4437	-0.4104	0.0000	0.4437	0.5111	-0.0009	0.0249	0.0249
SNB-Eb1	0.4104	0.0000	-0.4437	-0.4104	0.0000	0.4437	0.4418	-0.0004	0.0249	0.0249
SNB-Eb2	0.4104	0.0000	-0.4437	-0.4104	0.0000	0.4437	0.4418	-0.0010	0.0248	0.0248
SNB-Fa1	0.5173	0.0000	-0.5999	-0.5173	0.0000	0.5999	0.2880	-0.0026	0.0230	0.0230
SNB-Fa2	0.5173	0.0000	-0.5999	-0.5173	0.0000	0.5999	0.2880	-0.0030	0.0231	0.0231
SNB-Ga1	0.5327	0.0000	-0.6702	-0.5327	0.0000	0.6702	0.1494	-0.0024	0.0188	0.0188
SNB-Ga2	0.5327	0.0000	-0.6702	-0.5327	0.0000	0.6702	0.1494	-0.0026	0.0188	0.0188
SNB-Ha1	0.5674	0.0000	-0.7135	-0.5674	0.0000	0.7135	0.0543	-0.0026	0.0124	0.0124
SNB-Ha2	0.5674	0.0000	-0.7135	-0.5674	0.0000	0.7135	0.0543	-0.0026	0.0124	0.0124
SNB-Ia1	0.8374	0.0000	-0.8390	-0.8374	0.0000	0.8390	0.0058	-0.0023	0.0044	0.0044
SNB-Ia2	0.8374	0.0000	-0.8390	-0.8374	0.0000	0.8390	0.0058	-0.0023	0.0044	0.0044
SNB-Ib1	0.8374	0.0000	-0.8390	-0.8374	0.0000	0.8390	0.0058	-0.0023	0.0044	0.0044
SNB-Ib2	0.8374	0.0000	-0.8390	-0.8374	0.0000	0.8390	0.0058	-0.0023	0.0044	0.0044

Moments for Angles Modeled as Beams:

Label	Angle Torsion (ft-lbs)	Origin X Moment (ft-lbs)	Origin Y Moment (ft-lbs)	Origin Z Moment (ft-lbs)	End X Moment (ft-lbs)	End Y Moment (ft-lbs)	End Z Moment (ft-lbs)	Shear (lbs)	X Shear (lbs)	Y Shear (lbs)
Rohn-LA1P	0.01	1.04	4.68	26.06	-17.77	5.42	-2.62	8.13	8.13	-2.78
Rohn-LA1	2.04	-1.59	2.68	11.25	38.00	1.93	8.13	8.13	8.13	-2.78
Rohn-LA2P	-2.16	1.18	2.88	6.55	-16.77	1.55	-2.78	8.74	8.74	-2.78
Rohn-LA2	0.01	-26.06	17.77	-32.80	25.97	-11.76	-25.19	-25.19	-25.19	8.74
Rohn-LA21	2.04	-11.25	-38.00	-35.12	-88.05	-9.27	-25.19	-25.19	-25.19	8.74
Rohn-LA22	-2.16	6.55	16.77	1.15	3.92	-1.08	4.14	4.14	4.14	-2.78
Rohn-LA3P	0.01	32.79	-25.97	35.72	-13.14	13.69	-7.82	38.69	38.69	-2.78
Rohn-LA3	2.04	-35.12	88.05	40.70	105.53	15.15	38.69	38.69	38.69	-2.78
Rohn-LA32	-2.16	-1.15	-3.92	-24.20	50.89	-5.07	9.39	9.39	9.39	-2.78
Rohn-LA4P	0.01	-35.72	13.15	-18.78	24.82	-10.89	7.59	7.59	7.59	-2.78
Rohn-LA4	2.04	-40.70	-105.53	-61.82	-118.06	-20.49	-44.60	-44.60	-44.60	7.59

Rohn-LM42	-2.16	24.20	-50.89	46.17	-78.04	14.06	-25.76
Rohn-LB1P	3.01	18.10	-14.09	10.94	-2.36	5.81	-3.29
Rohn-LB11	8.55	60.13	124.64	115.06	226.51	35.01	70.17
Rohn-LB12	-2.44	-42.90	83.82	-109.28	210.95	-30.41	58.91
Rohn-LB2P	3.01	-10.94	2.36	-4.24	56.55	-3.04	11.78
Rohn-LB21	8.54	-115.06	-226.51	-141.95	-220.45	-51.36	-89.31
Rohn-LB22	-2.43	109.28	-210.96	141.26	-214.68	50.07	-85.05
Rohn-LB3P	3.01	4.24	-56.55	4.08	-0.39	1.66	-11.38
Rohn-LB31	8.55	141.95	220.45	77.72	166.58	43.90	77.34
Rohn-LB32	-2.44	-141.27	214.68	-77.72	165.13	-43.77	75.89
Rohn-LB4P	3.01	-4.08	0.39	-6.32	151.53	-2.08	30.37
Rohn-LB41	8.54	-77.72	-166.58	19.93	152.72	-11.54	-2.77
Rohn-LB42	-2.43	77.79	-165.13	-14.86	149.51	12.57	-3.12
Rohn-LC1P	3.01	6.32	-151.53	1.82	86.90	1.22	-9.70
Rohn-LC11	8.53	-19.94	-152.72	-47.45	-1.49	-10.11	-23.13
Rohn-LC12	-2.42	14.86	-149.51	49.63	-5.04	9.67	-23.18
Rohn-LC2P	3.01	1.82	-86.90	1.23	104.61	-0.09	2.65
Rohn-LC21	8.54	47.45	-86.90	-8.48	143.83	5.83	21.73
Rohn-LC22	-2.43	-49.63	5.04	13.40	134.09	-5.42	20.81
Rohn-LC3P	3.01	-1.24	-104.61	-3.16	238.01	-0.66	20.03
Rohn-LC31	8.54	8.48	-143.83	96.98	317.52	15.82	26.05
Rohn-LC32	-2.44	-13.41	-134.09	-104.02	339.10	-17.61	30.75
Rohn-LD1P	3.01	3.16	-238.01	6.65	396.80	1.47	23.84
Rohn-LD11	8.50	-96.98	-317.53	-227.37	49.08	-48.65	-40.26
Rohn-LD12	-2.39	104.01	-339.10	235.19	31.78	50.88	-46.09
Rohn-LD2P	3.01	-6.65	-396.80	-2.02	177.20	-1.30	-32.88
Rohn-LD21	8.61	227.36	-49.08	310.74	765.95	80.43	107.19
Rohn-LD22	-2.50	-235.19	-31.78	-310.74	771.84	-81.63	110.66
Rohn-LD3P	3.01	2.02	-177.20	-0.56	705.21	0.22	79.31
Rohn-LD31	8.44	310.50	-765.96	-291.18	92.55	-90.23	-100.99
Rohn-LD32	-2.33	-310.72	-771.85	292.86	94.35	90.52	-101.60
Rohn-LE1P	3.01	0.55	-705.21	11.80	272.39	1.85	-64.99
Rohn-LE11	8.58	291.18	-92.55	132.71	568.46	63.58	71.38
Rohn-LE12	-2.47	-292.86	-94.34	-128.02	554.91	-63.13	69.08
Rohn-LE2P	3.01	-11.80	-272.39	-25.61	227.34	-5.60	-6.74
Rohn-LE21	8.53	-132.70	-568.47	108.77	453.82	-3.58	-17.14
Rohn-LE22	-2.42	128.01	-554.92	-120.96	491.73	1.05	-9.45
Rohn-LE3P	3.02	25.60	-227.34	26.35	1087.65	7.80	129.21
Rohn-LE31	8.47	-108.76	-453.82	-416.13	170.28	-78.72	-42.52
Rohn-LE32	-2.36	120.95	-491.73	451.05	93.98	85.78	-59.65
Rohn-LF1P	3.00	-26.35	-1087.64	-37.74	90.16	-6.41	-99.77
Rohn-LF11	8.74	416.13	-170.27	740.70	1694.61	115.55	152.25
Rohn-LF12	-2.63	-451.05	-93.96	-762.16	1753.16	-121.18	165.72
Rohn-LF2P	3.03	37.74	-90.16	28.06	1610.28	6.58	152.06
Rohn-LF21	8.21	-740.63	-1694.65	-889.20	-304.86	-162.78	-199.70
Rohn-LF22	-2.09	762.07	-1753.21	921.08	-374.27	168.11	-212.48
Rohn-LG1P	3.00	-28.07	-1610.28	-24.84	-84.36	5.29	-169.51
Rohn-LG11	8.69	889.18	304.87	964.65	2024.10	187.16	232.82
Rohn-LG12	-2.79	-921.07	374.29	-996.39	2057.39	-191.52	282.87
Rohn-LG2P	3.02	24.84	84.36	12.42	1866.05	3.73	195.11
Rohn-LG21	8.19	-984.56	-2024.15	-1074.80	-436.99	-205.68	-245.81
Rohn-LG22	-2.08	996.29	-2057.44	1079.50	-447.25	207.32	-250.16
Rohn-LH1P	3.01	-12.42	-1866.05	0.33	-158.90	-1.21	-202.59
Rohn-LH11	8.87	1074.79	437.01	1207.75	2416.41	227.96	284.97
Rohn-LH12	-2.77	-1079.50	447.27	-1210.48	2423.87	-228.70	286.74
Rohn-LH2P	3.01	-0.33	158.90	-1.91	2378.15	-0.22	253.84
Rohn-LH21	7.86	-1207.62	2416.48	-1408.41	-648.22	-261.26	-306.06
Rohn-LH22	-1.75	1210.33	-2423.99	1412.97	-652.65	261.36	-307.25
Rohn-LI1P	3.01	1.91	-2378.15	-8.28	-189.44	-0.64	-256.85
Rohn-LI11	8.75	1408.40	648.24	1811.72	3738.65	321.61	438.14
Rohn-LI12	-2.64	-1412.96	652.67	-1799.04	3717.64	-320.80	436.48
Rohn-LI2P	3.01	8.27	189.44	53.01	5397.35	6.13	588.91
Rohn-LI21	7.47	-1811.54	-3738.74	-1861.55	1363.52	-366.84	-237.22
Rohn-LI22	-1.37	1798.85	-3717.73	1811.84	1457.98	360.61	-225.69
Rohn-H1P	0.20	2.22	0.09	3.07	0.70	0.70	-0.13
Rohn-H11	-0.06	0.07	-1.04	0.00	1.20	0.01	0.02
Rohn-H12	0.38	-3.10	1.03	-3.29	-0.06	-0.85	0.13
Rohn-H2P	-0.52	6.62	-1.52	6.92	-3.48	1.53	-0.61
Rohn-H21	-0.11	1.18	-3.21	0.07	-0.08	0.14	-0.37

Rohn-H22	0.15	-6.69	0.49	-6.16	-1.11	-1.45	-0.07
SNB-LA1P	-0.03	4.04	66.28	14.54	-9.89	3.71	11.27
SNB-LA11	0.28	66.99	-23.22	16.49	16.21	16.68	-1.40
SNB-LA12	-0.28	-71.19	-35.93	-24.99	-6.89	-19.22	-8.56
SNB-LA2P	0.03	-14.54	9.89	-19.71	36.80	-6.85	9.33
SNB-LA21	0.28	-16.49	-16.21	-6.37	-43.28	4.57	-11.89
SNB-LA22	-0.03	24.99	6.89	16.85	-14.09	8.36	-1.44
SNB-LA3P	0.03	19.71	-36.80	16.20	-39.27	7.18	-15.20
SNB-LA31	0.28	6.37	43.28	4.95	74.59	2.26	23.55
SNB-LA32	-0.28	-16.85	14.09	-13.63	50.64	-6.09	12.94
SNB-LA4P	-0.03	-16.20	39.27	-10.43	117.66	-5.32	31.36
SNB-LA41	0.28	-4.95	-74.59	12.48	-71.73	1.51	-29.24
SNB-LA42	-0.28	13.63	-50.64	-5.29	-54.87	1.67	-21.06
SNB-LB1P	-0.06	9.59	180.97	4.66	46.57	2.85	45.48
SNB-LB11	3.27	113.35	61.20	49.76	101.76	32.60	32.57
SNB-LB12	-3.06	-118.94	47.77	-52.99	94.71	-34.36	28.47
SNB-LB2P	0.06	-4.66	-46.57	-2.68	120.02	-1.47	14.68
SNB-LB21	3.26	-49.76	-101.76	-33.47	-5.90	-16.63	-21.51
SNB-LB22	-3.05	52.99	-94.71	35.71	-1.57	17.73	-19.24
SNB-LB3P	-0.06	2.68	-120.02	2.22	-57.11	0.98	-35.40
SNB-LB31	3.27	33.47	5.90	45.45	200.25	15.77	41.20
SNB-LB32	-3.05	-35.71	1.57	-45.70	197.62	-16.27	39.80
SNB-LB4P	-0.06	-2.22	57.11	-0.19	945.10	-0.48	120.37
SNB-LB41	3.26	45.45	-200.25	-0.96	34.90	-9.27	-33.04
SNB-LB42	-3.05	45.70	-197.62	3.72	36.52	9.88	-32.19
SNB-LC1P	0.03	0.19	-31.90	0.31	185.04	0.07	22.98
SNB-LC11	8.24	180.78	-41.25	76.48	176.62	38.59	20.31
SNB-LC12	-8.17	-182.79	42.56	-76.33	176.37	-38.87	20.07
SNB-LC2P	0.03	-0.31	-185.04	0.97	58.09	0.10	-19.00
SNB-LC21	8.22	-76.48	-176.62	27.97	347.69	-7.25	25.59
SNB-LC22	-8.14	76.33	-176.37	-28.34	346.38	7.16	25.43
SNB-LC3P	0.03	-0.97	-58.09	-0.35	606.31	-0.20	58.29
SNB-LC31	8.23	-27.97	-347.69	4.54	-45.26	-3.51	-88.94
SNB-LC32	-8.15	28.34	-346.38	-0.23	-42.43	4.22	-58.32
SNB-LD1P	-0.02	0.45	115.39	2.88	698.77	0.51	122.22
SNB-LD11	10.64	327.39	-37.18	17.80	537.05	51.78	74.98
SNB-LD12	-10.47	-331.86	-40.46	-18.70	533.08	-52.58	73.89
SNB-LD2P	-0.02	-2.98	-698.77	-0.14	60.82	-0.47	-95.50
SNB-LD21	10.63	-17.79	-537.05	298.95	846.13	42.05	46.22
SNB-LD22	-10.46	18.70	-533.08	-296.17	847.92	-41.50	47.08
SNB-LD3P	-0.02	0.14	-60.82	-0.74	1551.11	-0.09	223.78
SNB-LD31	10.49	-298.94	-846.14	-34.15	265.07	-96.00	-87.15
SNB-LD32	-10.32	296.15	-847.93	34.42	266.96	95.92	-87.13
SNB-LE1P	-0.28	1.34	-334.16	9.80	1080.65	1.67	112.06
SNB-LE11	21.78	690.21	-224.35	226.79	1174.01	137.55	142.45
SNB-LE12	-21.39	-692.85	-227.87	-227.87	1162.13	-138.11	140.18
SNB-LE2P	-0.28	-9.80	1080.65	-6.38	427.84	-2.42	-97.71
SNB-LE21	21.69	-226.77	-1174.01	352.20	1669.94	18.76	74.16
SNB-LE22	-21.29	227.85	-1162.13	-338.18	1695.23	-16.50	78.23
SNB-LE3P	-0.28	6.38	-427.84	4.65	2982.14	1.66	378.99
SNB-LE31	21.57	-352.17	-1669.94	-703.38	-486.04	-158.32	-323.37
SNB-LE32	-21.18	338.15	-1685.23	690.82	-488.74	154.34	-327.57
SNB-LF1P	-0.02	-4.53	-1710.58	-1.45	-183.05	-0.60	-189.36
SNB-LF11	37.89	1495.17	278.95	1550.36	3153.17	304.23	342.82
SNB-LF12	-37.87	-1483.78	290.74	-1535.87	3163.05	-301.64	344.99
SNB-LF2P	-0.02	1.45	183.05	3.12	3600.23	0.46	378.36
SNB-LF21	36.68	-1550.24	-1534.35	-1210.07	-308.11	-435.82	
SNB-LF22	-36.67	1535.75	-3163.13	1523.55	-1219.77	305.58	-437.77
SNB-LG1P	0.27	3.03	-2079.69	-0.19	135.90	0.32	-194.39
SNB-LG11	62.32	2852.60	603.92	2705.61	5791.32	555.21	638.79
SNB-LG12	-62.68	-2841.86	613.54	-2691.72	5799.32	-552.75	640.55
SNB-LG2P	-0.27	0.19	-135.90	2.03	6133.95	0.22	599.88
SNB-LG21	60.53	-7705.40	-5791.44	2168.54	-1562.24	-486.83	-734.50
SNB-LG22	-60.89	2691.51	-5799.44	-2166.71	-1565.43	485.26	735.61
SNB-LH1P	0.08	-1.88	-3942.99	3.80	-224.33	0.19	-416.83
SNB-LH11	60.29	3725.83	814.54	3198.94	6398.60	691.66	720.43
SNB-LH12	-60.51	-3724.90	817.11	-3194.24	6396.76	-691.10	720.50
SNB-LH2P	0.08	-3.80	224.34	-1.82	7035.01	-0.56	726.16
SNB-LH21	57.57	-3198.66	-6398.77	-3114.68	-1874.14	-630.55	-826.24

SNB-LH22	-57.78	3193.96	-6396.92	3117.78	-1870.09	630.39	-825.65
SNB-L11P	-0.02	-1.91	-4604.11	7.89	-401.33	0.98	-470.62
SNB-L11I	-20.26	5046.17	926.98	5282.81	9685.55	1031.67	1060.99
SNB-L112	-20.44	-5049.38	926.98	-5277.98	9688.99	-1031.51	1059.92
SNB-L12P	-0.02	-7.89	101.33	-1.67	13124.61	-0.96	1322.93
SNB-L12I	16.07	-5282.32	-9695.83	-5302.76	2554.68	1057.21	-713.24
SNB-LI22	-16.24	5277.47	-9689.26	5310.49	2562.12	1057.50	-711.84
SNB-H1aP	-1.76	40.40	66.77	149.97	-0.46	94.22	32.82
SNB-H1bP	-1.76	-149.97	-0.47	-30.16	34.88	-89.15	17.50
SNB-H1cP	-2.06	50.39	-35.68	137.72	-1.09	93.10	-18.20
SNB-H1dP	-2.06	-137.71	-1.09	-44.49	35.17	-90.18	17.95
SNB-H1eP	6.22	42.65	-34.72	143.52	-2.27	92.15	-18.31
SNB-H1fP	6.22	-42.65	34.72	-143.52	2.27	-92.15	18.31
SNB-H2aP	6.22	-143.52	2.26	-40.74	-66.58	-91.20	-31.84
SNB-H2bP	-7.59	176.66	53.31	151.48	2.53	121.40	20.66
SNB-H2cP	-7.58	-151.48	-2.52	-15.84	20.09	-61.91	6.50
SNB-H2dP	0.63	111.27	-25.19	136.14	4.12	91.54	-7.79
SNB-H2eP	0.63	-111.27	25.19	-136.14	-4.12	-91.54	7.79
SNB-H2fP	6.74	12.85	-19.81	153.05	1.22	61.38	-6.88
SNB-H2gP	6.74	-12.85	19.81	-153.05	-1.22	-61.38	6.88
SNB-H3aP	-6.00	289.67	34.89	204.98	-3.85	149.11	9.17
SNB-H3bP	-6.00	-289.67	-34.89	-204.98	3.85	-149.11	-9.17
SNB-H3cP	0.03	169.08	-19.56	191.79	11.55	106.63	-2.37
SNB-H3dP	0.02	-191.79	11.55	-168.56	19.44	-106.47	2.33
SNB-H3eP	5.92	10.52	-11.03	205.07	-3.83	63.70	-4.39
SNB-H3fP	5.92	-10.52	11.03	-205.07	3.83	-63.70	4.39
SNB-H4aP	-6.55	420.45	17.79	327.67	-14.87	183.99	0.72
SNB-H4bP	-6.55	-420.45	-17.79	-327.67	14.87	-183.99	-0.72
SNB-H4cP	-0.09	276.77	-9.59	314.81	34.29	145.50	6.07
SNB-H4dP	-0.11	-314.81	9.59	-276.77	-34.29	-145.48	-6.11
SNB-H4eP	6.62	-39.27	3.46	327.45	-15.05	104.95	-4.56
SNB-H4fP	6.63	327.45	15.06	-420.51	-17.73	-183.95	-0.65
SNB-H5aP	-10.26	708.31	27.51	426.89	-24.07	239.16	0.73
SNB-H5bP	-10.25	-708.31	-27.51	-426.89	24.07	-239.16	-0.73
SNB-H5cP	-0.34	360.03	-18.83	405.06	56.82	161.19	8.00
SNB-H5dP	-0.36	-360.03	18.83	-405.06	-56.82	-161.11	-8.05
SNB-H5eP	10.57	-39.47	0.48	426.13	-24.13	81.46	-4.98
SNB-H5fP	10.58	426.13	24.13	-708.95	-27.22	-239.13	-0.65
SNB-H6aP	-47.80	744.43	8.96	684.96	-23.46	263.32	-2.65
SNB-H6bP	-47.79	-744.43	-8.96	-684.96	23.46	-263.32	2.57
SNB-H6cP	-0.13	616.63	-14.56	580.29	47.56	220.50	6.08
SNB-H6dP	-0.15	-616.63	14.56	-580.29	-47.56	-220.50	-6.06
SNB-H6eP	47.92	267.89	-47.56	-617.27	14.68	-220.62	-6.06
SNB-H6fP	47.93	-267.89	47.56	617.27	-14.68	220.62	6.06
SNB-H7aP	-42.94	902.57	22.13	-744.47	-9.22	-263.29	2.40
SNB-H7bP	-42.92	-902.57	-22.13	744.47	9.22	263.29	-2.40
SNB-H7cP	0.03	918.48	30.20	-724.90	-17.25	282.61	2.10
SNB-H7dP	0.01	-913.28	-30.20	724.90	17.25	-282.61	-2.10
SNB-H7eP	42.91	723.04	17.48	1002.04	-29.06	282.67	-1.92
SNB-H7fP	42.93	-723.04	-17.48	-1002.04	29.06	-282.67	1.92
SNB-H8aP	-11.87	1186.04	29.10	-902.77	-7.99	-311.76	6.09
SNB-H8bP	-11.87	-1186.04	-29.10	902.77	7.99	311.76	-6.09
SNB-H8cP	-0.07	1112.67	5.73	-869.51	-8.52	-302.70	3.55
SNB-H8dP	-0.12	-1112.67	-5.73	869.51	8.52	302.70	-3.55
SNB-H8eP	11.98	870.06	8.44	1185.89	-32.47	302.76	-3.55
SNB-H8fP	12.01	-870.06	-8.44	-1185.89	32.47	-302.76	3.55
SNB-H9aP	-29.02	1420.18	-19.12	1379.62	-38.41	374.70	-7.68
SNB-H9bP	-29.00	-1420.18	19.12	-1379.62	38.41	-374.70	7.68
SNB-H9cP	0.01	1353.46	26.51	1338.13	75.97	360.23	13.72
SNB-H9dP	-0.05	-1353.46	-26.51	-1338.13	-75.97	-360.23	-13.72
SNB-H9eP	29.04	1108.21	-7.82	1379.59	-38.34	332.94	-6.20
SNB-H9fP	29.06	-1108.21	7.82	-1379.59	38.34	-332.94	6.20
SNB-H9gP	29.06	-1379.59	38.34	-1420.29	19.22	-374.71	7.73



Equilibrium Joint Positions and Rotations for Load Case "2: 0.9D + 1.0Dg + 1.6Wc":

Joint Label	X-Displ (ft)	Y-Displ (ft)	Z-Displ (ft)	X-Rot (deg)	Y-Rot (deg)	Z-Rot (deg)	X-Pos (ft)	Y-Pos (ft)	Z-Pos (ft)
RohnAP	1.757	-0.0008566	-0.08565	0.0063	0.9042	0.1112	6.09	-0.0008566	179.9
RohnBP	1.441	-4.944e-005	-0.0942	-0.0011	0.9022	0.1110	6.562	-4.944e-005	159.9
RohnCP	1.129	-0.0003082	-0.09815	-0.0006	0.8694	0.0073	7.038	-0.0003082	139.9
RohnDP	0.8377	-0.0004046	-0.08804	-0.0005	0.7889	0.0048	7.533	-0.0004046	119.9
RohnEP	0.5836	-0.0005454	-0.08004	-0.0005	0.6499	0.0032	8.065	-0.0005454	99.91
RohnFP	0.3774	-0.0007025	-0.0764	-0.0003	0.5153	0.0021	8.645	-0.0007025	79.92
RohnGP	0.216	-0.0006311	-0.06144	-0.0006	0.3914	0.0015	9.271	-0.0006311	59.94
RohnHP	0.09911	-0.0004152	-0.0442	-0.0010	0.2682	0.0009	9.94	-0.0004152	39.96
RohnIP	0.02794	-0.0002054	-0.02172	-0.0006	0.1220	0.0003	10.66	-0.0002054	19.98
RohnJP	0	0	0	0	0	0	11.42	0	0
RohnAP	1.757	-0.001726	-0.05107	0.0020	0.9008	-0.0000	4.09	-0.001726	179.9
RohnBP	1.441	-0.00132	-0.06035	0.0009	0.8964	-0.0000	4.562	-0.00132	159.9
RohnCP	1.129	-0.0009444	-0.06745	0.0010	0.8635	0.0000	5.037	-0.0009444	139.9
RohnDP	0.8379	-0.0006312	-0.06987	0.0008	0.7794	-0.0000	5.533	-0.0006312	119.9
RohnEP	0.5837	-0.0004042	-0.06432	0.0006	0.6358	0.0000	6.065	-0.0004042	99.94
RohnFP	0.3775	-0.0002485	-0.05953	0.0004	0.5159	0.0000	6.646	-0.0002485	79.94
RohnGP	0.2161	-0.0001362	-0.04914	0.0003	0.3745	0.0000	7.271	-0.0001362	59.95
RohnHP	0.09913	-5.785e-005	-0.03641	0.0002	0.2606	0.0000	7.94	-5.785e-005	39.96
RohnIP	0.02794	-1.49e-005	-0.01843	0.0001	0.1192	0.0000	8.656	-1.49e-005	19.98
RohnJP	0	0	0	0	0	0	9.415	0	0
RohnA1	1.759	-0.002185	0.01615	0.0011	0.9069	0.0044	-0.408	-3.755	180
RohnA2	1.757	-0.002091	0.01631	0.0006	0.9059	0.0178	-4.094	3.75	180
RohnB1	1.443	-0.0020164	0.02436	0.0060	0.9086	0.0000	-1.118	-4.437	160
RohnB2	1.44	-0.001964	0.02457	-0.0016	0.9067	0.0222	-1.12	4.433	160
RohnC1	1.13	-0.0009647	0.0309	-0.0016	0.8635	0.0089	-1.825	-5.118	140
RohnC2	1.129	-0.0011575	0.03108	0.0061	0.8601	0.0234	-1.826	5.116	140
RohnD1	0.8379	-0.0002252	0.03469	-0.0020	0.7846	-0.0132	-2.51	-5.798	120
RohnD2	0.8374	-0.001327	0.03485	0.0052	0.7821	0.0227	-2.51	5.797	120
RohnE1	0.5838	-0.0001772	0.03361	-0.0001	0.6490	-0.0130	-3.157	-6.479	100
RohnE2	0.5841	-0.0004873	0.03373	0.0027	0.6466	0.0195	-3.156	6.478	100
RohnF1	0.3766	-0.0005169	0.03075	0.0110	0.5371	-0.0128	-3.757	-7.16	80.03
RohnF2	0.3776	-0.0004388	0.03082	-0.0096	0.5361	0.0170	-3.756	7.16	80.03
RohnG1	0.2154	-0.000361	0.0256	0.0033	0.3975	-0.0097	-4.312	-7.841	60.03
RohnG2	0.2165	-1.751e-005	0.02566	-0.0029	0.3977	0.0126	-4.311	7.842	60.03
RohnH1	0.09842	-0.0004172	0.01885	0.0032	0.2744	-0.0071	-4.822	-8.522	40.02
RohnH2	0.09906	-0.0011701	0.01889	-0.0034	0.2751	0.0089	-4.821	8.522	40.02
RohnI1	0.02763	-0.0001878	0.009378	0.0060	0.1346	-0.0040	-5.287	-9.206	20.01
RohnI2	0.02796	-2.775e-005	0.009398	-0.0063	0.1354	0.0046	-5.287	9.206	20.01
RohnJ1	0	0	0	0	0	0	-5.71	-9.89	0
RohnJ2	0	0	0	0	0	0	-5.71	9.89	0
RohnA1	1.758	-0.001731	0.004211	-0.0028	0.9100	-0.0018	0.5911	-2.022	180
RohnA2	1.758	-0.001724	0.004294	0.0048	0.9094	0.0020	0.5911	2.019	180
RohnB1	1.441	-0.001328	0.01272	0.0002	0.9037	-0.0021	-0.119	-2.704	160
RohnB2	1.441	-0.001315	0.01282	0.0021	0.9039	0.0023	-0.1191	2.702	160
RohnC1	1.13	-0.0009366	0.02013	-0.0002	0.8716	-0.0029	-0.8243	-3.385	140
RohnC2	1.13	-0.0009599	0.02025	0.0022	0.8716	0.0030	-0.8243	3.383	140
RohnD1	0.8384	-0.0005453	0.02493	-0.0020	0.7921	-0.0050	-1.509	-4.067	120
RohnD2	0.8384	-0.0007196	0.02504	0.0035	0.7921	0.0050	-1.509	4.065	120
RohnE1	0.584	-0.0003111	0.02525	-0.0009	0.6441	-0.0040	-2.156	-4.747	100
RohnE2	0.584	-0.0004970	0.02534	0.0019	0.6440	0.0040	-2.156	4.746	100
RohnF1	0.3777	-0.0001576	0.02494	0.0043	0.5388	-0.0038	-2.756	-5.428	80.02
RohnF2	0.3777	-0.0003463	0.02501	-0.0035	0.5397	0.0038	-2.756	5.428	80.02
RohnG1	0.216	9.501e-006	0.02139	0.0028	0.4010	-0.0047	-3.311	-6.11	60.02
RohnG2	0.216	-0.0002888	0.02145	-0.0022	0.4010	0.0046	-3.311	6.11	60.02
RohnH1	0.0989	-0.0001415	0.01625	-0.0027	0.2751	-0.0045	-3.822	-6.79	40.02
RohnH2	0.0989	-0.0002586	0.01629	0.0030	0.2751	0.0045	-3.822	6.79	40.02
RohnI1	0.02752	-0.0002466	0.008334	0.0029	0.1399	-0.0042	-4.286	-7.472	20.01
RohnI2	0.02753	-0.0002762	0.008353	-0.0028	0.1399	0.0042	-4.286	7.472	20.01
RohnJ1	0	0	0	0	0	0	-4.708	-8.154	0
RohnJ2	0	0	0	0	0	0	-4.708	8.154	0

RohnA8	1.678	-0.0004212	-0.08806	0.0014	0.9084	0.0111	6.208	-0.0004212	174.9
RohnA5	1.598	-0.0003879	-0.9033	0.0027	0.9069	0.0111	6.325	-0.0003879	169.9
RohnA3	1.52	4.014e-005	-0.09237	0.0021	0.9043	0.0111	6.444	4.014e-005	164.9
RohnB8	1.362	-5.998e-005	-0.09585	-0.0002	0.9007	0.0101	6.68	-5.998e-005	154.9
RohnB5	1.286	-0.0001437	-0.09724	-0.0010	0.8943	0.0091	6.798	-0.0001437	149.9
RohnB3	1.203	-0.000217	-0.09824	-0.0010	0.8875	0.0082	6.918	-0.000217	144.9
RohnC8	1.029	-0.0003326	-0.0994	-0.0001	0.8448	0.0064	7.2	-0.0003326	133.2
RohnC5	0.9318	-0.0003628	-0.09926	-0.0004	0.8243	0.0056	7.365	-0.0003628	126.6
RohnC3	0.7481	-0.0004189	-0.09922	-0.0004	0.7470	0.0043	7.705	-0.0004189	113.2
RohnD8	0.6634	-0.000486	-0.09253	-0.0007	0.7082	0.0038	7.883	-0.000486	106.6
RohnD5	0.511	-0.000613	-0.08485	-0.0010	0.6029	0.0028	8.254	-0.000613	93.26
RohnD3	0.442	-0.0007196	-0.08097	-0.0003	0.5782	0.0025	8.448	-0.0007196	86.58
RohnE8	0.2929	-0.0007884	-0.06964	0.0002	0.4642	0.0018	8.954	-0.0007884	69.93
RohnE5	0.1541	-0.0005872	-0.05339	0.0005	0.3344	0.0012	9.602	-0.0005872	49.95
RohnE3	0.1059	-9.413e-005	-0.01128	0.0007	0.0857	0.0002	11.04	-9.413e-005	9.989
RohnF8	1.678	-0.001158	-0.05353	0.0005	0.9094	0.0001	4.208	-0.001158	174.9
RohnF5	1.599	-0.001579	-0.05893	0.0012	0.9063	0.0000	4.326	-0.001579	169.9
RohnF3	1.52	-0.001376	-0.05822	0.0017	0.9061	0.0000	4.444	-0.001376	164.9
RohnG8	1.264	-0.001128	-0.06435	0.0010	0.9026	0.0000	4.68	-0.001128	154.9
RohnG5	1.206	-0.001031	-0.06601	0.0011	0.8937	0.0000	4.798	-0.001031	144.9
RohnG3	1.129	-0.0008325	-0.06888	0.0010	0.8460	0.0000	5.2	-0.0008325	133.3
RohnH8	0.932	-0.0007261	-0.06967	0.0009	0.8270	0.0000	5.365	-0.0007261	126.6
RohnH5	0.7483	-0.0005406	-0.06699	0.0007	0.7491	0.0000	5.705	-0.0005406	113.3
RohnH3	0.6635	-0.0004708	-0.06708	0.0006	0.7120	0.0000	5.883	-0.0004708	106.6
RohnI8	0.5111	-0.0003395	-0.06337	0.0004	0.6075	0.0000	6.254	-0.0003395	93.28
RohnI5	0.4421	-0.0002991	-0.06173	0.0004	0.5780	0.0000	6.448	-0.0002991	86.6
RohnI3	0.2929	-0.0001904	-0.05495	0.0003	0.4690	0.0000	6.954	-0.0001904	69.95
RohnJ8	0.1542	-9.487e-005	-0.04335	0.0002	0.3412	0.0000	7.602	-9.487e-005	49.96
RohnJ5	0.05958	-2.992e-005	-0.02801	0.0001	0.2077	0.0000	8.294	-2.992e-005	29.97
RohnJ3	0.01059	-1.624e-006	-0.009751	0.0000	0.0869	0.0000	9.932	-1.624e-006	9.99
RohnK8	1.757	-0.001736	-0.02357	-0.0003	0.9051	0.0039	2.341	-1.012	180
RohnK5	1.758	-0.001728	-0.004135	0.0008	0.9097	0.0001	0.5912	-0.001728	180
RohnK3	1.757	-0.001716	-0.02352	0.0035	0.9051	0.0039	2.341	1.009	180
RohnL8	1.441	-0.001331	-0.02401	0.0036	0.8947	0.0040	2.221	-1.353	160
RohnL5	1.441	-0.001322	-0.01263	0.0012	0.9038	0.0001	0.119	-0.001322	160
RohnL3	1.441	-0.001307	-0.02397	-0.0016	0.8947	0.0040	2.221	1.35	160
RohnM8	1.129	-0.0009656	-0.02403	0.0073	0.8554	0.0038	2.106	-1.693	140
RohnM5	1.113	-0.0009478	-0.01989	0.0010	0.8716	0.0000	-0.8242	-0.0009478	140
RohnM3	1.129	-0.0009263	-0.02397	0.0054	0.8554	0.0039	2.106	1.691	140
RohnN8	0.8382	-0.0006643	-0.0233	0.0088	0.7695	0.0039	2.012	-2.034	120
RohnN5	0.8386	-0.0006325	-0.02426	0.0008	0.7921	0.0000	-1.509	-0.0006325	120
RohnN3	0.8382	-0.0005984	-0.02325	-0.0072	0.7695	0.0039	2.012	2.032	120
RohnO8	0.5839	-0.0004296	-0.02013	0.0099	0.6225	0.0029	1.954	-2.374	99.98
RohnO5	0.5842	-0.0004044	-0.0248	0.0005	0.6440	0.0000	-2.156	-0.0004044	100
RohnO3	0.5839	-0.0003791	-0.02009	-0.0088	0.6225	0.0029	1.954	2.373	99.98
RohnP8	0.3777	-0.0002821	-0.01862	0.0097	0.5151	0.0020	1.945	-2.714	79.98
RohnP5	0.3779	-0.000252	-0.02427	0.0004	0.5397	0.0000	-2.756	-0.000252	80.02
RohnP3	0.3777	-0.0002224	-0.01858	0.0008	0.5151	0.0020	1.945	2.714	79.98
RohnQ8	0.2161	-0.0001822	-0.01615	0.0046	0.3824	0.0015	1.98	-3.055	59.98
RohnQ5	0.2163	-0.0001397	-0.01984	0.0003	0.4010	0.0000	-3.311	-0.0001397	60.02
RohnQ3	0.2161	-9.793e-005	-0.01612	0.0041	0.3824	0.0015	1.98	3.055	59.98
RohnR8	0.0991	-0.0001065	-0.01309	0.0065	0.2544	0.0000	2.059	-3.395	39.99
RohnR5	0.09925	-5.852e-005	-0.01347	0.0002	0.2751	0.0000	-3.821	-5.852e-005	40.01
RohnR3	0.0991	-1.124e-005	-0.01307	0.0061	0.2544	0.0015	2.059	3.395	39.99
RohnS8	0.02786	-7.019e-005	-0.00927	0.0081	0.1181	0.0016	2.185	-3.736	19.99
RohnS5	0.02797	-1.482e-005	-0.004777	0.0001	0.1399	0.0000	-4.286	-1.482e-005	20
RohnS3	0.02786	4.013e-005	-0.009259	0.0080	0.1181	0.0016	2.185	3.736	19.99
RohnA1	1.68	-0.002242	0.01833	-0.0016	0.9001	0.0037	-0.5854	-3.925	175
RohnA2	1.678	-0.002206	-0.01848	-0.0003	0.9097	0.0190	-0.5871	3.921	175
RohnB1	1.601	-0.002379	0.02041	0.0030	0.9097	0.0222	-0.7625	-4.096	170
RohnB2	1.598	-0.002167	0.02062	0.0018	0.9122	0.0202	-0.7652	4.092	170
RohnA1	1.521	-0.002001	0.02244	0.0019	0.9063	0.0013	-0.9407	-4.266	165
RohnA2	1.519	-0.002215	0.02265	0.0027	0.9016	0.0208	-0.943	4.262	165
RohnB1	1.363	-0.001558	-0.02623	-0.0007	0.8964	0.0020	-1.296	-4.607	155
RohnB2	1.361	-0.002048	0.02643	0.0065	0.8915	0.0222	-1.298	4.603	155
RohnB1	1.286	-0.002029	0.02794	0.0025	0.8956	0.0048	-1.472	-4.778	150
RohnB2	1.284	-0.001216	0.02814	0.0026	0.8919	0.0231	-1.473	4.775	150

Joint Label	X Force Usage (kips)	X %	Y Force Usage (kips)	Y %	Z Comp. Usage (kips)	Z %	Uplift Usage (kips)	Uplift %	Result. Force Usage (kips)	Result. Force % (kips)	X Moment Usage (ft-k)	X-M. % (ft-k)	Y Moment Usage (ft-k)	Y-M. % (ft-k)	Z Moment Usage (ft-k)	Z-M. % (ft-k)	Max. Usage %
RohnBc1	1.207	-0.001153	0.02954	0.0102	0.9020	-0.00079	-1.649	-4.948	145								
RohnBc2	1.205	-0.001735	0.02974	-0.0050	0.8979	0.0243	-1.651	4.945	145								
RohnCa1	1.031	-0.001164	0.03254	0.0015	0.8476	-0.0108	-2.056	5.345	133.4								
RohnCa2	1.03	-0.0009826	0.03272	0.0023	0.8449	0.0237	-2.056	5.343	133.4								
RohnCb1	0.9323	-0.0006493	0.03386	0.0070	0.8329	-0.0128	-2.284	5.572	126.7								
RohnCb2	0.9317	-0.001173	0.03402	0.0040	0.8316	0.0241	-2.285	5.57	126.7								
RohnDd1	0.7483	-0.0004198	0.03493	0.0068	0.7601	-0.0141	-2.73	6.024	113.4								
RohnDd2	0.7482	-0.0007927	0.03508	0.0037	0.7574	0.0226	-2.73	6.024	113.4								
RohnDb1	0.6618	0.0006696	0.03461	0.0009	0.7061	-0.0136	-2.948	6.251	106.7								
RohnDb2	0.6618	-0.0016	0.03474	0.0017	0.7042	0.0211	-2.948	6.25	106.7								
RohnEa1	0.5097	0.0006182	0.03305	0.0077	0.6170	-0.0133	-3.362	6.705	93.37								
RohnEa2	0.5102	-0.001034	0.03316	-0.0035	0.6152	0.0190	-3.361	6.705	93.37								
RohnEb1	0.4406	0.0007201	0.0321	-0.0044	0.5677	-0.0123	-3.562	6.933	86.69								
RohnEb2	0.4413	-0.0008992	0.0322	0.0069	0.5647	0.0172	-3.562	6.932	86.69								
RohnFa1	0.2877	0.002603	0.02861	0.0032	0.4573	-0.0106	-4.043	7.498	70.03								
RohnFa2	0.2887	-0.002418	0.02868	0.0041	0.4570	0.0142	-4.042	7.499	70.03								
RohnGa1	0.149	0.00262	0.02567	0.0003	0.3335	-0.0083	-4.575	8.18	50.02								
RohnGa2	0.1498	-0.002337	0.02611	-0.0001	0.3351	0.0107	-4.574	8.18	50.02								
RohnHa1	0.05373	0.002953	0.01445	0.0018	0.2007	-0.0054	-5.064	8.861	30.01								
RohnHa2	0.0542	-0.002752	0.01448	0.0016	0.2015	0.0065	-5.064	8.861	30.01								
RohnIa1	0.006317	0.002096	0.004905	-0.0009	0.0840	-0.0026	-5.306	9.546	10								
RohnIa2	0.00648	-0.002012	0.004916	0.0003	0.0852	0.0029	-5.306	9.546	10								
SNB-Aa1	1.678	-0.001625	0.06401	0.0025	0.9055	-0.0020	-0.4134	-2.193	175								
SNB-Aa2	1.679	-0.001653	0.06486	0.0001	0.9063	0.0022	-0.4135	2.189	175								
SNB-Ab1	1.599	-0.001504	0.008556	0.0017	0.9090	-0.0022	-0.2359	-2.363	170								
SNB-Ab2	1.599	-0.001517	0.008655	0.0007	0.9090	0.0023	-0.2358	2.36	170								
SNB-Ac1	1.52	-0.001354	0.01067	0.0014	0.9048	-0.0021	-0.05806	-2.534	165								
SNB-Ac2	1.52	-0.001514	0.01077	0.0007	0.9041	0.0023	-0.05812	2.531	165								
SNB-Ba1	1.363	-0.001122	0.01474	0.0025	0.9021	-0.0026	-0.2963	-2.874	155								
SNB-Ba2	1.363	-0.001335	0.01485	-0.0004	0.9020	0.0028	-0.2963	2.872	155								
SNB-Bb1	1.284	-0.001027	0.01667	0.0020	0.8964	-0.0029	-0.4731	-3.045	150								
SNB-Bb2	1.284	-0.001235	0.01678	0.0002	0.8965	0.0030	-0.4731	3.042	150								
SNB-Bc1	1.206	-0.0008462	0.01847	0.0009	0.8857	-0.0030	-0.6494	-3.215	145								
SNB-Bc2	1.206	-0.001228	0.01859	0.0012	0.8857	0.0031	-0.6494	3.213	145								
SNB-Ca1	1.029	-0.0002982	0.0221	0.0066	0.8557	-0.0042	-1.056	-3.612	133.4								
SNB-Ca2	1.029	-0.001138	0.02221	-0.0048	0.8556	0.0043	-1.056	3.61	133.4								
SNB-Cb1	0.9314	-0.0001264	0.02371	0.0018	0.8163	-0.0042	-1.285	-3.839	126.7								
SNB-Cb2	0.9314	-0.001394	0.02382	0.0037	0.8164	0.0043	-1.285	3.838	126.7								
SNB-Da1	0.7473	0.0001697	0.02562	0.0111	0.7655	-0.0059	-1.731	-4.292	113.4								
SNB-Da2	0.7473	-0.001271	0.02572	-0.0097	0.7654	0.0059	-1.731	4.291	113.4								
SNB-Db1	0.6616	0.0007747	0.02572	0.0044	0.6986	-0.0044	-1.948	-4.519	106.7								
SNB-Db2	0.6616	-0.001718	0.02581	-0.0057	0.6987	0.0045	-1.948	4.518	106.7								
SNB-Ea1	0.5102	0.0002847	0.02554	0.0069	0.6180	-0.0044	-2.361	-4.973	93.37								
SNB-Ea2	0.5102	-0.0009757	0.02562	-0.0059	0.6180	0.0044	-2.361	4.973	93.37								
SNB-Eb1	0.4411	0.0004192	0.02542	0.0047	0.5637	-0.0033	-2.562	-5.201	86.69								
SNB-Eb2	0.4411	-0.001001	0.02549	-0.0054	0.5637	0.0033	-2.562	5.2	86.69								
SNB-Ea1	0.2876	-0.002671	0.02357	0.0001	0.4587	-0.0038	-3.043	-5.766	70.02								
SNB-Ea2	0.2876	-0.003032	0.02363	0.0005	0.4587	0.0038	-3.043	5.766	70.02								
SNB-Ga1	0.1493	0.002439	0.01917	0.0016	0.3334	-0.0045	-3.575	-6.448	50.02								
SNB-Ga2	0.1493	-0.002619	0.01922	-0.0011	0.3334	0.0045	-3.575	6.448	50.02								
SNB-Ha1	0.05428	0.002637	0.01263	0.0017	0.2019	-0.0043	-4.063	-7.129	30.01								
SNB-Ha2	0.05428	-0.002702	0.01266	-0.0014	0.2019	0.0042	-4.063	7.129	30.01								
SNB-Ia1	0.00587	0.002354	0.004451	-0.0005	0.0823	-0.0025	-4.505	-7.81	10								
SNB-Ia2	0.005873	-0.002362	0.004461	0.0006	0.0823	0.0025	-4.505	7.81	10								

Joint Support Reactions for Load Case "2: 0.9D + 1.0Dg + 1.6Wc":

Joint Label	X Force Usage (kips)	X %	Y Force Usage (kips)	Y %	Z Comp. Usage (kips)	Z %	Uplift Usage (kips)	Uplift %	Result. Force Usage (kips)	Result. Force % (kips)	X Moment Usage (ft-k)	X-M. % (ft-k)	Y Moment Usage (ft-k)	Y-M. % (ft-k)	Z Moment Usage (ft-k)	Z-M. % (ft-k)	Max. Usage %
RohnJP	-28.59	0.0	0.10	0.0	342.58	0.0	0.0	343.77	0.0	0.0	-0.05	0.0	-5.3	0.0	-0.01	0.0	0.0
SNB-JP	-49.56	0.0	0.00	0.0	495.02	0.0	0.0	497.50	0.0	0.0	0.00	0.0	-13.0	0.0	0.00	0.0	0.0
RohnJ1	-9.33	0.0	-9.95	0.0	-148.99	0.0	0.0	149.62	0.0	1.92	0.0	-1.4	0.0	0.00	0.0	0.0	0.0
RohnJ2	-9.51	0.0	9.88	0.0	-149.32	0.0	0.0	149.95	0.0	-1.87	0.0	-0.01	0.0	0.00	0.0	0.0	0.0
SNB-J1	-17.01	0.0	-18.33	0.0	-226.45	0.0	0.0	227.83	0.0	5.40	0.0	-2.6	0.0	-0.04	0.0	0.0	0.0
SNB-J2	-17.03	0.0	18.36	0.0	-226.95	0.0	0.0	228.32	0.0	-5.40	0.0	-2.6	0.0	0.04	0.0	0.0	0.0

Joint Displacements, Loads and Member Forces on Joints for Load Case "2: 0.9D + 1.0Dg + 1.6Wc":

Joint Label	X External Load (kips)	Y External Load (kips)	Z External Load (kips)	X Member Force (kips)	Y Member Force (kips)	Z Member Force (kips)	X Disp. (ft)	Y Disp. (ft)	Z Disp. (ft)
RohnAP	0.6446	0.0000	0.0000	-0.2657	-0.6446	-0.0000	0.2657	1.7569	-0.0856
RohnBP	3.0288	0.0000	0.0000	-0.9541	-3.0288	0.0000	0.9541	1.4406	-0.0942
RohnCP	0.6543	0.0000	0.0000	-0.3841	-0.6543	0.0000	0.3841	1.1288	-0.0988
RohnDP	0.7898	0.0000	0.0000	-0.4656	-0.7898	0.0000	0.4656	0.8377	-0.0881
RohnEP	0.8106	0.0000	0.0000	-0.5771	-0.8106	0.0000	0.5771	0.5836	-0.0980
RohnFP	0.9277	0.0000	0.0000	-0.7827	-0.9277	0.0000	0.7827	0.3774	-0.0764
RohnGP	1.2867	0.0000	0.0000	-1.0426	-1.2867	0.0000	1.0426	0.2160	-0.0614
RohnHP	1.1001	0.0000	0.0000	-1.0378	-1.1001	0.0000	1.0378	0.0991	-0.0442
RohnIP	1.4048	0.0000	0.0000	-1.1643	-1.4048	0.0000	1.1643	0.0279	-0.0217
RohnJP	0.8374	0.0000	0.0000	-0.6292	27.7526	-0.0983	-341.9525	0.0000	0.0000
RohnKP	0.1882	0.0000	0.0000	-0.1397	-0.1882	0.0000	0.1397	1.7572	-0.0511
RohnLP	0.4529	0.0000	0.0000	-0.3025	-0.4529	0.0000	0.3025	1.4409	-0.0013
RohnMP	0.6543	0.0000	0.0000	-0.3841	-0.6543	0.0000	0.3841	1.1291	-0.0674
RohnNP	0.7898	0.0000	0.0000	-0.4656	-0.7898	0.0000	0.4656	0.8379	-0.0699
RohnOP	0.8106	0.0000	0.0000	-0.5771	-0.8106	0.0000	0.5771	0.5837	-0.0643
RohnPP	0.9277	0.0000	0.0000	-0.7827	-0.9277	0.0000	0.7827	0.3775	-0.0595
RohnQP	1.0500	0.0000	0.0000	-0.9526	-1.0500	0.0000	0.9526	0.2161	-0.0491
RohnRP	1.1001	0.0000	0.0000	-1.0378	-1.1001	0.0000	1.0378	0.0991	-0.0364
RohnSP	1.4048	0.0000	0.0000	-1.1643	-1.4048	0.0000	1.1643	0.0279	-0.0184
RohnTP	0.8374	0.0000	0.0000	-0.6292	48.7255	-0.0012	-494.3940	0.0000	0.0000
RohnUP	0.6446	0.0000	0.0000	-0.2657	-0.6446	0.0000	0.2657	1.7585	-0.0022
RohnV1	1.1009	0.0000	0.0000	-0.9317	-1.1009	0.0000	0.9317	1.7571	-0.0163
RohnV2	1.0538	0.0000	0.0000	-0.4051	-1.0538	0.0000	0.4051	1.4427	-0.0244
RohnW1	0.7194	0.0000	0.0000	-0.3466	-0.7194	0.0000	0.3466	1.4404	-0.0246
RohnW2	0.6543	0.0000	0.0000	-0.3841	-0.6543	0.0000	0.3841	1.1298	-0.0309
RohnX1	0.6543	0.0000	0.0000	-0.3841	-0.6543	0.0000	0.3841	1.1287	-0.0311
RohnX2	1.0017	0.0000	0.0000	-0.5286	-1.0017	0.0000	0.5286	0.8379	-0.0347
RohnY1	0.7898	0.0000	0.0000	-0.4656	-0.7898	0.0000	0.4656	0.8374	-0.0349
RohnY2	0.8106	0.0000	0.0000	-0.5771	-0.8106	0.0000	0.5771	0.5838	-0.0336
RohnZ1	0.8106	0.0000	0.0000	-0.5771	-0.8106	0.0000	0.5771	0.5841	-0.0337
RohnZ2	0.9277	0.0000	0.0000	-0.7827	-0.9277	0.0000	0.7827	0.3766	-0.0005
RohnZ3	1.3907	0.0000	0.0000	-0.9132	-1.3907	0.0000	0.9132	0.3776	-0.0004
RohnG1	1.1820	0.0000	0.0000	-1.0066	-1.1820	0.0000	1.0066	0.2154	-0.0004
RohnG2	1.6035	0.0000	0.0000	-1.0930	-1.6035	0.0000	1.0930	0.2165	-0.0000
RohnH1	1.1001	0.0000	0.0000	-1.0378	-1.1001	0.0000	1.0378	0.0984	-0.0004
RohnH2	1.1001	0.0000	0.0000	-1.0378	-1.1001	0.0000	1.0378	0.0984	-0.0002
RohnI1	1.4048	0.0000	0.0000	-1.1643	-1.4048	0.0000	1.1643	0.0276	-0.0002
RohnI2	1.4048	0.0000	0.0000	-1.1643	-1.4048	0.0000	1.1643	0.0280	-0.0000
RohnJ1	0.8374	0.0000	0.0000	-0.6292	8.4889	9.9648	149.6238	0.0000	0.0000
RohnJ2	0.8374	0.0000	0.0000	-0.6292	8.6753	-9.8834	149.9473	0.0000	0.0000
RohnA1	0.1882	0.0000	0.0000	-0.1397	-0.1882	0.0000	0.1397	1.7576	-0.0017
RohnA2	0.1882	0.0000	0.0000	-0.1397	-0.1882	0.0000	0.1397	1.7576	-0.0017
RohnB1	0.4529	0.0000	0.0000	-0.3025	-0.4529	0.0000	0.3025	1.4415	-0.0013
RohnB2	0.4529	0.0000	0.0000	-0.3025	-0.4529	0.0000	0.3025	1.4414	-0.0013
RohnC1	0.6543	0.0000	0.0000	-0.3841	-0.6543	0.0000	0.3841	1.1297	-0.0009
RohnC2	0.6543	0.0000	0.0000	-0.3841	-0.6543	0.0000	0.3841	1.1297	-0.0010
RohnD1	0.7898	0.0000	0.0000	-0.4656	-0.7898	0.0000	0.4656	0.8384	-0.0005
RohnD2	0.7898	0.0000	0.0000	-0.4656	-0.7898	0.0000	0.4656	0.8384	-0.0007
RohnE1	0.8106	0.0000	0.0000	-0.5771	-0.8106	0.0000	0.5771	0.5840	-0.0003
RohnE2	0.8106	0.0000	0.0000	-0.5771	-0.8106	0.0000	0.5771	0.5840	-0.0005
RohnF1	0.9277	0.0000	0.0000	-0.7827	-0.9277	0.0000	0.7827	0.3777	-0.0002
RohnF2	0.9277	0.0000	0.0000	-0.7827	-0.9277	0.0000	0.7827	0.3777	-0.0003
RohnG1	1.0500	0.0000	0.0000	-0.9526	-1.0500	0.0000	0.9526	0.2160	-0.0000
RohnG2	1.0500	0.0000	0.0000	-0.9526	-1.0500	0.0000	0.9526	0.2160	-0.0003
RohnH1	1.1001	0.0000	0.0000	-1.0378	-1.1001	0.0000	1.0378	0.0989	-0.0001
RohnH2	1.1001	0.0000	0.0000	-1.0378	-1.1001	0.0000	1.0378	0.0989	-0.0003
RohnI1	1.4048	0.0000	0.0000	-1.1643	-1.4048	0.0000	1.1643	0.0275	-0.0003
RohnI2	1.4048	0.0000	0.0000	-1.1643	-1.4048	0.0000	1.1643	0.0275	-0.0003
RohnJ1	0.8374	0.0000	0.0000	-0.6292	16.1746	18.3277	227.0802	0.0000	0.0000
RohnJ2	0.8374	0.0000	0.0000	-0.6292	16.1629	-18.3595	227.5762	0.0000	0.0000
RohnAbs	0.6035	0.0000	0.0000	-0.1868	-0.6035	0.0000	0.1868	1.6778	-0.0004
RohnAbs	0.1882	0.0000	0.0000	-0.1397	-0.1882	0.0000	0.1397	1.5985	-0.0004
RohnAbs	0.5616	0.0000	0.0000	-0.1877	-0.5616	0.0000	0.1877	1.5196	-0.0000

RohnBas	0.2646	0.0000	-0.1628	-0.2646	0.0000	0.1628	1.3619	-0.0001	-0.0959
RohnBds	2.2005	0.0000	-0.8685	-2.2005	0.0000	0.8685	1.2835	-0.0001	-0.0972
RohnBcs	0.2646	0.0000	-0.1628	-0.2646	0.0000	0.1628	1.2058	-0.0002	-0.0982
RohnCas	2.0420	0.0000	-0.7183	-2.0420	0.0000	0.7183	1.0293	-0.0003	-0.0994
RohnChs	2.8434	0.0000	-1.2921	-2.8434	0.0000	1.2921	0.9318	-0.0004	-0.0993
RohnDas	2.8903	0.0000	-1.1394	-2.8903	0.0000	1.1394	0.7481	-0.0004	-0.0959
RohnDBs	0.4002	0.0000	-0.2443	-0.4002	0.0000	0.2443	0.6634	-0.0005	-0.0925
RohnEAs	0.4104	0.0000	-0.3328	-0.4104	0.0000	0.3328	0.5110	-0.0006	-0.0848
RohnEBS	0.5173	0.0000	-0.4499	-0.5173	0.0000	0.4499	0.4420	-0.0007	-0.0810
RohnFAs	0.5327	0.0000	-0.4929	-0.5327	0.0000	0.5327	0.2929	-0.0008	-0.0696
RohnGAs	0.5327	0.0000	-0.5027	-0.5027	0.0000	0.5027	0.1541	-0.0006	-0.0534
RohnHAs	0.5674	0.0000	-0.5351	-0.5674	0.0000	0.5351	0.0596	-0.0003	-0.0336
RohnIAs	0.8374	0.0000	-0.6292	-0.8374	0.0000	0.6292	0.0106	-0.0001	-0.0113
RohnJAs	0.1882	0.0000	-0.1397	-0.1882	0.0000	0.1397	1.6781	-0.0016	-0.0535
RohnKAs	0.1882	0.0000	-0.1397	-0.1882	0.0000	0.1397	1.5988	-0.0016	-0.0559
RohnLAs	0.1882	0.0000	-0.1397	-0.1882	0.0000	0.1397	1.5198	-0.0014	-0.0582
RohnMAs	0.1882	0.0000	-0.1397	-0.1882	0.0000	0.1397	1.3622	-0.0012	-0.0624
RohnNAs	0.2646	0.0000	-0.1628	-0.2646	0.0000	0.1628	1.2838	-0.0011	-0.0643
RohnOAs	0.2646	0.0000	-0.1628	-0.2646	0.0000	0.1628	1.2060	-0.0010	-0.0660
RohnPAs	0.3897	0.0000	-0.2213	-0.3896	0.0000	0.2213	1.0295	-0.0008	-0.0669
RohnQAs	0.3897	0.0000	-0.2213	-0.3896	0.0000	0.2213	0.9320	-0.0007	-0.0697
RohnRAs	0.4002	0.0000	-0.2443	-0.4002	0.0000	0.2443	0.7483	-0.0005	-0.0690
RohnSAs	0.4002	0.0000	-0.2443	-0.4002	0.0000	0.2443	0.6635	-0.0005	-0.0671
RohnTAs	0.4104	0.0000	-0.3328	-0.4104	0.0000	0.3328	0.5111	-0.0003	-0.0634
RohnUAs	0.4104	0.0000	-0.3328	-0.4104	0.0000	0.3328	0.4421	-0.0003	-0.0617
RohnVAs	0.5173	0.0000	-0.4499	-0.5173	0.0000	0.4499	0.2929	-0.0002	-0.0550
RohnWAs	0.5327	0.0000	-0.5027	-0.5327	0.0000	0.5027	0.1542	-0.0001	-0.0434
RohnXAs	0.5674	0.0000	-0.5351	-0.5674	0.0000	0.5351	0.0596	-0.0000	-0.0280
RohnYAs	0.8374	0.0000	-0.6292	-0.8374	0.0000	0.6292	0.0106	-0.0000	-0.0098
RohnZAs	0.1882	0.0000	-0.1397	-0.1882	0.0000	0.1397	1.7574	-0.0017	-0.0236
RohnAAs	0.1882	0.0000	-0.1397	-0.1882	0.0000	0.1397	1.7574	-0.0017	0.0041
RohnBAs	0.1882	0.0000	-0.1397	-0.1882	0.0000	0.1397	1.4412	-0.0013	-0.0235
RohnCAs	0.1882	0.0000	-0.1397	-0.1882	0.0000	0.1397	1.4412	-0.0013	-0.0240
RohnDAs	0.1882	0.0000	-0.1397	-0.1882	0.0000	0.1397	1.4412	-0.0013	-0.0126
RohnEAs	0.1882	0.0000	-0.1397	-0.1882	0.0000	0.1397	1.4412	-0.0013	-0.0126
RohnFAs	0.2646	0.0000	-0.1628	-0.2646	0.0000	0.1628	1.1294	-0.0010	-0.0240
RohnGAs	0.2646	0.0000	-0.1628	-0.2646	0.0000	0.1628	1.1294	-0.0009	-0.0199
RohnHAs	0.2646	0.0000	-0.1628	-0.2646	0.0000	0.1628	1.1294	-0.0009	-0.0240
RohnIAs	0.3897	0.0000	-0.2213	-0.3896	0.0000	0.2213	0.8382	-0.0007	-0.0233
RohnJAs	0.3897	0.0000	-0.2213	-0.3896	0.0000	0.2213	0.8382	-0.0006	-0.0243
RohnKAs	0.4002	0.0000	-0.2443	-0.4002	0.0000	0.2443	0.8382	-0.0006	-0.0232
RohnLAs	0.4002	0.0000	-0.2443	-0.4002	0.0000	0.2443	0.8382	-0.0006	-0.0232
RohnMAs	0.4002	0.0000	-0.2443	-0.4002	0.0000	0.2443	0.8382	-0.0006	-0.0232
RohnNAs	0.4002	0.0000	-0.2443	-0.4002	0.0000	0.2443	0.8382	-0.0006	-0.0232
RohnOAs	0.4002	0.0000	-0.2443	-0.4002	0.0000	0.2443	0.8382	-0.0006	-0.0232
RohnPAs	0.4104	0.0000	-0.3328	-0.4104	0.0000	0.3328	0.7483	-0.0004	-0.0248
RohnQAs	0.4104	0.0000	-0.3328	-0.4104	0.0000	0.3328	0.7483	-0.0004	-0.0248
RohnRAs	0.4104	0.0000	-0.3328	-0.4104	0.0000	0.3328	0.7483	-0.0004	-0.0248
RohnSAs	0.5173	0.0000	-0.4499	-0.5173	0.0000	0.4499	0.5839	-0.0004	-0.0248
RohnTAs	0.5173	0.0000	-0.4499	-0.5173	0.0000	0.4499	0.5839	-0.0004	-0.0248
RohnUAs	0.5173	0.0000	-0.4499	-0.5173	0.0000	0.4499	0.5839	-0.0004	-0.0248
RohnVAs	0.5173	0.0000	-0.4499	-0.5173	0.0000	0.4499	0.5839	-0.0004	-0.0248
RohnWAs	0.5173	0.0000	-0.4499	-0.5173	0.0000	0.4499	0.5839	-0.0004	-0.0248
RohnXAs	0.5173	0.0000	-0.4499	-0.5173	0.0000	0.4499	0.5839	-0.0004	-0.0248
RohnYAs	0.5173	0.0000	-0.4499	-0.5173	0.0000	0.4499	0.5839	-0.0004	-0.0248
RohnZAs	0.5173	0.0000	-0.4499	-0.5173	0.0000	0.4499	0.5839	-0.0004	-0.0248
RohnAAs	0.5674	0.0000	-0.5351	-0.5674	0.0000	0.5351	0.0279	-0.0000	-0.0186
RohnBAs	0.5674	0.0000	-0.5351	-0.5674	0.0000	0.5351	0.0279	-0.0000	-0.0186
RohnCAs	0.5674	0.0000	-0.5351	-0.5674	0.0000	0.5351	0.0279	-0.0000	-0.0186
RohnDAs	0.5674	0.0000	-0.5351	-0.5674	0.0000	0.5351	0.0279	-0.0000	-0.0186
RohnEAs	0.5674	0.0000	-0.5351	-0.5674	0.0000	0.5351	0.0279	-0.0000	-0.0186
RohnFAs	0.7887	0.0000	-0.2646	-0.7887	0.0000	0.2646	0.2161	-0.0002	-0.0186
RohnGAs	1.1155	-0.0500	-0.2477	-1.1155	0.0500	0.2477	1.6010	-0.0021	0.0185
RohnHAs	0.1882	0.0000	-0.1397	-0.1882	0.0000	0.1397	1.5983	-0.0022	0.0204
RohnIAs	0.1882	0.0000	-0.1397	-0.1882	0.0000	0.1397	1.5983	-0.0022	0.0206
RohnJAs	0.1882	0.0000	-0.1397	-0.1882	0.0000	0.1397	1.5983	-0.0022	0.0206
RohnKAs	0.1882	0.0000	-0.1397	-0.1882	0.0000	0.1397	1.5983	-0.0022	0.0206
RohnLAs	0.2646	0.0000	-0.1628	-0.2646	0.0000	0.1628	1.5190	-0.0022	0.0224
RohnMAs	0.2646	0.0000	-0.1628	-0.2646	0.0000	0.1628	1.3634	-0.0016	0.0226
RohnNAs	2.1265	0.0000	-0.8442	-2.1265	0.0000	0.8442	1.3634	-0.0016	0.0262
RohnOAs	2.1265	0.0000	-0.8442	-2.1265	0.0000	0.8442	1.2860	-0.0020	0.0264
RohnPAs	0.2646	0.0000	-0.1628	-0.2646	0.0000	0.1628	1.2860	-0.0020	0.0279
RohnQAs	0.2646	0.0000	-0.1628	-0.2646	0.0000	0.1628	1.2068	-0.0012	0.0281
RohnRAs	0.2646	0.0000	-0.1628	-0.2646	0.0000	0.1628	1.2068	-0.0012	0.0281
RohnSAs	2.2052	0.0000	-0.7723	-2.2052	0.0000	0.7723	1.2054	-0.0017	0.0297
RohnTAs	2.2052	0.0000	-0.7723	-2.2052	0.0000	0.7723	1.0306	-0.0012	0.0325

Label	Angle Torsion (ft-lbs)	Origin X Moment (ft-lbs)	Origin Y Moment (ft-lbs)	End X Moment (ft-lbs)	End Y Moment (ft-lbs)	Shear (lbs)	X Shear (lbs)	Y Shear (lbs)
RohnCa2	2.3119	0.0000	-0.8083	-2.3119	-0.0000	-0.0000	0.8083	1.0298
RohnCb1	2.4592	0.0000	-1.2021	-2.4592	0.0000	0.0000	1.2021	0.9323
RohnCb2	2.4592	0.0000	-1.2021	-2.4592	-0.0000	-0.0000	1.2021	0.9317
RohnDb1	2.6273	0.0000	-1.0449	-2.6273	0.0000	0.0000	1.0449	0.7483
RohnDb2	2.6273	0.0000	-1.0449	-2.6273	-0.0000	-0.0000	1.0449	0.7482
RohnOb1	0.4002	0.0000	-0.2443	-0.4002	0.0000	0.0000	0.2443	0.6618
RohnOb2	0.4002	0.0000	-0.2443	-0.4002	-0.0000	-0.0000	0.2443	0.6618
RohnPa1	0.4104	0.0000	-0.3328	-0.4104	0.0000	0.0000	0.3328	0.5097
RohnPa2	0.4104	0.0000	-0.3328	-0.4104	-0.0000	-0.0000	0.3328	0.5102
RohnPb1	0.4104	0.0000	-0.3328	-0.4104	0.0000	0.0000	0.3328	0.4406
RohnPb2	0.4104	0.0000	-0.3328	-0.4104	-0.0000	-0.0000	0.3328	0.4413
RohnFa1	0.5173	0.0000	-0.4499	-0.5173	0.0000	0.0000	0.4499	0.2877
RohnFa2	0.5173	0.0000	-0.4499	-0.5173	-0.0000	-0.0000	0.4499	0.2887
RohnGa1	0.5327	0.0000	-0.5027	-0.5327	0.0000	0.0000	0.5027	0.1490
RohnGa2	0.5327	0.0000	-0.5027	-0.5327	-0.0000	-0.0000	0.5027	0.1498
RohnHa1	0.5674	0.0000	-0.5351	-0.5674	0.0000	0.0000	0.5351	0.0537
RohnHa2	0.5674	0.0000	-0.5351	-0.5674	-0.0000	-0.0000	0.5351	0.0542
RohnIa1	0.8374	0.0000	-0.6292	-0.8374	0.0000	0.0000	0.6292	0.0063
RohnIa2	0.8374	0.0000	-0.6292	-0.8374	-0.0000	-0.0000	0.6292	0.0065
RohnBa1	0.1882	0.0000	-0.1397	-0.1882	0.0000	0.0000	0.1397	1.6784
RohnBa2	0.1882	0.0000	-0.1397	-0.1882	-0.0000	-0.0000	0.1397	1.6785
RohnAd1	0.1882	0.0000	-0.1397	-0.1882	0.0000	0.0000	0.1397	1.5994
RohnAd2	0.1882	0.0000	-0.1397	-0.1882	-0.0000	-0.0000	0.1397	1.5994
RohnAc1	0.1882	0.0000	-0.1397	-0.1882	0.0000	0.0000	0.1397	1.5201
RohnAc2	0.1882	0.0000	-0.1397	-0.1882	-0.0000	-0.0000	0.1397	1.5201
RohnBa1	0.2646	0.0000	-0.1628	-0.2646	0.0000	0.0000	0.1628	1.3625
RohnBa2	0.2646	0.0000	-0.1628	-0.2646	-0.0000	-0.0000	0.1628	1.3625
RohnBb1	0.2646	0.0000	-0.1628	-0.2646	0.0000	0.0000	0.1628	1.2842
RohnBb2	0.2646	0.0000	-0.1628	-0.2646	-0.0000	-0.0000	0.1628	1.2842
RohnBc1	0.2646	0.0000	-0.1628	-0.2646	0.0000	0.0000	0.1628	1.2062
RohnBc2	0.2646	0.0000	-0.1628	-0.2646	-0.0000	-0.0000	0.1628	1.2062
RohnCa1	0.3897	0.0000	-0.2213	-0.3897	0.0000	0.0000	0.2213	1.0291
RohnCa2	0.3897	0.0000	-0.2213	-0.3897	-0.0000	-0.0000	0.2213	1.0291
RohnCb1	0.3897	0.0000	-0.2213	-0.3897	0.0000	0.0000	0.2213	0.9314
RohnCb2	0.3897	0.0000	-0.2213	-0.3897	-0.0000	-0.0000	0.2213	0.9314
RohnDa1	0.4002	0.0000	-0.2443	-0.4002	0.0000	0.0000	0.2443	0.7473
RohnDa2	0.4002	0.0000	-0.2443	-0.4002	-0.0000	-0.0000	0.2443	0.7473
RohnDb1	0.4002	0.0000	-0.2443	-0.4002	0.0000	0.0000	0.2443	0.6616
RohnDb2	0.4002	0.0000	-0.2443	-0.4002	-0.0000	-0.0000	0.2443	0.6616
RohnEb1	0.4104	0.0000	-0.3328	-0.4104	0.0000	0.0000	0.3328	0.5102
RohnEb2	0.4104	0.0000	-0.3328	-0.4104	-0.0000	-0.0000	0.3328	0.5102
RohnEd1	0.4104	0.0000	-0.3328	-0.4104	0.0000	0.0000	0.3328	0.4411
RohnEd2	0.4104	0.0000	-0.3328	-0.4104	-0.0000	-0.0000	0.3328	0.4411
RohnFa1	0.5173	0.0000	-0.4499	-0.5173	0.0000	0.0000	0.4499	0.2876
RohnFa2	0.5173	0.0000	-0.4499	-0.5173	-0.0000	-0.0000	0.4499	0.2876
RohnGa1	0.5327	0.0000	-0.5027	-0.5327	0.0000	0.0000	0.5027	0.1493
RohnGa2	0.5327	0.0000	-0.5027	-0.5327	-0.0000	-0.0000	0.5027	0.1493
RohnHa1	0.5674	0.0000	-0.5351	-0.5674	0.0000	0.0000	0.5351	0.0543
RohnHa2	0.5674	0.0000	-0.5351	-0.5674	-0.0000	-0.0000	0.5351	0.0543
RohnIa1	0.8374	0.0000	-0.6292	-0.8374	0.0000	0.0000	0.6292	0.0059
RohnIa2	0.8374	0.0000	-0.6292	-0.8374	-0.0000	-0.0000	0.6292	0.0059
RohnLA1P	0.01	1.03	4.70	26.18	-16.78	5.44	-2.41	-2.41
Rohn-LA11	2.04	-1.56	2.67	12.14	37.60	2.12	8.05	8.05
Rohn-LA12	-2.16	1.13	2.85	5.75	-17.25	1.38	-2.88	-2.88
Rohn-LA2P	0.01	-26.18	16.78	-32.80	24.59	-11.79	8.27	8.27
Rohn-LA21	2.04	-12.15	-37.59	-87.35	-9.68	-24.97	-24.97	-24.97
Rohn-LA22	-2.16	5.75	17.25	2.34	4.59	-0.68	4.36	4.36
Rohn-LA3P	0.01	32.80	-24.59	35.69	-11.36	13.69	-7.18	-7.18
Rohn-LA31	2.04	36.29	87.35	42.21	104.60	15.69	38.36	38.36
Rohn-LA32	-2.16	-2.34	-4.59	-25.71	50.01	-5.61	9.08	9.08
Rohn-LA4P	0.01	-35.69	11.36	-18.74	22.27	-10.88	6.72	6.72
Rohn-LA41	2.04	-42.21	-104.60	-63.72	-116.68	-21.17	-44.22	-44.22

Moments for Angles Modeled as Beams:

Rohn-LM42	-2.16	25.72	-50.01	48.10	-76.71	14.75	-25.32
Rohn-LB1P	3.01	18.07	-11.50	10.89	0.71	5.79	-2.16
Rohn-LB11	8.54	62.05	123.25	117.31	224.06	35.84	69.41
Rohn-LB12	-2.43	-44.84	82.45	-111.56	208.57	-31.25	58.16
Rohn-LB2P	3.01	-10.90	-0.71	-4.23	52.89	-3.02	10.43
Rohn-LB21	8.53	117.31	-224.08	-144.37	-218.26	-52.29	-88.39
Rohn-LB22	-2.42	111.56	-208.57	143.68	-212.51	51.00	-84.14
Rohn-LB3P	3.01	4.23	-52.89	4.07	3.06	1.66	-9.96
Rohn-LB31	8.54	144.37	218.25	80.45	164.20	44.93	76.42
Rohn-LB32	-2.43	-143.68	212.50	-80.54	162.75	-44.81	74.98
Rohn-LB4P	3.01	-4.07	-3.06	-6.32	147.60	-2.08	28.90
Rohn-LB41	8.53	80.45	-164.20	17.07	154.09	-12.66	-2.02
Rohn-LB42	-2.42	80.54	-162.75	-12.01	150.88	13.69	-2.37
Rohn-LC1P	3.01	6.32	-147.59	1.80	87.62	1.22	-3.00
Rohn-LC11	8.52	-17.07	-154.09	-46.58	-2.36	-9.55	-23.47
Rohn-LC12	-2.41	12.01	-150.88	48.74	-5.88	9.11	-23.52
Rohn-LC2P	3.01	-1.80	-87.61	1.26	107.12	0.08	2.92
Rohn-LC21	8.53	46.58	2.36	-5.85	142.09	6.09	21.60
Rohn-LC22	-2.42	-48.74	5.88	10.79	132.33	-5.68	20.67
Rohn-LC3P	3.01	-1.25	-107.12	-3.16	231.69	-0.66	18.70
Rohn-LC31	8.53	5.85	162.09	91.84	319.28	14.65	26.58
Rohn-LC32	-2.42	-10.79	-132.32	-98.90	340.82	-16.85	31.27
Rohn-LD1P	3.01	3.16	-231.69	6.57	398.13	1.46	28.99
Rohn-LD11	8.49	-91.84	-319.28	-224.52	47.65	-47.45	-40.74
Rohn-LD12	-2.38	98.89	-340.82	232.29	30.41	49.67	-46.56
Rohn-LD2P	3.01	-6.57	-38.13	-2.00	182.33	-1.28	-32.31
Rohn-LD21	8.59	224.52	-47.65	314.39	760.84	80.59	106.64
Rohn-LD22	-2.48	-232.29	-30.41	-314.65	766.69	-81.78	110.09
Rohn-LD3P	3.01	2.00	-182.33	-0.58	693.83	0.21	76.83
Rohn-LD31	8.42	314.37	760.95	-298.47	97.27	-91.91	-99.51
Rohn-LD32	-2.31	314.63	-766.70	300.13	99.08	92.12	-100.12
Rohn-LE1P	3.01	0.58	-693.83	11.78	277.44	1.86	-62.53
Rohn-LE11	8.57	298.47	-97.27	137.25	564.13	65.35	70.02
Rohn-LE12	-2.46	-300.13	-99.07	-132.58	550.60	-64.90	67.32
Rohn-LE2P	3.01	-11.78	-277.44	-25.56	230.56	-5.59	-7.02
Rohn-LE21	8.52	137.24	-564.13	111.54	450.50	-3.84	-16.99
Rohn-LE22	-2.41	-132.57	-550.60	-123.76	488.33	1.32	-9.31
Rohn-LE3P	3.02	25.56	-230.56	26.22	1068.01	7.78	125.77
Rohn-LE31	8.46	-111.54	-450.50	-429.36	179.16	-81.12	-40.69
Rohn-LE32	-2.34	123.74	-488.34	464.28	103.05	88.19	-57.78
Rohn-LF1P	3.00	-26.22	-1068.01	-37.51	118.36	-6.37	94.98
Rohn-LF11	8.73	429.36	-179.15	762.54	1675.77	119.05	149.48
Rohn-LF12	-2.63	-464.28	-103.03	-783.90	1734.10	-124.67	162.91
Rohn-LF2P	3.03	37.50	-118.36	27.90	1574.38	6.54	145.65
Rohn-LF21	8.19	-762.46	-1675.81	913.92	-286.70	-167.43	-196.00
Rohn-LF22	-2.07	783.81	-1734.14	945.86	-355.88	172.75	-208.74
Rohn-LG1P	3.00	-27.90	-1574.38	-24.59	-49.22	-5.25	-162.40
Rohn-LG11	8.88	913.91	286.72	1011.26	2001.10	192.28	228.50
Rohn-LG12	-2.78	-945.85	355.90	-1022.87	2034.17	-196.63	238.71
Rohn-LG2P	3.02	24.59	49.23	12.31	1824.85	3.69	187.47
Rohn-LG21	8.17	-1011.17	-2001.15	-1103.53	-415.81	-211.20	-241.39
Rohn-LG22	-2.05	1022.77	-2034.12	1108.32	-425.93	212.84	-245.70
Rohn-LH1P	3.01	-12.32	-1624.85	0.45	-117.06	-1.19	-194.27
Rohn-LH11	8.87	1103.52	415.83	1239.73	2389.94	234.02	280.21
Rohn-LH12	-2.77	-1108.31	425.95	-1242.38	2397.29	-234.76	281.95
Rohn-LH2P	3.01	-0.46	117.06	-1.95	2324.09	-0.24	244.24
Rohn-LH21	7.83	-1239.60	-2390.01	-1447.21	-620.36	-268.32	-300.63
Rohn-LH22	-1.72	1242.24	2397.37	1451.87	-624.69	269.05	-301.80
Rohn-LI1P	3.01	1.94	-2324.09	-8.08	-121.90	-0.61	-244.68
Rohn-LI11	8.75	1447.19	620.38	1865.41	3685.51	330.84	431.04
Rohn-LI12	-2.64	-1451.86	624.71	-1852.56	3674.53	-330.03	429.36
Rohn-LI2P	3.01	8.08	121.90	52.88	5324.52	6.10	544.85
Rohn-LI21	7.43	-1865.23	-3695.61	-1916.17	1402.86	-377.65	-228.98
Rohn-LI22	-1.33	1852.38	-3674.44	1866.46	1497.50	371.40	-217.41
Rohn-H1P	0.20	2.23	3.04	-1.06	0.70	-0.13	0.00
Rohn-H11	-0.06	0.09	-1.04	0.02	1.20	0.01	0.02
Rohn-H12	0.38	-3.06	1.03	-3.30	-0.06	-0.85	0.13
Rohn-H2P	-0.52	6.64	-1.92	6.91	-3.48	1.53	-0.61
Rohn-H21	-0.11	1.19	-3.21	0.06	-0.08	0.14	-0.37

Rohn-HZ2	0.15	-6.69	0.48	-6.18	-1.10	-1.45	-0.07
SNB-LA1P	-0.03	4.06	47.60	14.54	-13.27	3.72	6.86
SNB-LA11	0.27	50.83	-13.88	13.53	17.92	12.86	0.81
SNB-LA12	-0.28	-54.96	-26.55	-21.96	-5.14	-15.37	-6.33
SNB-LA2P	0.07	-13.54	-13.27	-19.66	35.33	-6.84	9.71
SNB-LA21	-0.23	-14.53	-17.92	-7.54	-42.44	-4.21	-12.06
SNB-LA22	-0.28	21.96	5.14	18.04	-13.29	7.99	-1.63
SNB-LA3P	-0.03	19.66	-35.33	16.19	-33.70	7.17	-13.80
SNB-LA31	0.27	7.54	42.44	9.56	71.64	3.42	22.80
SNB-LA32	-0.28	-18.04	13.29	-18.21	47.71	-7.24	12.19
SNB-LA4P	-0.03	-16.19	33.70	-10.43	101.17	-5.32	26.96
SNB-LA41	0.27	-9.56	-71.64	-1.23	-63.61	-2.16	-27.03
SNB-LA42	-0.28	18.21	-47.71	8.39	-46.78	5.32	-18.88
SNB-LB1P	-0.06	9.58	153.61	4.63	45.03	2.84	39.70
SNB-LB11	3.23	89.71	74.36	48.42	101.68	27.60	35.18
SNB-LB12	-3.03	-95.36	-60.94	-51.68	94.64	-29.38	31.09
SNB-LB2P	-0.06	-4.63	45.03	-2.68	112.04	-1.46	13.39
SNB-LB21	3.22	-48.42	-101.68	-39.54	-2.33	-17.58	-20.79
SNB-LB22	-3.02	51.66	94.64	41.74	1.99	18.67	-18.52
SNB-LB3P	-0.06	2.68	-112.04	2.19	-40.47	0.97	-30.48
SNB-LB31	3.23	39.54	2.33	59.52	190.98	19.79	38.63
SNB-LB32	-3.03	-41.75	-1.99	-59.80	188.36	-20.29	37.24
SNB-LB4P	-0.06	-2.19	-40.47	-0.19	499.26	-0.47	107.88
SNB-LB41	3.22	-59.52	-190.98	-39.08	56.96	-19.70	-26.78
SNB-LB42	-3.02	59.80	-188.36	41.82	58.57	20.31	-25.93
SNB-LC1P	0.03	0.19	-56.54	0.30	175.10	0.07	17.79
SNB-LC11	8.18	158.46	-28.60	68.07	180.58	33.98	22.80
SNB-LC12	8.11	-160.45	-29.89	-67.92	180.33	-34.26	22.57
SNB-LC2P	0.03	-0.30	-175.10	0.96	75.70	0.10	-14.87
SNB-LC21	8.16	-68.07	-180.58	43.44	337.65	-3.68	23.49
SNB-LC22	-8.09	67.92	-180.33	-43.81	336.35	3.60	23.33
SNB-LC3P	0.03	-0.96	-75.70	-0.35	551.86	-0.20	71.47
SNB-LC31	8.16	-43.44	-337.65	-41.33	-18.76	-12.72	-53.46
SNB-LC32	-8.09	43.81	-336.35	45.59	-15.96	13.41	-52.85
SNB-LD1P	-0.03	0.45	52.98	2.93	678.99	0.51	109.88
SNB-LD11	10.68	272.21	-2.25	544.35	41.17	80.79	80.79
SNB-LD12	-10.53	-276.65	-9.01	-3.21	540.41	-41.98	79.71
SNB-LD2P	-0.03	-2.93	678.98	0.16	84.82	-0.46	-68.94
SNB-LD21	10.68	-2.24	-544.35	319.10	831.53	47.38	42.94
SNB-LD22	-10.53	3.20	-540.41	-316.38	833.50	-46.84	43.80
SNB-LD3P	-0.03	0.16	-84.82	-0.74	1488.45	-0.09	210.76
SNB-LD31	10.52	-319.08	-631.54	-391.12	294.00	-106.51	-80.62
SNB-LD32	-10.37	316.36	-633.31	393.36	295.91	106.44	-80.60
SNB-LE1P	-0.29	1.36	-422.39	9.73	1053.58	1.66	94.75
SNB-LE11	21.66	610.31	-178.89	204.74	1183.21	122.26	150.65
SNB-LE12	-21.28	-612.88	-182.10	-205.86	1171.39	-122.81	148.39
SNB-LE2P	-0.29	-9.73	1053.57	-6.33	480.94	-2.40	-85.71
SNB-LE21	21.59	-204.73	-1183.22	398.36	1638.65	28.96	68.11
SNB-LE22	-21.21	205.85	-1171.39	-384.44	1653.64	-26.71	72.15
SNB-LE3P	-0.29	6.33	-480.94	4.60	2759.18	1.64	342.04
SNB-LE31	21.44	-398.33	-1638.66	-863.17	-391.41	-189.21	-304.48
SNB-LE32	-21.06	384.42	-1653.85	850.80	-403.93	185.27	-308.64
SNB-LF1P	-0.02	-4.47	-1754.14	-1.29	-125.50	-0.58	-187.96
SNB-LF11	37.82	1449.53	302.18	1595.47	3117.53	304.17	341.58
SNB-LF12	-37.80	-1438.19	313.85	-1580.95	3127.27	-301.59	343.72
SNB-LF2P	-0.02	1.29	125.50	3.05	3411.64	0.44	353.74
SNB-LF21	36.56	-1595.36	-3117.61	-1686.97	-1116.61	-327.86	-422.92
SNB-LF22	-36.55	1580.83	-3127.34	1676.41	-1126.10	325.35	-424.84
SNB-LG1P	0.27	-2.99	-2259.24	0.16	219.94	-0.28	-203.94
SNB-LG11	62.34	2683.98	694.74	2771.02	5737.04	544.90	642.44
SNB-LG12	-62.67	-2673.43	704.18	-2756.90	5744.80	-542.44	644.15
SNB-LG2P	0.27	-0.16	-219.94	1.90	5783.94	0.17	557.47
SNB-LG21	60.51	-2770.82	-5737.16	-2447.94	-1394.08	-521.26	-712.27
SNB-LG22	-60.84	2756.70	-5744.92	2446.40	-1396.99	519.70	-713.34
SNB-LH1P	0.09	-1.77	-4072.33	4.17	-130.26	0.24	-420.35
SNB-LH11	60.52	3595.34	881.04	3271.25	6339.78	685.84	721.19
SNB-LH12	-60.71	-3594.67	983.33	-3266.35	6337.66	-685.29	721.20
SNB-LH2P	0.09	-4.17	130.27	-1.98	6729.54	-0.62	686.17
SNB-LH21	57.77	-3270.98	-6339.95	-3362.52	-1723.28	-662.52	-805.29



SNB-LH22	-57.95	3266.08	-6337.83	3365.88	-1718.94	662.36	-804.64
SNB-LI1P	0.00	2.06	-4855.95	8.42	-42.46	1.05	-489.92
SNB-LI11	20.88	4804.76	1055.28	5323.17	9647.96	1011.59	1069.04
SNB-LI12	-21.01	-4808.25	1050.84	-5317.99	9641.07	-1011.42	1067.91
SNB-LI2P	0.00	-8.42	42.46	-2.05	12995.33	-1.05	1304.09
SNB-LI21	16.77	-5322.69	-9648.23	-5395.56	2622.10	-1070.50	-701.74
SNB-LI22	-16.90	5317.51	-9641.34	5403.45	2629.73	1070.77	-700.29
SNB-H1aP	-1.76	29.58	66.76	113.70	0.26	70.92	32.91
SNB-H1bP	-1.76	-113.70	0.26	-19.39	34.93	-65.87	17.42
SNB-H1cP	-2.06	-101.47	-35.72	101.48	-1.63	69.83	-18.49
SNB-H1dP	-2.06	101.47	1.63	-33.67	35.22	-66.89	18.24
SNB-H1eP	6.21	31.83	-34.77	107.27	-2.04	68.84	-18.22
SNB-H1fP	6.21	-107.27	2.04	-29.98	-66.57	-67.93	-31.94
SNB-H2aP	7.55	151.34	53.28	113.51	2.64	97.99	20.69
SNB-H2bP	-7.55	-113.51	-2.64	8.72	20.25	-38.77	6.52
SNB-H2cP	0.64	86.21	-25.30	98.25	3.58	68.25	-8.04
SNB-H2dP	0.63	-98.25	3.58	-86.92	24.90	-68.51	7.89
SNB-H2eP	6.70	-11.69	-19.97	115.08	1.34	38.25	-6.89
SNB-H2fP	6.70	115.08	-1.34	-151.10	-53.28	-98.48	-20.21
SNB-H3aP	-5.99	258.97	34.74	153.64	-3.93	121.91	9.11
SNB-H3bP	-5.99	-153.64	-3.93	29.18	11.76	-56.77	4.64
SNB-H3cP	0.03	128.63	-20.01	140.42	10.62	79.50	-2.78
SNB-H3dP	0.03	-140.42	10.62	-128.12	19.89	-79.35	2.74
SNB-H3eP	5.91	-29.52	-11.51	153.74	-3.91	36.70	-4.56
SNB-H3fP	5.91	153.74	3.91	-259.11	-34.83	-121.98	-9.13
SNB-H4aP	-6.55	352.98	17.57	245.38	-15.09	147.16	0.61
SNB-H4bP	-6.55	-245.38	-17.57	-32.16	4.36	-68.26	4.78
SNB-H4cP	0.09	209.06	-10.54	231.96	32.70	108.47	5.45
SNB-H4dP	-0.10	-231.96	-32.70	-209.02	10.38	-108.45	-5.49
SNB-H4eP	6.62	32.50	-4.31	245.17	-15.28	68.29	-4.82
SNB-H4fP	6.63	-245.17	4.31	-353.04	-17.50	-147.12	-0.54
SNB-H5aP	-10.26	621.17	26.99	320.62	-24.55	198.41	0.52
SNB-H5bP	-10.25	-320.62	24.56	-126.17	0.73	-40.96	5.33
SNB-H5cP	-0.34	273.03	-19.90	298.25	54.96	120.35	7.39
SNB-H5dP	-0.35	-298.25	-54.96	-272.64	19.67	-120.27	-7.44
SNB-H5eP	10.57	-125.30	-0.77	319.86	-24.62	40.99	-5.35
SNB-H5fP	10.58	125.30	0.77	-319.86	24.62	-40.99	-5.35
SNB-H6aP	-47.71	607.81	8.71	521.15	-23.81	207.98	-0.44
SNB-H6bP	-47.70	-621.16	-8.71	-521.15	-23.81	207.98	-2.77
SNB-H6cP	-0.13	479.18	-15.86	415.69	45.44	164.86	5.45
SNB-H6dP	-0.15	-415.69	15.86	-479.73	15.99	-164.96	-5.43
SNB-H6eP	47.83	131.83	8.43	520.94	-22.46	120.25	-2.60
SNB-H6fP	47.84	-520.93	-8.43	-520.94	-22.46	120.25	-2.60
SNB-H7aP	-42.87	690.00	-7.73	757.87	-8.97	-207.95	2.50
SNB-H7bP	-42.86	-757.87	7.73	-757.87	-8.97	-207.95	2.50
SNB-H7cP	0.03	703.50	-12.62	667.17	53.72	224.35	6.73
SNB-H7dP	-0.01	-667.17	12.62	-703.45	12.76	-224.34	-6.70
SNB-H7eP	42.85	512.38	16.89	758.03	-28.70	207.93	-1.95
SNB-H7fP	42.87	-758.03	-16.89	-758.03	-28.70	207.93	-1.95
SNB-H8aP	-11.92	1000.85	-13.65	890.75	-32.44	278.56	-6.78
SNB-H8bP	-11.90	-890.75	13.65	-890.75	-32.44	278.56	-6.78
SNB-H8cP	-0.08	837.98	5.08	875.01	63.74	252.27	10.14
SNB-H8dP	-0.12	-875.01	-5.08	-875.01	63.74	252.27	10.14
SNB-H8eP	12.01	599.34	7.92	890.58	-5.15	-252.35	-10.15
SNB-H8fP	12.03	-599.34	-7.92	-890.58	-5.15	-252.35	-10.15
SNB-H9aP	-29.02	1098.32	-18.90	1039.56	-38.25	286.11	-7.63
SNB-H9bP	-29.00	-1098.32	18.90	-1039.56	-38.25	286.11	-7.63
SNB-H9cP	0.00	1025.15	25.99	991.73	75.13	269.93	13.53
SNB-H9dP	0.00	-1025.15	-25.99	-991.73	75.13	269.93	13.53
SNB-H9eP	-0.05	991.73	-75.13	-1025.20	-26.01	-269.94	-13.54
SNB-H9fP	-0.05	-991.73	75.13	1025.20	-26.01	-269.94	-13.54
SNB-H9gP	29.04	786.12	-6.10	1039.51	-38.19	244.52	-6.20
SNB-H9hP	29.06	-786.12	6.10	-1039.51	-38.19	244.52	-6.20
SNB-H9iP	29.06	-1039.51	38.23	-1098.41	18.99	-286.12	7.67

Equilibrium Joint Positions and Rotations for Load Case "4: 1.2D + 1.0Dg + 1.0E":

Joint Label	X-Displ (ft)	Y-Displ (ft)	Z-Displ (ft)	X-Rot (deg)	Y-Rot (deg)	Z-Rot (deg)	X-Pos (ft)	Y-Pos (ft)	Z-Pos (ft)
RohnAP	0.1395	9.999e-005	-0.01534	0.0000	0.0796	-0.0008	4.472	9.999e-005	180
RohnBP	0.1115	0.0001227	-0.01606	0.0000	0.0787	-0.0004	5.233	0.0001227	160
RohnCP	0.08464	0.0001146	-0.01586	-0.0000	0.0731	-0.0003	5.994	0.0001146	140
RohnDP	0.06077	7.869e-005	-0.01484	-0.0000	0.0622	-0.0001	6.756	7.869e-005	120
RohnEP	0.04112	4.468e-005	-0.0125	-0.0001	0.0486	-0.0001	7.522	4.468e-005	99.99
RohnFP	0.02594	2.385e-005	-0.01036	-0.0001	0.0357	-0.0001	8.294	4.385e-005	79.99
RohnGP	0.01443	1.717e-005	-0.008039	-0.0001	0.0270	-0.0001	9.069	1.717e-005	59.99
RohnHP	0.006382	2.553e-006	-0.005609	-0.0000	0.0177	-0.0000	9.847	2.553e-006	39.99
RohnIP	0.001676	-2.973e-006	-0.002694	-0.0000	0.0067	-0.0000	10.63	-2.973e-006	20
RohnJP	0	0	0	0.0000	0.0000	0.0000	11.42	0	0
SNB-AP	0.1395	0.0001679	-0.007763	-0.0000	0.0733	-0.0000	2.472	0.0001679	180
SNB-BP	0.1115	0.0001506	-0.008618	-0.0000	0.0739	-0.0000	3.233	0.0001506	160
SNB-CP	0.08465	0.0001365	-0.009051	-0.0001	0.0680	-0.0000	3.993	0.0001365	140
SNB-DP	0.06078	0.0001173	-0.008817	-0.0001	0.0542	-0.0000	4.756	0.0001173	120
SNB-EP	0.04113	9.182e-005	-0.007665	-0.0001	0.0430	-0.0000	5.522	9.182e-005	99.99
SNB-FP	0.02594	6.015e-005	-0.006683	-0.0001	0.0299	-0.0000	6.294	6.015e-005	79.99
SNB-GP	0.01443	3.151e-005	-0.005452	-0.0001	0.0167	-0.0000	7.069	3.151e-005	59.99
SNB-HP	0.006383	1.221e-005	-0.003919	-0.0000	0.0093	-0.0000	7.847	1.221e-005	40
SNB-IP	0.001676	2.297e-006	-0.001927	-0.0000	0.0008	-0.0000	8.63	2.297e-006	20
SNB-JP	0	0	0	0.0000	0.0000	0.0000	9.415	0	0
RohnA1	0.1394	0.0002078	-0.006378	-0.0007	0.0802	-0.0012	-2.027	-3.752	180
RohnA2	0.1395	0.0002061	-0.006402	0.0003	0.0806	-0.0004	-2.027	3.753	180
RohnB1	0.1115	0.0001693	-0.00572	-0.0000	0.0797	-0.0012	-2.449	-4.435	160
RohnB2	0.1115	0.0001581	-0.005721	-0.0001	0.0799	-0.0004	-2.449	4.435	160
RohnC1	0.08457	0.0001775	-0.004983	-0.0002	0.0729	-0.0015	-2.87	-5.117	140
RohnC2	0.08461	0.0001184	-0.005001	0.0001	0.0729	-0.0010	-2.87	5.117	140
RohnD1	0.06069	0.0001649	-0.00421	-0.0005	0.0628	-0.0015	-3.287	-5.798	120
RohnD2	0.06069	8.743e-005	-0.00422	0.0004	0.0628	-0.0011	-3.287	5.798	120
RohnE1	0.04105	0.0001197	-0.00326	-0.0002	0.0487	-0.0012	-3.699	-6.479	100
RohnE2	0.04108	8.269e-005	-0.00328	0.0000	0.0487	-0.0010	-3.699	6.479	100
RohnF1	0.02583	0.0001041	-0.002495	-0.0006	0.0395	-0.0011	-4.108	-7.116	80
RohnF2	0.02586	3.568e-005	-0.002525	0.0004	0.0396	-0.0009	-4.108	7.116	80
RohnG1	0.01436	6.258e-005	-0.001828	-0.0002	0.0279	-0.0008	-4.513	-7.842	60
RohnG2	0.01439	1.558e-005	-0.001854	0.0001	0.0279	-0.0007	-4.513	7.842	60
RohnH1	0.006314	4.315e-005	-0.001219	-0.0002	0.0186	-0.0005	-4.914	-8.523	40
RohnH2	0.00633	9.542e-006	-0.001234	0.0001	0.0186	-0.0005	-4.914	8.523	40
RohnI1	0.001625	2.444e-005	-0.0005804	-0.0005	0.0091	-0.0003	-5.313	-9.206	20
RohnI2	0.001633	-1.507e-005	-0.0005868	0.0005	0.0092	-0.0003	-5.313	9.206	20
RohnJ1	0	0	0	0.0000	0.0000	0.0000	-5.71	-9.89	0
RohnJ2	0	0	0	0.0000	0.0000	0.0000	-5.71	9.89	0
SNB-A1	0.1395	0.0001674	-0.002869	-0.0059	0.0837	-0.0001	-1.027	-2.02	180
SNB-A2	0.1395	0.000169	-0.002873	0.0058	0.0836	-0.0001	-1.027	2.021	180
SNB-B1	0.1115	0.0001501	-0.002249	-0.0038	0.0813	-0.0001	-1.449	-2.703	160
SNB-B2	0.1115	0.0001519	-0.002252	0.0037	0.0813	-0.0001	-1.449	2.703	160
SNB-C1	0.08464	0.0001347	-0.001689	-0.0042	0.0757	-0.0002	-1.869	-3.384	140
SNB-C2	0.08464	0.0001389	-0.001695	0.0041	0.0757	-0.0002	-1.869	3.385	140
SNB-D1	0.06075	0.0001146	-0.001239	-0.0069	0.0670	-0.0003	-2.287	-4.066	120
SNB-D2	0.06075	0.0001205	-0.001248	0.0068	0.0669	-0.0003	-2.287	4.066	120
SNB-E1	0.0411	9.169e-005	-0.0008185	-0.0042	0.0506	-0.0003	-2.699	-4.747	100
SNB-E2	0.0411	9.243e-005	-0.0009332	0.0041	0.0506	-0.0003	-2.699	4.747	100
SNB-F1	0.02591	5.684e-005	-0.0006739	-0.0062	0.0428	-0.0002	-3.108	-5.428	80
SNB-F2	0.02591	6.377e-005	-0.0006894	0.0060	0.0428	-0.0002	-3.108	5.428	80
SNB-G1	0.0144	3.964e-005	-0.0004759	-0.0081	0.0328	-0.0003	-3.513	-6.111	60
SNB-G2	0.0144	2.363e-005	-0.0004896	0.0080	0.0328	-0.0003	-3.513	6.111	60
SNB-H1	0.00635	2.253e-005	-0.000307	-0.0075	0.0227	-0.0003	-3.914	-6.79	40
SNB-H2	0.00635	2.2e-006	-0.0003166	0.0074	0.0227	-0.0003	-3.914	6.791	40
SNB-I1	0.001638	1.657e-005	-0.0001473	-0.0057	0.0122	-0.0002	-4.312	-7.472	20
SNB-I2	0.001638	1.176e-005	-0.0001516	0.0057	0.0122	-0.0002	-4.312	7.472	20
SNB-J1	0	0	0	0.0000	0.0000	0.0000	-4.708	-8.154	0
SNB-J2	0	0	0	0.0000	0.0000	0.0000	-4.708	8.154	0

RohnAaS	0.1325	0.0001007	-0.01558	0.0000	0.0806	-0.0007	4.662	0.0001007	175
RohnAbS	0.1254	0.0001073	-0.01578	0.0002	0.0801	-0.0006	4.852	0.0001073	170
RohnAcS	0.1165	0.0001233	-0.01594	0.0001	0.0660	-0.0005	5.042	0.0001233	165
RohnBbS	0.1047	0.0001207	-0.01611	0.0000	0.0784	-0.0004	5.423	0.0001207	155
RohnBcS	0.09784	0.0001188	-0.01601	0.0000	0.0757	-0.0003	5.613	0.0001188	145
RohnBdS	0.09122	0.0001098	-0.01566	0.0000	0.0689	-0.0002	6.247	0.0001098	133.3
RohnCs	0.06844	0.0001038	-0.01533	0.0000	0.0677	-0.0002	6.502	0.0001038	126.6
RohnDs	0.05384	0.0001098	-0.01421	0.0001	0.0570	-0.0002	7.011	9.338e-005	113.3
RohnEs	0.04731	8.405e-005	-0.01339	0.0001	0.0550	-0.0001	7.267	8.405e-005	106.6
RohnFbS	0.03581	6.432e-005	-0.01185	0.0001	0.0438	-0.0001	7.779	6.432e-005	93.33
RohnFbS	0.0307	5.348e-005	-0.01113	0.0001	0.0433	-0.0001	8.037	5.348e-005	86.65
RohnFbS	0.02017	2.666e-005	-0.009248	0.0001	0.0333	-0.0001	8.682	2.666e-005	69.99
RohnGaS	0.01042	6.567e-006	-0.006861	0.0000	0.0229	-0.0000	9.458	6.567e-006	49.99
RohnHaS	0.004064	1.584e-006	-0.004186	0.0000	0.0136	-0.0000	10.24	1.584e-006	30
RohnIaS	0.0008892	-2.634e-006	-0.001371	0.0000	0.0051	-0.0000	11.03	-2.634e-006	9.999
RohnAaS	0.1325	0.0001163	-0.008013	0.0001	0.0823	-0.0000	2.662	0.0001163	175
RohnAaS	0.1254	0.0001552	-0.008247	0.0000	0.0793	-0.0000	2.852	0.0001552	170
RohnAaS	0.1185	0.0001545	-0.008447	0.0000	0.0814	-0.0000	3.042	0.0001545	165
RohnAaS	0.1047	0.0001479	-0.008776	0.0000	0.0798	-0.0000	3.422	0.0001479	155
RohnBbS	0.09785	0.0001445	-0.008904	0.0000	0.0763	-0.0000	3.612	0.0001445	150
RohnBbS	0.09123	0.0001409	-0.008993	0.0000	0.0772	-0.0000	3.802	0.0001409	145
RohnBbS	0.07643	0.0001305	-0.009047	0.0001	0.0698	-0.0000	4.246	0.0001305	133.3
RohnCbS	0.06845	0.0001241	-0.008958	0.0001	0.0636	-0.0000	4.501	0.0001241	126.7
RohnDaS	0.05385	0.0001101	-0.008525	0.0001	0.0589	-0.0000	5.011	0.0001101	113.3
RohnDbS	0.04731	0.0001013	-0.008123	0.0001	0.0561	-0.0000	5.267	0.0001013	106.7
RohnEaS	0.03582	8.173e-005	-0.007441	0.0001	0.0451	-0.0000	5.779	8.173e-005	93.33
RohnEbS	0.0307	7.077e-005	-0.007154	0.0001	0.0446	-0.0000	6.037	7.077e-005	86.65
RohnFbS	0.02018	4.412e-005	-0.006618	0.0001	0.0375	-0.0000	6.582	4.412e-005	69.99
RohnGaS	0.004065	1.991e-005	-0.004719	0.0000	0.0277	-0.0000	7.458	1.991e-005	50
RohnHaS	0.0008892	-1.31e-007	-0.002953	0.0000	0.0173	-0.0000	8.239	5.35e-006	30
RohnIaS	0.0008892	-1.31e-007	-0.0009875	0.0000	0.0066	-0.0000	9.022	-1.31e-007	9.999
RohnAaS	0.1325	0.0001661	-0.005849	0.0029	0.0784	0.0000	0.7227	-1.01	180
RohnAaS	0.1254	0.0001682	-0.003042	0.0001	0.0837	0.0000	-1.027	0.0001682	180
RohnAaS	0.1185	0.0001701	-0.005491	0.0028	0.0784	0.0000	0.7227	1.01	180
RohnAaS	0.1115	0.0001493	-0.005669	0.0000	0.0768	0.0000	0.8918	-1.351	160
RohnAaS	0.1115	0.0001525	-0.002499	0.0000	0.0813	0.0000	-1.449	0.000151	160
RohnAaS	0.1115	0.0001355	-0.005692	0.0014	0.0768	0.0000	0.8918	-1.352	160
RohnAaS	0.08465	0.0001368	-0.002174	0.0000	0.0757	0.0000	-1.869	-1.692	140
RohnAaS	0.08465	0.0001381	-0.005862	0.0013	0.0706	0.0000	1.062	0.0001368	140
RohnAaS	0.06076	0.0001159	-0.006127	0.0029	0.0595	0.0001	1.235	1.692	140
RohnAaS	0.06077	0.0001176	-0.002233	0.0001	0.0670	0.0000	-2.287	-2.033	120
RohnAaS	0.04111	9.029e-005	-0.006131	0.0028	0.0595	0.0001	1.235	0.0001176	120
RohnAaS	0.04112	9.206e-005	-0.005058	0.0015	0.0457	0.0001	1.411	2.033	120
RohnAaS	0.04111	9.295e-005	-0.001684	0.0001	0.0506	0.0000	-2.699	-2.373	99.99
RohnAaS	0.02592	5.89e-005	-0.005276	0.0027	0.0356	0.0001	1.593	-2.373	99.99
RohnAaS	0.02592	6.059e-005	-0.002159	0.0001	0.0428	0.0000	-3.108	-2.714	79.99
RohnAaS	0.01442	3.018e-005	-0.005284	0.0025	0.0356	0.0001	1.593	6.03e-005	80
RohnAaS	0.01442	3.163e-005	-0.005729	0.0040	0.0246	0.0001	1.778	2.714	79.99
RohnAaS	0.01442	3.293e-005	-0.003201	0.0001	0.0328	0.0000	-3.513	-3.055	59.99
RohnAaS	0.006369	1.123e-005	-0.005736	0.0039	0.0246	0.0001	1.778	3.163e-005	60
RohnAaS	0.006371	1.236e-005	-0.006062	0.0034	0.0154	0.0001	1.967	3.055	59.99
RohnAaS	0.006369	1.338e-005	-0.004253	0.0000	0.0227	0.0000	-3.914	-3.395	39.99
RohnAaS	0.001661	1.668e-006	-0.006067	0.0033	0.0154	0.0001	1.967	3.395	39.99
RohnAaS	0.001662	2.405e-006	-0.005404	0.0027	0.0062	0.0001	2.159	-3.736	19.99
RohnAaS	0.001661	3.085e-006	-0.003548	0.0000	0.0122	0.0000	-4.312	2.405e-006	19.99
RohnAa1	0.1324	0.0001618	-0.006406	0.0026	0.0862	0.0001	2.159	3.736	19.99
RohnAa2	0.1325	0.0002175	-0.006217	0.0002	0.0800	0.0012	-2.133	-3.923	175
RohnAb1	0.1254	0.000175	-0.006232	0.0003	0.0806	0.0002	-2.132	3.923	175
RohnAb2	0.1255	0.0006054	-0.006054	0.0001	0.0806	0.0012	-2.238	-4.094	170
RohnAc1	0.1184	0.0001778	-0.006059	0.0002	0.0808	0.0000	-2.238	4.094	170
RohnAc2	0.1185	0.0001518	-0.005884	0.0000	0.0796	0.0012	-2.344	-4.264	165
RohnBb1	0.1045	0.000188	-0.005887	0.0001	0.0797	0.0002	-2.344	4.264	165
RohnBb2	0.1046	0.0001698	-0.005546	0.0003	0.0781	0.0013	-2.554	-4.605	155
RohnBb1	0.09784	0.0001399	-0.005549	0.0002	0.0781	0.0005	-2.554	4.606	155
RohnBb2	0.09788	0.0001741	-0.005387	0.0001	0.0772	0.0007	-2.66	-4.776	150
RohnBb2	0.09788	0.0001741	-0.005387	0.0000	0.0772	0.0007	-2.66	4.776	150

Joint Label	X (kips)	X Usage %	Y (kips)	Y Usage %	Z Comp. Usage %	Uplift Force (kips)	Result. Force (kips)	Result. Usage %	X Moment (ft-k)	X-M. Usage %	Y Moment (ft-k)	Y-M. Usage %	Z Moment (ft-k)	Z-M. Usage %	Max. Usage %
RohnBc1	0.09106	0.0001449	0.0000379	0.00030765	-0.00015	-2.765	-4.947	145							
RohnBc2	0.0911	0.0001605	-0.005186	-0.00050768	0.0009	-2.765	5.344	133.3							
RohnCa1	0.07621	0.0001067	-0.004759	-0.00070708	0.0015	-3.009	-5.344	133.3							
RohnCa2	0.07625	0.0001738	-0.00477	-0.00050708	0.0011	-3.009	-5.571	126.7							
RohnCb1	0.06817	0.0001023	-0.00451	-0.00070668	0.0011	-3.148	5.571	126.7							
RohnCb2	0.0682	0.0001644	-0.003909	-0.00070598	0.0014	-3.425	6.025	113.3							
RohnDa1	0.05351	6.428e-005	-0.003922	0.00050598	0.0011	-3.425	-6.252	106.7							
RohnDa2	0.05354	0.0001739	-0.003354	0.00040531	-0.0013	-3.563	6.252	106.7							
RohnDb1	0.04688	8.018e-005	-0.003358	0.00060532	0.0010	-3.563	-6.706	93.34							
RohnDb2	0.04691	0.0001411	-0.002997	-0.00030459	0.0012	-3.836	6.706	93.34							
RohnEa1	0.0355	7.586e-005	-0.003021	0.00010459	0.0010	-3.836	-6.933	86.66							
RohnEa2	0.03553	0.0001063	-0.002739	0.00030410	-0.0011	-3.973	6.933	86.66							
RohnEb1	0.03045	8.773e-005	-0.002765	0.00050410	0.0009	-3.972	-7.501	70							
RohnEb2	0.03048	7.346e-005	-0.002142	-0.00010324	-0.0009	-4.311	7.501	70							
RohnFa1	0.0193	-1.761e-005	-0.002142	-0.00010324	0.0007	-4.311	-8.182	50							
RohnFa2	0.01933	0.0001241	-0.001169	-0.00010320	0.0007	-4.311	8.182	50							
RohnGa1	0.009613	-4.073e-005	-0.00151	-0.00010230	-0.0006	-4.714	-8.864	30							
RohnGa2	0.009631	9.377e-005	-0.00153	-0.00010230	0.0006	-4.714	8.864	30							
RohnHa1	0.003177	7.695e-005	-0.000848	0.00001032	-0.0004	-5.115	-8.864	30							
RohnHa2	0.003187	9.613e-005	-0.0008955	0.00010133	0.0003	-5.115	8.864	30							
RohnIa1	0.0001649	-9.868e-005	-0.000283	-0.00010047	-0.0001	-5.512	-9.548	10							
RohnIa2	0.0001681	0.0001018	-0.0002862	0.00000048	0.0002	-5.512	9.548	10							
SNB-Aa1	0.1324	0.000139	-0.00271	0.00150794	0.0002	-1.133	-2.191	175							
SNB-Aa2	0.1324	0.0001842	-0.002715	0.00160795	0.0002	-1.133	2.191	175							
SNB-Ab1	0.1254	0.0001565	-0.002553	-0.00060810	0.0002	-1.238	-2.361	170							
SNB-Ab2	0.1254	0.0001583	-0.002557	0.00050810	0.0002	-1.238	2.361	170							
SNB-Ac1	0.1184	0.0001399	-0.002396	0.00100791	-0.0002	-1.344	-2.532	165							
SNB-Ac2	0.1184	0.0001666	-0.0024	0.00110791	0.0002	-1.344	2.532	165							
SNB-Ba1	0.1046	0.0001234	-0.002095	0.00100781	-0.0002	-1.554	-2.873	155							
SNB-Ba2	0.1046	0.0001725	-0.002099	0.00120781	0.0002	-1.554	2.873	155							
SNB-Bb1	0.09781	0.000152	-0.001951	0.00050777	-0.0002	-1.659	-3.043	150							
SNB-Bb2	0.09781	0.0001376	-0.001956	0.00050777	0.0002	-1.659	3.043	150							
SNB-Bc1	0.0911	0.0001224	-0.001814	0.00100749	-0.0002	-1.765	-3.214	145							
SNB-Bc2	0.0911	0.0001597	-0.001819	0.00110749	0.0002	-1.765	3.214	145							
SNB-Ca1	0.07617	0.000126	-0.001521	0.00050711	-0.0003	-2.009	-3.611	133.3							
SNB-Ca2	0.07617	0.0001349	-0.001528	0.00060711	0.0003	-2.009	3.611	133.3							
SNB-Cb1	0.06815	0.0001057	-0.001365	0.00150649	-0.0003	-2.148	-3.839	126.7							
SNB-Cb2	0.06816	0.0001424	-0.001373	0.00160649	0.0003	-2.148	3.839	126.7							
SNB-Da1	0.05348	7.847e-005	-0.001107	0.00130596	-0.0004	-2.425	-4.293	113.3							
SNB-Da2	0.05348	0.0001416	-0.001118	0.00150596	0.0004	-2.425	4.293	113.3							
SNB-Db1	0.04687	8.815e-005	-0.0009918	0.00080522	-0.0003	-2.563	-4.52	106.7							
SNB-Db2	0.04687	0.0001151	-0.0001094	0.00100522	0.0003	-2.563	4.52	106.7							
SNB-Ea1	0.03555	4.917e-005	-0.0008197	0.00050458	-0.0003	-2.836	-4.974	93.34							
SNB-Ea2	0.03555	0.0001147	-0.0008341	0.00070458	0.0003	-2.836	4.974	93.34							
SNB-Eb1	0.03048	6.85e-005	-0.0007357	0.00140400	-0.0002	-2.972	-5.201	86.66							
SNB-Eb2	0.03048	7.413e-005	-0.0007509	0.00160400	0.0002	-2.972	5.201	86.66							
SNB-Fa1	0.01926	2.815e-006	-0.0005509	0.00350306	-0.0002	-3.311	-5.769	70							
SNB-Fa2	0.01926	8.764e-005	-0.0005661	0.00360306	0.0002	-3.311	5.769	70							
SNB-Ga1	0.009612	-4.084e-005	-0.0003708	0.00380208	-0.0003	-3.714	-6.45	50							
SNB-Ga2	0.009612	8.264e-005	-0.0003827	0.00390208	0.0003	-3.714	6.45	50							
SNB-Ha1	0.005192	-8.601e-005	-0.0002066	0.00320115	-0.0002	-4.114	-7.131	30							
SNB-Ha2	0.005192	8.264e-005	-0.0002066	0.00320115	0.0002	-4.114	7.131	30							
SNB-Ia1	0.0001491	9.857e-005	-0.0002137	0.00330115	-0.0002	-4.511	-7.813	10							
SNB-Ia2	0.0001495	9.044e-005	-5.797e-005	0.00130040	-0.0001	-4.511	7.813	10							
SNB-Ia3	0.0001485	9.044e-005	-6.015e-005	0.00130040	0.0001	-4.511	7.813	10							

Joint Support Reactions for Load Case "4: 1.2D + 1.0Dg + 1.0E":

Joint Label	X (kips)	X Usage %	Y (kips)	Y Usage %	Z Comp. Usage %	Uplift Force (kips)	Result. Force (kips)	Result. Usage %	X Moment (ft-k)	X-M. Usage %	Y Moment (ft-k)	Y-M. Usage %	Z Moment (ft-k)	Z-M. Usage %	Max. Usage %
RohnJP	-2.52	0.0	0.00	0.0	41.46	0.0	41.54	0.0	-0.00	0.0	-0.6	0.0	0.00	0.0	0.0
SNB-JP	-3.04	0.0	0.00	0.0	49.29	0.0	49.29	0.0	-0.00	0.0	-1.2	0.0	-0.00	0.0	0.0
RohnJ1	0.11	0.0	0.32	0.0	8.90	0.0	8.91	0.0	-0.09	0.0	0.1	0.0	0.00	0.0	0.0
RohnJ2	0.10	0.0	-0.33	0.0	8.99	0.0	9.00	0.0	0.10	0.0	0.0	0.0	0.00	0.0	0.0
SNB-J1	-0.46	0.0	-0.54	0.0	2.94	0.0	3.02	0.0	-0.03	0.0	0.2	0.0	-0.01	0.0	0.0
SNB-J2	-0.45	0.0	0.54	0.0	3.04	0.0	3.12	0.0	0.03	0.0	0.2	0.0	0.01	0.0	0.0

Joint Displacements, Loads and Member Forces on Joints for Load Case "4: 1.2D + 1.0Dg + 1.0E":

Label	Joint X Load (kips)	External Y Load (kips)	External Z Load (kips)	External X Load (kips)	Member Z Force (kips)	Member Y Force (kips)	Member X Force (kips)	Disp. (ft)	Y Disp. (ft)	Z Disp. (ft)
RohnAP	0.0984	0.0000	0.0000	-0.3543	-0.0984	0.0000	0.3543	0.1395	0.0001	-0.0153
RohnBP	0.1982	0.0000	0.0000	-1.2721	-0.1982	0.0000	1.2721	0.1115	0.0001	-0.0161
RohnCP	0.0454	0.0000	0.0000	-0.5121	-0.0454	0.0000	0.5121	0.0846	0.0001	-0.0159
RohnDP	0.0371	0.0000	0.0000	-0.6208	-0.0371	0.0000	0.6208	0.0608	0.0001	-0.0148
RohnEP	0.0369	0.0000	0.0000	-0.7694	-0.0369	0.0000	0.7694	0.0411	0.0001	-0.0125
RohnFP	0.0403	0.0000	0.0000	-1.0436	-0.0403	0.0000	1.0436	0.0259	0.0000	-0.0104
RohnGP	0.0389	0.0000	0.0000	-1.3901	-0.0389	0.0000	1.3901	0.0144	0.0000	-0.0080
RohnHP	0.0253	0.0000	0.0000	-1.3837	-0.0253	0.0000	1.3837	0.0064	0.0000	-0.0056
RohnIP	0.0172	0.0000	0.0000	-1.5524	-0.0172	0.0000	1.5524	0.0017	-0.0000	-0.0027
RohnJP	0.0000	0.0000	0.0000	-0.8390	2.5204	-0.0032	40.6196	0.0000	0.0000	0.0000
SNB-AP	0.0517	0.0000	0.0000	-0.1863	-0.0517	0.0000	0.1863	0.1395	0.0002	-0.0078
SNB-BP	0.0628	0.0000	0.0000	-0.4033	-0.0628	0.0000	0.4033	0.1115	0.0002	-0.0086
SNB-CP	0.0454	0.0000	0.0000	-0.5121	-0.0454	0.0000	0.5121	0.0846	0.0001	-0.0091
SNB-DP	0.0371	0.0000	0.0000	-0.6208	-0.0371	0.0000	0.6208	0.0608	0.0001	-0.0088
SNB-EP	0.0369	0.0000	0.0000	-0.7694	-0.0369	0.0000	0.7694	0.0411	0.0001	-0.0077
SNB-FP	0.0403	0.0000	0.0000	-1.0436	-0.0403	0.0000	1.0436	0.0259	0.0001	-0.0068
SNB-GP	0.0355	0.0000	0.0000	-1.2701	-0.0355	0.0000	1.2701	0.0144	0.0000	-0.0055
SNB-HP	0.0253	0.0000	0.0000	-1.3837	-0.0253	0.0000	1.3837	0.0064	0.0000	-0.0039
SNB-IP	0.0172	0.0000	0.0000	-1.5524	-0.0172	0.0000	1.5524	0.0017	0.0000	-0.0019
SNB-JP	0.0000	0.0000	0.0000	-0.8390	3.0374	-0.0012	48.3621	0.0000	0.0000	0.0000
RohnA1	0.0984	0.0000	0.0000	-0.3543	-0.0984	0.0000	0.3543	0.1394	0.0002	-0.0064
RohnA2	0.1450	0.0000	0.0000	-0.5223	-0.1450	0.0000	0.5223	0.1395	0.0002	-0.0064
RohnB1	0.0841	0.0000	0.0000	-0.5401	-0.0841	0.0000	0.5401	0.1115	0.0002	-0.0057
RohnB2	0.0720	0.0000	0.0000	-0.4621	-0.0720	0.0000	0.4621	0.1115	0.0002	-0.0057
RohnC1	0.0454	0.0000	0.0000	-0.5121	-0.0454	0.0000	0.5121	0.0846	0.0002	-0.0050
RohnC2	0.0454	0.0000	0.0000	-0.5121	-0.0454	0.0000	0.5121	0.0846	0.0001	-0.0050
RohnD1	0.0421	0.0000	0.0000	-0.7048	-0.0421	0.0000	0.7048	0.0607	0.0002	-0.0042
RohnD2	0.0371	0.0000	0.0000	-0.6208	-0.0371	0.0000	0.6208	0.0607	0.0001	-0.0042
RohnE1	0.0369	0.0000	0.0000	-0.7694	-0.0369	0.0000	0.7694	0.0411	0.0001	-0.0033
RohnE2	0.0369	0.0000	0.0000	-0.7694	-0.0369	0.0000	0.7694	0.0411	0.0001	-0.0033
RohnF1	0.0403	0.0000	0.0000	-1.0436	-0.0403	0.0000	1.0436	0.0258	0.0001	-0.0025
RohnF2	0.0471	0.0000	0.0000	-1.2176	-0.0471	0.0000	1.2176	0.0259	0.0000	-0.0025
RohnG1	0.0375	0.0000	0.0000	-1.3421	-0.0375	0.0000	1.3421	0.0144	0.0001	-0.0018
RohnG2	0.0408	0.0000	0.0000	-1.4573	-0.0408	0.0000	1.4573	0.0144	0.0000	-0.0019
RohnH1	0.0253	0.0000	0.0000	-1.3837	-0.0253	0.0000	1.3837	0.0063	0.0000	-0.0012
RohnH2	0.0253	0.0000	0.0000	-1.3837	-0.0253	0.0000	1.3837	0.0063	0.0000	-0.0012
RohnI1	0.0172	0.0000	0.0000	-1.5524	-0.0172	0.0000	1.5524	0.0016	0.0000	-0.0006
RohnI2	0.0000	0.0000	0.0000	-1.5524	0.0172	0.0000	1.5524	0.0016	0.0000	-0.0006
RohnJ1	0.0000	0.0000	0.0000	-0.8390	-0.1072	-0.3234	-8.0602	0.0000	0.0000	0.0000
RohnJ2	0.0000	0.0000	0.0000	-0.8390	-0.1042	-0.3270	-8.1513	0.0000	0.0000	0.0000
SNB-A1	0.0517	0.0000	0.0000	-0.1863	-0.0517	0.0000	0.1863	0.1395	0.0002	-0.0029
SNB-A2	0.0517	0.0000	0.0000	-0.1863	-0.0517	0.0000	0.1863	0.1395	0.0002	-0.0029
SNB-B1	0.0628	0.0000	0.0000	-0.4033	-0.0628	0.0000	0.4033	0.1115	0.0002	-0.0022
SNB-B2	0.0628	0.0000	0.0000	-0.4033	-0.0628	0.0000	0.4033	0.1115	0.0002	-0.0022
SNB-C1	0.0454	0.0000	0.0000	-0.5121	-0.0454	0.0000	0.5121	0.0846	0.0001	-0.0017
SNB-C2	0.0454	0.0000	0.0000	-0.5121	-0.0454	0.0000	0.5121	0.0846	0.0001	-0.0017
SNB-D1	0.0371	0.0000	0.0000	-0.6208	-0.0371	0.0000	0.6208	0.0607	0.0001	-0.0012
SNB-D2	0.0371	0.0000	0.0000	-0.6208	-0.0371	0.0000	0.6208	0.0607	0.0001	-0.0012
SNB-E1	0.0369	0.0000	0.0000	-0.7694	-0.0369	0.0000	0.7694	0.0411	0.0001	-0.0009
SNB-E2	0.0369	0.0000	0.0000	-0.7694	-0.0369	0.0000	0.7694	0.0411	0.0001	-0.0009
SNB-F1	0.0403	0.0000	0.0000	-1.0436	-0.0403	0.0000	1.0436	0.0259	0.0001	-0.0007
SNB-F2	0.0403	0.0000	0.0000	-1.0436	-0.0403	0.0000	1.0436	0.0259	0.0001	-0.0007
SNB-G1	0.0355	0.0000	0.0000	-1.2701	-0.0355	0.0000	1.2701	0.0144	0.0000	-0.0005
SNB-G2	0.0355	0.0000	0.0000	-1.2701	-0.0355	0.0000	1.2701	0.0144	0.0000	-0.0005
SNB-H1	0.0253	0.0000	0.0000	-1.3837	-0.0253	0.0000	1.3837	0.0063	0.0000	-0.0003
SNB-H2	0.0253	0.0000	0.0000	-1.3837	-0.0253	0.0000	1.3837	0.0063	0.0000	-0.0003
SNB-I1	0.0172	0.0000	0.0000	-1.5524	-0.0172	0.0000	1.5524	0.0016	0.0000	-0.0001
SNB-I2	0.0172	0.0000	0.0000	-1.5524	-0.0172	0.0000	1.5524	0.0016	0.0000	-0.0001
SNB-J1	0.0000	0.0000	0.0000	-0.8390	0.4564	0.0000	-2.0985	0.0000	0.0000	0.0000
SNB-J2	0.0000	0.0000	0.0000	-0.8390	0.4547	0.0000	-2.2002	0.0000	0.0000	0.0000
RohnAas	0.0601	0.0000	0.0000	-0.8390	-0.0601	0.0000	0.2490	0.1325	0.0001	-0.0156
RohnBAs	0.0390	0.0000	0.0000	-0.1863	-0.0390	0.0000	0.1863	0.1254	0.0001	-0.0158
RohnCAs	0.0452	0.0000	0.0000	-0.2502	-0.0452	0.0000	0.2502	0.1185	0.0001	-0.0159

RohnBaS	0.0292	0.0000	-0.2170	-0.0292	0.0000	0.2170	0.1047	0.0001	-0.0161
RohnBbS	0.1346	0.0000	-1.1580	-0.1346	0.0000	1.1580	0.0978	0.0001	-0.0161
RohnBcS	0.0219	0.0000	-0.2170	-0.0219	0.0000	0.2170	0.0912	0.0001	-0.0160
RohnCaS	0.0726	0.0000	-0.9577	-0.0726	0.0000	0.9577	0.0764	0.0001	-0.0157
RohnCbS	0.1145	0.0000	-1.7228	-0.1145	0.0000	1.7228	0.0684	0.0001	-0.0153
RohnDbS	0.0834	0.0000	-1.5191	-0.0834	0.0000	1.5191	0.0538	0.0001	-0.0142
RohnEbS	0.0166	0.0000	-0.3257	-0.0166	0.0000	0.3257	0.0473	0.0001	-0.0134
RohnFaS	0.0200	0.0000	-0.4437	-0.0200	0.0000	0.4437	0.0358	0.0001	-0.0119
RohnFbS	0.0186	0.0000	-0.4437	-0.0186	0.0000	0.4437	0.0307	0.0001	-0.0111
RohnFas	0.0200	0.0000	-0.5999	-0.0200	0.0000	0.5999	0.0202	0.0000	-0.0092
RohnGas	0.0153	0.0000	-0.6702	-0.0153	0.0000	0.6702	0.0104	0.0000	-0.0069
RohnHAs	0.0104	0.0000	-0.7135	-0.0104	0.0000	0.7135	0.0041	0.0000	-0.0042
RohnIAs	0.0059	0.0000	-0.8390	-0.0059	0.0000	0.8390	0.0009	0.0000	-0.0014
SNB-ABs	0.0450	0.0000	-0.1863	-0.0450	0.0000	0.1863	0.1325	0.0002	-0.0080
SNB-ABs	0.0390	0.0000	-0.1863	-0.0390	0.0000	0.1863	0.1294	0.0002	-0.0082
SNB-ACs	0.0337	0.0000	-0.1863	-0.0337	0.0000	0.1863	0.1185	0.0001	-0.0084
SNB-BAs	0.0292	0.0000	-0.2170	-0.0292	0.0000	0.2170	0.1047	0.0001	-0.0088
SNB-BBs	0.0252	0.0000	-0.2170	-0.0252	0.0000	0.2170	0.0979	0.0001	-0.0089
SNB-BCs	0.0219	0.0000	-0.2170	-0.0219	0.0000	0.2170	0.0912	0.0001	-0.0090
SNB-CAs	0.0224	0.0000	-0.2951	-0.0224	0.0000	0.2951	0.0764	0.0001	-0.0090
SNB-CBs	0.0196	0.0000	-0.2951	-0.0196	0.0000	0.2951	0.0685	0.0001	-0.0090
SNB-DAs	0.0179	0.0000	-0.3257	-0.0179	0.0000	0.3257	0.0538	0.0001	-0.0085
SNB-DAs	0.0166	0.0000	-0.3257	-0.0166	0.0000	0.3257	0.0473	0.0001	-0.0081
SNB-EAs	0.0200	0.0000	-0.4437	-0.0200	0.0000	0.4437	0.0358	0.0001	-0.0074
SNB-EAs	0.0186	0.0000	-0.4437	-0.0186	0.0000	0.4437	0.0307	0.0001	-0.0072
SNB-FAs	0.0200	0.0000	-0.5999	-0.0200	0.0000	0.5999	0.0202	0.0000	-0.0062
SNB-GAs	0.0153	0.0000	-0.6702	-0.0153	0.0000	0.6702	0.0104	0.0000	-0.0047
SNB-HAs	0.0104	0.0000	-0.7135	-0.0104	0.0000	0.7135	0.0041	0.0000	-0.0030
SNB-IAs	0.0059	0.0000	-0.8390	-0.0059	0.0000	0.8390	0.0009	0.0000	-0.0010
SNB-WI-AS	0.0517	0.0000	-0.1863	-0.0517	0.0000	0.1863	0.1395	0.0002	-0.0055
SNB-WI-Bs	0.0517	0.0000	-0.1863	-0.0517	0.0000	0.1863	0.1395	0.0002	-0.0055
SNB-WI-Bs	0.0317	0.0000	-0.1863	-0.0317	0.0000	0.1863	0.1115	0.0001	-0.0057
SNB-WI-Bs	0.0290	0.0000	-0.1863	-0.0290	0.0000	0.1863	0.1115	0.0002	-0.0025
SNB-WI-Bs	0.0290	0.0000	-0.1863	-0.0290	0.0000	0.1863	0.1115	0.0002	-0.0025
SNB-WI-Bs	0.0192	0.0000	-0.2170	-0.0192	0.0000	0.2170	0.0846	0.0001	-0.0059
SNB-WI-C2S	0.0192	0.0000	-0.2170	-0.0192	0.0000	0.2170	0.0846	0.0001	-0.0059
SNB-WI-C3S	0.0192	0.0000	-0.2170	-0.0192	0.0000	0.2170	0.0846	0.0001	-0.0059
SNB-WI-D1S	0.0176	0.0000	-0.2951	-0.0176	0.0000	0.2951	0.0608	0.0001	-0.0061
SNB-WI-D2S	0.0176	0.0000	-0.2951	-0.0176	0.0000	0.2951	0.0608	0.0001	-0.0061
SNB-WI-D3S	0.0176	0.0000	-0.2951	-0.0176	0.0000	0.2951	0.0608	0.0001	-0.0061
SNB-WI-ES	0.0156	0.0000	-0.3257	-0.0156	0.0000	0.3257	0.0411	0.0001	-0.0051
SNB-WI-EZS	0.0156	0.0000	-0.3257	-0.0156	0.0000	0.3257	0.0411	0.0001	-0.0051
SNB-WI-E3S	0.0171	0.0000	-0.4437	-0.0171	0.0000	0.4437	0.0259	0.0001	-0.0053
SNB-WI-F1S	0.0171	0.0000	-0.4437	-0.0171	0.0000	0.4437	0.0259	0.0001	-0.0053
SNB-WI-F2S	0.0171	0.0000	-0.4437	-0.0171	0.0000	0.4437	0.0259	0.0001	-0.0053
SNB-WI-F3S	0.0171	0.0000	-0.4437	-0.0171	0.0000	0.4437	0.0259	0.0001	-0.0053
SNB-WI-G1S	0.0168	0.0000	-0.5999	-0.0168	0.0000	0.5999	0.0144	0.0000	-0.0057
SNB-WI-G2S	0.0168	0.0000	-0.5999	-0.0168	0.0000	0.5999	0.0144	0.0000	-0.0057
SNB-WI-G3S	0.0168	0.0000	-0.5999	-0.0168	0.0000	0.5999	0.0144	0.0000	-0.0057
SNB-WI-H1S	0.0123	0.0000	-0.6702	-0.0123	0.0000	0.6702	0.0064	0.0000	-0.0061
SNB-WI-H2S	0.0123	0.0000	-0.6702	-0.0123	0.0000	0.6702	0.0064	0.0000	-0.0061
SNB-WI-H3S	0.0123	0.0000	-0.6702	-0.0123	0.0000	0.6702	0.0064	0.0000	-0.0061
SNB-WI-I1S	0.0079	0.0000	-0.7135	-0.0079	0.0000	0.7135	0.0017	0.0000	-0.0064
SNB-WI-I2S	0.0079	0.0000	-0.7135	-0.0079	0.0000	0.7135	0.0017	0.0000	-0.0064
SNB-WI-I3S	0.0079	0.0000	-0.7135	-0.0079	0.0000	0.7135	0.0017	0.0000	-0.0064
RohnAa1	0.0663	0.0000	-0.2745	-0.0663	0.0000	0.2745	0.1324	0.0002	-0.0062
RohnAa2	0.0730	0.0000	-0.3021	-0.0730	0.0000	0.3021	0.1325	0.0002	-0.0062
RohnAa1	0.0691	0.0000	-0.3303	-0.0691	0.0000	0.3303	0.1254	0.0002	-0.0061
RohnAa2	0.0390	0.0000	-0.1863	-0.0390	0.0000	0.1863	0.1255	0.0002	-0.0061
RohnAc1	0.0337	0.0000	-0.1863	-0.0337	0.0000	0.1863	0.1184	0.0002	-0.0059
RohnAc2	0.0337	0.0000	-0.1863	-0.0337	0.0000	0.1863	0.1185	0.0002	-0.0059
RohnBa1	0.0292	0.0000	-0.2170	-0.0292	0.0000	0.2170	0.1045	0.0002	-0.0055
RohnBa2	0.0292	0.0000	-0.2170	-0.0292	0.0000	0.2170	0.1046	0.0002	-0.0055
RohnBb1	0.1308	0.0000	-1.1256	-0.1308	0.0000	1.1256	0.0978	0.0001	-0.0054
RohnBb2	0.1308	0.0000	-1.1256	-0.1308	0.0000	1.1256	0.0978	0.0001	-0.0054
RohnBc1	0.0219	0.0000	-0.2170	-0.0219	0.0000	0.2170	0.0911	0.0001	-0.0052
RohnBc2	0.0219	0.0000	-0.2170	-0.0219	0.0000	0.2170	0.0911	0.0001	-0.0052
RohnCa1	0.0781	0.0000	-1.0297	-0.0781	0.0000	1.0297	0.0762	0.0001	-0.0048

Label	Angle Torsion (ft-lbs)	Origin X Moment (ft-lbs)	Origin Y Moment (ft-lbs)	Origin X Moment (ft-lbs)	End X Moment (ft-lbs)	End Y Moment (ft-lbs)	End X Shear (lbs)	Y Shear (lbs)
RohnCa2	0.0817	0.0000	-1.0777	-0.0817	-0.0000	1.0777	0.0762	0.0002
RohnCb1	0.1065	0.0000	-1.6028	-0.1065	0.0000	1.6028	0.0682	0.0001
RohnCb2	0.0764	0.0000	-1.6028	-0.1065	0.0000	1.6028	0.0682	0.0002
RohnDa1	0.0764	0.0000	-1.3931	-0.0764	0.0000	1.3931	0.0535	0.0001
RohnDa2	0.0166	0.0000	-1.3931	-0.0764	0.0000	1.3931	0.0535	0.0002
RohnDb1	0.0166	0.0000	-0.3257	-0.0166	0.0000	0.3257	0.0469	0.0001
RohnDb2	0.0200	0.0000	-0.3257	-0.0166	0.0000	0.3257	0.0469	0.0001
RohnEa1	0.0200	0.0000	-0.4437	-0.0200	0.0000	0.4437	0.0355	0.0001
RohnEa2	0.0186	0.0000	-0.4437	-0.0186	0.0000	0.4437	0.0304	0.0001
RohnEb1	0.0186	0.0000	-0.4437	-0.0186	0.0000	0.4437	0.0305	0.0001
RohnEb2	0.0200	0.0000	-0.4437	-0.0186	0.0000	0.4437	0.0305	0.0001
RohnFa1	0.0200	0.0000	-0.5999	-0.0200	0.0000	0.5999	0.0193	0.0001
RohnFa2	0.0153	0.0000	-0.5999	-0.0200	0.0000	0.5999	0.0193	0.0001
RohnGa1	0.0153	0.0000	-0.6702	-0.0153	0.0000	0.6702	0.0096	0.0001
RohnGa2	0.0104	0.0000	-0.6702	-0.0153	0.0000	0.6702	0.0096	0.0001
RohnHa1	0.0104	0.0000	-0.7135	-0.0104	0.0000	0.7135	0.0032	0.0001
RohnHa2	0.0059	0.0000	-0.7135	-0.0104	0.0000	0.7135	0.0032	0.0001
RohnIa1	0.0059	0.0000	-0.8390	-0.0059	0.0000	0.8390	0.0002	0.0001
RohnIa2	0.0450	0.0000	-0.8390	-0.0059	0.0000	0.8390	0.0002	0.0001
RohnIb1	0.0450	0.0000	-0.1863	-0.0450	0.0000	0.1863	0.1324	0.0001
RohnIb2	0.0390	0.0000	-0.1863	-0.0390	0.0000	0.1863	0.1254	0.0002
RohnAb1	0.0337	0.0000	-0.1863	-0.0337	0.0000	0.1863	0.1184	0.0001
RohnAb2	0.0337	0.0000	-0.1863	-0.0337	0.0000	0.1863	0.1184	0.0002
RohnAc1	0.0292	0.0000	-0.2170	-0.0292	0.0000	0.2170	0.1046	0.0001
RohnAc2	0.0292	0.0000	-0.2170	-0.0292	0.0000	0.2170	0.1046	0.0002
RohnBa1	0.0252	0.0000	-0.2170	-0.0252	0.0000	0.2170	0.0978	0.0002
RohnBa2	0.0252	0.0000	-0.2170	-0.0252	0.0000	0.2170	0.0978	0.0001
RohnBc1	0.0219	0.0000	-0.2170	-0.0219	0.0000	0.2170	0.0911	0.0001
RohnBc2	0.0224	0.0000	-0.2170	-0.0219	0.0000	0.2170	0.0911	0.0002
RohnCa1	0.0224	0.0000	-0.2951	-0.0224	0.0000	0.2951	0.0762	0.0001
RohnCa2	0.0196	0.0000	-0.2951	-0.0224	0.0000	0.2951	0.0762	0.0001
RohnCb1	0.0196	0.0000	-0.2951	-0.0196	0.0000	0.2951	0.0682	0.0001
RohnCb2	0.0179	0.0000	-0.3257	-0.0179	0.0000	0.3257	0.0535	0.0001
RohnDa1	0.0166	0.0000	-0.3257	-0.0166	0.0000	0.3257	0.0469	0.0001
RohnDa2	0.0200	0.0000	-0.3257	-0.0166	0.0000	0.3257	0.0469	0.0001
RohnDb1	0.0200	0.0000	-0.4437	-0.0200	0.0000	0.4437	0.0355	0.0000
RohnDb2	0.0186	0.0000	-0.4437	-0.0200	0.0000	0.4437	0.0355	0.0000
RohnEb1	0.0186	0.0000	-0.4437	-0.0186	0.0000	0.4437	0.0305	0.0001
RohnEb2	0.0200	0.0000	-0.4437	-0.0186	0.0000	0.4437	0.0305	0.0001
RohnFa1	0.0200	0.0000	-0.5999	-0.0200	0.0000	0.5999	0.0193	0.0000
RohnFa2	0.0153	0.0000	-0.5999	-0.0200	0.0000	0.5999	0.0193	0.0001
RohnGa1	0.0153	0.0000	-0.6702	-0.0153	0.0000	0.6702	0.0096	0.0000
RohnGa2	0.0104	0.0000	-0.6702	-0.0153	0.0000	0.6702	0.0096	0.0001
RohnHa1	0.0104	0.0000	-0.7135	-0.0104	0.0000	0.7135	0.0032	0.0001
RohnHa2	0.0059	0.0000	-0.7135	-0.0104	0.0000	0.7135	0.0032	0.0001
RohnIa1	0.0059	0.0000	-0.8390	-0.0059	0.0000	0.8390	0.0001	0.0001
RohnIa2	0.0059	0.0000	-0.8390	-0.0059	0.0000	0.8390	0.0001	0.0001

Moments for Angles Modeled as Beams:

Label	Angle Torsion (ft-lbs)	Origin X Moment (ft-lbs)	Origin Y Moment (ft-lbs)	Origin X Moment (ft-lbs)	End X Moment (ft-lbs)	End Y Moment (ft-lbs)	End X Shear (lbs)	Y Shear (lbs)
Rohn-IA1P	-0.19	0.10	0.79	-0.08	-4.17	0.00	-0.68	0.36
Rohn-IA1	0.01	-0.39	0.43	-3.32	1.39	0.74	0.36	0.24
Rohn-LA12	-0.41	0.08	0.63	3.32	0.59	0.11	2.18	2.18
Rohn-LA2P	-0.19	0.08	4.17	-0.64	6.74	-0.11	1.25	-1.14
Rohn-LA2	0.41	3.32	-1.39	2.96	-4.29	1.25	-1.45	-0.48
Rohn-LA22	-0.41	-3.32	-0.59	-3.93	-1.81	-1.45	-0.48	-2.57
Rohn-LA3P	-0.19	0.64	-6.74	1.01	-6.34	0.33	2.69	1.85
Rohn-LA3	0.01	-2.96	4.29	-3.15	9.16	-1.22	1.85	3.78
Rohn-LA32	-0.41	3.93	1.81	3.63	7.43	-0.30	1.22	-3.78
Rohn-LA4P	-0.19	-1.01	6.14	-4.48	12.76	-0.30	1.22	-3.78
Rohn-LA4	0.01	3.15	-9.16	2.97	-9.77	1.22	-3.78	-3.78

Rohn-LB42	-0.41	-3.63	-7.43	-3.55	-8.23	-1.43	-3.13
Rohn-LB1P	-0.11	0.49	-11.56	0.44	-9.07	0.19	-4.12
Rohn-LB11	0.41	3.37	10.51	-1.30	24.28	-0.93	6.95
Rohn-LB12	-0.63	-3.91	9.00	1.56	23.62	1.09	6.52
Rohn-LB2P	-0.11	-0.44	9.07	-0.16	21.06	0.31	-8.19
Rohn-LB21	0.41	1.30	-24.28	0.24	-16.69	0.31	-8.19
Rohn-LB22	-0.63	-1.56	-23.62	-0.25	-16.43	-0.36	-8.00
Rohn-LB3P	-0.11	0.16	-21.06	0.10	-10.80	0.05	-6.37
Rohn-LB31	0.41	-0.24	16.69	-4.17	22.34	-0.88	7.80
Rohn-LB32	-0.63	0.25	16.43	4.24	22.19	0.90	7.72
Rohn-LB4P	-0.11	-0.10	10.80	-0.03	32.13	-0.03	8.58
Rohn-LB41	0.41	4.17	-22.34	8.61	7.59	2.55	-2.95
Rohn-LB42	-0.63	-4.24	-22.19	-8.64	7.83	-2.58	-2.87
Rohn-LC1P	-0.11	0.03	-32.13	0.09	8.50	0.02	-3.54
Rohn-LC11	0.41	-8.61	-7.59	-4.34	12.49	-1.94	0.73
Rohn-LC12	-0.63	8.64	-7.83	4.52	12.11	1.97	0.64
Rohn-LC2P	-0.11	-0.09	-8.50	-0.05	3.03	-0.02	-0.82
Rohn-LC21	0.41	4.34	-12.49	7.25	25.71	-0.44	1.98
Rohn-LC22	-0.63	-4.52	-12.11	-7.12	25.85	0.39	2.06
Rohn-LC3P	-0.11	0.05	-3.03	-0.06	49.36	-0.00	6.95
Rohn-LC31	0.41	7.25	-25.71	17.37	12.11	3.69	-2.04
Rohn-LC32	-0.63	-7.13	-25.85	-17.39	12.50	-3.68	-2.00
Rohn-LD1P	-0.11	0.06	-49.36	0.43	28.55	0.07	-3.12
Rohn-LD11	0.41	-17.37	-12.11	-14.94	33.16	-4.85	3.16
Rohn-LD12	-0.63	17.39	-12.50	15.17	32.76	4.89	3.04
Rohn-LD2P	-0.11	-0.43	-28.55	-0.13	1.57	-0.08	-4.04
Rohn-LD21	0.41	14.94	-33.16	-1.50	66.23	2.01	4.95
Rohn-LD22	-0.63	-15.17	-32.76	1.62	66.45	-2.03	5.04
Rohn-LD3P	-0.11	0.13	-1.57	0.12	95.15	0.04	14.04
Rohn-LD31	0.41	1.50	-66.23	11.51	1.10	1.95	-9.77
Rohn-LD32	-0.63	-1.62	-66.45	-11.42	1.01	-1.96	-9.82
Rohn-LE1P	-0.11	-0.12	-95.15	0.11	3.45	-0.00	-13.76
Rohn-LE11	0.41	-11.51	-9.10	-9.18	56.05	-3.10	8.24
Rohn-LE12	-0.63	11.42	-1.01	9.26	55.93	3.10	8.24
Rohn-LE2P	-0.11	-3.45	-0.33	-0.33	7.38	-0.07	0.59
Rohn-LE21	0.41	9.18	-56.05	4.01	45.42	0.77	-1.59
Rohn-LE22	-0.63	-9.26	-55.93	-4.01	45.95	-0.79	-1.49
Rohn-LE3P	-0.11	0.33	-7.38	0.59	149.03	0.14	21.26
Rohn-LE31	0.41	4.01	-45.42	22.98	-15.85	4.05	-9.19
Rohn-LE32	-0.63	-4.01	-45.95	-22.78	-17.12	-4.02	-9.46
Rohn-LF1P	-0.11	-0.59	-149.03	-1.07	-94.68	-0.17	-24.38
Rohn-LF11	0.41	-22.98	15.85	-35.44	161.53	-5.84	19.72
Rohn-LF12	-0.63	22.78	-17.12	34.92	162.73	5.77	19.97
Rohn-LF2P	-0.11	1.07	94.88	0.63	241.55	0.17	33.62
Rohn-LF21	0.41	35.44	-181.53	38.89	-76.62	7.43	-25.80
Rohn-LF22	-0.63	-34.92	-182.73	-38.98	-77.85	-7.38	-26.04
Rohn-LG1P	-0.11	-0.63	-241.55	-1.00	-131.47	-0.16	-37.28
Rohn-LG11	0.41	-38.89	76.62	-42.94	208.44	-8.18	28.48
Rohn-LG12	-0.63	38.98	-77.85	42.40	209.36	8.13	28.70
Rohn-LG2P	-0.11	1.00	131.47	0.37	271.07	0.14	40.23
Rohn-LG21	0.41	42.94	-208.44	47.72	-61.83	9.06	-30.00
Rohn-LG22	-0.63	-42.40	-209.36	-48.07	-62.37	-9.04	-30.15
Rohn-LH1P	-0.11	-0.37	-271.07	-0.41	161.00	-0.08	-43.18
Rohn-LH11	0.40	-47.72	91.83	54.38	235.98	-10.20	32.76
Rohn-LH12	-0.62	48.07	-92.37	-54.04	236.48	10.20	32.86
Rohn-LH2P	-0.11	0.41	161.00	0.03	346.61	0.04	50.73
Rohn-LH21	0.41	54.38	-235.98	69.15	-125.90	12.34	-36.16
Rohn-LH22	-0.63	-54.04	-236.48	-69.54	-126.35	-12.35	-36.26
Rohn-LI1P	-0.11	-0.03	-346.61	-1.07	248.39	-0.11	-59.46
Rohn-LI11	0.40	-69.15	125.90	-97.70	392.89	-16.67	51.84
Rohn-LI12	-0.62	69.54	-126.35	97.34	392.95	16.68	51.89
Rohn-LI2P	-0.11	1.07	248.39	1.89	555.53	0.30	60.52
Rohn-LI21	0.40	97.70	-392.89	94.36	-105.24	19.19	-49.78
Rohn-LI22	-0.62	-97.34	-392.95	-95.76	-103.55	-19.30	-49.61
Rohn-H1P	0.02	0.39	0.01	0.54	-0.06	0.12	-0.01
Rohn-H11	0.02	-0.10	0.05	0.06	0.18	-0.01	0.03
Rohn-H12	0.02	-0.67	0.24	-0.51	0.18	-0.16	0.06
Rohn-H2P	-0.03	0.71	-0.14	0.84	-0.25	0.17	-0.04
Rohn-H21	0.01	-0.02	-0.16	-0.03	0.07	-0.01	-0.01



Robn-H22	0.04	-0.85	0.17	-0.72	0.06	-0.18	0.03
SNB-LA1P	-0.00	0.08	76.46	13.32	0.09	17.94	0.00
SNB-LA11	0.02	64.79	35.89	12.72	-6.30	15.49	-8.43
SNB-LA12	-0.02	-65.20	-13.23	-13.16	-6.37	-15.66	-8.63
SNB-LA2P	0.00	-0.35	-13.32	-0.62	-0.20	-1.10	0.28
SNB-LA21	0.02	-12.72	6.30	2.40	-4.91	-2.06	0.58
SNB-LA22	-0.02	13.16	6.97	-2.21	-4.08	2.19	0.58
SNB-LA3P	0.00	0.62	-7.83	0.42	-22.15	0.21	-5.99
SNB-LA31	0.02	-2.40	4.91	-14.17	18.52	-3.31	4.68
SNB-LA32	-0.02	2.21	4.08	13.81	17.83	3.20	4.38
SNB-LA33	0.00	-0.42	22.15	-0.26	74.16	-0.14	19.25
SNB-LA4P	0.02	14.17	-18.52	48.17	-34.08	12.46	-10.51
SNB-LA41	-0.02	-13.81	-47.82	-47.82	-33.57	-12.52	-10.27
SNB-LA42	0.00	0.29	118.86	0.19	15.99	0.10	26.95
SNB-LB1P	0.42	97.69	40.38	11.65	16.84	21.85	-4.71
SNB-LB11	-0.42	-97.73	-40.74	-11.65	-16.62	-21.86	-4.82
SNB-LB2P	-0.00	-0.19	-15.99	-0.06	45.09	-0.05	5.81
SNB-LB21	0.42	11.65	-16.84	16.67	-10.12	1.00	-5.39
SNB-LB22	-0.42	-11.65	16.84	-16.51	-9.96	-0.97	-5.31
SNB-LB3P	0.00	0.06	-45.09	0.14	-61.50	0.04	-21.30
SNB-LB31	0.42	-16.67	10.12	-43.83	59.77	-12.09	13.97
SNB-LB32	-0.42	16.51	9.96	43.91	-59.66	12.07	-13.91
SNB-LB4P	0.00	-0.14	61.50	-0.02	223.84	-0.03	57.03
SNB-LB41	-0.42	43.83	-59.77	135.29	-74.75	35.80	-26.88
SNB-LB42	-0.42	-43.91	-59.66	-135.19	-74.66	-35.79	-26.84
SNB-LC1P	-0.00	0.01	80.35	0.03	56.99	0.01	20.61
SNB-LC11	0.85	100.62	-51.79	39.10	9.49	20.96	-6.35
SNB-LC12	-0.85	-100.76	-51.89	-39.10	9.44	-20.98	-6.37
SNB-LC2P	0.00	-0.03	-56.99	0.03	-54.18	0.00	-16.63
SNB-LC21	0.85	39.07	-9.49	-52.96	71.85	-13.77	9.33
SNB-LC22	-0.85	-39.10	9.49	52.94	-71.81	13.77	-9.33
SNB-LC3P	0.00	-0.03	54.18	-0.01	256.79	-0.01	46.66
SNB-LC31	-0.85	52.96	-71.85	164.40	-99.23	32.61	-25.67
SNB-LC32	-0.85	-52.94	-71.81	-164.19	-99.10	-32.58	-25.64
SNB-LD1P	-0.00	0.03	226.08	0.21	129.99	0.04	53.43
SNB-LD11	1.12	235.94	-124.33	65.62	26.95	45.24	-14.61
SNB-LD12	-1.12	-236.10	124.45	-65.50	-26.78	-45.25	-14.65
SNB-LD2P	0.00	-0.21	-129.99	0.03	-73.33	-0.03	-30.42
SNB-LD21	1.12	65.62	-26.95	-54.65	125.22	-17.99	14.70
SNB-LD22	-1.12	-65.50	26.78	54.94	-125.35	18.02	-14.74
SNB-LD3P	0.00	-0.03	73.33	0.05	345.36	0.00	62.66
SNB-LD31	1.12	54.65	-125.22	158.74	-90.84	32.02	-32.42
SNB-LD32	-1.12	-54.94	-125.35	-158.74	-90.88	-32.06	-32.44
SNB-LE1P	-0.01	-0.09	293.63	0.31	183.47	0.03	71.58
SNB-LE11	1.90	351.11	-188.39	102.18	61.52	68.01	-19.04
SNB-LE12	-1.90	-351.38	-188.45	-102.05	-61.24	-68.03	-19.09
SNB-LE2P	0.01	-0.31	-183.47	-0.22	-158.07	-0.08	-51.09
SNB-LE21	1.89	-102.18	-61.52	-148.97	240.50	-37.57	26.77
SNB-LE22	-1.89	102.05	61.24	149.43	-241.02	37.62	-26.89
SNB-LE3P	-0.01	0.22	158.07	0.18	921.35	0.06	161.96
SNB-LE31	1.91	148.98	-240.50	546.05	-388.72	104.28	-94.40
SNB-LE32	-1.91	-149.43	-241.02	-546.93	-389.44	-104.48	-94.59
SNB-LF1P	0.01	-0.29	41.32	-0.64	-221.32	-0.09	-17.99
SNB-LF11	2.73	274.64	-69.05	-60.50	356.29	21.40	28.70
SNB-LF12	-2.75	-274.24	68.49	60.41	-356.97	-21.37	-28.83
SNB-LF2P	0.01	0.64	221.33	0.22	944.80	0.09	116.53
SNB-LF21	2.74	60.51	-356.29	463.84	-433.39	52.39	-78.91
SNB-LF22	-2.75	-60.41	356.97	-464.87	434.23	-52.49	-79.06
SNB-LG1P	0.02	-0.27	531.23	1.42	-290.41	-0.17	24.06
SNB-LG11	4.42	821.20	-300.41	-66.22	594.44	75.44	29.38
SNB-LG12	-4.45	-820.32	299.59	65.31	-595.54	-75.44	-29.57
SNB-LG2P	0.02	1.42	-290.42	0.44	1659.60	0.19	194.87
SNB-LG21	4.42	66.22	-594.44	903.42	-735.78	96.89	-132.92
SNB-LG22	-4.45	-65.31	595.54	-904.56	736.93	-96.91	-133.14
SNB-LH1P	0.01	-0.45	240.08	-1.46	-351.13	-0.19	-11.10
SNB-LH11	4.13	725.98	-198.23	-69.64	630.95	65.58	43.24
SNB-LH12	-4.16	-724.88	197.88	68.76	-632.12	-65.56	-43.47
SNB-LH2P	0.01	1.46	351.13	0.55	1575.43	0.20	192.53
SNB-LH21	4.13	69.64	-630.95	735.17	-683.05	80.42	-131.30

SNB-LH22	-4.15	-68.76	-632.11	-736.23	-684.28	-80.44	-131.54
SNB-LI1P	0.00	-0.54	673.29	-2.04	-185.62	-0.26	48.73
SNB-LI11	2.25	1210.71	-433.61	164.34	794.22	137.40	36.03
SNB-LI12	-2.27	-1209.58	-432.34	-165.09	795.66	-137.44	36.30
SNB-LI2P	0.00	-2.04	185.62	1.17	1170.80	0.32	135.55
SNB-LI21	2.21	-164.33	-794.22	30.52	-197.80	-13.33	-99.13
SNB-LI22	-2.23	165.88	-795.66	-31.22	-199.23	13.46	-99.41
SNB-H1AP	-0.30	44.32	-2.70	145.17	-2.02	93.79	-2.34
SNB-H1BP	-0.30	-145.17	2.03	-141.66	-1.20	-92.47	0.41
SNB-H1CP	-0.07	43.71	1.12	144.33	3.76	93.07	2.42
SNB-H1DP	-0.07	-144.33	-3.76	-43.92	-1.13	-93.17	-2.42
SNB-H1EP	0.37	41.94	1.20	145.01	-2.11	92.53	-0.45
SNB-H1FP	0.37	-145.01	-2.11	-44.36	2.71	-93.73	2.38
SNB-H2AP	-1.05	112.00	-0.55	182.48	-0.53	97.65	-0.40
SNB-H2BP	-1.05	-152.48	0.55	-86.53	1.30	-88.43	-0.28
SNB-H2CP	0.01	101.70	-2.43	150.15	2.43	93.18	1.11
SNB-H2DP	0.01	-150.15	2.43	-101.48	-0.57	-93.10	-1.11
SNB-H2EP	1.03	86.38	1.30	152.51	-0.58	88.38	0.26
SNB-H2FP	1.03	-152.51	-1.30	-112.08	0.55	-97.89	0.42
SNB-H3AP	-0.52	175.93	0.92	205.94	0.49	112.83	0.42
SNB-H3BP	-0.52	-175.93	-0.92	-146.34	-2.06	-104.09	-0.75
SNB-H3CP	0.00	162.33	1.29	204.80	3.30	108.48	1.36
SNB-H3DP	0.00	-204.80	-3.30	-182.37	-1.29	-108.49	-1.36
SNB-H3EP	0.52	146.35	2.06	205.94	0.49	104.09	0.75
SNB-H3FP	0.52	-146.35	-2.06	-175.92	-0.93	-112.83	-0.42
SNB-H4AP	-0.70	279.17	0.49	330.50	1.16	149.94	0.81
SNB-H4BP	-0.70	-330.50	-1.16	-258.39	-3.14	-144.83	-1.06
SNB-H4CP	-0.00	270.62	2.16	329.16	5.59	147.51	2.02
SNB-H4DP	-0.00	-329.16	-2.16	-270.57	-2.61	-147.50	-2.02
SNB-H4EP	0.70	258.37	3.14	330.49	1.15	144.83	1.06
SNB-H4FP	0.70	-258.37	-3.14	-330.49	-2.13	-149.95	-0.81
SNB-H5AP	-0.76	369.52	3.23	426.47	1.46	167.69	0.99
SNB-H5BP	-0.76	-426.47	-3.23	-322.69	-4.63	-157.83	-1.28
SNB-H5CP	-0.00	347.93	3.33	424.96	8.28	162.83	2.44
SNB-H5DP	-0.00	-347.93	-3.33	-348.13	-3.32	-162.87	-2.44
SNB-H5EP	0.76	322.80	4.63	426.46	1.46	157.85	1.28
SNB-H5FP	0.76	-322.80	-4.63	-369.43	-3.23	-167.67	-0.99
SNB-H6AP	-3.63	557.99	3.09	659.13	1.90	224.22	0.92
SNB-H6BP	-3.63	-557.99	-3.09	-530.38	-4.76	-219.13	-1.23
SNB-H6CP	0.01	552.49	7.42	651.33	7.42	221.77	1.99
SNB-H6DP	0.01	-552.49	-7.42	-552.89	-3.38	-221.84	-1.99
SNB-H6EP	3.62	530.57	4.77	659.15	1.92	219.17	1.23
SNB-H6FP	3.62	-530.57	-4.77	-557.78	-3.10	-224.18	-0.92
SNB-H7AP	-2.94	853.92	0.33	980.67	-0.73	300.27	-0.06
SNB-H7BP	-2.94	-853.92	-0.33	-848.55	-2.24	-299.39	-0.25
SNB-H7CP	0.01	858.45	0.28	974.77	4.31	300.05	0.75
SNB-H7DP	0.01	-858.45	-0.28	-858.58	-0.27	-300.07	-0.75
SNB-H7EP	2.93	848.59	2.24	980.69	-0.71	299.40	0.25
SNB-H7FP	2.93	-848.59	-2.24	-853.83	-0.34	-300.26	0.06
SNB-H8AP	-0.59	1057.13	0.53	1186.50	-0.75	336.30	-0.03
SNB-H8BP	-0.59	-1057.13	-0.53	-1078.19	-1.29	-333.51	-0.08
SNB-H8CP	0.00	1050.12	1.31	1186.34	4.67	335.24	0.88
SNB-H8DP	0.00	-1050.12	-1.31	-1090.16	-1.32	-335.25	-0.88
SNB-H8EP	0.59	1078.19	1.29	1186.50	-0.77	333.51	0.08
SNB-H8FP	0.59	-1078.19	-1.29	-1186.50	-0.52	-336.29	0.04
SNB-H9AP	-1.72	1299.28	0.35	1369.31	-1.09	357.14	-0.10
SNB-H9BP	-1.72	-1369.31	-0.35	-1289.56	-0.13	-355.84	0.13
SNB-H9CP	0.00	1300.03	1.76	1367.18	4.43	356.96	0.83
SNB-H9DP	0.00	-1300.03	-1.76	-1299.98	-1.76	-356.95	-0.83
SNB-H9EP	1.72	1259.52	0.13	1369.31	-1.09	355.84	-0.13
SNB-H9FP	1.72	-1259.52	-0.13	-1299.30	-0.35	-357.14	0.10

\*\*\* Analysis Results for Load Case No. 4 "5: 0.9D + 1.0Dg + 1.0E" - Number of iterations in SAPS 12

Equilibrium Joint Positions and Rotations for Load Case "5: 0.9D + 1.0Dg + 1.0E":

Joint Label	X-Displ (ft)	Y-Displ (ft)	Z-Displ (ft)	X-Rot (deg)	Y-Rot (deg)	Z-Rot (deg)	X-Pos (ft)	Y-Pos (ft)	Z-Pos (ft)
RohnAP	0.1388	5.718e-005	-0.01298	0.0001	0.0793	-0.0008	4.472	5.718e-005	180
RohnBP	0.111	8.475e-005	-0.01373	0.0000	0.0783	-0.0004	5.232	8.475e-005	160
RohnCP	0.0843	6.908e-005	-0.01368	-0.0000	0.0727	-0.0003	5.993	8.008e-005	140
RohnDP	0.06055	6.915e-005	-0.01287	-0.0000	0.0620	-0.0002	6.756	6.915e-005	120
RohnEP	0.04099	5.136e-005	-0.0109	-0.0001	0.0484	-0.0001	7.522	5.136e-005	99.99
RohnFP	0.02586	2.851e-005	-0.009061	-0.0001	0.0359	-0.0001	8.294	2.851e-005	79.99
RohnGP	0.01439	9.294e-006	-0.00705	-0.0000	0.0270	-0.0001	9.069	9.294e-006	59.99
RohnHP	0.006366	-4.012e-007	-0.004929	-0.0000	0.0178	-0.0000	9.847	-4.012e-007	40
RohnJP	0.001672	-3.446e-006	-0.002369	-0.0000	0.0069	-0.0000	10.63	-3.446e-006	20
RohnK	0	0	0	0	0	0	11.42	0	0
RohnL	0.1388	0.0001254	-0.006633	-0.0000	0.0745	-0.0000	2.472	0.0001254	180
RohnM	0.111	0.0001128	-0.00751	-0.0000	0.0746	-0.0000	3.232	0.0001128	160
RohnN	0.08431	0.0001022	-0.007996	-0.0000	0.0689	-0.0000	3.992	0.0001022	140
RohnO	0.06056	8.784e-005	-0.007856	-0.0000	0.0560	-0.0000	4.756	8.784e-005	120
RohnP	0.04099	6.877e-005	-0.006857	-0.0001	0.0440	-0.0000	5.522	6.877e-005	99.99
RohnQ	0.02586	4.505e-005	-0.006133	-0.0001	0.0318	-0.0000	6.294	4.505e-005	79.99
RohnR	0.01439	2.36e-005	-0.004907	-0.0001	0.0191	-0.0000	7.069	2.36e-005	60
RohnS	0.006366	9.146e-006	-0.003534	-0.0000	0.0115	-0.0000	7.847	9.146e-006	40
RohnT	0.001672	1.721e-006	-0.001738	-0.0000	0.0026	-0.0000	8.63	1.721e-006	20
RohnU	0	0	0	0	0	0	9.415	0	0
RohnV	0.1387	0.000165	-0.004076	-0.0002	0.0796	-0.0012	-2.028	-3.752	180
RohnW	0.1189	0.0001658	-0.004094	-0.0002	0.0800	-0.0012	-2.028	3.753	180
RohnX	0.111	0.0001296	-0.003469	-0.0001	0.0792	-0.0012	-2.45	-4.435	160
RohnY	0.111	0.0001221	-0.00347	-0.0002	0.0793	-0.0012	-2.449	4.435	160
RohnZ	0.08424	0.000142	-0.00287	-0.0002	0.0725	-0.0015	-2.87	-5.117	140
Rohn1	0.08428	8.51e-005	-0.002876	-0.0001	0.0725	-0.0015	-2.87	5.117	140
Rohn2	0.06045	0.0001367	-0.002296	-0.0004	0.0624	-0.0015	-3.287	-5.798	120
Rohn3	0.06048	5.67e-005	-0.002303	-0.0003	0.0625	-0.0011	-3.287	5.798	120
Rohn4	0.04092	9.786e-005	-0.001707	-0.0000	0.0485	-0.0012	-3.7	-6.479	100
Rohn5	0.04095	5.83e-005	-0.001707	-0.0000	0.0485	-0.0012	-3.7	6.479	100
Rohn6	0.02575	9.135e-005	-0.001228	-0.0002	0.0392	-0.0011	-4.108	-7.16	80
Rohn7	0.02579	1.808e-005	-0.001251	-0.0001	0.0392	-0.0009	-4.108	7.16	80
Rohn8	0.01433	5.512e-005	-0.0008624	-0.0001	0.0278	-0.0008	-4.513	-7.842	60
Rohn9	0.01435	7.214e-006	-0.0008815	-0.0000	0.0278	-0.0007	-4.513	7.842	60
Rohn10	0.006299	4.092e-005	-0.0005537	-0.0001	0.0185	-0.0005	-4.914	-8.523	40
Rohn11	0.006315	-1.342e-005	-0.000565	-0.0001	0.0185	-0.0005	-4.914	8.523	40
Rohn12	0.001622	2.446e-005	-0.0002615	-0.0003	0.0090	-0.0003	-5.313	-9.206	20
Rohn13	0.00163	-1.622e-005	-0.0002664	-0.0003	0.0090	-0.0003	-5.313	9.206	20
Rohn14	0	0	0	0	0	0	-5.71	-9.89	0
Rohn15	0	0	0	0	0	0	-5.71	9.89	0
Rohn16	0.1388	0.0001249	-0.00177	-0.0004	0.0823	-0.0001	-1.028	-2.02	180
Rohn17	0.1388	0.0001264	-0.001773	-0.0004	0.0823	-0.0001	-1.028	2.02	180
Rohn18	0.111	0.0001124	-0.00118	-0.0002	0.0802	-0.0001	-1.449	-2.703	160
Rohn19	0.111	0.0001137	-0.001183	-0.0002	0.0802	-0.0001	-1.449	2.703	160
Rohn20	0.08431	0.0001015	-0.0006784	-0.0001	0.0747	-0.0002	-1.87	-3.384	140
Rohn21	0.08431	0.0001033	-0.0006784	-0.0001	0.0747	-0.0002	-1.87	3.384	140
Rohn22	0.06053	8.826e-005	-0.0003143	-0.0001	0.0656	-0.0003	-2.287	-4.066	120
Rohn23	0.06053	8.786e-005	-0.000321	-0.0001	0.0656	-0.0003	-2.287	4.066	120
Rohn24	0.04097	7.103e-005	-0.0001382	-0.0001	0.0498	-0.0003	-2.7	-4.747	100
Rohn25	0.04097	6.687e-005	-0.0001483	-0.0000	0.0498	-0.0003	-2.7	4.747	100
Rohn26	0.02583	4.48e-005	-0.000188	-0.0004	0.0417	-0.0002	-3.108	-5.428	80
Rohn27	0.02583	4.549e-005	-0.000188	-0.0004	0.0417	-0.0002	-3.108	5.428	80
Rohn28	0.01436	3.242e-005	-0.000133	-0.0005	0.0314	-0.0003	-3.513	-6.11	60
Rohn29	0.01436	1.495e-005	-0.000133	-0.0005	0.0314	-0.0003	-3.513	6.11	60
Rohn30	0.006335	2.037e-005	-0.0000678	-0.0005	0.0215	-0.0003	-3.914	-6.79	40
Rohn31	0.006335	-1.845e-006	-0.0000678	-0.0005	0.0215	-0.0003	-3.914	6.79	40
Rohn32	0.001636	1.659e-005	-0.0000133	-0.0002	0.0113	-0.0002	-4.312	-7.472	20
Rohn33	0.001636	-1.239e-005	-0.0000133	-0.0002	0.0113	-0.0002	-4.312	7.472	20
Rohn34	0	0	0	0	0	0	-4.708	-8.154	0
Rohn35	0	0	0	0	0	0	-4.708	8.154	0

RohrnAS	0.1318	6.122e-005	-0.01322	0.0001	0.0800	-0.0007	4.662	6.122e-005	175
RohrnBS	0.1249	6.829e-005	-0.01343	0.0002	0.0796	-0.0006	4.852	6.829e-005	170
RohrnAC	0.1179	8.466e-005	-0.01136	0.0000	0.0779	-0.0005	5.042	8.466e-005	165
RohrnBC	0.1042	8.623e-005	-0.01383	0.0000	0.0775	-0.0003	5.612	8.623e-005	150
RohrnBS	0.09743	8.412e-005	-0.01378	0.0000	0.0753	-0.0003	5.803	8.244e-005	145
RohrnCS	0.0761	7.691e-005	-0.01353	0.0000	0.0688	-0.0002	6.247	7.691e-005	133.3
RohrnCS	0.06817	7.287e-005	-0.01327	0.0000	0.0672	-0.0002	6.501	7.287e-005	126.6
RohrnDS	0.05362	6.547e-005	-0.01234	0.0000	0.0571	-0.0002	7.01	6.547e-005	113.3
RohrnDS	0.04711	5.838e-005	-0.01166	0.0000	0.0545	-0.0001	7.266	5.838e-005	106.6
RohrnES	0.03567	4.368e-005	-0.01034	0.0001	0.0438	-0.0001	7.779	4.368e-005	93.33
RohrnES	0.03059	3.537e-005	-0.009727	0.0000	0.0429	-0.0001	8.037	3.537e-005	86.65
RohrnFS	0.02004	1.567e-005	-0.008104	0.0001	0.0332	-0.0001	8.682	1.567e-005	69.99
RohrnGS	0.01032	1.844e-006	-0.006026	0.0000	0.0229	-0.0000	9.459	1.844e-006	49.99
RohrnHS	0.00397	-2.898e-006	-0.003683	0.0000	0.0135	-0.0000	10.24	-2.898e-006	30
RohrnAS	0.0008134	-2.563e-006	-0.001208	0.0000	0.0050	-0.0000	11.03	-2.563e-006	9.999
RohrnAS	0.1319	0.0001222	-0.006885	-0.0001	0.0814	-0.0000	2.662	0.0001222	175
RohrnBS	0.1249	0.0001158	-0.007123	-0.0000	0.0790	-0.0000	2.852	0.0001158	170
RohrnCS	0.1179	0.0001107	-0.007331	-0.0000	0.0805	-0.0000	3.042	0.0001107	165
RohrnCS	0.1042	0.0001107	-0.007679	-0.0000	0.0790	-0.0000	3.422	0.0001107	155
RohrnDS	0.09744	0.0001081	-0.007819	-0.0000	0.0761	-0.0000	3.612	0.0001081	150
RohrnDS	0.09085	0.0001055	-0.007922	-0.0000	0.0765	-0.0000	3.802	0.0001055	145
RohrnES	0.07611	9.772e-005	-0.008002	-0.0000	0.0695	-0.0000	4.246	9.772e-005	133.3
RohrnES	0.06817	9.292e-005	-0.007964	-0.0000	0.0686	-0.0000	4.501	9.292e-005	126.7
RohrnFS	0.05363	8.249e-005	-0.00761	-0.0001	0.0585	-0.0000	5.01	8.249e-005	113.3
RohrnFS	0.04712	7.587e-005	-0.007263	-0.0001	0.0555	-0.0000	5.266	7.587e-005	106.7
RohrnGS	0.03568	6.123e-005	-0.006668	-0.0001	0.0449	-0.0000	5.779	6.123e-005	93.33
RohrnGS	0.03059	5.299e-005	-0.00642	-0.0001	0.0438	-0.0000	6.037	5.299e-005	86.65
RohrnHS	0.02004	3.302e-005	-0.00555	-0.0001	0.0363	-0.0000	6.682	3.302e-005	69.99
RohrnHS	0.01032	1.498e-005	-0.004255	-0.0000	0.0265	-0.0000	7.458	1.498e-005	50
RohrnAS	0.00997	4.006e-006	-0.002667	-0.0000	0.0163	-0.0000	8.238	4.006e-006	30
RohrnAS	0.0008134	-9.776e-008	-0.0008937	-0.0000	0.0062	-0.0000	9.022	-9.776e-008	9.999
RohrnBS	0.1388	0.0001236	-0.004331	-0.0022	0.0783	-0.0000	0.7221	-1.01	180
RohrnBS	0.1388	0.0001256	-0.001899	-0.0000	0.0823	-0.0000	-1.028	0.0001256	180
RohrnCS	0.1111	0.0001114	-0.004538	-0.0009	0.0766	-0.0000	0.8913	-1.351	160
RohrnCS	0.1111	0.0001131	-0.004366	-0.0000	0.0802	-0.0000	-1.449	0.0001131	160
RohrnDS	0.1111	0.0001146	-0.00454	-0.0009	0.0766	-0.0000	0.8913	-1.352	160
RohrnDS	0.08431	0.000101	-0.004702	-0.0009	0.0705	-0.0000	1.061	-1.692	140
RohrnES	0.08431	0.0001024	-0.001037	-0.0000	0.0747	-0.0000	-1.87	0.0001024	140
RohrnES	0.08431	0.0001037	-0.004704	0.0008	0.0705	-0.0000	1.061	1.692	140
RohrnFS	0.06055	8.646e-005	-0.00491	-0.0020	0.0598	-0.0001	1.234	-2.033	120
RohrnFS	0.06055	8.806e-005	-0.00113	-0.0000	0.0656	-0.0000	-2.287	8.806e-005	120
RohrnGS	0.06055	8.946e-005	-0.004913	0.0019	0.0598	0.0001	1.234	2.033	120
RohrnGS	0.04098	6.787e-005	-0.004072	-0.0010	0.0458	-0.0001	1.411	-2.373	100
RohrnGS	0.04098	6.895e-005	-0.0007108	-0.0001	0.0498	-0.0000	-2.7	6.895e-005	100
RohrnHS	0.04098	6.985e-005	-0.004077	0.0008	0.0458	-0.0001	1.411	2.373	100
RohrnHS	0.02585	4.38e-005	-0.004215	-0.0018	0.0360	-0.0001	1.593	-2.714	80
RohrnHS	0.02585	4.514e-005	-0.001108	-0.0001	0.0417	-0.0000	-3.108	4.514e-005	80
RohrnAS	0.02585	4.634e-005	-0.004221	0.0017	0.0360	0.0001	1.593	2.714	80
RohrnAS	0.01438	2.226e-005	-0.004505	-0.0029	0.0251	-0.0001	1.778	-3.055	60
RohrnAS	0.01438	2.368e-005	-0.001984	-0.0000	0.0314	-0.0000	-3.513	2.368e-005	60
RohrnBS	0.01438	2.499e-005	-0.004511	0.0028	0.0251	0.0001	1.778	3.055	60
RohrnBS	0.006354	8.152e-006	-0.004696	-0.0024	0.0159	-0.0001	1.967	-3.395	40
RohrnBS	0.006356	9.266e-006	-0.00289	-0.0000	0.0215	-0.0000	-3.914	9.266e-006	40
RohrnBS	0.006354	1.028e-005	-0.0047	0.0024	0.0159	0.0001	1.967	3.395	40
RohrnBS	0.001658	1.076e-006	-0.00488	-0.0019	0.0066	-0.0001	2.159	-3.736	20
RohrnBS	0.001658	1.801e-006	-0.003956	0.0019	0.0113	0.0000	-4.312	1.801e-006	20
RohrnBS	0.001658	2.484e-006	-0.004881	0.0019	0.0066	-0.0001	2.159	3.736	20
RohrnBS	0.1318	0.0001262	-0.003922	-0.0002	0.0795	-0.0001	-2.135	-3.923	175
RohrnBS	0.1319	0.0001723	-0.003934	-0.0002	0.0801	-0.0002	-2.133	3.923	175
RohrnBS	0.1248	0.000132	-0.003769	-0.0000	0.0800	-0.0001	-2.239	-4.094	170
RohrnBS	0.1249	0.0001392	-0.003773	-0.0002	0.0803	-0.0000	-2.239	4.094	170
RohrnBS	0.1179	0.0001207	-0.003615	-0.0001	0.0791	-0.0012	-2.344	-4.264	165
RohrnBS	0.1179	0.000142	-0.003617	-0.0001	0.0792	-0.0002	-2.344	4.264	165
RohrnBS	0.1041	0.0001232	-0.003317	-0.0003	0.0776	-0.0013	-2.555	-4.605	155
RohrnBS	0.1041	0.000124	-0.003332	-0.0002	0.0776	-0.0005	-2.555	4.605	155
RohrnBS	0.08743	0.0001035	-0.003178	-0.0001	0.0767	-0.0014	-2.66	-4.776	150
RohrnBS	0.08743	0.0001378	-0.003182	0.0000	0.0768	-0.0007	-2.66	4.776	150

Joint Label	X (kips)	Y (kips)	Z Comp. Usage %	Uplift Result. Force % (kips)	Result. Force % (kips)	X X-M. Usage Moment % (ft-k)	Y Y-M. Usage Moment % (ft-k)	Z Z-M. Usage Moment % (ft-k)	Max. Usage %
RohnBc1	0.0907	0.00012	-0.003015	0.0003	0.0760	-0.0015	-2.765	-4.947	145
RohnBc2	0.09074	0.0001145	-0.00302	-0.0004	0.0761	0.0009	-2.765	4.947	145
RohnCa1	9.115e-005	0.0001259	-0.00269	0.0003	0.0703	-0.0015	-3.009	-5.344	133.3
RohnCa2	0.07597	0.0001259	-0.002698	0.0003	0.0703	0.0011	-3.009	5.344	133.3
RohnCb1	0.06793	0.0001111	-0.002507	0.0005	0.0666	-0.0011	-3.149	-5.571	126.7
RohnCb2	0.06796	0.0001111	-0.002507	0.0005	0.0666	0.0011	-3.149	5.571	126.7
RohnD1	0.05334	6.572e-005	-0.002096	0.0004	0.0594	-0.0014	-3.425	-6.025	113.3
RohnD2	0.05338	0.0001172	-0.002106	0.0003	0.0594	0.0011	-3.425	6.025	113.3
RohnD3	0.04675	8.713e-005	-0.001874	0.0003	0.0531	-0.0013	-3.563	-6.252	106.7
RohnD4	0.04678	0.0001886	-0.001886	0.0004	0.0531	0.0013	-3.563	6.252	106.7
RohnE1	0.03541	7.791e-005	-0.001526	0.0001	0.0456	-0.0012	-3.836	-6.706	93.34
RohnE2	0.03544	6.315e-005	-0.001543	0.0001	0.0456	0.0010	-3.836	6.706	93.34
RohnE3	0.03037	8.549e-005	-0.001369	0.0001	0.0410	-0.0011	-3.973	-6.933	86.66
RohnE4	0.0304	3.985e-005	-0.001389	0.0003	0.0409	0.0009	-3.973	6.933	86.66
RohnF1	0.01929	4.145e-005	-0.001025	0.0001	0.0323	-0.0009	-4.311	-7.501	70
RohnF2	0.01931	4.246e-005	-0.001045	0.0000	0.0324	0.0007	-4.311	7.501	70
RohnG1	0.09627	1.979e-005	-0.0006937	0.0000	0.0229	-0.0006	-4.714	-8.182	50
RohnG2	0.09646	2.295e-005	-0.0007066	0.0001	0.0229	0.0006	-4.714	8.182	50
RohnH1	0.003213	-4.496e-006	-0.0003925	0.0000	0.0132	-0.0004	-5.115	-8.864	30
RohnH2	0.003224	2.057e-005	-0.0004005	0.0000	0.0133	0.0003	-5.115	8.864	30
RohnI1	0.0002023	3.448e-005	-0.0001228	0.0001	0.0047	-0.0001	-5.512	-9.548	10
RohnI2	0.0002058	3.743e-005	-0.0001252	0.0000	0.0048	0.0001	-5.512	9.548	10
RohnAa1	0.11318	0.0001048	-0.001617	0.0011	0.0792	-0.0002	-1.133	-2.191	175
RohnAa2	0.11318	0.0001369	-0.00162	0.0012	0.0792	0.0002	-1.133	2.191	175
RohnAb1	0.1249	0.0001179	-0.001466	0.0004	0.0804	-0.0002	-1.239	-2.362	170
RohnAb2	0.1249	0.000118	-0.001469	0.0004	0.0804	0.0002	-1.239	2.362	170
RohnAc1	0.1179	0.0001097	-0.001321	0.0008	0.0788	-0.0002	-1.344	-2.532	165
RohnAc2	0.1179	0.0001197	-0.001321	0.0008	0.0787	0.0002	-1.344	2.532	165
RohnBa1	0.1041	9.777e-005	-0.001038	0.0008	0.0777	-0.0002	-1.555	-2.873	155
RohnBa2	0.1041	0.0001238	-0.001041	0.0009	0.0777	0.0002	-1.555	2.873	155
RohnBb1	0.0974	0.0001179	-0.000907	0.0004	0.0771	-0.0002	-1.66	-3.044	150
RohnBb2	0.0974	9.895e-005	-0.0009105	0.0003	0.0771	0.0002	-1.66	3.044	150
RohnBc1	0.09073	9.98e-005	-0.0007839	0.0007	0.0746	-0.0002	-1.765	-3.214	145
RohnBc2	0.09073	0.0001114	-0.0007878	0.0008	0.0746	0.0002	-1.765	3.214	145
RohnCa1	0.07589	0.000112	-0.0005329	0.0005	0.0707	-0.0003	-2.009	-3.611	133.3
RohnCa2	0.07589	8.327e-005	-0.0005381	0.0006	0.0707	0.0003	-2.009	3.611	133.3
RohnCb1	0.06792	9.831e-005	-0.0004087	0.0010	0.0649	-0.0003	-2.149	-3.839	126.7
RohnCb2	0.06792	8.748e-005	-0.0004146	0.0011	0.0649	0.0003	-2.149	3.839	126.7
RohnDa1	0.05332	8.101e-005	-0.000227	0.0012	0.0594	-0.0004	-2.425	-4.293	113.3
RohnDa2	0.05332	8.38e-005	-0.0002348	0.0013	0.0594	0.0004	-2.425	4.293	113.3
RohnDb1	0.04673	9.628e-005	-0.0001627	0.0004	0.0522	-0.0003	-2.563	-4.52	106.7
RohnDb2	0.04673	5.596e-005	-0.0001717	0.0006	0.0522	0.0003	-2.563	4.52	106.7
RohnEa1	0.03545	5.218e-005	-7.356e-005	0.0005	0.0456	-0.0003	-2.836	-4.974	93.34
RohnEa2	0.03545	7.057e-005	-8.44e-005	0.0007	0.0456	0.0003	-2.836	4.974	93.34
RohnEb1	0.0304	6.709e-005	-2.656e-005	0.0009	0.0401	-0.0002	-2.973	-5.201	86.66
RohnEb2	0.0304	3.795e-005	-3.795e-005	0.0011	0.0401	0.0002	-2.973	5.201	86.66
RohnFa1	0.01925	6.207e-005	4.851e-005	0.0026	0.0310	-0.0002	-3.312	-5.769	70
RohnFa2	0.01925	5.706e-006	3.718e-005	0.0027	0.0310	0.0002	-3.312	5.769	70
RohnGa1	0.009626	1.979e-005	7.93e-005	0.0028	0.0213	-0.0003	-3.714	-6.45	50
RohnGa2	0.009626	1.152e-005	7.042e-005	0.0029	0.0213	0.0003	-3.714	6.45	50
RohnHa1	0.003229	-1.349e-005	7.113e-005	0.0024	0.0120	-0.0002	-4.114	-7.131	30
RohnHa2	0.003228	2.29e-005	6.584e-005	0.0024	0.0120	0.0002	-4.114	7.131	30
RohnIa1	0.0001864	-2.527e-005	3.316e-005	0.0010	0.0042	-0.0001	-4.511	-7.813	10
RohnIa2	0.0001859	2.595e-005	3.152e-005	0.0010	0.0042	0.0001	-4.511	7.813	10

Joint Support Reactions for Load Case "5: 0.9D + 1.0Dg + 1.0E":

Joint Label	X (kips)	Y (kips)	Z Comp. Usage %	Uplift Result. Force % (kips)	Result. Force % (kips)	X X-M. Usage Moment % (ft-k)	Y Y-M. Usage Moment % (ft-k)	Z Z-M. Usage Moment % (ft-k)	Max. Usage %
RohnJP	-2.25	0.0	0.0	0.0	36.53	0.0	-0.00	0.0	0.0
Rohn-JP	-2.90	0.0	0.0	0.0	44.53	0.0	0.0	-1.1	0.0
RohnJI	-0.03	0.0	0.0	0.0	4.00	0.0	-0.04	0.0	0.0
RohnJZ	-0.03	0.0	-0.10	0.0	4.06	0.0	0.04	0.0	0.0
Rohn-JI	-0.52	0.0	-0.66	0.0	1.82	0.0	0.07	0.1	0.0
Rohn-JZ	-0.52	0.0	0.66	0.0	1.75	0.0	-0.07	0.0	0.0

Joint Displacements, Loads and Member Forces on Joints for Load Case "5: 0.9D + 1.0Dg + 1.0E":

Label	Joint X Load (kips)	External Y Load (kips)	External Z Load (kips)	External X Load (kips)	Member Y Force (kips)	Member Z Force (kips)	Member X Force (kips)	Disp. (ft)	Y Disp. (ft)	Z Disp. (ft)
RohnAP	0.0984	0.0000	0.0000	-0.2657	-0.0984	0.0000	0.2657	0.1388	0.0001	-0.0130
RohnBP	0.1982	0.0000	0.0000	-0.9541	-0.1982	0.0000	0.9541	0.1110	0.0001	-0.0137
RohnCP	0.0454	0.0000	0.0000	-0.3841	-0.0454	0.0000	0.3841	0.0843	0.0001	-0.0137
RohnDP	0.0371	0.0000	0.0000	-0.4656	-0.0371	0.0000	0.4656	0.0606	0.0001	-0.0129
RohnEP	0.0369	0.0000	0.0000	-0.5771	-0.0369	0.0000	0.5771	0.0410	0.0001	-0.0109
RohnFP	0.0403	0.0000	0.0000	-0.7827	-0.0403	0.0000	0.7827	0.0259	0.0000	-0.0091
RohnGP	0.0389	0.0000	0.0000	-1.0426	-0.0389	0.0000	1.0426	0.0144	0.0000	-0.0070
RohnHP	0.0253	0.0000	0.0000	-1.0378	-0.0253	0.0000	1.0378	0.0064	0.0000	-0.0049
RohnIP	0.0172	0.0000	0.0000	-1.1643	-0.0172	0.0000	1.1643	0.0017	0.0000	-0.0024
RohnJP	0.0000	0.0000	0.0000	-0.6292	2.2545	-0.0031	35.8286	0.0000	0.0000	0.0000
RohnAP	0.0517	0.0000	0.0000	-0.1397	-0.0517	0.0000	0.1397	0.1388	0.0001	-0.0066
RohnBP	0.0628	0.0000	0.0000	-0.3025	-0.0628	0.0000	0.3025	0.1110	0.0001	-0.0075
RohnCP	0.0454	0.0000	0.0000	-0.3841	-0.0454	0.0000	0.3841	0.0843	0.0001	-0.0080
RohnDP	0.0371	0.0000	0.0000	-0.4656	-0.0371	0.0000	0.4656	0.0606	0.0001	-0.0079
RohnEP	0.0369	0.0000	0.0000	-0.5771	-0.0369	0.0000	0.5771	0.0410	0.0001	-0.0069
RohnFP	0.0403	0.0000	0.0000	-0.7827	-0.0403	0.0000	0.7827	0.0259	0.0000	-0.0061
RohnGP	0.0389	0.0000	0.0000	-1.0426	-0.0389	0.0000	1.0426	0.0144	0.0000	-0.0049
RohnHP	0.0253	0.0000	0.0000	-1.0378	-0.0253	0.0000	1.0378	0.0064	0.0000	-0.0049
RohnIP	0.0172	0.0000	0.0000	-1.1643	-0.0172	0.0000	1.1643	0.0017	0.0000	-0.0035
RohnJP	0.0000	0.0000	0.0000	-0.6292	2.9005	-0.0009	43.8977	0.0000	0.0000	0.0000
RohnA1	0.0984	0.0000	0.0000	-0.2657	-0.0984	0.0000	0.2657	0.1387	0.0002	-0.0041
RohnA2	0.1450	0.0000	0.0000	-0.3917	-0.1450	0.0000	0.3917	0.1389	0.0002	-0.0041
RohnB1	0.0841	0.0000	0.0000	-0.4051	-0.0841	0.0000	0.4051	0.1110	0.0001	-0.0035
RohnB2	0.0720	0.0000	0.0000	-0.3466	-0.0720	0.0000	0.3466	0.1110	0.0001	-0.0035
RohnC1	0.0454	0.0000	0.0000	-0.3841	-0.0454	0.0000	0.3841	0.0842	0.0001	-0.0029
RohnC2	0.0454	0.0000	0.0000	-0.3841	-0.0454	0.0000	0.3841	0.0843	0.0001	-0.0029
RohnD1	0.0421	0.0000	0.0000	-0.5286	-0.0421	0.0000	0.5286	0.0604	0.0001	-0.0023
RohnD2	0.0371	0.0000	0.0000	-0.4656	-0.0371	0.0000	0.4656	0.0605	0.0001	-0.0023
RohnE1	0.0369	0.0000	0.0000	-0.5771	-0.0369	0.0000	0.5771	0.0409	0.0001	-0.0017
RohnE2	0.0403	0.0000	0.0000	-0.7827	-0.0403	0.0000	0.7827	0.0258	0.0001	-0.0012
RohnF1	0.0471	0.0000	0.0000	-0.9132	-0.0471	0.0000	0.9132	0.0258	0.0000	-0.0013
RohnG1	0.0375	0.0000	0.0000	-1.0066	-0.0375	0.0000	1.0066	0.0143	0.0001	-0.0009
RohnG2	0.0408	0.0000	0.0000	-1.0930	-0.0408	0.0000	1.0930	0.0144	0.0000	-0.0009
RohnH1	0.0253	0.0000	0.0000	-1.0378	-0.0253	0.0000	1.0378	0.0063	0.0000	-0.0006
RohnH2	0.0253	0.0000	0.0000	-1.0378	-0.0253	0.0000	1.0378	0.0063	0.0000	-0.0006
RohnI1	0.0172	0.0000	0.0000	-1.1643	-0.0172	0.0000	1.1643	0.0016	0.0000	-0.0003
RohnI2	0.0172	0.0000	0.0000	-1.1643	-0.0172	0.0000	1.1643	0.0016	0.0000	-0.0003
RohnJ1	0.0000	0.0000	0.0000	-0.6292	0.0254	-0.0946	3.3667	0.0000	0.0000	0.0000
RohnJ2	0.0000	0.0000	0.0000	-0.6292	0.0288	0.0979	-3.4350	0.0000	0.0000	0.0000
RohnA1	0.0517	0.0000	0.0000	-0.1397	-0.0517	0.0000	0.1397	0.1388	0.0001	-0.0018
RohnB1	0.0517	0.0000	0.0000	-0.1397	-0.0517	0.0000	0.1397	0.1388	0.0001	-0.0018
RohnB2	0.0628	0.0000	0.0000	-0.3025	-0.0628	0.0000	0.3025	0.1110	0.0001	-0.0012
RohnB3	0.0628	0.0000	0.0000	-0.3025	-0.0628	0.0000	0.3025	0.1110	0.0001	-0.0012
RohnC1	0.0454	0.0000	0.0000	-0.3841	-0.0454	0.0000	0.3841	0.0843	0.0001	-0.0007
RohnC2	0.0454	0.0000	0.0000	-0.3841	-0.0454	0.0000	0.3841	0.0843	0.0001	-0.0007
RohnD1	0.0371	0.0000	0.0000	-0.4656	-0.0371	0.0000	0.4656	0.0605	0.0001	-0.0003
RohnD2	0.0371	0.0000	0.0000	-0.4656	-0.0371	0.0000	0.4656	0.0605	0.0001	-0.0003
RohnE1	0.0369	0.0000	0.0000	-0.5771	-0.0369	0.0000	0.5771	0.0410	0.0001	-0.0001
RohnE2	0.0369	0.0000	0.0000	-0.5771	-0.0369	0.0000	0.5771	0.0410	0.0001	-0.0001
RohnF1	0.0403	0.0000	0.0000	-0.7827	-0.0403	0.0000	0.7827	0.0258	0.0000	-0.0000
RohnF2	0.0403	0.0000	0.0000	-0.7827	-0.0403	0.0000	0.7827	0.0258	0.0000	-0.0000
RohnG1	0.0355	0.0000	0.0000	-0.9526	-0.0355	0.0000	0.9526	0.0144	0.0000	0.0000
RohnG2	0.0355	0.0000	0.0000	-0.9526	-0.0355	0.0000	0.9526	0.0144	0.0000	0.0000
RohnH1	0.0253	0.0000	0.0000	-1.0378	-0.0253	0.0000	1.0378	0.0063	0.0000	0.0001
RohnH2	0.0253	0.0000	0.0000	-1.0378	-0.0253	0.0000	1.0378	0.0063	0.0000	0.0001
RohnI1	0.0172	0.0000	0.0000	-1.1643	-0.0172	0.0000	1.1643	0.0016	0.0000	0.0000
RohnI2	0.0172	0.0000	0.0000	-1.1643	-0.0172	0.0000	1.1643	0.0016	0.0000	0.0000
RohnJ1	0.0000	0.0000	0.0000	-0.6292	0.5249	-0.6607	2.2426	0.0000	0.0000	0.0000
RohnJ2	0.0000	0.0000	0.0000	-0.6292	0.5235	-0.6501	2.1664	0.0000	0.0000	0.0000
RohnA3	0.0601	0.0000	0.0000	-0.1868	-0.0601	0.0000	0.1868	0.1218	0.0001	-0.0132
RohnB3	0.0390	0.0000	0.0000	-0.1397	-0.0390	0.0000	0.1397	0.1249	0.0001	-0.0134
RohnA3	0.0452	0.0000	0.0000	-0.1877	-0.0452	0.0000	0.1877	0.1179	0.0001	-0.0136

RohnBa5	0.0292	0.0000	-0.1628	-0.0292	0.0000	0.1628	0.1042	0.0001	-0.0138
RohnBa6	0.1346	0.0000	-0.8685	-0.1346	0.0000	0.8685	0.0974	0.0001	-0.0138
RohnBa7	0.0219	0.0000	-0.1628	-0.0219	0.0000	0.1628	0.0908	0.0001	-0.0138
RohnBa8	0.0726	0.0000	-0.7183	-0.0726	0.0000	0.7183	0.0761	0.0001	-0.0135
RohnBa9	0.1145	0.0000	-1.2921	-0.1145	0.0000	1.2921	0.0682	0.0001	-0.0133
RohnBa10	0.0834	0.0000	-1.1394	-0.0834	0.0000	1.1394	0.0536	0.0001	-0.0123
RohnBa11	0.0166	0.0000	-0.2443	-0.0166	0.0000	0.2443	0.0471	0.0001	-0.0117
RohnBa12	0.0200	0.0000	-0.3328	-0.0200	0.0000	0.3328	0.0357	0.0000	-0.0103
RohnBa13	0.0186	0.0000	-0.3328	-0.0186	0.0000	0.3328	0.0306	0.0000	-0.0097
RohnBa14	0.0200	0.0000	-0.4499	-0.0200	0.0000	0.4499	0.0200	0.0000	-0.0081
RohnBa15	0.0153	0.0000	-0.5027	-0.0153	0.0000	0.5027	0.0103	0.0000	-0.0060
RohnBa16	0.0104	0.0000	-0.5351	-0.0104	0.0000	0.5351	0.0040	0.0000	-0.0037
RohnBa17	0.0059	0.0000	-0.6292	-0.0059	0.0000	0.6292	0.0008	0.0000	-0.0012
RohnBa18	0.0450	0.0000	-0.1397	-0.0450	0.0000	0.1397	0.1319	0.0001	-0.0069
RohnBa19	0.0390	0.0000	-0.1397	-0.0390	0.0000	0.1397	0.1249	0.0001	-0.0071
RohnBa20	0.0337	0.0000	-0.1397	-0.0337	0.0000	0.1397	0.1179	0.0001	-0.0073
RohnBa21	0.0292	0.0000	-0.1628	-0.0292	0.0000	0.1628	0.1042	0.0001	-0.0077
RohnBa22	0.0252	0.0000	-0.1628	-0.0252	0.0000	0.1628	0.0974	0.0001	-0.0078
RohnBa23	0.0219	0.0000	-0.1628	-0.0219	0.0000	0.1628	0.0908	0.0001	-0.0079
RohnBa24	0.0224	0.0000	-0.2213	-0.0224	0.0000	0.2213	0.0761	0.0001	-0.0080
RohnBa25	0.0196	0.0000	-0.2213	-0.0196	0.0000	0.2213	0.0682	0.0001	-0.0080
RohnBa26	0.0179	0.0000	-0.2443	-0.0179	0.0000	0.2443	0.0536	0.0001	-0.0076
RohnBa27	0.0166	0.0000	-0.2443	-0.0166	0.0000	0.2443	0.0471	0.0001	-0.0073
RohnBa28	0.0200	0.0000	-0.3328	-0.0200	0.0000	0.3328	0.0357	0.0001	-0.0067
RohnBa29	0.0186	0.0000	-0.3328	-0.0186	0.0000	0.3328	0.0306	0.0001	-0.0064
RohnBa30	0.0200	0.0000	-0.4499	-0.0200	0.0000	0.4499	0.0200	0.0000	-0.0056
RohnBa31	0.0153	0.0000	-0.5027	-0.0153	0.0000	0.5027	0.0103	0.0000	-0.0043
RohnBa32	0.0104	0.0000	-0.5351	-0.0104	0.0000	0.5351	0.0040	0.0000	-0.0027
RohnBa33	0.0059	0.0000	-0.6292	-0.0059	0.0000	0.6292	0.0008	0.0000	-0.0009
RohnBa34	0.0517	0.0000	-0.1397	-0.0517	0.0000	0.1397	0.1388	0.0001	-0.0043
RohnBa35	0.0517	0.0000	-0.1397	-0.0517	0.0000	0.1397	0.1388	0.0001	-0.0019
RohnBa36	0.0290	0.0000	-0.1397	-0.0290	0.0000	0.1397	0.1110	0.0001	-0.0043
RohnBa37	0.0290	0.0000	-0.1397	-0.0290	0.0000	0.1397	0.1110	0.0001	-0.0045
RohnBa38	0.0290	0.0000	-0.1397	-0.0290	0.0000	0.1397	0.1110	0.0001	-0.0014
RohnBa39	0.0192	0.0000	-0.1628	-0.0192	0.0000	0.1628	0.0843	0.0001	-0.0045
RohnBa40	0.0192	0.0000	-0.1628	-0.0192	0.0000	0.1628	0.0843	0.0001	-0.0047
RohnBa41	0.0171	0.0000	-0.1628	-0.0171	0.0000	0.1628	0.0843	0.0001	-0.0047
RohnBa42	0.0171	0.0000	-0.1628	-0.0171	0.0000	0.1628	0.0843	0.0001	-0.0010
RohnBa43	0.0168	0.0000	-0.2213	-0.0168	0.0000	0.2213	0.0605	0.0001	-0.0047
RohnBa44	0.0176	0.0000	-0.2213	-0.0176	0.0000	0.2213	0.0605	0.0001	-0.0049
RohnBa45	0.0176	0.0000	-0.2213	-0.0176	0.0000	0.2213	0.0605	0.0001	-0.0011
RohnBa46	0.0176	0.0000	-0.2213	-0.0176	0.0000	0.2213	0.0605	0.0001	-0.0011
RohnBa47	0.0176	0.0000	-0.2213	-0.0176	0.0000	0.2213	0.0605	0.0001	-0.0049
RohnBa48	0.0156	0.0000	-0.2443	-0.0156	0.0000	0.2443	0.0410	0.0001	-0.0041
RohnBa49	0.0156	0.0000	-0.2443	-0.0156	0.0000	0.2443	0.0410	0.0001	-0.0041
RohnBa50	0.0156	0.0000	-0.2443	-0.0156	0.0000	0.2443	0.0410	0.0001	-0.0007
RohnBa51	0.0171	0.0000	-0.3328	-0.0171	0.0000	0.3328	0.0258	0.0000	-0.0041
RohnBa52	0.0171	0.0000	-0.3328	-0.0171	0.0000	0.3328	0.0258	0.0000	-0.0042
RohnBa53	0.0171	0.0000	-0.3328	-0.0171	0.0000	0.3328	0.0258	0.0000	-0.0042
RohnBa54	0.0168	0.0000	-0.4499	-0.0168	0.0000	0.4499	0.0144	0.0000	-0.0041
RohnBa55	0.0168	0.0000	-0.4499	-0.0168	0.0000	0.4499	0.0144	0.0000	-0.0045
RohnBa56	0.0168	0.0000	-0.4499	-0.0168	0.0000	0.4499	0.0144	0.0000	-0.0020
RohnBa57	0.0123	0.0000	-0.5027	-0.0123	0.0000	0.5027	0.0064	0.0000	-0.0045
RohnBa58	0.0123	0.0000	-0.5027	-0.0123	0.0000	0.5027	0.0064	0.0000	-0.0047
RohnBa59	0.0123	0.0000	-0.5027	-0.0123	0.0000	0.5027	0.0064	0.0000	-0.0029
RohnBa60	0.0079	0.0000	-0.5351	-0.0079	0.0000	0.5351	0.0017	0.0000	-0.0047
RohnBa61	0.0079	0.0000	-0.5351	-0.0079	0.0000	0.5351	0.0017	0.0000	-0.0049
RohnBa62	0.0079	0.0000	-0.5351	-0.0079	0.0000	0.5351	0.0017	0.0000	-0.0049
RohnBa63	0.0079	0.0000	-0.5351	-0.0079	0.0000	0.5351	0.0017	0.0000	-0.0040
RohnBa64	0.0663	0.0000	-0.2059	-0.0663	0.0000	0.2059	0.1318	0.0001	-0.0049
RohnBa65	0.0730	0.0000	-0.2266	-0.0730	0.0000	0.2266	0.1319	0.0001	-0.0039
RohnBa66	0.0691	0.0000	-0.2477	-0.0691	0.0000	0.2477	0.1248	0.0001	-0.0039
RohnBa67	0.0390	0.0000	-0.1397	-0.0390	0.0000	0.1397	0.1249	0.0001	-0.0038
RohnBa68	0.0337	0.0000	-0.1397	-0.0337	0.0000	0.1397	0.1179	0.0001	-0.0038
RohnBa69	0.0337	0.0000	-0.1397	-0.0337	0.0000	0.1397	0.1179	0.0001	-0.0036
RohnBa70	0.0292	0.0000	-0.1628	-0.0292	0.0000	0.1628	0.1041	0.0001	-0.0036
RohnBa71	0.0292	0.0000	-0.1628	-0.0292	0.0000	0.1628	0.1041	0.0001	-0.0033
RohnBa72	0.1308	0.0000	-0.8442	-0.1308	0.0000	0.8442	0.0974	0.0001	-0.0033
RohnBa73	0.1308	0.0000	-0.8442	-0.1308	0.0000	0.8442	0.0974	0.0001	-0.0032
RohnBa74	0.0219	0.0000	-0.1628	-0.0219	0.0000	0.1628	0.0907	0.0001	-0.0032
RohnBa75	0.0219	0.0000	-0.1628	-0.0219	0.0000	0.1628	0.0907	0.0001	-0.0030
RohnBa76	0.0781	0.0000	-0.7723	-0.0781	0.0000	0.7723	0.0759	0.0001	-0.0030

Label	Angle Torsion (ft-lbs)	Origin X Moment (ft-lbs)	Origin Y Moment (ft-lbs)	End X Moment (ft-lbs)	End Y Moment (ft-lbs)	End Shear (lbs)	X Shear (lbs)	Y Shear (lbs)
RohnCa2	0.0817	0.0000	-0.8083	-0.0817	-0.0000	0.0000	0.0000	0.0000
RohnCb1	0.1065	0.0000	-1.2021	-0.1065	-0.0000	0.0000	0.0000	0.0000
RohnCb2	0.1065	0.0000	-1.2021	-0.1065	-0.0000	0.0000	0.0000	0.0000
RohnBa1	0.0764	0.0000	-1.0449	-0.0764	-0.0000	0.0000	0.0000	0.0000
RohnBa2	0.0764	0.0000	-1.0449	-0.0764	-0.0000	0.0000	0.0000	0.0000
RohnBb1	0.0166	0.0000	-0.2443	-0.0166	-0.0000	0.0000	0.0000	0.0000
RohnBb2	0.0166	0.0000	-0.2443	-0.0166	-0.0000	0.0000	0.0000	0.0000
RohnBa1	0.0200	0.0000	-0.3328	-0.0200	-0.0000	0.0000	0.0000	0.0000
RohnBa2	0.0200	0.0000	-0.3328	-0.0200	-0.0000	0.0000	0.0000	0.0000
RohnBb1	0.0186	0.0000	-0.3328	-0.0186	-0.0000	0.0000	0.0000	0.0000
RohnBb2	0.0186	0.0000	-0.3328	-0.0186	-0.0000	0.0000	0.0000	0.0000
RohnFa1	0.0200	0.0000	-0.4499	-0.0200	-0.0000	0.0000	0.0000	0.0000
RohnFa2	0.0200	0.0000	-0.4499	-0.0200	-0.0000	0.0000	0.0000	0.0000
RohnGa1	0.0153	0.0000	-0.5027	-0.0153	-0.0000	0.0000	0.0000	0.0000
RohnGa2	0.0153	0.0000	-0.5027	-0.0153	-0.0000	0.0000	0.0000	0.0000
RohnHa1	0.0104	0.0000	-0.5351	-0.0104	-0.0000	0.0000	0.0000	0.0000
RohnHa2	0.0104	0.0000	-0.5351	-0.0104	-0.0000	0.0000	0.0000	0.0000
RohnIa1	0.0059	0.0000	-0.6292	-0.0059	-0.0000	0.0000	0.0000	0.0000
RohnIa2	0.0059	0.0000	-0.6292	-0.0059	-0.0000	0.0000	0.0000	0.0000
RohnBa1	0.0450	0.0000	-0.1397	-0.0450	-0.0000	0.0000	0.0000	0.0000
RohnBa2	0.0450	0.0000	-0.1397	-0.0450	-0.0000	0.0000	0.0000	0.0000
RohnAb1	0.0390	0.0000	-0.1397	-0.0390	-0.0000	0.0000	0.0000	0.0000
RohnAb2	0.0390	0.0000	-0.1397	-0.0390	-0.0000	0.0000	0.0000	0.0000
RohnAc1	0.0337	0.0000	-0.1397	-0.0337	-0.0000	0.0000	0.0000	0.0000
RohnAc2	0.0337	0.0000	-0.1397	-0.0337	-0.0000	0.0000	0.0000	0.0000
RohnBa1	0.0292	0.0000	-0.1628	-0.0292	-0.0000	0.0000	0.0000	0.0000
RohnBa2	0.0292	0.0000	-0.1628	-0.0292	-0.0000	0.0000	0.0000	0.0000
RohnBb1	0.0252	0.0000	-0.1628	-0.0252	-0.0000	0.0000	0.0000	0.0000
RohnBb2	0.0252	0.0000	-0.1628	-0.0252	-0.0000	0.0000	0.0000	0.0000
RohnBc1	0.0219	0.0000	-0.1628	-0.0219	-0.0000	0.0000	0.0000	0.0000
RohnBc2	0.0219	0.0000	-0.1628	-0.0219	-0.0000	0.0000	0.0000	0.0000
RohnCa1	0.0224	0.0000	-0.2213	-0.0224	-0.0000	0.0000	0.0000	0.0000
RohnCb1	0.0196	0.0000	-0.2213	-0.0196	-0.0000	0.0000	0.0000	0.0000
RohnCb2	0.0196	0.0000	-0.2213	-0.0196	-0.0000	0.0000	0.0000	0.0000
RohnDa1	0.0179	0.0000	-0.2443	-0.0179	-0.0000	0.0000	0.0000	0.0000
RohnDa2	0.0179	0.0000	-0.2443	-0.0179	-0.0000	0.0000	0.0000	0.0000
RohnDb1	0.0166	0.0000	-0.2443	-0.0166	-0.0000	0.0000	0.0000	0.0000
RohnDb2	0.0166	0.0000	-0.2443	-0.0166	-0.0000	0.0000	0.0000	0.0000
RohnEa1	0.0200	0.0000	-0.3328	-0.0200	-0.0000	0.0000	0.0000	0.0000
RohnEa2	0.0200	0.0000	-0.3328	-0.0200	-0.0000	0.0000	0.0000	0.0000
RohnEb1	0.0186	0.0000	-0.3328	-0.0186	-0.0000	0.0000	0.0000	0.0000
RohnEb2	0.0186	0.0000	-0.3328	-0.0186	-0.0000	0.0000	0.0000	0.0000
RohnFa1	0.0200	0.0000	-0.4499	-0.0200	-0.0000	0.0000	0.0000	0.0000
RohnFa2	0.0200	0.0000	-0.4499	-0.0200	-0.0000	0.0000	0.0000	0.0000
RohnGa1	0.0153	0.0000	-0.5027	-0.0153	-0.0000	0.0000	0.0000	0.0000
RohnGa2	0.0153	0.0000	-0.5027	-0.0153	-0.0000	0.0000	0.0000	0.0000
RohnHa1	0.0104	0.0000	-0.5351	-0.0104	-0.0000	0.0000	0.0000	0.0000
RohnHa2	0.0104	0.0000	-0.5351	-0.0104	-0.0000	0.0000	0.0000	0.0000
RohnIa1	0.0059	0.0000	-0.6292	-0.0059	-0.0000	0.0000	0.0000	0.0000
RohnIa2	0.0059	0.0000	-0.6292	-0.0059	-0.0000	0.0000	0.0000	0.0000

Moments for Angles Modeled as Beams:

Label	Angle Torsion (ft-lbs)	Origin X Moment (ft-lbs)	Origin Y Moment (ft-lbs)	End X Moment (ft-lbs)	End Y Moment (ft-lbs)	End Shear (lbs)	X Shear (lbs)	Y Shear (lbs)
Rohn-LA1P	-0.19	0.10	0.82	0.06	-3.18	0.03	0.03	-0.47
Rohn-LA1L	0.01	-0.37	0.42	-2.41	0.99	-0.56	-0.56	0.28
Rohn-LA12	-0.41	0.33	0.60	2.51	0.09	0.57	0.57	0.14
Rohn-LA2P	-0.19	-0.06	3.18	-0.67	5.37	-0.15	-0.15	1.71
Rohn-LA2L	0.01	2.41	-0.99	1.75	-3.65	0.83	0.83	-0.93
Rohn-LA22	-0.41	-2.51	-0.09	-2.72	-1.13	-1.04	-1.04	-0.25
Rohn-LA3P	-0.19	0.67	-5.37	1.00	-4.35	0.33	0.33	-1.94
Rohn-LA3L	0.01	-1.75	3.65	-1.57	8.35	-0.66	-0.66	2.40
Rohn-LA32	-0.41	2.72	-1.13	2.06	6.64	0.95	0.95	1.55
Rohn-LA3P	-0.19	1.00	4.35	-0.46	10.23	-0.23	-0.23	2.91
Rohn-LA4L	0.01	1.57	-8.35	0.92	-8.56	0.50	0.50	-3.38



Rohn-LM42	-0.41	-2.06	-6.64	-1.50	-7.05	-0.71	-2.74
Rohn-LB1P	-0.11	0.47	-8.97	0.41	-5.98	0.18	-2.99
Rohn-LB11	0.41	1.32	9.32	1.23	22.30	-0.02	6.32
Rohn-LB12	-0.63	1.86	7.82	-0.99	21.67	0.17	5.89
Rohn-LB2P	-0.11	-0.41	5.98	-0.16	17.52	-0.11	4.70
Rohn-LB21	0.41	-1.23	-22.30	-2.52	-14.94	-0.75	-7.44
Rohn-LB22	-0.63	0.99	-21.67	2.50	-14.69	0.70	-7.27
Rohn-LB3P	-0.11	0.16	-17.52	0.10	-7.32	0.05	-4.96
Rohn-LB31	0.41	2.52	14.94	-1.20	20.34	0.26	7.05
Rohn-LB32	-0.63	-2.50	14.69	1.27	20.19	-0.25	6.97
Rohn-LB4P	-0.11	-0.10	7.52	-0.04	28.51	-0.03	7.16
Rohn-LB41	0.41	1.20	-20.34	5.69	9.22	1.38	-2.22
Rohn-LB42	-0.63	-1.27	-20.19	-5.74	9.46	-1.40	-2.15
Rohn-LC1P	-0.11	0.04	-28.51	0.07	9.43	0.02	-2.86
Rohn-LC11	0.41	-5.69	-9.22	-3.48	11.77	-1.38	0.38
Rohn-LC12	-0.63	5.74	9.46	3.65	11.40	1.41	0.29
Rohn-LC2P	-0.11	-0.07	-9.43	-0.02	5.82	-0.01	-0.54
Rohn-LC21	0.41	3.48	-11.77	-4.67	24.17	-0.18	1.86
Rohn-LC3P	-0.63	-3.65	-11.40	4.57	24.29	0.14	1.93
Rohn-LC31	0.41	0.02	-5.82	-0.07	43.50	-0.01	5.65
Rohn-LC32	-0.11	4.67	-24.17	12.43	14.67	2.57	-1.43
Rohn-LC33	-0.63	-4.57	-24.29	-12.49	15.06	-2.56	-1.38
Rohn-LD1P	-0.11	0.07	-43.50	0.37	30.84	0.07	-1.90
Rohn-LD11	0.41	-12.43	-14.67	-12.64	31.72	-3.76	2.56
Rohn-LD12	-0.63	12.49	-15.06	12.84	31.36	3.80	2.44
Rohn-LD2P	-0.11	-0.37	-30.84	-0.12	7.05	-0.07	-3.56
Rohn-LD21	0.41	12.65	-31.72	3.25	62.95	2.38	4.67
Rohn-LD22	-0.63	-12.84	-31.36	-3.16	65.14	-2.39	4.75
Rohn-LD3P	-0.11	0.12	-7.05	0.09	83.23	0.03	11.73
Rohn-LD31	0.41	3.25	-62.95	3.35	5.78	0.02	-8.58
Rohn-LD32	-0.63	-3.16	-63.14	-3.28	5.72	-0.02	-8.62
Rohn-LD33	-0.11	0.09	-85.23	0.12	9.05	0.00	-11.43
Rohn-LE1P	-0.11	-0.35	-5.78	-4.26	52.93	-1.14	7.07
Rohn-LE11	0.41	3.28	-5.72	4.33	52.79	1.14	7.06
Rohn-LE12	-0.63	-0.12	-9.05	-0.34	11.04	-0.07	0.30
Rohn-LE2P	-0.11	4.26	-52.93	0.80	43.27	0.52	-1.44
Rohn-LE21	0.41	-4.33	-52.79	-0.76	43.79	-0.53	-1.35
Rohn-LE22	-0.63	0.34	-11.04	0.54	131.49	0.13	18.07
Rohn-LE3P	-0.11	0.80	-43.27	8.32	-7.32	1.37	-7.59
Rohn-LE31	0.41	-0.76	-43.79	-8.07	-8.50	-1.33	-7.85
Rohn-LE32	-0.63	0.76	-43.79	8.07	-8.50	-1.33	-7.85
Rohn-LF1P	-0.11	-0.54	-131.49	-0.91	-66.64	-0.14	-19.80
Rohn-LF11	0.41	-8.32	7.32	-11.22	166.84	-1.95	17.40
Rohn-LF12	-0.63	8.07	-7.32	11.22	166.84	-1.95	17.40
Rohn-LF2P	-0.11	0.91	66.64	0.54	208.72	0.15	27.52
Rohn-LF21	0.41	-11.22	-166.84	11.28	-60.35	2.25	-22.70
Rohn-LF22	-0.63	10.76	-167.89	-11.28	-61.43	-2.20	-22.91
Rohn-LG1P	-0.11	-0.54	-208.72	-0.81	-96.73	-0.13	-30.53
Rohn-LG11	0.41	-11.28	60.35	-13.18	150.49	-2.44	25.07
Rohn-LG12	-0.63	11.28	61.43	12.74	191.25	2.40	25.25
Rohn-LG2P	-0.11	0.81	96.73	0.30	233.19	0.11	32.97
Rohn-LG21	0.41	-13.18	-190.49	15.72	-72.98	2.89	-26.33
Rohn-LG22	-0.63	-12.74	-191.25	-15.98	-73.40	-2.87	-26.44
Rohn-LH1P	-0.11	-0.30	-233.19	-0.30	-119.75	-0.06	-35.27
Rohn-LH11	0.40	-15.72	72.98	-19.01	214.80	-3.47	28.76
Rohn-LH12	-0.62	15.98	73.40	18.73	215.21	3.47	28.84
Rohn-LH2P	-0.11	0.30	119.75	0.01	296.37	0.03	41.59
Rohn-LH21	0.40	-19.01	-214.80	26.53	-100.84	4.55	-31.54
Rohn-LH22	-0.62	18.73	-215.21	-26.80	-101.24	-4.55	-31.62
Rohn-LI1P	-0.11	-0.01	-296.37	-0.87	-180.61	-0.09	-47.67
Rohn-LI11	0.40	-26.53	100.84	-39.35	358.01	-6.58	45.85
Rohn-LI12	-0.62	26.80	101.24	39.15	357.94	6.59	45.88
Rohn-LI2P	-0.11	0.87	180.61	1.76	485.98	0.26	66.62
Rohn-LI21	0.40	-39.35	-358.01	35.17	-70.29	7.45	-42.80
Rohn-LI22	-0.62	39.15	-357.94	-36.56	-68.43	-7.57	-42.60
Rohn-H1P	0.02	0.42	0.01	0.52	-0.06	0.12	-0.01
Rohn-H11	0.02	-0.09	0.05	0.03	0.18	-0.01	0.03
Rohn-H12	0.02	-0.64	0.24	-0.52	0.18	-0.16	0.06
Rohn-H2P	-0.03	0.74	-0.14	0.84	-0.25	0.18	-0.04
Rohn-H21	0.01	-0.00	-0.16	-0.04	-0.07	-0.00	-0.01

Robn-H22	0.04	-0.86	0.17	-0.75	0.06	-0.18	0.03
SNB-LA1P	-0.02	0.10	57.78	0.37	9.92	0.09	13.53
SNB-LA11	0.02	48.64	-26.55	9.78	-4.59	11.67	-6.22
SNB-LA12	-0.02	-48.97	-26.87	-10.14	-5.23	-11.81	-6.41
SNB-LA2P	-0.02	-0.37	-9.92	-0.59	-6.39	-0.19	-0.71
SNB-LA21	0.02	-9.78	4.59	1.20	-4.11	-1.71	0.10
SNB-LA22	-0.02	10.14	5.23	-0.98	-3.30	1.83	0.39
SNB-LA3P	-0.02	0.59	-6.39	0.42	-16.59	0.20	-4.59
SNB-LA31	0.02	-1.20	4.11	-9.49	15.67	-2.14	3.95
SNB-LA32	-0.02	0.98	3.30	9.15	14.99	2.02	3.66
SNB-LA4P	-0.02	-0.42	16.59	-0.27	57.76	-0.14	14.86
SNB-LA41	0.02	9.49	-16.67	34.33	-26.03	8.76	-8.33
SNB-LA42	-0.02	-9.15	-18.99	-34.02	-25.54	-8.63	-8.10
SNB-LB1P	0.00	0.28	91.63	0.17	14.52	0.09	21.21
SNB-LB11	0.41	74.14	-27.00	10.46	17.01	16.91	-2.00
SNB-LB12	-0.41	-74.21	-27.37	-10.50	-16.79	-16.93	-2.11
SNB-LB2P	-0.00	-0.17	-14.52	-0.07	37.34	-0.05	4.56
SNB-LB21	0.41	10.46	-17.01	10.40	-6.57	-0.01	-4.71
SNB-LB22	-0.41	-10.50	-16.79	-10.27	-6.41	0.05	-4.64
SNB-LB3P	-0.00	0.07	-37.34	0.12	-44.87	0.04	-16.43
SNB-LB31	0.41	-10.40	6.57	-29.46	50.91	-7.97	11.49
SNB-LB32	-0.41	10.27	6.41	29.52	50.80	7.95	11.43
SNB-LB4P	-0.00	-0.12	44.87	-0.02	178.82	-0.03	44.71
SNB-LB41	0.41	29.46	-50.91	96.78	-52.42	25.23	-20.65
SNB-LB42	-0.41	-29.52	-50.80	-96.70	-52.35	-25.22	-20.61
SNB-LC1P	-0.00	0.01	55.37	0.02	47.37	0.01	15.42
SNB-LC11	0.84	78.55	-39.13	30.77	13.89	16.40	-3.79
SNB-LC12	-0.84	-78.67	-39.21	-30.80	13.85	-16.42	-3.80
SNB-LC2P	-0.00	-0.02	-47.37	0.02	-36.23	0.00	-12.51
SNB-LC21	0.84	30.77	-13.89	-37.30	62.50	-10.18	7.27
SNB-LC22	-0.84	30.80	-13.85	37.29	62.46	10.18	7.27
SNB-LC3P	-0.00	-0.02	36.24	-0.00	203.07	-0.00	35.91
SNB-LC31	0.84	37.31	-62.50	118.27	-72.53	23.94	-20.26
SNB-LC32	-0.84	-37.29	-62.46	-118.09	-72.43	-23.31	-20.24
SNB-LD1P	-0.00	0.02	163.22	0.17	111.60	0.03	41.24
SNB-LD11	1.12	181.10	-92.73	49.94	35.44	34.66	-8.59
SNB-LD12	-1.12	-181.24	-92.83	-49.87	35.29	-34.67	-8.63
SNB-LD2P	-0.00	-0.17	-111.60	0.02	-49.04	-0.02	-24.03
SNB-LD21	1.12	-49.94	-35.44	-33.61	112.44	-12.50	11.52
SNB-LD22	-1.12	49.87	-35.29	33.83	112.54	12.52	11.56
SNB-LD3P	-0.00	-0.02	49.04	0.04	285.57	0.00	50.21
SNB-LD31	1.12	33.61	-112.44	107.57	-61.24	21.18	-26.06
SNB-LD32	-1.12	-33.83	-112.54	-107.57	-61.27	-21.21	-26.08
SNB-LE1P	-0.01	-0.06	203.50	0.26	158.21	0.03	54.27
SNB-LE11	1.89	272.33	-142.94	80.54	73.20	52.94	-10.46
SNB-LE12	-1.89	-272.53	-142.99	-80.45	72.95	-52.96	-10.51
SNB-LE2P	-0.01	-0.26	-158.21	-0.19	-103.66	-0.07	-39.17
SNB-LE21	1.88	-80.54	-73.20	-101.70	212.42	-27.26	20.82
SNB-LE22	-1.88	80.45	-72.95	102.08	212.86	27.30	20.93
SNB-LE3P	-0.01	0.19	103.66	0.15	732.50	0.05	125.46
SNB-LE31	1.89	101.70	-212.42	383.62	-234.51	72.81	-76.05
SNB-LE32	-1.89	-102.08	-212.86	-384.33	-235.08	-72.98	-76.21
SNB-LF1P	0.00	-0.24	-6.48	-0.49	-164.19	-0.07	-17.05
SNB-LF11	2.73	232.03	-44.85	11.64	326.66	22.02	28.16
SNB-LF12	-2.74	-231.69	-44.38	-11.61	327.20	-21.99	28.26
SNB-LF2P	0.00	0.49	164.19	0.18	761.72	0.07	92.53
SNB-LF21	2.73	11.65	-326.66	306.90	-341.92	31.83	-66.81
SNB-LF22	-2.74	-11.61	-327.20	-307.70	-342.59	-31.91	-66.93
SNB-LG1P	0.01	-0.21	344.91	-1.07	206.67	-0.13	13.81
SNB-LG11	4.42	658.05	-207.00	5.56	550.88	66.31	34.36
SNB-LG12	-4.44	-657.35	-206.35	-6.22	551.73	-66.31	34.51
SNB-LG2P	0.01	1.07	206.67	0.34	1327.71	0.14	153.33
SNB-LG21	4.42	-5.56	-550.88	618.03	-570.01	61.20	-112.00
SNB-LG22	-4.44	6.22	-551.73	-618.89	-570.89	-61.22	-112.17
SNB-LH1P	0.01	-0.34	100.93	-1.10	-258.38	-0.14	-15.73
SNB-LH11	4.15	603.22	-128.32	9.80	583.12	61.25	45.44
SNB-LH12	-4.16	-602.38	-127.45	-10.46	584.00	-61.24	45.62
SNB-LH2P	0.01	1.10	258.38	0.41	1278.90	0.15	153.62
SNB-LH21	4.14	-9.80	-583.12	480.51	-535.02	47.03	-111.73

SNB-LH22	-4.16	10.46	-584.00	-481.30	-535.95	-47.05	-111.91
SNB-L11P	0.00	-0.41	408.94	-1.53	-126.99	-0.19	28.18
SNB-L11L	2.29	979.24	-300.97	214.28	762.78	119.26	46.14
SNB-L112	-2.30	-978.39	-300.02	-215.44	763.86	-118.29	46.35
SNB-L12P	0.00	1.53	126.99	0.87	1050.54	0.24	117.67
SNB-L12L	2.26	-214.28	-762.78	-71.17	-137.29	-28.52	-89.94
SNB-L122	-2.27	215.44	-763.86	70.95	-138.37	28.62	-90.15
SNB-H1ap	-0.29	33.52	-2.72	108.90	-2.05	70.49	-2.36
SNB-H1bp	-0.07	32.95	2.05	-30.89	-1.14	-69.19	0.45
SNB-H1cp	-0.07	32.95	1.07	108.07	3.67	69.80	2.35
SNB-H1dp	-0.07	31.13	-3.67	-33.09	-1.08	-69.87	-2.35
SNB-H1ep	0.37	-108.75	1.14	108.75	-2.12	69.23	-0.48
SNB-H1fp	0.37	-108.75	2.12	-33.59	2.72	-70.45	2.39
SNB-H2ap	-1.03	86.81	-0.63	114.49	-0.62	74.48	-0.46
SNB-H2bp	-1.03	114.49	0.62	-61.79	-1.17	-65.22	-0.20
SNB-H2cp	0.02	76.68	0.45	112.20	2.28	69.88	1.01
SNB-H2dp	0.02	-112.20	-2.28	-76.52	-0.46	-69.82	-1.01
SNB-H2ep	1.02	-114.53	1.17	114.53	0.67	65.19	0.19
SNB-H2fp	-0.70	211.87	-0.53	-191.12	-2.45	-108.01	-0.73
SNB-H3ap	-0.69	-248.04	-0.53	-191.12	-2.45	-108.01	-0.73
SNB-H3bp	-0.52	135.52	0.59	154.57	0.16	85.71	0.22
SNB-H3cp	-0.52	154.57	0.16	-105.96	-1.68	-76.98	-0.54
SNB-H3dp	0.00	121.93	0.91	153.43	2.87	81.36	1.12
SNB-H3ep	0.00	-153.43	-2.87	-121.93	-0.91	-81.37	-1.12
SNB-H3fp	0.52	105.97	1.68	154.57	0.15	76.98	0.54
SNB-H3fp	0.52	-105.97	-1.68	-154.57	-0.15	-76.98	-0.54
SNB-H4ap	-0.70	211.87	-0.53	-191.12	-2.45	-108.01	-0.73
SNB-H4bp	-0.69	-248.04	-0.53	-191.12	-2.45	-108.01	-0.73
SNB-H4cp	-0.00	203.26	1.91	246.64	4.83	110.65	1.66
SNB-H4dp	-0.00	-246.64	-4.83	-203.26	-1.91	-110.64	-1.66
SNB-H4ep	0.70	191.11	2.45	248.03	0.52	108.00	0.73
SNB-H4fp	0.70	-248.03	-2.45	-248.03	-0.52	-108.00	-0.73
SNB-H5ap	-0.76	282.84	-0.76	320.01	-3.66	-117.16	-0.89
SNB-H5bp	-0.76	-282.84	0.76	-320.01	3.66	117.16	0.89
SNB-H5cp	-0.00	261.25	2.37	318.46	7.25	122.13	2.03
SNB-H5dp	-0.00	-261.25	-2.37	-318.46	-7.25	-122.13	-2.03
SNB-H5ep	0.76	236.17	3.65	320.00	0.55	117.17	0.89
SNB-H5fp	0.76	-236.17	-3.65	-320.00	-0.55	-117.17	-0.89
SNB-H6ap	-3.61	421.33	-2.19	495.08	1.00	168.82	0.59
SNB-H6bp	-3.61	-421.33	2.19	-495.08	-1.00	-168.82	-0.59
SNB-H6cp	0.01	415.76	2.40	487.22	6.38	166.35	1.62
SNB-H6dp	0.00	-415.76	-2.40	-487.22	-6.38	-166.35	-1.62
SNB-H6ep	0.00	-487.22	-6.38	-416.07	-2.40	-166.40	-1.62
SNB-H6fp	3.61	393.86	3.80	495.09	1.02	163.76	0.89
SNB-H6fp	3.61	-393.86	-3.80	-495.09	-1.02	-163.76	-0.89
SNB-H7ap	-2.93	640.63	0.14	736.07	-0.93	225.33	-0.13
SNB-H7bp	-2.93	-640.63	-0.14	-736.07	0.93	-225.33	-0.13
SNB-H7cp	0.01	644.96	0.00	730.01	3.98	225.04	0.65
SNB-H7dp	0.01	-644.96	-0.00	-730.01	-3.98	-225.04	-0.65
SNB-H7ep	2.92	635.23	1.97	736.08	0.00	225.06	0.65
SNB-H7fp	2.92	-635.23	-1.97	-736.08	-0.00	-225.06	-0.65
SNB-H8ap	-0.59	825.17	0.32	890.04	-0.15	-225.32	0.13
SNB-H8bp	-0.59	-825.17	-0.32	-890.04	0.15	225.32	0.13
SNB-H8cp	0.00	817.87	0.98	806.21	-1.02	-249.80	-0.10
SNB-H8dp	0.00	-817.87	-0.98	-806.21	1.02	249.80	0.10
SNB-H8ep	0.59	806.21	1.01	890.04	4.34	251.45	0.79
SNB-H8fp	0.59	-806.21	-1.01	-890.04	-4.34	-251.45	-0.79
SNB-H9ap	-1.72	975.46	0.99	825.16	-0.99	249.80	0.00
SNB-H9bp	-1.72	-975.46	-0.99	-825.16	0.99	-249.80	0.00
SNB-H9cp	0.00	975.74	1.24	965.67	0.04	268.04	0.14
SNB-H9dp	0.00	-975.74	-1.24	-965.67	-0.04	-268.04	-0.14
SNB-H9ep	1.71	965.64	-4.21	1024.81	4.21	267.74	0.77
SNB-H9fp	1.71	-965.64	-4.21	-1024.81	-4.21	-267.74	-0.77
SNB-H9fp	1.72	-1027.37	1.25	-975.47	-1.25	266.73	-0.17
SNB-H9fp	1.72	1027.37	1.25	975.47	1.25	-266.73	-0.17

Equilibrium Joint Positions and Rotations for Load Case "6: Service 1.0D + 1.0Dg + 1.0 Wo":

Joint Label	X-Displ (ft)	Y-Displ (ft)	Z-Displ (ft)	X-Rot (deg)	Y-Rot (deg)	Z-Rot (deg)	X-Pos (ft)	Y-Pos (ft)	Z-Pos (ft)
RohnAP	0.3932	-7.68e-005	-0.02351	0.0012	0.2022	0.0025	4.726	7.69e-005	180
RohnBP	0.3224	-8.938e-005	-0.02575	-0.0003	0.2019	0.0024	5.443	8.938e-005	160
RohnCP	0.2526	-1.112e-005	-0.02681	-0.0002	0.1945	0.0016	6.162	2.328e-005	140
RohnDP	0.1875	-5.869e-005	-0.02353	-0.0001	0.1761	0.0011	6.882	-1.112e-005	120
RohnEP	0.1306	-2.831e-005	-0.02353	-0.0002	0.1452	0.0007	7.612	-5.869e-005	99.98
RohnFP	0.08451	-0.0001146	-0.02033	-0.0001	0.1142	0.0005	8.353	-0.0001146	79.98
RohnGP	0.04838	-8.971e-006	-0.01626	0.0001	0.0873	0.0003	9.103	-0.0001187	59.98
RohnHP	0.02217	-4.558e-006	-0.01165	0.0002	0.0597	0.0002	9.863	-8.392e-005	39.99
RohnIP	0.006264	-4.403e-005	-0.005714	0.0001	0.0266	0.0001	10.64	-4.403e-005	19.99
RohnJP	0	0	0	0.0000	0.0000	0.0000	11.42	0	0
RohnKP	0.3933	-0.0002711	-0.0125	0.0004	0.1972	-0.0000	2.726	-0.0002711	180
RohnLP	0.3224	-0.0001193	-0.01494	0.0002	0.1976	-0.0000	3.443	-0.0001193	160
RohnMP	0.2526	-0.0001187	-0.0168	0.0002	0.1899	-0.0000	4.161	-0.0001187	140
RohnNP	0.1875	-6.193e-005	-0.01746	0.0001	0.1688	-0.0000	4.882	-6.193e-005	120
RohnOP	0.1306	-2.831e-005	-0.0161	0.0001	0.1389	-0.0000	5.612	-2.831e-005	99.98
RohnPP	0.08452	-1.476e-005	-0.01493	0.0000	0.1102	0.0000	6.353	-1.476e-005	79.99
RohnQP	0.04838	-8.971e-006	-0.01233	0.0000	0.0771	0.0000	7.103	-8.971e-006	59.99
RohnRP	0.02221	-4.558e-006	-0.009127	0.0000	0.0525	0.0000	7.863	-4.558e-006	39.99
RohnSP	0.006264	-1.705e-006	-0.004613	0.0000	0.0220	0.0000	8.634	-1.705e-006	20
RohnTP	0	0	0	0.0000	0.0000	0.0000	9.415	0	0
RohnUP	0.3935	-0.0003692	-0.0065919	-0.0003	0.2033	0.0014	-1.773	-3.753	180
RohnVP	0.3932	-0.0003549	-0.006777	-0.0004	0.2031	0.0035	-1.773	3.752	180
RohnWP	0.3227	-0.0003445	-0.008413	-0.0010	0.2037	0.0046	-2.238	-4.435	160
RohnXP	0.3222	-0.0003376	-0.008809	-0.0002	0.2033	0.0046	-2.238	4.435	160
RohnY	0.2527	-0.0001222	-0.02221	-0.0005	0.1932	-0.0018	-2.702	-5.117	140
RohnZ	0.2524	-0.000259	-0.02254	-0.0013	0.1925	-0.0050	-2.702	5.117	140
RohnA1	0.1873	2.383e-005	0.003262	-0.0008	0.1756	-0.0028	-3.16	-5.798	120
RohnB1	0.1872	1.679e-005	0.003291	-0.0014	0.1751	-0.0049	-3.61	-6.479	100
RohnC1	0.1306	-4.122e-005	0.003677	-0.0002	0.1451	-0.0028	-3.61	6.479	100
RohnD1	0.1306	-4.122e-005	0.003677	0.0006	0.1446	0.0042	-3.61	-7.116	80
RohnE1	0.08442	-0.0001462	0.003667	0.0015	0.1207	-0.0028	-4.05	-7.116	80
RohnF1	0.08445	-4.786e-005	0.003666	-0.0013	0.1205	0.0037	-4.05	7.116	80
RohnG1	0.0482	9.385e-005	0.003216	-0.0005	0.0891	-0.0021	-4.479	-7.842	60
RohnH1	0.04844	2.471e-005	0.003212	-0.0005	0.0891	0.0028	-4.479	7.842	60
RohnI1	0.02203	9.13e-005	0.002458	-0.0005	0.0616	-0.0016	-4.898	-8.522	40
RohnJ1	0.02217	-2.014e-005	0.002457	-0.0006	0.0617	0.0020	-4.898	8.522	40
RohnK1	0.006193	3.386e-005	0.001246	0.0007	0.0306	-0.0009	-5.309	-9.206	20
RohnL1	0.006265	-4.728e-006	0.001247	-0.0008	0.0308	0.0010	-5.309	9.206	20
RohnM1	0	0	0	0.0000	0.0000	0.0000	-5.71	-9.89	0
RohnN1	0	0	0	0.0000	0.0000	0.0000	-5.71	9.89	0
RohnO1	0.3933	-0.0002716	-0.001109	-0.0004	0.2061	-0.0002	-0.7732	-2.021	180
RohnP1	0.3933	-0.0002703	-9.572e-005	0.0050	0.2059	0.0002	-0.7732	2.02	180
RohnQ1	0.3225	-0.0001945	0.001431	-0.0027	0.2040	-0.0002	-1.238	-2.703	160
RohnR1	0.3225	-0.0001945	0.001451	0.0032	0.2040	0.0003	-1.238	2.703	160
RohnS1	0.2526	-0.0001197	0.002805	-0.0030	0.1967	-0.0005	-1.701	-3.385	140
RohnT1	0.2526	-0.0001183	0.002827	-0.0034	0.1967	0.0005	-1.701	3.384	140
RohnU1	0.1875	-5.093e-005	0.003749	-0.0053	0.1789	-0.0010	-2.16	-4.066	120
RohnV1	0.1875	-5.093e-005	0.003767	0.0055	0.1789	0.0010	-2.16	4.066	120
RohnW1	0.1306	-4.11e-005	0.003931	-0.0031	0.1457	-0.0008	-2.61	-4.747	100
RohnX1	0.1306	-4.206e-005	0.003941	-0.0036	0.1456	0.0008	-2.61	4.747	100
RohnY1	0.08448	-3.641e-006	0.003968	-0.0036	0.1233	-0.0008	-3.05	-5.428	80
RohnZ1	0.08448	-3.641e-006	0.003974	-0.0037	0.1233	0.0008	-3.05	5.428	80
RohnA2	0.04833	1.957e-005	0.003454	-0.0052	0.0931	-0.0010	-3.479	-6.11	60
RohnB2	0.04833	1.957e-005	0.003458	-0.0052	0.0931	0.0010	-3.479	6.11	60
RohnC2	0.02213	3.473e-005	0.002659	-0.0057	0.0645	-0.0010	-3.898	-6.79	40
RohnD2	0.02213	3.473e-005	0.002661	-0.0057	0.0645	0.0010	-3.898	6.79	40
RohnE2	0.006161	5.204e-005	0.001377	-0.0034	0.0337	-0.0009	-4.308	-7.472	20
RohnF2	0.006162	-5.204e-005	0.001378	0.0034	0.0337	0.0009	-4.308	7.472	20
RohnG2	0	0	0	0.0000	0.0000	0.0000	-4.708	-8.154	0
RohnH2	0	0	0	0.0000	0.0000	0.0000	-4.708	8.154	0

RohnA35	0.3756	1.071e-005	-0.02414	0.0002	0.2036	0.0025	4.906	1.071e-005	175
RohnA36	0.3578	1.705e-005	-0.02473	0.0006	0.2030	0.0025	5.085	1.705e-005	170
RohnA37	0.3401	0.0001108	-0.02527	0.0004	0.2027	0.0025	5.264	0.0001108	165
RohnA38	0.3048	8.58e-005	-0.02615	-0.0002	0.2017	0.0022	5.623	8.58e-005	155
RohnA39	0.2872	6.496e-005	-0.02649	-0.0003	0.2001	0.0020	5.802	6.496e-005	150
RohnA40	0.2699	4.603e-005	-0.02671	-0.0003	0.1986	0.0018	5.982	4.603e-005	145
RohnA41	0.2504	1.341e-005	-0.02693	-0.0001	0.1883	0.0014	6.401	1.341e-005	133.3
RohnA42	0.2308	1.801e-006	-0.02683	-0.0002	0.1848	0.0012	6.642	1.801e-006	126.6
RohnA43	0.1675	1.863e-005	-0.02579	-0.0001	0.1662	0.0008	7.124	1.863e-005	113.3
RohnA44	0.1486	3.932e-005	-0.02479	-0.0002	0.1590	0.0008	7.368	3.932e-005	106.6
RohnA45	0.1145	8.05e-005	-0.02263	-0.0003	0.1342	0.0006	8.727	8.05e-005	93.32
RohnA46	0.099	-0.0001108	-0.02155	-0.0001	0.1300	0.0005	8.105	-0.0001108	86.64
RohnA47	0.0658	-0.0001447	-0.01845	-0.0000	0.1040	0.0004	9.727	-0.0001447	69.98
RohnA48	0.03473	-0.0001169	-0.01409	0.0001	0.0748	0.0003	9.483	-0.0001169	49.99
RohnA49	0.01358	-6.218e-005	-0.00882	0.0001	0.0459	0.0001	10.25	-6.218e-005	29.99
RohnA50	0.002576	-2.099e-005	-0.002953	0.0002	0.0193	0.0000	11.03	-2.099e-005	9.997
RohnA51	0.3756	-0.0002432	-0.01314	0.0001	0.2050	0.0000	2.906	-0.0002432	175
RohnA52	0.3578	-0.0002465	-0.01378	0.0002	0.2024	0.0000	3.085	-0.0002465	170
RohnA53	0.3401	-0.0002039	-0.01437	0.0004	0.2040	0.0000	3.264	-0.0002039	165
RohnA54	0.3048	-0.0001723	-0.01548	0.0002	0.2030	0.0000	3.623	-0.0001723	155
RohnA55	0.2872	-0.0001543	-0.01598	0.0002	0.1996	0.0000	3.802	-0.0001543	150
RohnA56	0.2699	-0.0001352	-0.01642	0.0002	0.2000	0.0000	3.981	-0.0001352	145
RohnA57	0.2504	-9.786e-005	-0.01717	0.0002	0.1892	0.0000	4.4	-9.786e-005	133.3
RohnA58	0.2308	-7.843e-005	-0.01738	0.0002	0.1866	0.0000	4.642	-7.843e-005	126.6
RohnA59	0.1675	-4.659e-005	-0.01724	0.0001	0.1679	0.0000	5.124	-4.659e-005	113.3
RohnA60	0.1486	-3.677e-005	-0.01677	0.0001	0.1604	0.0000	5.368	-3.677e-005	106.6
RohnA61	0.1145	-2.072e-005	-0.01587	0.0000	0.1359	0.0000	5.858	-2.072e-005	93.32
RohnA62	0.09901	-1.867e-005	-0.01546	0.0000	0.1309	0.0000	6.105	-1.867e-005	86.64
RohnA63	0.0658	-1.25e-005	-0.01377	0.0000	0.1078	0.0000	6.727	-1.25e-005	69.99
RohnA64	0.03473	-7.564e-006	-0.01086	0.0000	0.0794	0.0000	7.483	-7.564e-006	49.99
RohnA65	0.01358	-3.006e-006	-0.00703	0.0000	0.0490	0.0000	8.248	-3.006e-006	29.99
RohnA66	0.002576	-4.466e-007	-0.002426	0.0000	0.0205	0.0000	9.024	-4.466e-007	9.98
RohnA67	0.3756	-0.0002725	-0.006451	-0.0021	0.2016	-0.0001	0.9765	-0.0002725	180
RohnA68	0.3578	-0.0002709	-0.006444	-0.0021	0.2060	0.0000	0.7732	-0.0002709	180
RohnA69	0.3401	-0.0002691	-0.00644	-0.0021	0.2015	0.0001	0.9765	-0.0002691	180
RohnA70	0.3048	-0.0001949	-0.006966	-0.0005	0.1995	0.0002	1.103	-0.0001949	160
RohnA71	0.2872	-0.0001927	-0.006957	-0.0005	0.2040	0.0000	-1.238	-0.0001927	160
RohnA72	0.2699	-0.0001901	-0.006957	-0.0009	0.1995	0.0002	1.103	-0.0001901	160
RohnA73	0.2504	-0.000142	-0.007405	0.0002	0.1905	0.0002	1.23	-0.000142	140
RohnA74	0.2308	-0.000119	-0.007395	0.0002	0.1967	0.0000	-1.701	-0.000119	140
RohnA75	0.2108	-0.0001146	-0.007395	0.0002	0.1905	0.0002	1.23	-0.0001146	140
RohnA76	0.1875	-6.907e-005	-0.007773	-0.0005	0.1707	0.0003	1.361	-6.907e-005	120
RohnA77	0.1875	-6.181e-005	-0.007864	-0.0001	0.1799	0.0000	-2.16	-6.181e-005	120
RohnA78	0.1875	-5.448e-005	-0.007763	0.0007	0.1707	0.0003	1.361	-5.448e-005	120
RohnA79	0.1306	-3.384e-005	-0.006729	0.0007	0.1384	-0.0003	1.501	-3.384e-005	100
RohnA80	0.1307	-2.809e-005	-0.003315	0.0001	0.1456	-0.0000	-2.61	-2.809e-005	100
RohnA81	0.1306	-2.257e-005	-0.006724	-0.0006	0.1383	0.0003	1.501	-2.257e-005	100
RohnA82	0.08451	-2.221e-005	-0.006783	-0.0001	0.1138	0.0002	1.652	-2.221e-005	80
RohnA83	0.08453	-1.529e-005	-0.002807	0.0000	0.1233	-0.0000	-3.049	-1.529e-005	80
RohnA84	0.08451	-0.733e-006	-0.00678	0.0002	0.1138	0.0002	1.652	-0.733e-006	80
RohnA85	0.04837	-1.93e-006	-0.00678	-0.0019	0.0838	-0.0002	1.812	-1.93e-006	59.99
RohnA86	0.04839	-9.55e-006	-0.006778	0.0000	0.0931	0.0000	-3.479	-9.55e-006	60
RohnA87	0.04837	-1.692e-007	-0.006778	0.0019	0.0838	0.0002	1.812	-1.692e-007	60
RohnA88	0.02219	-1.548e-005	-0.006538	-0.0011	0.0555	-0.0002	1.982	-1.548e-005	59.99
RohnA89	0.02221	-4.537e-006	-0.006536	0.0000	0.0645	-0.0000	-3.898	-4.537e-006	40
RohnA90	0.02219	6.111e-006	-0.006536	0.0011	0.0555	0.0002	1.982	6.111e-006	39.99
RohnA91	0.006238	-1.417e-005	-0.006129	-0.0002	0.0253	-0.0003	2.163	-1.417e-005	20
RohnA92	0.006261	-1.595e-006	-0.002886	0.0000	0.0337	-0.0000	-4.308	-1.595e-006	20
RohnA93	0.006238	-0.083e-005	-0.006128	0.0002	0.0253	0.0003	2.163	-0.083e-005	20
RohnA94	0.3758	-0.0004046	-0.002883	-0.0004	0.2016	0.0012	1.889	-0.0004046	175
RohnA95	0.3754	-0.0003369	-0.002883	-0.0001	0.2038	0.0038	-1.889	-0.0003369	175
RohnA96	0.3582	-0.0004247	-0.002773	-0.0004	0.2039	0.0009	-2.005	-0.0004247	170
RohnA97	0.3576	-0.000376	-0.002773	-0.0004	0.2039	0.0009	-2.006	-0.000376	170
RohnA98	0.3403	-0.0003632	-0.004729	-0.0004	0.2030	0.0041	-2.122	-0.0003632	165
RohnA99	0.3398	-0.0003683	-0.005107	-0.0005	0.2020	0.0042	-2.122	-0.0003683	165
RohnA100	0.3049	-0.0002709	-0.00121	-0.0003	0.2008	-0.0001	-2.354	-0.0002709	155
RohnA101	0.3045	-0.0003362	0.001219	0.0014	0.1997	0.0046	-2.355	-0.0003362	155
RohnA102	0.2876	-0.0003562	0.001555	0.0014	0.2005	-0.0008	-2.47	-0.0003562	150
RohnA103	0.2872	-0.0001709	0.001592	0.0006	0.1997	0.0048	-2.47	-0.0001709	150

Joint Label	X (kips)	Y (kips)	Z (kips)	Comp. Usage %	Uplift Usage %	Result. Force (kips)	X-M. Usage %	Y-M. Usage %	Z-M. Usage %	Max. Usage %
RohnBc1	0.2699	-0.0001909	0.001911	0.0021	0.2019	-0.00015	-2.586	-4.947	145	0.0
RohnBc2	0.2696	-0.0002621	0.001946	-0.0011	0.2010	0.00051	-2.586	4.946	145	0.0
RohnCa1	0.2304	-0.0002189	0.002605	-0.0003	0.1899	-0.00022	-2.855	-5.344	133.3	0.0
RohnCa2	0.2303	-0.361e-005	0.002635	-0.0010	0.1893	0.00051	-2.855	5.344	133.3	0.0
RohnCb1	0.2084	-0.0001221	0.002959	-0.0018	0.1861	-0.00027	-3.008	-5.571	126.7	0.0
RohnCb2	0.2083	-0.0001172	0.002988	-0.0013	0.1858	0.00052	-3.008	5.571	126.7	0.0
RohnDa1	0.1673	-9.954e-005	0.003486	-0.0007	0.1704	-0.00030	-3.311	-6.025	113.3	0.0
RohnDa2	0.1672	-2.251e-005	0.003351	-0.0002	0.1698	0.00049	-3.311	6.025	113.3	0.0
RohnDb1	0.1479	-0.0001314	0.003365	-0.0007	0.1576	-0.00029	-3.462	-6.252	106.7	0.0
RohnDb2	0.1479	-0.0002021	0.003366	-0.0002	0.1572	0.00046	-3.462	6.252	106.7	0.0
RohnEa1	0.1139	-0.0001132	0.003744	-0.0012	0.1383	-0.00028	-3.756	-6.706	93.34	0.0
RohnEa2	0.1141	-0.0001148	0.003752	-0.0008	0.1379	0.00041	-3.757	6.706	93.34	0.0
RohnEb1	0.09852	-0.0001667	0.003742	-0.0005	0.1266	-0.00027	-3.904	-6.933	86.66	0.0
RohnEb2	0.09867	-0.0001109	0.003747	-0.0009	0.1259	0.00038	-3.904	6.933	86.66	0.0
RohnFa1	0.06424	-0.0004291	0.003525	-0.0006	0.1021	-0.00023	-4.267	-7.501	70	0.0
RohnFa2	0.06444	-0.0003279	0.003524	-0.0007	0.1021	0.00041	-4.266	7.501	70	0.0
RohnGa1	0.03321	-0.0004329	0.002902	-0.0001	0.0746	-0.00018	-4.691	-8.182	50	0.0
RohnGa2	0.03339	-0.0003425	0.002929	-0.0009	0.0750	0.00023	-4.691	8.182	50	0.0
RohnHa1	0.01189	-0.0004478	0.00192	-0.0004	0.0449	-0.00012	-5.106	-8.864	30	0.0
RohnHa2	0.012	-0.0004249	0.00192	-0.0003	0.0450	0.00014	-5.106	8.864	30	0.0
RohnIa1	0.0013	-0.0003062	0.0006679	-0.0001	0.0189	-0.00006	-5.511	-9.548	10	0.0
RohnIa2	0.001335	-0.0002872	0.0006682	-0.0000	0.0191	0.00006	-5.511	9.548	10	0.0
RohnAa1	0.3755	-0.0002684	0.0002821	0.0015	0.2022	-0.0002	-0.8994	-2.191	175	0.0
RohnAa2	0.3756	-0.0002434	0.000298	-0.0011	0.2024	0.0002	-0.8994	2.191	175	0.0
RohnAb1	0.3578	-0.0002313	0.0006712	-0.0002	0.2040	-0.0002	-1.006	-2.362	170	0.0
RohnAb2	0.3578	-0.0002301	0.0006901	0.0007	0.2040	0.0003	-1.006	2.361	170	0.0
RohnAc1	0.3401	-0.0002188	0.001058	-0.0010	0.2023	-0.0002	-1.122	-2.532	165	0.0
RohnAc2	0.3401	-0.0002131	0.001077	-0.0006	0.2021	0.0003	-1.122	2.532	165	0.0
RohnBa1	0.3048	-0.0001792	0.001805	-0.0012	0.2016	-0.0004	-1.354	-2.873	155	0.0
RohnBa2	0.3048	-0.0001686	0.001827	-0.0008	0.2016	0.0004	-1.354	2.873	155	0.0
RohnBb1	0.2872	-0.0001371	0.002216	-0.0000	0.2009	-0.0004	-1.47	-3.044	150	0.0
RohnBb2	0.2872	-0.0001716	0.002182	0.0005	0.2010	0.0005	-1.47	3.043	150	0.0
RohnBc1	0.2698	-0.0001266	0.002497	-0.0009	0.1978	-0.0005	-1.586	-3.214	145	0.0
RohnBc2	0.2698	-0.0001457	0.002518	-0.0005	0.1978	0.0005	-1.586	3.214	145	0.0
RohnCa1	0.2301	-2.424e-005	0.003183	-0.0013	0.1915	-0.0008	-1.855	-3.611	133.3	0.0
RohnCa2	0.2301	-0.0001698	0.003204	-0.0010	0.1915	0.0008	-1.855	3.611	133.3	0.0
RohnCb1	0.2082	-7.243e-006	0.003504	-0.0009	0.1818	-0.0008	-2.008	-3.839	126.7	0.0
RohnCb2	0.2082	-0.0001525	0.003524	-0.0006	0.1818	0.0008	-2.008	3.839	126.7	0.0
RohnDa1	0.1671	-3.098e-005	0.003916	-0.0027	0.1710	-0.0012	-2.311	-4.293	113.3	0.0
RohnDa2	0.1671	-0.0001281	0.003932	-0.0025	0.1710	0.0012	-2.311	4.293	113.3	0.0
RohnDb1	0.1479	-0.0001529	0.003981	-0.0000	0.1556	-0.0009	-2.462	-4.52	106.7	0.0
RohnDb2	0.1479	-0.0002262	0.003994	-0.0002	0.1556	0.0009	-2.462	4.52	106.7	0.0
RohnEa1	0.1141	-5.586e-005	0.004017	-0.0015	0.1382	-0.0009	-2.757	-4.974	93.34	0.0
RohnEa2	0.1141	-9.931e-005	0.004025	-0.0014	0.1382	0.0009	-2.757	4.974	93.34	0.0
RohnEb1	0.09864	-9.84e-005	0.004028	-0.0003	0.1252	-0.0007	-2.904	-5.201	86.66	0.0
RohnEb2	0.09864	-0.0001317	0.004035	-0.0002	0.1252	0.0007	-2.904	5.201	86.66	0.0
RohnFa1	0.06422	-0.0004419	0.003379	-0.0025	0.1011	-0.0008	-3.267	-5.769	70	0.0
RohnFa2	0.06421	-0.0004611	0.003395	-0.0024	0.1011	0.0008	-3.267	5.769	70	0.0
RohnGa1	0.03329	-0.0003988	0.003128	-0.0029	0.0731	-0.0010	-3.691	-6.45	50	0.0
RohnGa2	0.03329	-0.0003998	0.003131	-0.0029	0.0731	0.0010	-3.691	6.45	50	0.0
RohnHa1	0.01202	-0.0004027	0.00209	-0.0025	0.0439	-0.0009	-4.105	-7.131	30	0.0
RohnHa2	0.01202	-0.0004084	0.002092	-0.0025	0.0439	0.0009	-4.105	7.131	30	0.0
RohnIa1	0.001206	-0.0003604	0.0007519	-0.0008	0.0179	-0.0005	-4.51	-7.812	10	0.0
RohnIa2	0.001206	-0.0003616	0.0007527	-0.0008	0.0179	0.0005	-4.51	7.812	10	0.0

Joint Support Reactions for Load Case "6: Service 1.0D + 1.0Dg + 1.0 Wc":

Joint Label	X (kips)	Y (kips)	Z (kips)	Comp. Usage %	Uplift Usage %	Result. Force (kips)	X-M. Usage %	Y-M. Usage %	Z-M. Usage %	Max. Usage %
RohnJP	-7.13	0.0	0.02	0.0	0.0	89.82	0.0	0.0	90.11	0.0
RohnJP	-11.50	0.0	0.0	0.0	0.0	123.52	0.0	0.0	123.52	0.0
RohnJ1	-1.72	0.0	-1.60	0.0	0.0	20.32	0.0	0.28	0.0	0.0
RohnJ2	-1.72	0.0	1.58	0.0	0.0	20.33	0.0	-0.27	0.0	0.0
RohnJ1	-3.62	0.0	-3.77	0.0	0.0	38.83	0.0	0.35	0.0	0.0
RohnJ2	-3.62	0.0	3.77	0.0	0.0	38.87	0.0	-0.35	0.0	0.0

Joint Displacements, Loads and Member Forces on Joints for Load Case "6: Service 1.0D + 1.0Dg + 1.0 Wc":

Joint Label	External X Load (kips)	External Y Load (kips)	External Z Load (kips)	Member X Force (kips)	Member Y Force (kips)	Member Z Force (kips)	Member X Disp. (ft)	Member Y Disp. (ft)	Member Z Disp. (ft)
RohnAP	0.1426	0.0000	0.0000	-0.1428	-0.0000	0.2953	0.3932	-0.0001	-0.0235
RohnBP	0.6713	0.0000	-1.0601	-0.6713	0.0000	1.0601	0.3224	0.0001	-0.0257
RohnCP	0.1463	0.0000	-0.4267	-0.1463	0.0000	0.4267	0.2526	0.0000	-0.0268
RohnDP	0.1775	0.0000	-0.5173	-0.1775	0.0000	0.5173	0.1875	-0.0000	-0.0265
RohnEP	0.1832	0.0000	-0.6412	-0.1832	0.0000	0.6412	0.1306	-0.0001	-0.0235
RohnFP	0.2103	0.0000	-0.8697	-0.2103	0.0000	0.8697	0.0845	-0.0001	-0.0203
RohnGP	0.2904	0.0000	-1.1585	-0.2904	0.0000	1.1585	0.0484	-0.0001	-0.0163
RohnHP	0.2489	0.0000	-1.1531	-0.2489	0.0000	1.1531	0.0222	-0.0001	-0.0117
RohnJP	0.3148	0.0000	-1.2937	-0.3148	0.0000	1.2937	0.0063	-0.0000	-0.0057
RohnKP	0.1865	0.0000	-0.6991	-0.1865	0.0000	0.6991	0.0226	-0.0000	0.0000
RohnLP	0.0418	0.0000	-0.1553	-0.0418	0.0000	0.1553	0.3933	-0.0003	-0.0125
RohnMP	0.1010	0.0000	-0.3361	-0.1010	0.0000	0.3361	0.3224	-0.0002	-0.0149
RohnNP	0.1463	0.0000	-0.4267	-0.1463	0.0000	0.4267	0.2526	-0.0001	-0.0168
RohnOP	0.1775	0.0000	-0.5173	-0.1775	0.0000	0.5173	0.1875	-0.0001	-0.0175
RohnPP	0.1832	0.0000	-0.6412	-0.1832	0.0000	0.6412	0.1306	-0.0000	-0.0161
RohnQP	0.2103	0.0000	-0.8697	-0.2103	0.0000	0.8697	0.0845	-0.0000	-0.0149
RohnRP	0.2380	0.0000	-1.0585	-0.2380	0.0000	1.0585	0.0484	-0.0000	-0.0123
RohnSP	0.2489	0.0000	-1.1531	-0.2489	0.0000	1.1531	0.0222	-0.0000	-0.0091
RohnTP	0.3148	0.0000	-1.2937	-0.3148	0.0000	1.2937	0.0063	-0.0000	-0.0046
RohnUP	0.1865	0.0000	-0.6991	-0.1865	0.0000	0.6991	0.0226	-0.0000	0.0000
RohnVP	0.1428	0.0000	-0.2953	-0.1428	0.0000	0.2953	0.3935	-0.0004	-0.0007
RohnW1	0.4353	0.0000	-0.4353	0.4353	0.0000	0.4353	0.3932	-0.0004	-0.0007
RohnX1	0.4501	0.0000	-0.4501	0.4501	0.0000	0.4501	0.3222	-0.0003	-0.0008
RohnY1	0.4267	0.0000	-0.4267	0.4267	0.0000	0.4267	0.2527	-0.0001	-0.0022
RohnZ1	0.4267	0.0000	-0.4267	0.4267	0.0000	0.4267	0.2524	-0.0003	-0.0023
RohnA2	0.5873	0.0000	-0.5873	0.5873	0.0000	0.5873	0.1873	0.0000	0.0033
RohnB2	0.1775	0.0000	-0.1775	0.1775	0.0000	0.1775	0.1872	-0.0002	0.0033
RohnC2	0.6412	0.0000	-0.6412	0.6412	0.0000	0.6412	0.1306	0.0000	0.0037
RohnD2	0.8697	0.0000	-0.8697	0.8697	0.0000	0.8697	0.0842	-0.0001	0.0037
RohnE2	1.1185	0.0000	-1.1185	1.1185	0.0000	1.1185	0.0484	-0.0000	0.0032
RohnF2	1.2145	0.0000	-1.2145	1.2145	0.0000	1.2145	0.0484	0.0000	0.0032
RohnG2	1.1531	0.0000	-1.1531	1.1531	0.0000	1.1531	0.0220	-0.0001	0.0025
RohnH2	1.1531	0.0000	-1.1531	1.1531	0.0000	1.1531	0.0222	-0.0000	0.0025
RohnI2	1.2937	0.0000	-1.2937	1.2937	0.0000	1.2937	0.0062	0.0000	0.0012
RohnJ2	20.8803	0.0000	-20.8803	20.8803	0.0000	20.8803	0.0000	0.0000	0.0000
RohnK2	1.5799	0.0000	-1.5799	1.5799	0.0000	1.5799	0.0000	0.0000	0.0000
RohnL2	1.5799	0.0000	-1.5799	1.5799	0.0000	1.5799	0.0000	0.0000	0.0000
RohnM2	0.418	0.0000	-0.418	0.418	0.0000	0.418	0.0000	0.0000	0.0000
RohnN2	0.418	0.0000	-0.418	0.418	0.0000	0.418	0.0000	0.0000	0.0000
RohnO2	0.418	0.0000	-0.418	0.418	0.0000	0.418	0.0000	0.0000	0.0000
RohnP2	0.418	0.0000	-0.418	0.418	0.0000	0.418	0.0000	0.0000	0.0000
RohnQ2	0.418	0.0000	-0.418	0.418	0.0000	0.418	0.0000	0.0000	0.0000
RohnR2	0.418	0.0000	-0.418	0.418	0.0000	0.418	0.0000	0.0000	0.0000
RohnS2	0.418	0.0000	-0.418	0.418	0.0000	0.418	0.0000	0.0000	0.0000
RohnT2	0.418	0.0000	-0.418	0.418	0.0000	0.418	0.0000	0.0000	0.0000
RohnU2	0.418	0.0000	-0.418	0.418	0.0000	0.418	0.0000	0.0000	0.0000
RohnV2	0.418	0.0000	-0.418	0.418	0.0000	0.418	0.0000	0.0000	0.0000
RohnW2	0.418	0.0000	-0.418	0.418	0.0000	0.418	0.0000	0.0000	0.0000
RohnX2	0.418	0.0000	-0.418	0.418	0.0000	0.418	0.0000	0.0000	0.0000
RohnY2	0.418	0.0000	-0.418	0.418	0.0000	0.418	0.0000	0.0000	0.0000
RohnZ2	0.418	0.0000	-0.418	0.418	0.0000	0.418	0.0000	0.0000	0.0000
RohnA3	0.1338	0.0000	-0.2075	-0.1338	0.0000	0.2075	0.3756	0.0000	-0.0241
RohnB3	0.0418	0.0000	-0.1553	-0.0418	0.0000	0.1553	0.3578	0.0000	-0.0247
RohnC3	0.1245	0.0000	-0.2085	-0.1245	0.0000	0.2085	0.3401	0.0001	-0.0253

RohnBas	0.0592	0.0000	-0.1808	-0.0592	-0.0000	0.1808	0.3048	0.0001	-0.0262
RohnBcs	0.4878	0.0000	-0.9650	-0.4878	0.0000	0.9650	0.2872	0.0000	-0.0265
RohnBcs	0.0592	0.0000	-0.1808	-0.0592	0.0000	0.1808	0.2699	0.0000	-0.0267
RohnCas	0.4530	0.0000	-0.7981	-0.4530	-0.0000	0.7981	0.2304	0.0000	-0.0269
RohnCbs	0.6305	0.0000	-1.4356	-0.6305	-0.0000	1.4356	0.2086	0.0000	-0.0268
RohnDbs	0.6417	0.0000	-1.2660	-0.6417	-0.0000	1.2660	0.1675	-0.0000	-0.0258
RohnEbs	0.0904	0.0000	-0.2714	-0.0904	-0.0000	0.2714	0.1486	-0.0000	-0.0248
RohnFbs	0.0928	0.0000	-0.3697	-0.0928	-0.0000	0.3697	0.1145	-0.0000	-0.0226
RohnGbs	0.0928	0.0000	-0.3697	-0.0928	-0.0000	0.3697	0.0990	-0.0000	-0.0215
RohnHbs	0.1175	0.0000	-0.4999	-0.1175	-0.0000	0.4999	0.0658	-0.0000	-0.0184
RohnIbs	0.1205	0.0000	-0.5585	-0.1205	-0.0000	0.5585	0.0347	-0.0000	-0.0141
RohnJbs	0.1283	0.0000	-0.5946	-0.1283	-0.0000	0.5946	0.0136	-0.0000	-0.0088
RohnKbs	0.1865	0.0000	-0.6991	-0.1865	-0.0000	0.6991	0.0026	-0.0000	-0.0030
RohnLbs	0.0418	0.0000	-0.1553	-0.0418	-0.0000	0.1553	0.3756	-0.0000	-0.0131
RohnMbs	0.0418	0.0000	-0.1553	-0.0418	-0.0000	0.1553	0.3578	-0.0000	-0.0138
RohnNbs	0.0418	0.0000	-0.1553	-0.0418	-0.0000	0.1553	0.3401	-0.0000	-0.0144
RohnObs	0.0592	0.0000	-0.1808	-0.0592	-0.0000	0.1808	0.3048	-0.0000	-0.0155
RohnPbs	0.0592	0.0000	-0.1808	-0.0592	-0.0000	0.1808	0.2872	-0.0000	-0.0160
RohnQbs	0.0592	0.0000	-0.1808	-0.0592	-0.0000	0.1808	0.2699	-0.0000	-0.0164
RohnRbs	0.0871	0.0000	-0.2459	-0.0871	-0.0000	0.2459	0.2304	-0.0000	-0.0172
RohnSbs	0.0871	0.0000	-0.2459	-0.0871	-0.0000	0.2459	0.2086	-0.0000	-0.0174
RohnTbs	0.0904	0.0000	-0.2714	-0.0904	-0.0000	0.2714	0.1675	-0.0000	-0.0172
RohnUbs	0.0928	0.0000	-0.3697	-0.0928	-0.0000	0.3697	0.1486	-0.0000	-0.0168
RohnVbs	0.0928	0.0000	-0.3697	-0.0928	-0.0000	0.3697	0.1145	-0.0000	-0.0159
RohnWbs	0.1175	0.0000	-0.4999	-0.1175	-0.0000	0.4999	0.0658	-0.0000	-0.0138
RohnXbs	0.1205	0.0000	-0.5585	-0.1205	-0.0000	0.5585	0.0347	-0.0000	-0.0109
RohnYbs	0.1283	0.0000	-0.5946	-0.1283	-0.0000	0.5946	0.0136	-0.0000	-0.0070
RohnZbs	0.1865	0.0000	-0.6991	-0.1865	-0.0000	0.6991	0.0026	-0.0000	-0.0024
SNB-WI-A1S	0.0418	0.0000	-0.1553	-0.0418	0.0000	0.1553	0.3933	-0.0000	-0.0065
SNB-WI-A2S	0.0418	0.0000	-0.1553	-0.0418	-0.0000	0.1553	0.3933	-0.0000	-0.0062
SNB-WI-A3S	0.0418	0.0000	-0.1553	-0.0418	-0.0000	0.1553	0.3933	-0.0000	-0.0064
SNB-WI-B1S	0.0418	0.0000	-0.1553	-0.0418	-0.0000	0.1553	0.3224	-0.0000	-0.0070
SNB-WI-B2S	0.0418	0.0000	-0.1553	-0.0418	-0.0000	0.1553	0.3225	-0.0000	-0.0012
SNB-WI-B3S	0.0418	0.0000	-0.1553	-0.0418	-0.0000	0.1553	0.3224	-0.0000	-0.0070
SNB-WI-C1S	0.0592	0.0000	-0.1808	-0.0592	-0.0000	0.1808	0.2526	-0.0000	-0.0074
SNB-WI-C2S	0.0592	0.0000	-0.1808	-0.0592	-0.0000	0.1808	0.2527	-0.0000	-0.0074
SNB-WI-C3S	0.0592	0.0000	-0.1808	-0.0592	-0.0000	0.1808	0.2526	-0.0000	-0.0074
SNB-WI-D1S	0.0871	0.0000	-0.2459	-0.0871	-0.0000	0.2459	0.1875	-0.0000	-0.0074
SNB-WI-D2S	0.0871	0.0000	-0.2459	-0.0871	-0.0000	0.2459	0.1875	-0.0000	-0.0029
SNB-WI-D3S	0.0871	0.0000	-0.2459	-0.0871	-0.0000	0.2459	0.1875	-0.0000	-0.0078
SNB-WI-E1S	0.0904	0.0000	-0.2714	-0.0904	0.0000	0.2714	0.1306	-0.0000	-0.0067
SNB-WI-E2S	0.0904	0.0000	-0.2714	-0.0904	-0.0000	0.2714	0.1307	-0.0000	-0.0033
SNB-WI-E3S	0.0904	0.0000	-0.2714	-0.0904	-0.0000	0.2714	0.1306	-0.0000	-0.0067
SNB-WI-F1S	0.0928	0.0000	-0.3697	-0.0928	-0.0000	0.3697	0.0845	-0.0000	-0.0068
SNB-WI-F2S	0.0928	0.0000	-0.3697	-0.0928	-0.0000	0.3697	0.0845	-0.0000	-0.0028
SNB-WI-F3S	0.0928	0.0000	-0.3697	-0.0928	-0.0000	0.3697	0.0845	-0.0000	-0.0068
SNB-WI-G1S	0.1175	0.0000	-0.4999	-0.1175	-0.0000	0.4999	0.0484	-0.0000	-0.0068
SNB-WI-G2S	0.1175	0.0000	-0.4999	-0.1175	-0.0000	0.4999	0.0484	-0.0000	-0.0113
SNB-WI-G3S	0.1175	0.0000	-0.4999	-0.1175	-0.0000	0.4999	0.0484	-0.0000	-0.0068
SNB-WI-H1S	0.1205	0.0000	-0.5585	-0.1205	-0.0000	0.5585	0.0222	-0.0000	-0.0065
SNB-WI-H2S	0.1205	0.0000	-0.5585	-0.1205	-0.0000	0.5585	0.0222	-0.0000	-0.0066
SNB-WI-H3S	0.1205	0.0000	-0.5585	-0.1205	-0.0000	0.5585	0.0222	-0.0000	-0.0065
SNB-WI-I1S	0.1283	0.0000	-0.5946	-0.1283	-0.0000	0.5946	0.0062	-0.0000	-0.0061
SNB-WI-I2S	0.1283	0.0000	-0.5946	-0.1283	-0.0000	0.5946	0.0063	-0.0000	-0.0030
SNB-WI-I3S	0.1283	0.0000	-0.5946	-0.1283	-0.0000	0.5946	0.0062	-0.0000	-0.0061
RohnAal	0.1106	0.0000	-0.2288	-0.1106	-0.0000	0.2288	0.3758	-0.0000	-0.0003
RohnAa2	0.1748	0.0000	-0.2518	-0.1748	-0.0000	0.2518	0.3754	-0.0000	-0.0003
RohnAa1	0.0418	-0.1111	-0.2753	-0.0418	0.1111	0.2753	0.3582	-0.0000	-0.0001
RohnAb2	0.0418	0.0000	-0.1553	-0.0418	-0.0000	0.1553	0.3576	-0.0000	-0.0001
RohnAc1	0.0418	0.0000	-0.1553	-0.0418	-0.0000	0.1553	0.3403	-0.0000	-0.0005
RohnAc2	0.0418	0.0000	-0.1553	-0.0418	-0.0000	0.1553	0.3398	-0.0000	-0.0005
RohnBa1	0.0592	0.0000	-0.1808	-0.0592	-0.0000	0.1808	0.3049	-0.0000	-0.0012
RohnBa2	0.0592	0.0000	-0.1808	-0.0592	-0.0000	0.1808	0.3045	-0.0000	-0.0012
RohnBb1	0.4714	0.0000	-0.9380	-0.4714	-0.0000	0.9380	0.2876	-0.0000	-0.0016
RohnBb2	0.4714	0.0000	-0.9380	-0.4714	-0.0000	0.9380	0.2872	-0.0000	-0.0016
RohnBc1	0.0592	0.0000	-0.1808	-0.0592	-0.0000	0.1808	0.2699	-0.0000	-0.0019
RohnBc2	0.0592	0.0000	-0.1808	-0.0592	-0.0000	0.1808	0.2696	-0.0000	-0.0019
RohnCa1	0.4892	0.0000	-0.8581	-0.4892	-0.0000	0.8581	0.2304	-0.0000	-0.0026



Label	Angle Torsion (ft-lbs)	Origin X Moment (ft-lbs)	Origin Y Moment (ft-lbs)	Origin Z Moment (ft-lbs)	End X Moment (ft-lbs)	End Y Moment (ft-lbs)	End Z Moment (ft-lbs)	X Shear (lbs)	Y Shear (lbs)	Z Shear (lbs)	
RohnCa2	0.5128	0.0000	0.0000	0.0000	-0.8981	-0.5128	-0.0000	0.8981	0.2303	0.0000	0.0026
RohnCb1	0.5454	0.0000	0.0000	0.0000	-1.3356	-0.5454	-0.0000	1.3356	0.2084	0.0001	0.0030
RohnCb2	0.5454	0.0000	0.0000	0.0000	-1.3356	-0.5454	-0.0000	1.3356	0.2083	0.0001	0.0030
RohnDa1	0.5835	0.0000	0.0000	0.0000	-1.1610	-0.5835	-0.0000	1.1610	0.1673	0.0001	0.0035
RohnDa2	0.5835	0.0000	0.0000	0.0000	-1.1610	-0.5835	-0.0000	1.1610	0.1672	0.0000	0.0035
RohnDb1	0.904	0.0000	0.0000	0.0000	-0.2714	-0.904	-0.0000	0.2714	0.1479	0.0001	0.0036
RohnDb2	0.904	0.0000	0.0000	0.0000	-0.2714	-0.904	-0.0000	0.2714	0.1479	0.0002	0.0037
RohnEa1	0.928	0.0000	0.0000	0.0000	-0.3697	-0.928	-0.0000	0.3697	0.1139	0.0001	0.0038
RohnEa2	0.928	0.0000	0.0000	0.0000	-0.3697	-0.928	-0.0000	0.3697	0.1141	0.0001	0.0038
RohnEb1	0.928	0.0000	0.0000	0.0000	-0.3697	-0.928	-0.0000	0.3697	0.0987	0.0001	0.0037
RohnEb2	0.928	0.0000	0.0000	0.0000	-0.3697	-0.928	-0.0000	0.3697	0.0987	0.0001	0.0037
RohnFa1	0.1175	0.0000	0.0000	0.0000	-0.4999	-0.1175	-0.0000	0.4999	0.0644	0.0003	0.0035
RohnFa2	0.1175	0.0000	0.0000	0.0000	-0.4999	-0.1175	-0.0000	0.4999	0.0644	0.0003	0.0035
RohnGa1	0.1205	0.0000	0.0000	0.0000	-0.5585	-0.1205	-0.0000	0.5585	0.0332	0.0004	0.0029
RohnGa2	0.1205	0.0000	0.0000	0.0000	-0.5585	-0.1205	-0.0000	0.5585	0.0334	0.0003	0.0029
RohnHa1	0.1283	0.0000	0.0000	0.0000	-0.5946	-0.1283	-0.0000	0.5946	0.0119	0.0005	0.0019
RohnHa2	0.1283	0.0000	0.0000	0.0000	-0.5946	-0.1283	-0.0000	0.5946	0.0120	0.0004	0.0019
RohnIa1	0.1865	0.0000	0.0000	0.0000	-0.6991	-0.1865	-0.0000	0.6991	0.0013	0.0003	0.0007
RohnIa2	0.1865	0.0000	0.0000	0.0000	-0.6991	-0.1865	-0.0000	0.6991	0.0013	0.0003	0.0007
SNB-Aa1	0.0418	0.0000	0.0000	0.0000	-0.1553	-0.0418	-0.0000	0.1553	0.3755	0.0003	0.0003
SNB-Aa2	0.0418	0.0000	0.0000	0.0000	-0.1553	-0.0418	-0.0000	0.1553	0.3756	0.0002	0.0003
SNB-Ab1	0.0418	0.0000	0.0000	0.0000	-0.1553	-0.0418	-0.0000	0.1553	0.3578	0.0002	0.0007
SNB-Ab2	0.0418	0.0000	0.0000	0.0000	-0.1553	-0.0418	-0.0000	0.1553	0.3578	0.0002	0.0007
SNB-Ac1	0.0418	0.0000	0.0000	0.0000	-0.1553	-0.0418	-0.0000	0.1553	0.3401	0.0002	0.0011
SNB-Ac2	0.0418	0.0000	0.0000	0.0000	-0.1553	-0.0418	-0.0000	0.1553	0.3401	0.0002	0.0011
SNB-Ba1	0.0592	0.0000	0.0000	0.0000	-0.1808	-0.0592	-0.0000	0.1808	0.3048	0.0002	0.0018
SNB-Ba2	0.0592	0.0000	0.0000	0.0000	-0.1808	-0.0592	-0.0000	0.1808	0.3048	0.0002	0.0018
SNB-Bb1	0.0592	0.0000	0.0000	0.0000	-0.1808	-0.0592	-0.0000	0.1808	0.2872	0.0001	0.0022
SNB-Bb2	0.0592	0.0000	0.0000	0.0000	-0.1808	-0.0592	-0.0000	0.1808	0.2872	0.0002	0.0022
SNB-Bc1	0.0592	0.0000	0.0000	0.0000	-0.1808	-0.0592	-0.0000	0.1808	0.2698	0.0001	0.0025
SNB-Bc2	0.0592	0.0000	0.0000	0.0000	-0.1808	-0.0592	-0.0000	0.1808	0.2698	0.0001	0.0025
SNB-Ca1	0.0871	0.0000	0.0000	0.0000	-0.2459	-0.0871	-0.0000	0.2459	0.2301	0.0000	0.0032
SNB-Ca2	0.0871	0.0000	0.0000	0.0000	-0.2459	-0.0871	-0.0000	0.2459	0.2301	0.0002	0.0032
SNB-Cb1	0.0871	0.0000	0.0000	0.0000	-0.2459	-0.0871	-0.0000	0.2459	0.2082	0.0000	0.0035
SNB-Cb2	0.0871	0.0000	0.0000	0.0000	-0.2459	-0.0871	-0.0000	0.2459	0.2082	0.0002	0.0035
SNB-Da1	0.0904	0.0000	0.0000	0.0000	-0.2714	-0.0904	-0.0000	0.2714	0.1671	0.0000	0.0039
SNB-Da2	0.0904	0.0000	0.0000	0.0000	-0.2714	-0.0904	-0.0000	0.2714	0.1671	0.0001	0.0039
SNB-Db1	0.0904	0.0000	0.0000	0.0000	-0.2714	-0.0904	-0.0000	0.2714	0.1479	0.0002	0.0040
SNB-Db2	0.0904	0.0000	0.0000	0.0000	-0.2714	-0.0904	-0.0000	0.2714	0.1479	0.0002	0.0040
SNB-Ea1	0.0928	0.0000	0.0000	0.0000	-0.3697	-0.0928	-0.0000	0.3697	0.1141	0.0001	0.0040
SNB-Ea2	0.0928	0.0000	0.0000	0.0000	-0.3697	-0.0928	-0.0000	0.3697	0.1141	0.0001	0.0040
SNB-Eb1	0.0928	0.0000	0.0000	0.0000	-0.3697	-0.0928	-0.0000	0.3697	0.0986	0.0001	0.0040
SNB-Eb2	0.0928	0.0000	0.0000	0.0000	-0.3697	-0.0928	-0.0000	0.3697	0.0986	0.0001	0.0040
SNB-Fa1	0.1175	0.0000	0.0000	0.0000	-0.4999	-0.1175	-0.0000	0.4999	0.0642	0.0004	0.0038
SNB-Fa2	0.1175	0.0000	0.0000	0.0000	-0.4999	-0.1175	-0.0000	0.4999	0.0642	0.0005	0.0038
SNB-Ga1	0.1205	0.0000	0.0000	0.0000	-0.5585	-0.1205	-0.0000	0.5585	0.0333	0.0004	0.0031
SNB-Ga2	0.1205	0.0000	0.0000	0.0000	-0.5585	-0.1205	-0.0000	0.5585	0.0333	0.0004	0.0031
SNB-Ha1	0.1283	0.0000	0.0000	0.0000	-0.5946	-0.1283	-0.0000	0.5946	0.0120	0.0004	0.0021
SNB-Ha2	0.1283	0.0000	0.0000	0.0000	-0.5946	-0.1283	-0.0000	0.5946	0.0120	0.0004	0.0021
SNB-Ia1	0.1865	0.0000	0.0000	0.0000	-0.6991	-0.1865	-0.0000	0.6991	0.0012	0.0004	0.0008
SNB-Ia2	0.1865	0.0000	0.0000	0.0000	-0.6991	-0.1865	-0.0000	0.6991	0.0012	0.0004	0.0008

Moments for Angles Modeled as Beams:

Label	Angle Torsion (ft-lbs)	Origin X Moment (ft-lbs)	Origin Y Moment (ft-lbs)	Origin Z Moment (ft-lbs)	End X Moment (ft-lbs)	End Y Moment (ft-lbs)	End Z Moment (ft-lbs)	X Shear (lbs)	Y Shear (lbs)	Z Shear (lbs)
Rohn-LA1P	0.00	0.27	1.01	5.44	-6.08	-1.01	-1.01	1.14	-1.01	-1.01
Rohn-LA1L	0.49	-0.45	0.62	0.47	9.27	0.00	1.98	0.27	0.00	1.98
Rohn-LA2	0.00	0.39	0.76	3.21	-2.60	0.72	-0.37	0.72	-0.37	0.72
Rohn-LA2P	0.00	-5.44	6.08	-7.17	8.79	-2.52	2.97	-2.52	2.97	-2.52
Rohn-LA2L	0.49	-0.47	-9.27	-5.05	-20.95	-1.10	-6.04	-1.10	-6.04	-1.10
Rohn-LA22	-0.52	-3.21	2.60	-2.41	0.66	-1.12	0.39	-1.12	0.39	-1.12
Rohn-LA3P	0.00	7.17	-8.79	7.86	-7.01	3.00	-3.16	7.86	-7.01	3.00
Rohn-LA3L	0.49	5.05	20.95	5.32	25.22	2.07	9.23	5.32	2.07	9.23
Rohn-LA32	-0.52	2.41	-0.66	-1.81	13.08	0.12	2.75	-1.81	0.12	2.75
Rohn-LA4P	0.00	-7.86	7.01	-3.96	11.35	-2.36	3.67	-3.96	-2.36	3.67
Rohn-LA4L	0.49	-5.32	-25.22	-8.68	-28.95	-2.80	-10.83	-2.80	-10.83	-2.80

Rohn-LB42	-0.52	1.81	-13.08	5.67	-20.05	1.49	-6.62
Rohn-LB1P	0.67	3.78	-9.04	2.40	1.23	1.23	-3.34
Rohn-LB11	2.01	8.18	30.47	19.54	54.89	5.54	17.06
Rohn-LB12	-0.65	-4.97	21.32	-18.41	51.37	-4.67	14.53
Rohn-LB2P	0.67	-2.40	7.68	-0.94	-20.79	-0.67	5.69
Rohn-LB21	2.01	-19.54	-54.89	-25.12	-53.00	-8.92	-21.56
Rohn-LB22	-0.65	18.41	-51.37	24.99	-51.71	8.67	-20.60
Rohn-LB3P	0.67	0.94	-20.79	0.88	-8.17	0.36	-5.79
Rohn-LB31	2.01	25.12	53.00	10.29	41.55	7.08	18.89
Rohn-LB32	-0.65	-24.99	-51.71	-10.31	-41.25	-7.05	-18.58
Rohn-LB4P	0.67	-0.88	8.17	-1.47	41.98	-0.47	10.02
Rohn-LB41	2.01	-10.29	-41.55	10.99	30.07	0.14	-2.29
Rohn-LB42	-0.65	10.31	-41.25	-10.06	29.33	0.05	-2.38
Rohn-LC1P	0.67	1.47	-31.98	0.44	17.15	0.29	-3.73
Rohn-LC11	2.00	-10.99	-30.07	-12.56	1.19	-3.53	-4.33
Rohn-LC12	-0.65	10.06	-29.33	13.05	0.37	3.47	-4.35
Rohn-LC2P	0.67	0.44	-17.15	0.16	16.39	-0.04	-0.11
Rohn-LC21	2.00	12.56	-1.19	-8.26	35.56	0.64	5.14
Rohn-LC22	-0.65	-13.05	-0.37	9.27	33.47	-0.57	4.95
Rohn-LC3P	0.67	-0.16	-16.39	-0.73	66.72	-0.13	7.55
Rohn-LC31	2.00	8.26	-35.56	33.58	64.45	6.28	4.33
Rohn-LC32	-0.65	-9.27	-33.47	-33.23	69.25	-6.68	5.37
Rohn-LD1P	0.67	0.73	-66.72	1.57	82.66	0.35	2.59
Rohn-LD11	2.00	-33.58	-64.45	-56.81	13.14	-13.56	-7.70
Rohn-LD12	-0.64	35.23	-69.25	58.64	9.21	14.08	-9.01
Rohn-LD2P	0.67	-1.57	-82.66	-0.48	25.53	-0.31	-8.55
Rohn-LD21	2.01	56.81	-13.14	58.22	179.31	17.21	24.86
Rohn-LD22	-0.65	-56.84	-9.21	-58.25	180.68	-17.48	25.65
Rohn-LD3P	0.67	0.48	-25.53	-0.09	180.55	0.06	23.27
Rohn-LD31	2.00	-58.22	-179.31	-45.65	7.58	-15.58	-25.76
Rohn-LD32	-0.64	58.25	-180.68	45.99	7.93	15.64	-25.92
Rohn-LE1P	0.67	0.09	-180.55	2.51	46.88	0.39	-20.06
Rohn-LE11	2.00	45.65	-17.58	17.46	133.94	9.47	18.96
Rohn-LE12	-0.65	-45.99	-7.93	-16.45	130.98	-9.37	18.46
Rohn-LE2P	0.67	-2.51	-46.88	-5.53	41.04	-1.20	-0.87
Rohn-LE21	2.00	17.46	-133.94	17.42	107.43	-0.01	-3.96
Rohn-LE22	-0.64	16.45	-130.98	-20.06	115.88	-0.54	-2.26
Rohn-LE3P	0.67	5.53	-41.04	5.74	285.00	1.69	36.61
Rohn-LE31	2.00	-17.42	-107.43	-59.45	12.84	-11.53	-14.19
Rohn-LE32	-0.64	20.06	-115.88	67.01	-4.31	13.06	-18.03
Rohn-LF1P	0.67	5.75	-285.00	-8.54	-49.98	1.43	-33.48
Rohn-LF11	2.01	59.45	-12.84	109.79	419.13	16.91	40.60
Rohn-LF12	-0.65	-67.01	4.31	-114.76	432.48	-18.16	43.64
Rohn-LF2P	0.67	8.54	49.99	6.19	439.27	1.47	48.90
Rohn-LF21	1.99	-109.78	-419.13	-136.33	-116.46	-24.59	-53.52
Rohn-LF22	-0.63	114.76	-432.48	143.18	-132.21	25.77	-56.42
Rohn-LG1P	0.67	-6.19	-439.27	-5.80	-104.94	-1.20	-54.39
Rohn-LG11	2.02	136.33	116.46	153.76	504.60	28.99	62.05
Rohn-LG12	-0.67	-143.18	132.22	-156.67	512.33	-29.96	64.40
Rohn-LG2P	0.67	5.80	104.94	2.78	509.19	0.86	61.38
Rohn-LG21	2.00	-153.76	-504.60	-169.54	-154.96	-32.30	-65.90
Rohn-LG22	-0.64	156.67	-512.34	170.35	-157.49	32.67	-66.93
Rohn-LH1P	0.67	-2.78	-509.19	-0.19	-137.62	-0.30	-64.65
Rohn-LH11	1.99	169.54	154.96	191.90	602.65	36.11	75.70
Rohn-LH12	-0.64	-170.35	157.49	-192.70	604.52	-36.27	76.14
Rohn-LH2P	0.67	0.19	137.62	-0.35	654.51	-0.02	79.18
Rohn-LH21	1.96	-191.89	-602.66	-220.66	-220.56	-41.22	-82.25
Rohn-LH22	-0.60	192.69	604.52	221.40	-221.78	41.37	-82.56
Rohn-LI1P	0.67	0.35	-654.51	-2.35	-211.06	-0.20	-86.51
Rohn-LI11	1.98	220.66	220.56	273.52	935.94	49.38	115.55
Rohn-LI12	-0.62	-221.40	221.78	-271.12	931.66	-49.21	115.25
Rohn-LI2P	0.67	2.35	211.06	12.05	1379.23	1.44	158.95
Rohn-LI21	1.93	-273.51	-935.94	-281.26	205.83	-55.43	-72.95
Rohn-LI22	-0.58	271.11	931.66	270.20	226.30	54.09	-70.48
Rohn-H1P	0.05	0.43	-0.17	0.71	-0.35	0.15	-0.07
Rohn-H11	-0.01	-0.06	-0.15	0.05	0.20	-0.00	0.01
Rohn-H12	0.08	-0.82	0.34	-0.76	0.18	-0.21	0.07
Rohn-H2P	-0.12	1.47	-0.60	1.60	-0.89	0.35	-0.17
Rohn-H21	-0.02	0.17	-0.66	-0.01	-0.07	0.02	-0.08

Rohn-H22	0.03	-1.48	0.23	-1.29	-0.08	-0.31	0.02
SNB-LA1P	-0.00	1.08	61.40	3.24	6.74	0.86	13.62
SNB-LA11	0.08	54.19	-28.03	11.10	-0.78	13.05	-5.76
SNB-LA12	-0.08	-55.78	-30.47	-13.29	-5.85	-13.80	-7.26
SNB-LA2P	-0.00	-3.24	-6.74	4.45	11.26	-1.54	0.90
SNB-LA21	0.08	-11.10	0.78	1.20	-11.33	-1.98	-2.11
SNB-LA22	-0.08	13.29	5.85	1.10	-4.85	2.87	0.20
SNB-LA3P	-0.00	4.45	-11.26	3.58	-22.01	1.60	-6.65
SNB-LA31	0.08	-1.20	11.33	-10.01	23.22	-2.24	6.90
SNB-LA32	-0.08	1.20	-11.33	10.01	-17.91	1.38	-4.55
SNB-LA4P	-0.00	-3.58	22.01	-2.31	66.22	-1.18	17.63
SNB-LA41	0.08	10.01	-23.22	36.24	-35.08	9.24	-11.65
SNB-LA42	-0.08	-10.01	23.22	-36.24	31.37	-8.49	-9.85
SNB-LB1P	0.02	2.12	108.77	1.06	15.06	0.64	24.75
SNB-LB11	0.78	82.99	-19.04	14.61	21.79	19.51	0.55
SNB-LB12	-0.75	-84.01	-22.04	-15.22	20.22	-19.83	-0.36
SNB-LB2P	-0.02	-1.06	-15.06	-0.57	44.66	-0.33	5.92
SNB-LB21	0.78	-14.61	-21.79	7.12	-9.74	-1.50	-6.30
SNB-LB22	-0.74	15.22	-20.22	-6.55	-8.76	1.73	-5.79
SNB-LB3P	-0.02	0.57	-44.66	0.55	-52.78	0.22	-19.47
SNB-LB31	0.78	-7.12	9.74	-24.44	65.68	-6.31	15.07
SNB-LB32	-0.74	6.55	8.76	24.44	-65.68	6.20	-14.76
SNB-LB4P	-0.02	-0.55	-52.78	-0.04	231.19	-0.12	56.75
SNB-LB41	0.78	24.44	-65.68	93.82	-46.65	23.63	-22.45
SNB-LB42	-0.75	-24.44	65.68	-93.21	-46.28	-23.52	-22.25
SNB-LC1P	0.00	0.03	55.66	0.07	65.08	0.02	18.12
SNB-LC11	1.91	94.24	-40.19	37.23	28.09	19.73	-1.81
SNB-LC12	-1.90	-94.73	40.51	-37.19	-28.03	-19.79	-1.87
SNB-LC2P	0.00	-0.07	-65.08	0.25	-31.32	0.03	-14.42
SNB-LC21	1.90	-37.23	-28.09	-32.13	100.14	-10.37	10.78
SNB-LC22	-1.89	37.19	28.03	32.05	99.81	10.36	10.74
SNB-LC3P	0.00	-0.25	31.32	-0.09	266.34	-0.05	44.66
SNB-LC31	1.91	32.13	-100.14	113.97	-75.69	21.92	-26.38
SNB-LC32	-1.90	-32.05	-99.81	-112.94	-75.00	-21.75	-26.23
SNB-LD1P	-0.01	0.12	181.49	0.76	200.79	0.13	57.36
SNB-LD11	2.51	207.38	-85.61	41.75	97.39	37.38	1.77
SNB-LD12	-2.48	-208.43	86.38	-41.84	-96.46	-37.55	1.51
SNB-LD2P	-0.01	-0.76	-200.79	0.02	-46.76	-0.11	-37.04
SNB-LD21	2.50	-41.75	-97.39	15.61	220.16	-3.91	18.36
SNB-LD22	-2.48	41.84	96.46	-14.84	-220.59	4.04	-18.57
SNB-LD3P	-0.01	-0.02	46.76	-0.13	491.41	-0.02	80.76
SNB-LD31	2.51	-15.61	-220.16	48.55	-15.09	4.94	-35.29
SNB-LD32	-2.48	14.84	220.59	-48.06	-14.69	-4.98	-35.30
SNB-LE1P	-0.07	0.24	148.53	2.27	302.44	0.38	67.67
SNB-LE11	5.01	347.14	-159.71	102.78	231.10	67.50	10.71
SNB-LE12	-4.93	-347.92	-160.43	-102.90	-228.41	-67.64	-10.20
SNB-LE2P	-0.07	-2.27	-302.44	-1.45	-40.03	-0.56	-51.24
SNB-LE21	4.99	-102.78	-231.10	-35.94	441.45	-20.75	31.46
SNB-LE22	-4.92	102.90	-228.41	39.20	-445.00	21.26	-32.40
SNB-LE3P	-0.07	1.45	40.03	1.10	1120.99	0.38	174.22
SNB-LE31	5.01	35.94	-441.45	236.14	-342.77	41.12	-117.65
SNB-LE32	-4.93	-39.21	-445.00	-241.31	-345.88	-42.08	-118.65
SNB-LF1P	-0.00	-1.14	-262.75	-0.67	-181.93	-0.18	-44.44
SNB-LF11	8.50	439.65	7.63	228.88	778.79	66.80	78.58
SNB-LF12	-8.50	-437.04	-10.47	-225.85	-781.29	-66.24	-79.11
SNB-LF2P	-0.00	0.67	181.93	0.79	1250.81	0.15	143.19
SNB-LF21	8.46	-228.87	-778.79	36.66	-500.06	-19.21	-127.78
SNB-LF22	-8.47	225.85	-781.29	-39.55	-582.63	18.61	-128.28
SNB-LG1P	0.07	-0.81	-6.82	-0.89	-177.60	-0.17	-18.43
SNB-LG11	14.02	1039.83	-86.69	435.86	1404.95	147.45	131.72
SNB-LG12	-14.11	-1037.03	84.14	-433.44	-1407.33	-146.93	-132.21
SNB-LG2P	0.07	0.89	177.60	0.71	2181.09	0.16	235.74
SNB-LG21	13.95	-435.84	-1404.95	202.91	-785.11	-23.27	-216.82
SNB-LG22	-14.05	433.43	1407.34	-203.94	-766.50	22.93	-217.20
SNB-LH1P	0.02	-0.69	-539.88	-0.09	-280.41	-0.08	-81.99
SNB-LH11	13.53	1141.35	22.31	531.61	1555.53	167.15	157.65
SNB-LH12	-13.59	-1140.54	-23.56	-531.15	-1555.86	-167.03	-157.81
SNB-LH2P	0.02	0.00	280.41	-0.02	2297.72	0.01	257.68
SNB-LH21	13.42	-531.39	-1555.54	-87.72	-795.53	-61.88	-234.91

SNB-Label	Joint Elevation (ft)	Actual Twist (deg)	Allowable Twist (deg)	Twist Usage (%)	Actual Sway (ft)	Allowable Sway (ft)	Sway Usage (%)	Actual Disp. (ft)	Allowable Disp. (ft)	Disp. Usage (%)
SNB-LH22	-13.48	531.13	-1555.87	87.78	-795.44	61.84	-234.93	0.05	-55.68	0.05
SNB-LI1F	-0.00	0.04	-383.59	0.44	-173.55	0.05	-55.68	0.05	-55.68	0.05
SNB-LI1F	4.73	1705.27	-101.41	1073.13	2259.17	277.61	215.59	215.59	215.59	215.59
SNB-LI12	-4.78	1705.32	-101.49	-1073.01	2259.17	-277.61	-215.59	-215.59	-215.59	-215.59
SNB-LI2F	-0.00	-0.44	173.55	0.35	3235.84	-0.01	340.76	-0.01	340.76	-0.01
SNB-LI21	4.48	-1073.10	-2259.13	-949.31	407.66	-202.07	-184.99	-184.99	-184.99	-184.99
SNB-LI22	-4.52	1072.99	-2259.13	950.77	408.35	202.20	-184.88	-184.88	-184.88	-184.88
SNB-H1aP	-0.53	35.49	0.95	122.31	-1.37	78.10	-0.21	0.86	-77.03	1.11
SNB-H1bP	-0.53	-122.31	1.38	-33.33	1.11	-77.03	1.11	0.86	-77.03	1.11
SNB-H1cP	-0.58	37.07	-1.05	119.61	2.21	77.54	0.57	0.98	-77.54	0.57
SNB-H1dP	-0.58	-119.61	-2.21	-37.12	-0.98	-77.54	-0.57	0.98	-77.54	-0.57
SNB-H1eP	1.24	35.20	-0.84	120.90	-1.78	77.26	-1.30	0.98	-77.26	-1.30
SNB-H1fP	1.24	-35.20	0.84	-120.90	-1.78	-77.26	-1.30	0.98	-77.26	-1.30
SNB-H2aP	-1.66	102.00	1.68	-127.00	-0.26	84.72	0.44	-0.97	84.72	0.44
SNB-H2bP	-1.66	-102.00	-1.68	127.00	-0.26	-84.72	-0.44	-0.97	-84.72	-0.44
SNB-H2cP	0.15	86.17	-0.23	123.61	3.26	77.61	1.12	3.26	77.61	1.12
SNB-H2dP	0.15	-86.17	-0.23	-123.61	-3.26	-77.61	-1.12	-3.26	-77.61	-1.12
SNB-H2eP	1.50	62.69	0.99	127.33	-0.57	70.30	0.15	-0.57	70.30	0.15
SNB-H2fP	1.50	-62.69	-0.99	-127.33	0.57	-70.30	-0.15	0.57	-70.30	-0.15
SNB-H3aP	-1.25	166.33	1.01	171.96	-2.28	80.64	-0.45	-2.28	80.64	-0.45
SNB-H3bP	-1.25	-166.33	-1.01	-171.96	2.28	-80.64	0.45	2.28	-80.64	0.45
SNB-H3cP	0.01	136.51	0.75	-100.95	5.20	90.53	1.66	5.20	90.53	1.66
SNB-H3dP	0.01	-136.51	-0.75	100.95	-5.20	-90.53	-1.66	-5.20	-90.53	-1.66
SNB-H3eP	1.24	100.89	2.30	171.98	-0.41	90.31	-1.66	-0.41	90.31	-1.66
SNB-H3fP	1.24	-100.89	-2.30	-171.98	0.41	-90.31	1.66	0.41	-90.31	1.66
SNB-H4aP	-1.38	259.34	0.46	275.68	-1.03	99.96	-0.08	-1.03	99.96	-0.08
SNB-H4bP	-1.38	-259.34	-0.46	-275.68	1.03	-99.96	0.08	1.03	-99.96	0.08
SNB-H4cP	-1.38	275.68	2.16	-186.96	-3.54	-113.78	-0.42	-3.54	-113.78	-0.42
SNB-H4dP	-1.38	-275.68	-2.16	186.96	3.54	113.78	0.42	3.54	113.78	0.42
SNB-H4eP	-0.02	226.72	2.10	272.94	-2.12	122.88	-3.09	-2.12	122.88	-3.09
SNB-H4fP	-0.02	-226.72	-2.10	-272.94	2.12	-122.88	3.09	2.12	-122.88	3.09
SNB-H4gP	1.40	187.01	3.53	275.63	-2.20	113.78	0.33	-2.20	113.78	0.33
SNB-H4hP	1.40	-187.01	-3.53	-275.63	2.20	-113.78	-0.33	2.20	-113.78	-0.33
SNB-H5aP	-2.16	370.69	1.14	356.29	-6.25	153.15	-0.54	-6.25	153.15	-0.54
SNB-H5bP	-2.16	-370.69	-1.14	-356.29	6.25	-153.15	0.54	6.25	-153.15	0.54
SNB-H5cP	-0.07	292.27	1.92	351.67	-1.95	135.66	-3.93	-1.95	135.66	-3.93
SNB-H5dP	-0.08	-292.27	-1.92	-351.67	1.95	-135.66	3.93	1.95	-135.66	3.93
SNB-H5eP	2.23	203.36	6.22	356.13	-3.74	117.87	0.52	-3.74	117.87	0.52
SNB-H5fP	2.23	-203.36	-6.22	-356.13	3.74	-117.87	-0.52	3.74	-117.87	-0.52
SNB-H6aP	-10.70	501.76	0.31	554.68	-2.81	194.62	-0.46	-2.81	194.62	-0.46
SNB-H6bP	-10.70	-501.76	-0.31	-554.68	2.81	-194.62	0.46	2.81	-194.62	0.46
SNB-H6cP	-0.02	472.05	1.58	531.21	-1.40	184.82	-2.88	-1.40	184.82	-2.88
SNB-H6dP	-0.03	-472.05	-1.58	-531.21	1.40	-184.82	2.88	1.40	-184.82	2.88
SNB-H6eP	10.73	393.33	6.98	554.64	-2.51	174.84	0.82	-2.51	174.84	0.82
SNB-H6fP	10.73	-393.33	-6.98	-554.64	2.51	-174.84	-0.82	2.51	-174.84	-0.82
SNB-H7aP	-9.71	723.84	-3.06	822.04	-5.82	253.02	-1.45	-5.82	253.02	-1.45
SNB-H7bP	-9.71	-723.84	3.06	-822.04	5.82	-253.02	1.45	5.82	-253.02	1.45
SNB-H7cP	0.01	726.74	-0.79	801.78	13.35	250.18	2.06	13.35	250.18	2.06
SNB-H7dP	0.01	-726.74	0.79	-801.78	-13.35	-250.18	-2.06	-13.35	-250.18	-2.06
SNB-H7eP	9.70	682.92	5.89	822.09	-5.56	246.33	0.05	-5.56	246.33	0.05
SNB-H7fP	9.70	-682.92	-5.89	-822.09	5.56	-246.33	-0.05	5.56	-246.33	-0.05
SNB-H8aP	-2.71	949.13	-3.15	989.66	-6.39	285.51	-1.40	-6.39	285.51	-1.40
SNB-H8bP	-2.71	-949.13	3.15	-989.66	6.39	-285.51	1.40	6.39	-285.51	1.40
SNB-H8cP	-0.02	912.82	2.49	986.30	15.21	279.67	2.61	15.21	279.67	2.61
SNB-H8dP	-0.02	-912.82	-2.49	-986.30	-15.21	-279.67	-2.61	-15.21	-279.67	-2.61
SNB-H8eP	2.73	858.85	3.14	989.62	-6.35	272.21	-0.47	-6.35	272.21	-0.47
SNB-H8fP	2.73	-858.85	-3.14	-989.62	6.35	-272.21	0.47	6.35	-272.21	0.47
SNB-H9aP	-6.58	1108.91	-3.79	1143.85	-7.82	301.49	-1.55	-7.82	301.49	-1.55
SNB-H9bP	-6.58	-1108.91	3.79	-1143.85	7.82	-301.49	1.55	7.82	-301.49	1.55
SNB-H9cP	0.00	1093.08	6.55	1133.54	17.40	287.99	3.21	17.40	287.99	3.21
SNB-H9dP	-0.01	-1093.08	-6.55	-1133.54	-17.40	-287.99	-3.21	-17.40	-287.99	-3.21
SNB-H9eP	6.58	1038.51	-0.99	1143.84	-7.81	292.07	-1.48	-7.81	292.07	-1.48
SNB-H9fP	6.58	-1038.51	0.99	-1143.84	7.81	-292.07	1.48	7.81	-292.07	1.48
SNB-H9gP	6.59	-1143.84	7.82	-1108.94	3.81	-301.49	1.56	3.81	-301.49	1.56

Service Loads Check:

Joint Label	Elevation (ft)	Actual Twist (deg)	Allowable Twist (deg)	Twist Usage (%)	Actual Sway (ft)	Allowable Sway (ft)	Sway Usage (%)	Actual Disp. (ft)	Allowable Disp. (ft)	Disp. Usage (%)
SNB-A2	180.00	0.00	4.00	0.1	0.20	4.00	5.1	0.39	5.40	7.3

SNB-A1	180.00	0.00	4.00	0.1	0.20	4.00	5.1	0.39	5.40	7.3	7.3
SNB-WL-A2S	180.00	0.00	4.00	0.1	0.20	4.00	5.1	0.39	5.40	7.3	7.3
RohnA2	180.00	0.00	4.00	0.1	0.20	4.00	5.1	0.39	5.40	7.3	7.3
RohnA1	180.00	0.00	4.00	0.1	0.20	4.00	5.1	0.39	5.40	7.3	7.3
SNB-WL-A3S	179.99	0.00	4.00	0.1	0.20	4.00	5.1	0.39	5.40	7.3	7.3
SNB-WL-A3S	179.99	0.00	4.00	0.1	0.20	4.00	5.1	0.39	5.40	7.3	7.3
SNB-WL-A1S	179.99	0.00	4.00	0.1	0.20	4.00	5.1	0.39	5.40	7.3	7.3
SNB-AP	179.99	0.00	4.00	0.1	0.20	4.00	5.1	0.39	5.40	7.3	7.3
RohnAP	179.99	0.00	4.00	0.1	0.20	4.00	5.1	0.39	5.40	7.3	7.3
SNB-Aa2	175.00	0.00	4.00	0.1	0.20	4.00	5.1	0.38	5.40	7.0	7.0
SNB-Aa1	175.00	0.00	4.00	0.1	0.20	4.00	5.1	0.38	5.40	7.0	7.0
RohnAa2	175.00	0.00	4.00	0.1	0.20	4.00	5.1	0.38	5.40	7.0	7.0
RohnAa1	175.00	0.00	4.00	0.1	0.20	4.00	5.1	0.38	5.40	7.0	7.0
SNB-Aa5	174.99	0.00	4.00	0.1	0.20	4.00	5.1	0.38	5.40	7.0	7.0
RohnAa5	174.99	0.00	4.00	0.1	0.20	4.00	5.1	0.38	5.40	7.0	7.0
RohnAa4	174.98	0.00	4.00	0.1	0.20	4.00	5.1	0.38	5.40	6.6	6.6
SNB-Ab2	170.00	0.00	4.00	0.1	0.20	4.00	5.1	0.36	5.40	6.6	6.6
SNB-Ab1	170.00	0.00	4.00	0.1	0.20	4.00	5.1	0.36	5.40	6.6	6.6
RohnAb2	170.00	0.00	4.00	0.1	0.20	4.00	5.1	0.36	5.40	6.6	6.6
RohnAb1	170.00	0.00	4.00	0.1	0.20	4.00	5.1	0.36	5.40	6.6	6.6
SNB-Abs	169.99	0.00	4.00	0.1	0.20	4.00	5.1	0.36	5.40	6.6	6.6
RohnAbs	169.99	0.00	4.00	0.1	0.20	4.00	5.1	0.36	5.40	6.6	6.6
SNB-AC2	165.00	0.00	4.00	0.1	0.20	4.00	5.1	0.34	5.40	6.3	6.3
SNB-AC1	165.00	0.00	4.00	0.1	0.20	4.00	5.1	0.34	5.40	6.3	6.3
RohnAC2	165.00	0.00	4.00	0.1	0.20	4.00	5.1	0.34	5.40	6.3	6.3
RohnAC1	165.00	0.00	4.00	0.1	0.20	4.00	5.1	0.34	5.40	6.3	6.3
SNB-ACS	164.99	0.00	4.00	0.1	0.20	4.00	5.1	0.34	5.40	6.3	6.3
RohnACS	164.97	0.00	4.00	0.1	0.20	4.00	5.1	0.34	5.40	6.3	6.3
SNB-B2	160.00	0.00	4.00	0.1	0.20	4.00	5.1	0.32	5.40	6.0	6.0
SNB-B1	160.00	0.00	4.00	0.1	0.20	4.00	5.1	0.32	5.40	6.0	6.0
SNB-WL-B2S	160.00	0.00	4.00	0.1	0.20	4.00	5.1	0.32	5.40	6.0	6.0
RohnB2	160.00	0.00	4.00	0.1	0.20	4.00	5.1	0.32	5.40	6.0	6.0
RohnB1	160.00	0.00	4.00	0.1	0.20	4.00	5.1	0.32	5.40	6.0	6.0
RohnB3	159.99	0.00	4.00	0.1	0.20	4.00	5.1	0.32	5.40	6.0	6.0
SNB-WL-B1S	159.99	0.00	4.00	0.1	0.20	4.00	5.1	0.32	5.40	6.0	6.0
SNB-BF	159.99	0.00	4.00	0.1	0.20	4.00	5.1	0.32	5.40	6.0	6.0
RohnBF	159.97	0.00	4.00	0.1	0.20	4.00	5.1	0.32	5.40	6.0	6.0
SNB-Ba2	155.00	0.00	4.00	0.1	0.20	4.00	5.1	0.30	5.40	5.6	5.6
SNB-Ba1	155.00	0.00	4.00	0.1	0.20	4.00	5.1	0.30	5.40	5.6	5.6
RohnBa2	155.00	0.00	4.00	0.1	0.20	4.00	5.1	0.30	5.40	5.6	5.6
RohnBa1	155.00	0.00	4.00	0.1	0.20	4.00	5.1	0.30	5.40	5.6	5.6
SNB-Ba5	154.98	0.00	4.00	0.1	0.20	4.00	5.1	0.30	5.40	5.6	5.6
RohnBa5	154.97	0.00	4.00	0.1	0.20	4.00	5.1	0.30	5.40	5.6	5.6
RohnBa4	150.00	0.00	4.00	0.1	0.20	4.00	5.1	0.29	5.40	5.3	5.3
SNB-Bb2	150.00	0.00	4.00	0.1	0.20	4.00	5.1	0.29	5.40	5.3	5.3
SNB-Bb1	150.00	0.00	4.00	0.1	0.20	4.00	5.1	0.29	5.40	5.3	5.3
RohnBb2	150.00	0.00	4.00	0.1	0.20	4.00	5.1	0.29	5.40	5.3	5.3
RohnBb1	150.00	0.00	4.00	0.1	0.20	4.00	5.1	0.29	5.40	5.3	5.3
SNB-Bb5	149.98	0.00	4.00	0.1	0.20	4.00	5.1	0.29	5.40	5.3	5.3
RohnBb5	149.97	0.00	4.00	0.1	0.20	4.00	5.1	0.29	5.40	5.3	5.3
SNB-Bc2	145.00	0.00	4.00	0.1	0.20	4.00	5.1	0.27	5.40	5.0	5.0
SNB-Bc1	145.00	0.00	4.00	0.1	0.20	4.00	5.1	0.27	5.40	5.0	5.0
RohnBc2	145.00	0.00	4.00	0.1	0.20	4.00	5.1	0.27	5.40	5.0	5.0
RohnBc1	145.00	0.00	4.00	0.1	0.20	4.00	5.1	0.27	5.40	5.0	5.0
SNB-Bc5	144.98	0.00	4.00	0.1	0.20	4.00	5.1	0.27	5.40	5.0	5.0
RohnBc5	144.97	0.00	4.00	0.1	0.20	4.00	5.1	0.27	5.40	5.0	5.0
RohnBc4	140.00	0.00	4.00	0.1	0.20	4.00	5.1	0.25	5.40	4.7	4.7
SNB-C2	140.00	0.00	4.00	0.1	0.20	4.00	5.1	0.25	5.40	4.7	4.7
SNB-WL-C2S	140.00	0.00	4.00	0.1	0.20	4.00	5.1	0.25	5.40	4.7	4.7
RohnC2	140.00	0.00	4.00	0.1	0.20	4.00	5.1	0.25	5.40	4.7	4.7
RohnC1	140.00	0.00	4.00	0.1	0.20	4.00	5.1	0.25	5.40	4.7	4.7
SNB-WL-C3S	139.99	0.00	4.00	0.1	0.20	4.00	5.1	0.25	5.40	4.7	4.7
SNB-WL-C1S	139.99	0.00	4.00	0.1	0.20	4.00	5.1	0.25	5.40	4.7	4.7
RohnC3	139.98	0.00	4.00	0.1	0.20	4.00	5.1	0.25	5.40	4.7	4.7
RohnC4	139.97	0.00	4.00	0.1	0.20	4.00	5.1	0.25	5.40	4.7	4.7
SNB-Ca2	133.34	0.00	4.00	0.1	0.20	4.00	5.1	0.23	5.40	4.3	4.3
SNB-Ca1	133.34	0.00	4.00	0.1	0.20	4.00	5.1	0.23	5.40	4.3	4.3
RohnCa2	133.34	0.00	4.00	0.1	0.20	4.00	5.1	0.23	5.40	4.3	4.3
RohnCa1	133.34	0.00	4.00	0.1	0.20	4.00	5.1	0.23	5.40	4.3	4.3
SNB-Ca5	133.32	0.00	4.00	0.1	0.20	4.00	5.1	0.23	5.40	4.3	4.3
RohnCa5	133.31	0.00	4.00	0.1	0.20	4.00	5.1	0.23	5.40	4.3	4.3
SNB-Cb2	126.66	0.00	4.00	0.1	0.20	4.00	5.1	0.21	5.40	3.9	3.9

SNB-Cb1	126.66	0.00	4.00	0.1	0.20	4.00	5.1	0.21	5.40	3.9	5.1
RohnCb2	126.66	0.00	4.00	0.1	0.20	4.00	5.1	0.21	5.40	3.9	5.1
RohnCb1	126.66	0.00	4.00	0.1	0.20	4.00	5.1	0.21	5.40	3.9	5.1
SNB-CBS	126.64	0.00	4.00	0.1	0.20	4.00	5.1	0.21	5.40	3.9	5.1
RohnCBS	126.63	0.00	4.00	0.1	0.20	4.00	5.1	0.19	5.40	3.5	5.1
SNB-D2	120.00	0.00	4.00	0.1	0.20	4.00	5.1	0.19	5.40	3.5	5.1
RohnD2	120.00	0.00	4.00	0.1	0.20	4.00	5.1	0.19	5.40	3.5	5.1
SNB-D1	120.00	0.00	4.00	0.1	0.20	4.00	5.1	0.19	5.40	3.5	5.1
RohnD1	120.00	0.00	4.00	0.1	0.20	4.00	5.1	0.19	5.40	3.5	5.1
SNB-WL-D2S	120.00	0.00	4.00	0.1	0.20	4.00	5.1	0.19	5.40	3.5	5.1
SNB-WL-D3S	119.99	0.00	4.00	0.1	0.20	4.00	5.1	0.19	5.40	3.5	5.1
SNB-WL-D1S	119.99	0.00	4.00	0.1	0.20	4.00	5.1	0.19	5.40	3.5	5.1
SNB-DP	119.98	0.00	4.00	0.1	0.20	4.00	5.1	0.19	5.40	3.5	5.1
RohnDP	119.97	0.00	4.00	0.1	0.20	4.00	5.1	0.17	5.40	3.1	5.1
SNB-Da2	113.34	0.00	4.00	0.1	0.20	4.00	5.1	0.17	5.40	3.1	5.1
SNB-Da1	113.34	0.00	4.00	0.1	0.20	4.00	5.1	0.17	5.40	3.1	5.1
RohnDa2	113.34	0.00	4.00	0.1	0.20	4.00	5.1	0.17	5.40	3.1	5.1
RohnDa1	113.34	0.00	4.00	0.1	0.20	4.00	5.1	0.17	5.40	3.1	5.1
SNB-Da3	113.32	0.00	4.00	0.1	0.20	4.00	5.1	0.17	5.40	3.1	5.1
RohnDa3	113.31	0.00	4.00	0.1	0.20	4.00	5.1	0.17	5.40	3.1	5.1
SNB-Da2	106.65	0.00	4.00	0.1	0.20	4.00	5.1	0.15	5.40	2.7	5.1
SNB-Da1	106.65	0.00	4.00	0.1	0.20	4.00	5.1	0.15	5.40	2.7	5.1
RohnDa2	106.66	0.00	4.00	0.1	0.20	4.00	5.1	0.15	5.40	2.7	5.1
RohnDa1	106.66	0.00	4.00	0.1	0.20	4.00	5.1	0.15	5.40	2.7	5.1
SNB-DB5	106.64	0.00	4.00	0.1	0.20	4.00	5.1	0.15	5.40	2.8	5.1
RohnDB5	106.64	0.00	4.00	0.1	0.20	4.00	5.1	0.15	5.40	2.8	5.1
SNB-E2	100.00	0.00	4.00	0.1	0.20	4.00	5.1	0.13	5.40	2.4	5.1
SNB-E1	100.00	0.00	4.00	0.1	0.20	4.00	5.1	0.13	5.40	2.4	5.1
RohnE2	100.00	0.00	4.00	0.1	0.20	4.00	5.1	0.13	5.40	2.4	5.1
RohnE1	100.00	0.00	4.00	0.1	0.20	4.00	5.1	0.13	5.40	2.4	5.1
SNB-WL-E2S	99.99	0.00	4.00	0.1	0.20	4.00	5.1	0.13	5.40	2.4	5.1
SNB-WL-E3S	99.99	0.00	4.00	0.1	0.20	4.00	5.1	0.13	5.40	2.4	5.1
SNB-WL-E1S	99.99	0.00	4.00	0.1	0.20	4.00	5.1	0.13	5.40	2.4	5.1
SNB-EP	99.98	0.00	4.00	0.1	0.20	4.00	5.1	0.13	5.40	2.4	5.1
RohnEP	99.98	0.00	4.00	0.1	0.20	4.00	5.1	0.11	5.40	2.1	5.1
SNB-Ea2	93.34	0.00	4.00	0.1	0.20	4.00	5.1	0.11	5.40	2.1	5.1
SNB-Ea1	93.34	0.00	4.00	0.1	0.20	4.00	5.1	0.11	5.40	2.1	5.1
RohnEa2	93.34	0.00	4.00	0.1	0.20	4.00	5.1	0.11	5.40	2.1	5.1
RohnEa1	93.34	0.00	4.00	0.1	0.20	4.00	5.1	0.11	5.40	2.1	5.1
SNB-Ea3	93.32	0.00	4.00	0.1	0.20	4.00	5.1	0.11	5.40	2.1	5.1
SNB-Ea2	93.32	0.00	4.00	0.1	0.20	4.00	5.1	0.11	5.40	2.1	5.1
RohnEa3	86.66	0.00	4.00	0.1	0.20	4.00	5.1	0.10	5.40	1.8	5.1
RohnEa2	86.66	0.00	4.00	0.1	0.20	4.00	5.1	0.10	5.40	1.8	5.1
SNB-Ed1	86.66	0.00	4.00	0.1	0.20	4.00	5.1	0.10	5.40	1.8	5.1
RohnEd1	86.66	0.00	4.00	0.1	0.20	4.00	5.1	0.10	5.40	1.8	5.1
SNB-Eb3	86.64	0.00	4.00	0.1	0.20	4.00	5.1	0.10	5.40	1.8	5.1
RohnEb3	86.64	0.00	4.00	0.1	0.20	4.00	5.1	0.10	5.40	1.8	5.1
SNB-F2	80.00	0.00	4.00	0.1	0.20	4.00	5.1	0.08	5.40	1.6	5.1
SNB-F1	80.00	0.00	4.00	0.1	0.20	4.00	5.1	0.08	5.40	1.6	5.1
RohnF1	80.00	0.00	4.00	0.1	0.20	4.00	5.1	0.08	5.40	1.6	5.1
RohnF2	80.00	0.00	4.00	0.1	0.20	4.00	5.1	0.08	5.40	1.6	5.1
SNB-WL-F2S	80.00	0.00	4.00	0.1	0.20	4.00	5.1	0.08	5.40	1.6	5.1
SNB-WL-F3S	80.00	0.00	4.00	0.1	0.20	4.00	5.1	0.08	5.40	1.6	5.1
SNB-WL-F1S	79.99	0.00	4.00	0.1	0.20	4.00	5.0	0.08	5.40	1.6	5.0
SNB-FP	79.99	0.00	4.00	0.1	0.20	4.00	5.0	0.08	5.40	1.6	5.0
RohnFP	79.98	0.00	4.00	0.1	0.20	4.00	5.0	0.08	5.40	1.6	5.0
SNB-Fa2	70.00	0.00	4.00	0.0	0.19	4.00	4.8	0.06	5.40	1.2	4.8
SNB-Fa1	70.00	0.00	4.00	0.0	0.19	4.00	4.8	0.06	5.40	1.2	4.8
RohnFa1	70.00	0.00	4.00	0.0	0.19	4.00	4.8	0.06	5.40	1.2	4.8
RohnFa2	70.00	0.00	4.00	0.0	0.19	4.00	4.8	0.06	5.40	1.2	4.8
SNB-Fa3	69.99	0.00	4.00	0.0	0.19	4.00	4.8	0.06	5.40	1.2	4.8
RohnFa3	69.98	0.00	4.00	0.0	0.19	4.00	4.7	0.07	5.40	1.2	4.7
SNB-G2	60.00	0.00	4.00	0.0	0.17	4.00	4.3	0.05	5.40	0.9	4.3
SNB-G1	60.00	0.00	4.00	0.0	0.17	4.00	4.3	0.05	5.40	0.9	4.3
RohnG1	60.00	0.00	4.00	0.0	0.17	4.00	4.3	0.05	5.40	0.9	4.3
RohnG2	60.00	0.00	4.00	0.0	0.17	4.00	4.3	0.05	5.40	0.9	4.3
SNB-WL-G2S	60.00	0.00	4.00	0.0	0.17	4.00	4.3	0.05	5.40	0.9	4.3
SNB-WL-G3S	59.99	0.00	4.00	0.0	0.16	4.00	4.1	0.05	5.40	0.9	4.1
SNB-WL-G1S	59.99	0.00	4.00	0.0	0.16	4.00	4.1	0.05	5.40	0.9	4.1

SNB-GP	59.99	0.00	4.00	0.0	0.16	4.00	4.1	0.05	5.40	0.9	4.1
RohnGP	59.98	0.00	4.00	0.0	0.16	4.00	4.1	0.05	5.40	0.9	4.1
SNB-Ga2	50.00	-0.00	4.00	0.0	0.14	4.00	3.5	0.03	5.40	0.6	3.5
SNB-Ga1	50.00	-0.00	4.00	0.0	0.14	4.00	3.5	0.03	5.40	0.6	3.5
RohnGa1	50.00	-0.00	4.00	0.0	0.14	4.00	3.5	0.03	5.40	0.6	3.5
RohnGa2	50.00	-0.00	4.00	0.0	0.14	4.00	3.5	0.03	5.40	0.6	3.5
SNB-Ga5	49.99	-0.00	4.00	0.0	0.13	4.00	3.3	0.03	5.40	0.6	3.3
RohnGa5	49.99	-0.00	4.00	0.0	0.13	4.00	3.3	0.03	5.40	0.6	3.3
SNB-H2	40.00	-0.00	4.00	0.0	0.11	4.00	2.8	0.02	5.40	0.4	2.8
SNB-H1	40.00	-0.00	4.00	0.0	0.11	4.00	2.8	0.02	5.40	0.4	2.8
RohnH1	40.00	-0.00	4.00	0.0	0.11	4.00	2.8	0.02	5.40	0.4	2.8
RohnH2	40.00	-0.00	4.00	0.0	0.11	4.00	2.8	0.02	5.40	0.4	2.8
SNB-WL-H2S	40.00	-0.00	4.00	0.0	0.09	4.00	2.4	0.02	5.40	0.4	2.4
SNB-WL-H3S	39.99	-0.00	4.00	0.0	0.09	4.00	2.4	0.02	5.40	0.4	2.4
SNB-WL-H1S	39.99	-0.00	4.00	0.0	0.09	4.00	2.4	0.02	5.40	0.4	2.4
SNB-HP	39.99	-0.00	4.00	0.0	0.09	4.00	2.4	0.02	5.40	0.4	2.4
RohnHP	39.99	-0.00	4.00	0.0	0.09	4.00	2.4	0.02	5.40	0.4	2.4
SNB-Ha2	30.00	-0.00	4.00	0.0	0.08	4.00	2.1	0.01	5.40	0.2	2.1
SNB-Ha1	30.00	-0.00	4.00	0.0	0.08	4.00	2.1	0.01	5.40	0.2	2.1
RohnHa2	30.00	-0.00	4.00	0.0	0.08	4.00	2.1	0.01	5.40	0.2	2.1
RohnHa1	30.00	-0.00	4.00	0.0	0.08	4.00	2.1	0.01	5.40	0.2	2.1
SNB-Ha5	29.99	-0.00	4.00	0.0	0.07	4.00	1.7	0.01	5.40	0.3	1.7
RohnHa5	29.99	-0.00	4.00	0.0	0.07	4.00	1.7	0.01	5.40	0.3	1.7
RohnHaS	29.99	-0.00	4.00	0.0	0.07	4.00	1.7	0.01	5.40	0.3	1.7
RohnHaS	29.99	-0.00	4.00	0.0	0.07	4.00	1.7	0.01	5.40	0.3	1.7
SNB-I2	20.00	-0.00	4.00	0.0	0.06	4.00	1.4	0.01	5.40	0.1	1.4
SNB-I1	20.00	-0.00	4.00	0.0	0.06	4.00	1.4	0.01	5.40	0.1	1.4
RohnI2	20.00	-0.00	4.00	0.0	0.06	4.00	1.4	0.01	5.40	0.1	1.4
RohnI1	20.00	-0.00	4.00	0.0	0.06	4.00	1.4	0.01	5.40	0.1	1.4
SNB-WL-I2S	20.00	-0.00	4.00	0.0	0.04	4.00	0.9	0.01	5.40	0.1	0.9
SNB-IP	20.00	-0.00	4.00	0.0	0.04	4.00	0.9	0.01	5.40	0.1	0.9
RohnIP	19.99	-0.00	4.00	0.0	0.04	4.00	0.9	0.01	5.40	0.1	0.9
SNB-WL-I3S	19.99	-0.00	4.00	0.0	0.04	4.00	0.9	0.01	5.40	0.1	0.9
SNB-WL-I1S	19.99	-0.00	4.00	0.0	0.04	4.00	0.9	0.01	5.40	0.1	0.9
SNB-Ia2	10.00	-0.00	4.00	0.0	0.03	4.00	0.6	0.00	5.40	0.0	0.6
SNB-Ia1	10.00	-0.00	4.00	0.0	0.03	4.00	0.6	0.00	5.40	0.0	0.6
RohnIa2	10.00	-0.00	4.00	0.0	0.03	4.00	0.6	0.00	5.40	0.0	0.6
RohnIa1	10.00	-0.00	4.00	0.0	0.03	4.00	0.6	0.00	5.40	0.0	0.6
SNB-Ia5	10.00	-0.00	4.00	0.0	0.01	4.00	0.3	0.00	5.40	0.0	0.3
RohnIa5	10.00	-0.00	4.00	0.0	0.01	4.00	0.3	0.00	5.40	0.0	0.3

\*\*\* Analysis Results for Load Case No. 6 "1.2\*DL" - Number of iterations in SABS 9

Equilibrium Joint Positions and Rotations for Load Case "1.2\*DL":

Joint Label	X-Displ (ft)	Y-Displ (ft)	Z-Displ (ft)	X-Rot (deg)	Y-Rot (deg)	Z-Rot (deg)	X-Pos (ft)	Y-Pos (ft)	Z-Pos (ft)
RohnAP	0.001688	0.0001689	-0.009409	-0.0002	0.0009	0.0000	4.335	0.0001689	180
RohnBP	0.00117	-0.0001497	-0.009267	-0.0000	0.0011	0.0000	5.122	0.0001497	160
RohnCP	0.0007433	0.0001364	-0.008695	-0.0001	0.0010	0.0000	5.91	0.0001364	140
RohnDP	0.0004544	0.0001169	-0.007824	-0.0000	0.0002	0.0000	6.695	0.0001169	120
RohnEP	0.0002592	9.238e-005	-0.006394	-0.0001	0.0003	0.0000	7.481	9.238e-005	99.99
RohnFP	0.0001511	6.085e-005	-0.005157	-0.0001	0.0013	0.0000	8.268	6.085e-005	79.99
RohnGP	7.062e-005	3.119e-005	-0.00393	-0.0001	0.0002	0.0000	9.055	3.119e-005	60
RohnHP	3.082e-005	1.168e-005	-0.002703	-0.0000	0.0003	0.0000	9.841	1.168e-005	40
RohnIP	9.313e-006	1.85e-006	-0.001294	-0.0000	0.0011	0.0000	10.63	1.85e-006	20
RohnJP	0	0	0	0.0000	0.0000	0.0000	11.42	0	0
RohnAP	0.001694	0.0001676	-0.004489	-0.0001	0.0053	0.0000	2.335	0.0001676	180
RohnBP	0.001176	0.0001498	-0.004394	-0.0000	0.0032	0.0000	3.122	0.0001498	160
RohnCP	0.0007484	0.000136	-0.004018	-0.0001	0.0039	0.0000	3.909	0.000136	140
RohnDP	0.0004584	0.0001169	-0.003805	-0.0001	0.0075	0.0000	4.695	0.0001169	120
RohnEP	0.0002617	9.164e-005	-0.003199	-0.0001	0.0045	0.0000	5.481	9.164e-005	100
RohnFP	0.0001524	6.012e-005	-0.002754	-0.0001	0.0075	0.0000	6.268	6.012e-005	80
RohnGP	7.135e-005	3.151e-005	-0.002157	-0.0001	0.0099	0.0000	7.055	3.151e-005	60
RohnHP	3.111e-005	1.223e-005	-0.001526	-0.0000	0.0086	0.0000	7.841	1.223e-005	40
RohnIP	9.328e-006	2.321e-006	-0.0007472	-0.0000	0.0071	0.0000	8.628	2.321e-006	20
RohnJP	0	0	0	0.0000	0.0000	0.0000	9.415	0	0
RohnA1	0.001696	0.0001734	-0.009236	-0.0006	0.0017	0.0000	-2.165	-3.752	180
RohnA2	0.001697	0.0001626	-0.009326	-0.0004	0.0017	0.0000	-2.165	3.753	180
RohnB1	0.001178	0.0001539	-0.009036	-0.0003	0.0017	0.0000	-2.559	-4.435	160
RohnB2	0.001178	0.0001456	-0.009037	-0.0002	0.0017	0.0000	-2.559	4.435	160
RohnC1	0.0007394	0.0001371	-0.008524	-0.0001	0.0010	0.0000	-2.954	-5.117	140
RohnC2	0.0007398	0.0001335	-0.008533	-0.0000	0.0010	0.0000	-2.954	5.117	140
RohnD1	0.0004354	0.0001098	-0.007689	-0.0004	0.0009	0.0000	-3.347	-5.798	120
RohnD2	0.0004354	0.0001249	-0.007698	-0.0003	0.0009	0.0000	-3.347	5.798	120
RohnE1	0.0002435	8.511e-005	-0.006239	-0.0002	0.0005	0.0000	-3.74	-6.479	99.99
RohnE2	0.0002442	9.852e-005	-0.006319	-0.0000	0.0005	0.0000	-3.74	6.479	99.99
RohnF1	0.0001294	4.944e-005	-0.005088	-0.0015	0.0010	0.0000	-4.134	-7.16	79.99
RohnF2	0.00013	7.115e-005	-0.005118	-0.0013	0.0010	0.0000	-4.134	7.16	79.99
RohnG1	6.532e-005	2.892e-005	-0.00388	-0.0004	0.0003	0.0000	-4.527	-7.842	60
RohnG2	6.504e-005	3.395e-005	-0.003905	-0.0003	0.0003	0.0000	-4.527	7.842	60
RohnH1	2.289e-005	8.022e-006	-0.002671	-0.0004	0.0003	0.0000	-4.92	-8.523	40
RohnH2	2.235e-005	1.627e-005	-0.002606	-0.0003	0.0003	0.0000	-4.92	8.523	40
RohnI1	2.458e-006	-1.174e-006	-0.00128	-0.0010	0.0006	0.0000	-5.315	-9.206	20
RohnI2	1.987e-006	5.689e-006	-0.001287	0.0010	0.0006	0.0000	-5.315	9.206	20
RohnJ1	0	0	0	0.0000	0.0000	0.0000	-5.71	-9.89	0
RohnJ2	0	0	0	0.0000	0.0000	0.0000	-5.71	9.89	0
RohnA1	0.001694	0.0001678	-0.004397	-0.0060	0.0049	0.0000	-1.165	-2.02	180
RohnA2	0.001694	0.0001676	-0.004401	-0.0058	0.0049	0.0000	-1.165	2.021	180
RohnB1	0.001175	0.0001492	-0.004281	-0.0041	0.0038	0.0000	-1.559	-2.703	160
RohnB2	0.001175	0.0001503	-0.004284	-0.0040	0.0038	0.0000	-1.559	2.703	160
RohnC1	0.0007397	0.0001312	-0.004072	-0.0043	0.0035	0.0000	-1.953	-3.384	140
RohnC2	0.0007397	0.0001407	-0.004078	-0.0042	0.0035	0.0000	-1.953	3.385	140
RohnD1	0.0004356	0.0001042	-0.003714	-0.0072	0.0048	0.0000	-2.347	-4.066	120
RohnD2	0.0004356	0.0001295	-0.003723	0.0070	0.0048	0.0000	-2.347	4.066	120
RohnE1	0.0002443	8.186e-005	-0.003135	-0.0044	0.0029	0.0000	-2.74	-4.747	100
RohnE2	0.0002443	0.0001014	-0.003148	-0.0042	0.0029	0.0000	-2.74	4.747	100
RohnF1	0.00013	4.749e-005	-0.002703	-0.0068	0.0042	0.0000	-3.134	-5.428	80
RohnF2	0.00013	7.276e-005	-0.002719	-0.0067	0.0042	0.0000	-3.134	5.428	80
RohnG1	6.521e-005	2.816e-005	-0.00212	-0.0087	0.0052	0.0000	-3.527	-6.11	60
RohnG2	6.52e-005	3.488e-005	-0.002134	-0.0086	0.0052	0.0000	-3.527	6.11	60
RohnH1	2.288e-005	7.7e-006	-0.001503	-0.0076	0.0044	0.0000	-3.92	-6.79	40
RohnH2	2.282e-005	1.667e-005	-0.001512	-0.0075	0.0044	0.0000	-3.92	6.791	40
RohnI1	2.682e-006	-1.32e-006	-0.0007368	-0.0062	0.0036	0.0000	-4.314	-7.472	20
RohnI2	2.619e-006	6.071e-006	-0.0007412	0.0061	0.0036	0.0000	-4.314	7.472	20
RohnJ1	0	0	0	0.0000	0.0000	0.0000	-4.708	-8.154	0
RohnJ2	0	0	0	0.0000	0.0000	0.0000	-4.708	8.154	0



RohnAa5	0.001580	0.0001566	-0.009392	-0.0001	0.0016	0.0000	4.532	0.0001556	175
RohnAa5	0.001435	0.0001539	-0.009362	-0.0000	0.0013	0.0000	4.728	0.0001539	170
RohnAa5	0.001338	0.0001522	-0.009319	-0.0000	0.0016	0.0000	4.925	0.0001522	165
RohnAa5	0.001099	0.0001478	-0.009159	-0.0000	0.0013	0.0000	5.319	0.0001478	155
RohnAa5	0.0009437	0.0001443	-0.009046	-0.0000	0.0011	0.0000	5.516	0.0001443	150
RohnAa5	0.0008896	0.0001405	-0.008873	-0.0000	0.0011	0.0000	5.713	0.0001405	145
RohnAa5	0.0007158	0.0001299	-0.008468	-0.0001	-0.0001	0.0000	6.171	0.0001299	133.3
RohnAa5	0.0006381	0.0001225	-0.008184	-0.0001	0.0015	0.0000	6.434	0.0001225	126.7
RohnAa5	0.0005051	0.0001107	-0.007408	-0.0001	-0.0007	0.0000	6.957	0.0001105	113.3
RohnAa5	0.0004583	0.0001017	-0.006899	-0.0001	0.0014	0.0000	7.22	0.0001017	106.7
RohnAa5	0.0003148	8.214e-005	-0.005997	-0.0001	-0.0005	0.0000	7.743	8.214e-005	93.33
RohnAa5	0.000245	7.181e-005	-0.005582	-0.0001	0.0013	0.0000	8.006	7.181e-005	86.65
RohnAa5	0.000248	4.361e-005	-0.004547	-0.0001	0.0005	0.0000	8.662	4.361e-005	70
RohnAa5	0.0003509	1.871e-005	-0.00332	-0.0001	0.0001	0.0000	9.448	1.871e-005	50
RohnAa5	0.0003577	5.183e-006	-0.002	-0.0000	0.0002	0.0000	10.24	5.183e-006	30
RohnAa5	0.0003001	-2.9e-007	-0.0006503	-0.0000	0.0001	0.0000	11.03	-2.9e-007	9.999
RohnAa5	0.001594	0.0001697	-0.004476	-0.0001	0.0033	0.0000	2.532	0.0001697	175
RohnAa5	0.001441	0.0001555	-0.004458	-0.0000	0.0006	0.0000	2.728	0.0001555	170
RohnAa5	0.001344	0.0001523	-0.004429	-0.0000	0.0029	0.0000	2.925	0.0001523	165
RohnAa5	0.001105	0.000147	-0.004349	-0.0000	0.0026	0.0000	3.319	0.000147	155
RohnAa5	0.0009493	0.0001439	-0.004301	-0.0000	0.0005	0.0000	3.515	0.0001439	150
RohnAa5	0.0007206	0.0001403	-0.004241	-0.0000	0.0025	0.0000	3.712	0.0001403	145
RohnAa5	0.0006426	0.0001237	-0.004068	-0.0001	0.0008	0.0000	4.171	0.0001237	133.3
RohnAa5	0.0005086	0.0001097	-0.003935	-0.0001	0.0033	0.0000	4.434	0.0001097	126.7
RohnAa5	0.0004613	0.0001012	-0.003404	-0.0001	0.0012	0.0000	4.957	0.0001012	106.7
RohnAa5	0.000317	8.152e-005	-0.003058	-0.0001	0.0005	0.0000	5.22	8.152e-005	93.34
RohnAa5	0.0002469	7.076e-005	-0.002905	-0.0001	0.0027	0.0000	6.006	7.076e-005	86.66
RohnAa5	0.0004296	4.42e-005	-0.002453	-0.0001	0.0046	0.0000	6.662	4.42e-005	70
RohnAa5	0.0003514	1.998e-005	-0.001939	-0.0001	0.0046	0.0000	7.448	1.998e-005	50
RohnAa5	0.0003579	5.388e-006	-0.001133	-0.0000	0.0038	0.0000	8.235	5.388e-006	30
RohnAa5	0.0003001	-1.139e-007	-0.0003712	-0.0000	0.0016	0.0000	9.022	-1.139e-007	10
RohnAa5	0.001694	0.0001677	-0.004615	-0.0030	-0.0002	0.0000	0.5849	-1.01	180
RohnAa5	0.001694	0.0001677	-0.004571	-0.0001	0.0049	0.0000	1.165	0.0001677	180
RohnAa5	0.001176	0.0001498	-0.004592	-0.0020	0.0002	0.0000	0.5849	1.01	180
RohnAa5	0.001176	0.0001498	-0.004537	-0.0000	0.0038	0.0000	0.7814	-1.351	160
RohnAa5	0.001176	0.0001498	-0.004594	-0.0019	0.0002	0.0000	1.559	0.0001498	160
RohnAa5	0.0007427	0.0001359	-0.004612	-0.0022	0.0002	0.0000	0.9777	1.352	160
RohnAa5	0.0007426	0.0001336	-0.004561	-0.0000	0.0035	0.0000	1.953	-1.652	140
RohnAa5	0.0007427	0.000136	-0.004615	-0.0021	0.0002	0.0000	0.9777	0.0001336	140
RohnAa5	0.0004434	0.0001167	-0.004854	-0.0036	-0.0013	0.0000	1.174	1.692	140
RohnAa5	0.0004432	0.0001169	-0.004812	-0.0001	0.0048	0.0000	2.347	-2.033	120
RohnAa5	0.0004434	0.0001117	-0.004858	-0.0035	0.0013	0.0000	1.174	0.0001169	120
RohnAa5	0.0002502	9.154e-005	-0.00393	-0.0022	-0.0008	0.0000	1.371	2.033	120
RohnAa5	0.0002502	9.164e-005	-0.003905	-0.0001	0.0029	0.0000	-2.74	-2.373	100
RohnAa5	0.0002502	9.174e-005	-0.003937	0.0021	-0.0008	0.0000	1.371	9.164e-005	100
RohnAa5	0.0001376	6.02e-005	-0.004238	-0.0035	-0.0017	0.0000	1.567	2.373	100
RohnAa5	0.0001376	6.012e-005	-0.00422	-0.0001	0.0042	0.0000	3.134	-2.714	80
RohnAa5	0.0001376	6.022e-005	-0.004246	-0.0033	-0.0017	0.0000	1.567	6.012e-005	80
RohnAa5	6.731e-005	3.149e-005	-0.004888	-0.0044	0.0023	0.0000	1.764	2.714	80
RohnAa5	6.727e-005	3.152e-005	-0.004876	-0.0001	0.0052	0.0000	-3.527	-3.055	60
RohnAa5	6.731e-005	3.154e-005	-0.004895	0.0043	0.0023	0.0000	1.764	3.152e-005	60
RohnAa5	2.566e-005	1.225e-005	-0.005461	-0.0038	-0.0021	0.0000	1.96	3.055	60
RohnAa5	2.562e-005	1.228e-005	-0.005454	-0.0000	0.0044	0.0000	-3.92	-3.395	39.99
RohnAa5	2.566e-005	1.231e-005	-0.005466	0.0037	-0.0021	0.0000	1.96	1.228e-005	39.99
RohnAa5	4.93e-006	2.556e-006	-0.006097	-0.0031	0.0017	0.0000	2.157	-3.395	39.99
RohnAa5	4.897e-006	2.574e-006	-0.006094	-0.0000	0.0036	0.0000	4.314	3.73e-006	19.99
RohnAa5	4.929e-006	2.391e-006	-0.006099	0.0031	-0.0017	0.0000	2.157	2.374e-006	19.99
RohnAa5	0.001559	0.0001391	-0.009211	0.0000	0.0014	0.0000	-2.263	-3.923	175
RohnAa5	0.001555	0.0001795	-0.009225	-0.0002	0.0016	0.0000	-2.263	3.923	175
RohnAa5	0.001442	0.0001548	-0.009171	-0.0002	0.0016	0.0000	-2.362	-4.094	170
RohnAa5	0.00144	0.0001557	-0.009175	0.0001	0.0015	0.0000	-2.362	4.094	170
RohnAa5	0.001295	0.0001211	-0.009107	0.0001	0.0015	0.0000	-2.461	-4.264	165
RohnAa5	0.001295	0.0001835	-0.009111	-0.0001	0.0015	0.0000	-2.461	4.264	165
RohnAa5	0.001022	0.0001115	-0.008945	-0.0000	0.0014	0.0000	-2.658	-4.605	155
RohnAa5	0.001023	0.0001183	-0.008949	-0.0000	0.0014	0.0000	-2.658	4.606	155
RohnAa5	0.0009334	0.0001417	-0.008846	-0.0000	0.0013	0.0000	-2.757	-4.776	150
RohnAa5	0.0009336	0.0001464	-0.008852	0.0001	0.0013	0.0000	-2.757	4.776	150

Joint Label	X (kips)	X % (kips)	Y (kips)	Y % (kips)	Z (kips)	Comp. Usage %	Uplift Usage %	Result. Force (kips)	Result. Usage (kips)	X-Moment % (ft-k)	X-Moment Usage %	Y-Moment % (ft-k)	Y-Moment Usage %	Z-Moment % (ft-k)	Z-Moment Usage %	Max. Usage %
RohnBc1	0.0008055		9.676e-005		-0.008689	-0.0001	0.0012	0.0000	-2.855				145			
RohnBc2	0.0008058		0.0001838		-0.008696	-0.0000	0.0011	0.0000	-2.855				145			
RohnCa1	0.0005861		5.936e-005		-0.008311	-0.0009	0.0014	0.0000	-3.085				133.3			
RohnCa2	0.0005862		0.0002001		-0.008321	-0.0008	0.0014	0.0000	-3.085				133.3			
RohnCb1	0.0004766		3.24e-005		-0.008035	-0.0005	0.0005	0.0000	-3.216				126.7			
RohnCb2	0.0004759		0.0002138		-0.008045	-0.0006	0.0005	0.0000	-3.216				126.7			
RohnDb1	0.0002962		-7.667e-006		-0.007282	-0.0012	0.0012	0.0000	-3.478				113.3			
RohnDb2	0.0002971		0.0002271		-0.007295	-0.0010	0.0012	0.0000	-3.478				113.3			
RohnEb1	0.0002217		-3.036e-005		-0.006789	-0.0009	0.0000	0.0000	-3.609				106.7			
RohnEb2	0.0002222		0.0002329		-0.006806	-0.0009	0.0000	0.0000	-3.609				106.7			
RohnFa1	0.0001508		-1.019e-008		-0.005911	-0.0008	0.0008	0.0000	-3.871				93.33			
RohnFa2	0.0001513		0.0001736		-0.005934	-0.0006	0.0008	0.0000	-3.871				93.33			
RohnFa3	0.0001295		7.199e-006		-0.005594	-0.0008	-0.0002	0.0000	-4.003				86.65			
RohnFa4	0.0001302		0.0001352		-0.005553	-0.0010	0.0000	0.0000	-4.003				86.65			
RohnFa5	-6.772e-005		0.0002386		-0.004487	-0.0002	0.0000	0.0000	-4.331				70			
RohnFa6	-6.912e-005		0.0003282		-0.004514	-0.0004	0.0000	0.0000	-4.331				70			
RohnGa1	-0.0001101		0.0001587		-0.003279	-0.0001	0.0001	0.0000	-4.724				50			
RohnGa2	-0.0001121		0.0002846		-0.003299	-0.0000	0.0001	0.0000	-4.724				50			
RohnHa1	-0.0001598		0.0002909		-0.001978	-0.0001	0.0000	0.0000	-5.118				30			
RohnHa2	-0.000161		0.0003032		-0.001988	-0.0002	0.0000	0.0000	-5.118				30			
RohnIa1	-0.000149		0.0002576		-0.0006434	-0.0001	0.0000	0.0000	-5.513				9.999			
RohnIa2	-0.0001498		0.0002584		-0.0006456	-0.0001	0.0000	0.0000	-5.513				9.999			
RohnIa3	0.0001551		0.0001369		-0.004377	-0.0015	0.0005	0.0000	-1.263				175			
RohnIa4	0.0001552		0.0001845		-0.004382	-0.0017	0.0005	0.0000	-1.263				175			
RohnIa5	0.0001434		0.0001527		-0.004352	-0.0008	0.0020	0.0000	-1.362				170			
RohnIa6	0.0001433		0.0001587		-0.004356	-0.0007	0.0020	0.0000	-1.362				170			
RohnIa7	0.0001284		0.0001211		-0.004318	-0.0012	0.0008	0.0000	-1.461				165			
RohnIa8	0.0001284		0.0001835		-0.004322	-0.0012	0.0008	0.0000	-1.461				165			
RohnIa9	0.0001026		0.0001033		-0.004235	-0.0010	0.0008	0.0000	-1.658				155			
RohnIa10	0.0001026		0.0001908		-0.004239	-0.0011	0.0008	0.0000	-1.658				155			
RohnIa11	0.0009332		0.0001355		-0.004187	-0.0007	0.0016	0.0000	-1.756				150			
RohnIa12	0.0009332		0.0001524		-0.004192	-0.0006	0.0016	0.0000	-1.756				150			
RohnIa13	0.0009332		9.966e-005		-0.00413	-0.0012	0.0004	0.0000	-1.855				145			
RohnIa14	0.0008053		0.0001895		-0.004136	-0.0013	0.0004	0.0000	-1.855				145			
RohnIa15	0.0005831		5.562e-005		-0.003966	-0.0001	0.0010	0.0000	-2.084				133.3			
RohnIa16	0.0005834		0.0002004		-0.003972	0.0000	0.0010	0.0000	-2.084				133.3			
RohnIa17	0.0004728		2.953e-005		-0.003838	0.0021	0.0005	0.0000	-2.216				126.7			
RohnIa18	0.0004732		0.0002173		-0.003846	-0.0022	0.0005	0.0000	-2.216				126.7			
RohnIa19	0.0002938		-1.031e-005		-0.003535	0.0004	0.0003	0.0000	-2.478				113.3			
RohnIa20	0.0002994		0.0002294		-0.003545	-0.0006	0.0003	0.0000	-2.478				113.3			
RohnIa21	0.0002211		-3.38e-005		-0.003353	0.0015	0.0004	0.0000	-2.609				106.7			
RohnIa22	0.0002211		0.0002357		-0.003342	-0.0016	0.0004	0.0000	-2.609				106.7			
RohnIa23	0.0001508		-1.257e-005		-0.002998	0.0000	0.0003	0.0000	-2.871				93.34			
RohnIa24	0.0001507		0.0001757		-0.003012	-0.0002	0.0003	0.0000	-2.871				93.34			
RohnIa25	0.00013		4.975e-006		-0.00285	-0.0002	0.0009	0.0000	-3.003				86.66			
RohnIa26	0.0001297		0.000137		-0.002865	-0.0002	0.0009	0.0000	-3.003				86.66			
RohnIa27	-6.949e-005		-0.0002387		-0.002409	0.0037	0.0020	0.0000	-3.331				70			
RohnIa28	-7.038e-005		0.0003287		-0.002424	-0.0039	0.0020	0.0000	-3.331				70			
RohnIa29	-0.0001113		0.0002437		-0.001809	0.0039	0.0021	0.0000	-3.724				50			
RohnIa30	-0.0001122		0.0002852		-0.001821	-0.0040	0.0021	0.0000	-3.724				50			
RohnIa31	-0.0001602		0.0002908		-0.001116	0.0032	0.0018	0.0000	-4.117				30			
RohnIa32	-0.0001612		0.0003033		-0.001123	-0.0033	0.0018	0.0000	-4.117				30			
RohnIa33	-0.000149		-0.0002576		0.0003661	0.0014	0.0008	0.0000	-4.511				10			
RohnIa34	-0.0001497		0.0002585		-0.0003683	-0.0014	0.0008	0.0000	-4.511				10			

Joint Support Reactions for Load Case "1.2\*DL":

Joint Label	X (kips)	X % (kips)	Y (kips)	Y % (kips)	Z (kips)	Comp. Usage %	Uplift Usage %	Result. Force (kips)	Result. Usage (kips)	X-Moment % (ft-k)	X-Moment Usage %	Y-Moment % (ft-k)	Y-Moment Usage %	Z-Moment % (ft-k)	Z-Moment Usage %	Max. Usage %
RohnJP	-1.07	0.0	0.0	0.0	19.88	0.0	0.0	19.91	0.0	-0.00	0.0	-0.3	0.0	-0.00	0.0	0.0
RohnJP	0.55	0.0	0.0	0.0	18.52	0.0	0.0	18.53	0.0	-0.00	0.0	-0.5	0.0	-0.00	0.0	0.0
RohnJ1	0.53	0.0	0.0	0.0	19.69	0.0	0.0	19.72	0.0	-0.24	0.0	0.1	0.0	-0.00	0.0	0.0
RohnJ2	0.27	0.0	-0.92	0.0	19.78	0.0	0.0	19.81	0.0	0.24	0.0	0.1	0.0	-0.00	0.0	0.0
RohnJ1	0.53	0.0	0.47	0.0	18.28	0.0	0.0	18.29	0.0	-0.41	0.0	0.2	0.0	-0.00	0.0	0.0
RohnJ2	0.28	0.0	-0.47	0.0	18.38	0.0	0.0	18.39	0.0	0.41	0.0	0.2	0.0	-0.00	0.0	0.0

Joint Displacements, Loads and Member Forces on Joints for Load Case "1.2\*DL":

Joint Label	X External Load (kips)	Y External Load (kips)	Z External Load (kips)	X Member Force (kips)	Y Member Force (kips)	Z Member Force (kips)	X Disp. (ft)	Y Disp. (ft)	Z Disp. (ft)
RohnAP	0.0000	0.0000	0.0000	0.0000	0.0000	0.3543	0.0017	0.0002	-0.0094
RohnBP	0.0000	0.0000	-1.2721	0.0000	0.0000	1.2721	0.0012	0.0001	-0.0093
RohnCP	0.0000	0.0000	-0.5121	0.0000	0.0000	0.5121	0.0007	0.0001	-0.0087
RohnDP	0.0000	0.0000	-0.6208	0.0000	0.0000	0.6208	0.0005	0.0001	-0.0078
RohnEP	0.0000	0.0000	-0.7694	0.0000	0.0000	0.7694	0.0003	0.0001	-0.0064
RohnFP	0.0000	0.0000	-1.0436	0.0000	0.0000	1.0436	0.0001	0.0000	-0.0052
RohnGP	0.0000	0.0000	-1.3901	0.0000	0.0000	1.3901	0.0001	0.0000	-0.0039
RohnHP	0.0000	0.0000	-1.3837	0.0000	0.0000	1.3837	0.0000	0.0000	-0.0027
RohnIP	0.0000	0.0000	-1.5524	0.0000	0.0000	1.5524	0.0000	0.0000	-0.0013
RohnJP	0.0000	0.0000	-1.0658	0.0000	-0.0007	-19.0455	0.0000	0.0000	0.0000
RohnAP	0.0000	0.0000	-0.1863	0.0000	0.0000	0.1863	0.0017	0.0002	-0.0045
RohnBP	0.0000	0.0000	-0.4033	0.0000	0.0000	0.4033	0.0012	0.0001	-0.0044
RohnCP	0.0000	0.0000	-0.5121	0.0000	0.0000	0.5121	0.0007	0.0001	-0.0042
RohnDP	0.0000	0.0000	-0.6208	0.0000	0.0000	0.6208	0.0005	0.0001	-0.0038
RohnEP	0.0000	0.0000	-0.7694	0.0000	0.0000	0.7694	0.0003	0.0001	-0.0032
RohnFP	0.0000	0.0000	-1.0436	0.0000	0.0000	1.0436	0.0002	0.0001	-0.0028
RohnGP	0.0000	0.0000	-1.2701	0.0000	0.0000	1.2701	0.0001	0.0000	-0.0022
RohnHP	0.0000	0.0000	-1.3837	0.0000	0.0000	1.3837	0.0000	0.0000	-0.0015
RohnIP	0.0000	0.0000	-1.5524	0.0000	0.0000	1.5524	0.0000	0.0000	-0.0007
RohnJP	0.0000	0.0000	-0.8390	0.0000	-0.0012	-17.6794	0.0000	0.0000	0.0000
RohnA1	0.0000	0.0000	-0.3543	0.0000	0.0000	0.3543	0.0017	0.0002	-0.0092
RohnA2	0.0000	0.0000	-0.5223	0.0000	0.0000	0.5223	0.0017	0.0002	-0.0093
RohnB1	0.0000	0.0000	-0.5401	0.0000	0.0000	0.5401	0.0012	0.0002	-0.0090
RohnB2	0.0000	0.0000	-0.4621	0.0000	0.0000	0.4621	0.0012	0.0001	-0.0090
RohnC1	0.0000	0.0000	-0.5121	0.0000	0.0000	0.5121	0.0007	0.0001	-0.0085
RohnC2	0.0000	0.0000	-0.5121	0.0000	0.0000	0.5121	0.0007	0.0001	-0.0085
RohnD1	0.0000	0.0000	-0.7048	0.0000	0.0000	0.7048	0.0004	0.0001	-0.0077
RohnD2	0.0000	0.0000	-0.6208	0.0000	0.0000	0.6208	0.0004	0.0001	-0.0077
RohnE1	0.0000	0.0000	-0.7694	0.0000	0.0000	0.7694	0.0002	0.0001	-0.0063
RohnE2	0.0000	0.0000	-0.7694	0.0000	0.0000	0.7694	0.0002	0.0001	-0.0063
RohnF1	0.0000	0.0000	-1.0436	0.0000	0.0000	1.0436	0.0001	0.0000	-0.0051
RohnF2	0.0000	0.0000	-1.2716	0.0000	0.0000	1.2716	0.0001	0.0001	-0.0051
RohnG1	0.0000	0.0000	-1.3421	0.0000	0.0000	1.3421	0.0001	0.0000	-0.0039
RohnG2	0.0000	0.0000	-1.4573	0.0000	0.0000	1.4573	0.0001	0.0000	-0.0039
RohnH1	0.0000	0.0000	-1.3837	0.0000	0.0000	1.3837	0.0000	0.0000	-0.0027
RohnH2	0.0000	0.0000	-1.3837	0.0000	0.0000	1.3837	0.0000	0.0000	-0.0027
RohnI1	0.0000	0.0000	-1.5524	0.0000	0.0000	1.5524	0.0000	0.0000	-0.0013
RohnI2	0.0000	0.0000	-1.5524	0.0000	0.0000	1.5524	0.0000	0.0000	-0.0013
RohnJ1	0.0000	0.0000	-0.8390	-0.5315	-0.9191	-18.8479	0.0000	0.0000	0.0000
RohnJ2	0.0000	0.0000	-0.8390	-0.5329	-0.9202	-18.9387	0.0000	0.0000	0.0000
RohnA1	0.0000	0.0000	-0.1863	0.0000	0.0000	0.1863	0.0017	0.0002	-0.0044
RohnA2	0.0000	0.0000	-0.1863	0.0000	0.0000	0.1863	0.0017	0.0002	-0.0044
RohnB1	0.0000	0.0000	-0.4033	0.0000	0.0000	0.4033	0.0012	0.0001	-0.0043
RohnB2	0.0000	0.0000	-0.4033	0.0000	0.0000	0.4033	0.0012	0.0001	-0.0043
RohnC1	0.0000	0.0000	-0.5121	0.0000	0.0000	0.5121	0.0007	0.0001	-0.0041
RohnC2	0.0000	0.0000	-0.5121	0.0000	0.0000	0.5121	0.0007	0.0001	-0.0041
RohnD1	0.0000	0.0000	-0.6208	0.0000	0.0000	0.6208	0.0004	0.0001	-0.0037
RohnD2	0.0000	0.0000	-0.6208	0.0000	0.0000	0.6208	0.0004	0.0001	-0.0037
RohnE1	0.0000	0.0000	-0.7694	0.0000	0.0000	0.7694	0.0002	0.0001	-0.0031
RohnE2	0.0000	0.0000	-0.7694	0.0000	0.0000	0.7694	0.0002	0.0001	-0.0031
RohnF1	0.0000	0.0000	-1.0436	0.0000	0.0000	1.0436	0.0001	0.0000	-0.0027
RohnF2	0.0000	0.0000	-1.0436	0.0000	0.0000	1.0436	0.0001	0.0001	-0.0027
RohnG1	0.0000	0.0000	-1.2701	0.0000	0.0000	1.2701	0.0001	0.0000	-0.0021
RohnG2	0.0000	0.0000	-1.2701	0.0000	0.0000	1.2701	0.0001	0.0000	-0.0021
RohnH1	0.0000	0.0000	-1.3837	0.0000	0.0000	1.3837	0.0000	0.0000	-0.0015
RohnH2	0.0000	0.0000	-1.3837	0.0000	0.0000	1.3837	0.0000	0.0000	-0.0015
RohnI1	0.0000	0.0000	-1.5524	0.0000	0.0000	1.5524	0.0000	0.0000	-0.0007
RohnI2	0.0000	0.0000	-1.5524	0.0000	0.0000	1.5524	0.0000	0.0000	-0.0007
RohnJ1	0.0000	0.0000	-0.8390	-0.2743	-0.4718	-17.4395	0.0000	0.0000	0.0000
RohnJ2	0.0000	0.0000	-0.8390	-0.2761	-0.4726	-17.5409	0.0000	0.0000	0.0000
RohnAas	0.0000	0.0000	-0.2490	0.0000	0.0000	0.2490	0.0016	0.0002	-0.0094
RohnAbs	0.0000	0.0000	-0.1863	0.0000	0.0000	0.1863	0.0014	0.0002	-0.0094
RohnAcs	0.0000	0.0000	-0.2502	0.0000	0.0000	0.2502	0.0013	0.0002	-0.0093

RohnBaS	0.0000	-0.2170	0.0000	0.0000	0.2170	0.0011	0.0001	-0.0092
RohnBbS	0.0000	-1.1580	0.0000	0.0000	1.1580	0.0009	0.0001	-0.0090
RohnBcS	0.0000	-0.2170	0.0000	0.0000	0.2170	0.0009	0.0001	-0.0089
RohnCsS	0.0000	-0.9577	0.0000	0.0000	0.9577	0.0007	0.0001	-0.0085
RohnDcS	0.0000	-1.7228	0.0000	0.0000	1.7228	0.0006	0.0001	-0.0082
RohnDbS	0.0000	-1.5191	0.0000	0.0000	1.5191	0.0005	0.0001	-0.0074
RohnEaS	0.0000	-0.3257	0.0000	0.0000	0.3257	0.0005	0.0001	-0.0069
RohnEbS	0.0000	-0.4437	0.0000	0.0000	0.4437	0.0003	0.0001	-0.0060
RohnFaS	0.0000	-0.5999	0.0000	0.0000	0.5999	0.0004	0.0001	-0.0056
RohnFbS	0.0000	-0.6702	0.0000	0.0000	0.6702	0.0004	0.0001	-0.0045
RohnGaS	0.0000	-0.7135	0.0000	0.0000	0.7135	0.0004	0.0000	-0.0033
RohnIaS	0.0000	-0.8390	0.0000	0.0000	0.8390	0.0003	-0.0000	-0.0020
RohnJAS	0.0000	-0.1863	0.0000	0.0000	0.1863	0.0016	0.0002	-0.0007
RohnKAS	0.0000	-0.1863	0.0000	0.0000	0.1863	0.0014	0.0002	-0.0045
RohnLbS	0.0000	-0.1863	0.0000	0.0000	0.1863	0.0013	0.0002	-0.0044
RohnMBS	0.0000	-0.2170	0.0000	0.0000	0.2170	0.0011	0.0001	-0.0043
RohnNBS	0.0000	-0.2170	0.0000	0.0000	0.2170	0.0009	0.0001	-0.0043
RohnOBS	0.0000	-0.2170	0.0000	0.0000	0.2170	0.0009	0.0001	-0.0042
RohnPbS	0.0000	-0.2951	0.0000	0.0000	0.2951	0.0007	0.0001	-0.0041
RohnQbS	0.0000	-0.2951	0.0000	0.0000	0.2951	0.0006	0.0001	-0.0039
RohnRbS	0.0000	-0.3257	0.0000	0.0000	0.3257	0.0005	0.0001	-0.0036
RohnSbS	0.0000	-0.4437	0.0000	0.0000	0.4437	0.0003	0.0001	-0.0034
RohnTbS	0.0000	-0.4437	0.0000	0.0000	0.4437	0.0002	0.0001	-0.0031
RohnUaS	0.0000	-0.5999	0.0000	0.0000	0.5999	0.0002	0.0001	-0.0029
RohnVaS	0.0000	-0.6702	0.0000	0.0000	0.6702	0.0004	0.0000	-0.0025
RohnWbS	0.0000	-0.7135	0.0000	0.0000	0.7135	0.0004	0.0000	-0.0018
RohnXbS	0.0000	-0.8390	0.0000	0.0000	0.8390	0.0003	0.0000	-0.0011
RohnYbS	0.0000	-0.1863	0.0000	0.0000	0.1863	0.0017	0.0002	-0.0004
RohnZbS	0.0000	-0.1863	0.0000	0.0000	0.1863	0.0017	0.0002	-0.0046
RohnAbS	0.0000	-0.1863	0.0000	0.0000	0.1863	0.0012	0.0001	-0.0046
RohnBbS	0.0000	-0.1863	0.0000	0.0000	0.1863	0.0012	0.0001	-0.0045
RohnCbS	0.0000	-0.2170	0.0000	0.0000	0.2170	0.0007	0.0001	-0.0046
RohnDbS	0.0000	-0.2170	0.0000	0.0000	0.2170	0.0007	0.0001	-0.0046
RohnEbS	0.0000	-0.2170	0.0000	0.0000	0.2170	0.0007	0.0001	-0.0046
RohnFbS	0.0000	-0.2951	0.0000	0.0000	0.2951	0.0004	0.0001	-0.0049
RohnGbS	0.0000	-0.2951	0.0000	0.0000	0.2951	0.0004	0.0001	-0.0048
RohnHbS	0.0000	-0.3257	0.0000	0.0000	0.3257	0.0003	0.0001	-0.0039
RohnIbS	0.0000	-0.3257	0.0000	0.0000	0.3257	0.0003	0.0001	-0.0039
RohnJbS	0.0000	-0.4437	0.0000	0.0000	0.4437	0.0001	0.0001	-0.0042
RohnKbS	0.0000	-0.4437	0.0000	0.0000	0.4437	0.0001	0.0001	-0.0042
RohnLbS	0.0000	-0.4437	0.0000	0.0000	0.4437	0.0001	0.0001	-0.0042
RohnMbS	0.0000	-0.5999	0.0000	0.0000	0.5999	0.0001	0.0000	-0.0049
RohnNbS	0.0000	-0.5999	0.0000	0.0000	0.5999	0.0001	0.0000	-0.0049
RohnObS	0.0000	-0.6702	0.0000	0.0000	0.6702	0.0000	0.0000	-0.0055
RohnPbS	0.0000	-0.6702	0.0000	0.0000	0.6702	0.0000	0.0000	-0.0055
RohnQbS	0.0000	-0.6702	0.0000	0.0000	0.6702	0.0000	0.0000	-0.0055
RohnRbS	0.0000	-0.7135	0.0000	0.0000	0.7135	0.0000	0.0000	-0.0061
RohnSbS	0.0000	-0.7135	0.0000	0.0000	0.7135	0.0000	0.0000	-0.0061
RohnTbS	0.0000	-0.7135	0.0000	0.0000	0.7135	0.0000	0.0001	-0.0092
RohnUa1	0.0000	-0.2745	0.0000	0.0000	0.2745	0.0016	0.0001	-0.0092
RohnUa2	0.0000	-0.3021	0.0000	0.0000	0.3021	0.0016	0.0002	-0.0092
RohnAb1	0.0000	-0.3303	0.0000	0.0000	0.3303	0.0014	0.0002	-0.0092
RohnAb2	0.0000	-0.1863	0.0000	0.0000	0.1863	0.0014	0.0002	-0.0092
RohnAc1	0.0000	-0.1863	0.0000	0.0000	0.1863	0.0013	0.0001	-0.0091
RohnAc2	0.0000	-0.1863	0.0000	0.0000	0.1863	0.0013	0.0002	-0.0091
RohnBa1	0.0000	-0.2170	0.0000	0.0000	0.2170	0.0010	0.0001	-0.0089
RohnBa2	0.0000	-0.2170	0.0000	0.0000	0.2170	0.0010	0.0001	-0.0089
RohnBb1	0.0000	-1.1256	0.0000	0.0000	1.1256	0.0009	0.0001	-0.0089
RohnBb2	0.0000	-1.1256	0.0000	0.0000	1.1256	0.0009	0.0001	-0.0089
RohnBc1	0.0000	-0.2170	0.0000	0.0000	0.2170	0.0008	0.0001	-0.0087
RohnBc2	0.0000	-0.2170	0.0000	0.0000	0.2170	0.0008	0.0002	-0.0087
RohnCa1	0.0000	-1.0297	0.0000	0.0000	1.0297	0.0006	0.0001	-0.0083

Label	Angle Torsion (ft-lbs)	Origin X Moment (ft-lbs)	Origin Y Moment (ft-lbs)	Origin X Moment (ft-lbs)	Origin Y Moment (ft-lbs)	End X Moment (ft-lbs)	End Y Moment (ft-lbs)	End X Shear (lbs)	End Y Shear (lbs)
RohnCa2	0.0000	0.0000	0.0000	-1.0777	0.0000	0.0000	0.0000	1.0777	0.0006
RohnCb1	0.0000	0.0000	0.0000	-1.6028	0.0000	0.0000	0.0000	1.6028	0.0005
RohnCb2	0.0000	0.0000	0.0000	-1.6028	0.0000	0.0000	0.0000	1.6028	0.0005
RohnDa1	0.0000	0.0000	0.0000	-1.3931	0.0000	0.0000	0.0000	1.3931	0.0003
RohnDa2	0.0000	0.0000	0.0000	-1.3931	0.0000	0.0000	0.0000	1.3931	0.0003
RohnDb1	0.0000	0.0000	0.0000	-0.3257	0.0000	0.0000	0.0000	0.3257	0.0002
RohnDb2	0.0000	0.0000	0.0000	-0.3257	0.0000	0.0000	0.0000	0.3257	0.0002
RohnEa1	0.0000	0.0000	0.0000	-0.4437	0.0000	0.0000	0.0000	0.4437	0.0002
RohnEa2	0.0000	0.0000	0.0000	-0.4437	0.0000	0.0000	0.0000	0.4437	0.0002
RohnEb1	0.0000	0.0000	0.0000	-0.4437	0.0000	0.0000	0.0000	0.4437	0.0001
RohnEb2	0.0000	0.0000	0.0000	-0.4437	0.0000	0.0000	0.0000	0.4437	0.0001
RohnFa1	0.0000	0.0000	0.0000	-0.5999	0.0000	0.0000	0.0000	0.5999	0.0001
RohnFa2	0.0000	0.0000	0.0000	-0.5999	0.0000	0.0000	0.0000	0.5999	0.0001
RohnGa1	0.0000	0.0000	0.0000	-0.6702	0.0000	0.0000	0.0000	0.6702	0.0001
RohnGa2	0.0000	0.0000	0.0000	-0.6702	0.0000	0.0000	0.0000	0.6702	0.0001
RohnHa1	0.0000	0.0000	0.0000	-0.7135	0.0000	0.0000	0.0000	0.7135	0.0002
RohnHa2	0.0000	0.0000	0.0000	-0.7135	0.0000	0.0000	0.0000	0.7135	0.0002
RohnIa1	0.0000	0.0000	0.0000	-0.8390	0.0000	0.0000	0.0000	0.8390	0.0001
RohnIa2	0.0000	0.0000	0.0000	-0.8390	0.0000	0.0000	0.0000	0.8390	0.0001
SNB-Aa1	0.0000	0.0000	0.0000	-0.1863	0.0000	0.0000	0.0000	0.1863	0.0016
SNB-Aa2	0.0000	0.0000	0.0000	-0.1863	0.0000	0.0000	0.0000	0.1863	0.0016
SNB-Ab1	0.0000	0.0000	0.0000	-0.1863	0.0000	0.0000	0.0000	0.1863	0.0014
SNB-Ab2	0.0000	0.0000	0.0000	-0.1863	0.0000	0.0000	0.0000	0.1863	0.0014
SNB-Ac1	0.0000	0.0000	0.0000	-0.1863	0.0000	0.0000	0.0000	0.1863	0.0013
SNB-Ac2	0.0000	0.0000	0.0000	-0.1863	0.0000	0.0000	0.0000	0.1863	0.0013
SNB-Ba1	0.0000	0.0000	0.0000	-0.2170	0.0000	0.0000	0.0000	0.2170	0.0010
SNB-Ba2	0.0000	0.0000	0.0000	-0.2170	0.0000	0.0000	0.0000	0.2170	0.0010
SNB-Bb1	0.0000	0.0000	0.0000	-0.2170	0.0000	0.0000	0.0000	0.2170	0.0009
SNB-Bb2	0.0000	0.0000	0.0000	-0.2170	0.0000	0.0000	0.0000	0.2170	0.0009
SNB-Bc1	0.0000	0.0000	0.0000	-0.2170	0.0000	0.0000	0.0000	0.2170	0.0008
SNB-Bc2	0.0000	0.0000	0.0000	-0.2170	0.0000	0.0000	0.0000	0.2170	0.0008
SNB-Ca1	0.0000	0.0000	0.0000	-0.2951	0.0000	0.0000	0.0000	0.2951	0.0006
SNB-Ca2	0.0000	0.0000	0.0000	-0.2951	0.0000	0.0000	0.0000	0.2951	0.0006
SNB-Cb1	0.0000	0.0000	0.0000	-0.2951	0.0000	0.0000	0.0000	0.2951	0.0005
SNB-Cb2	0.0000	0.0000	0.0000	-0.2951	0.0000	0.0000	0.0000	0.2951	0.0005
SNB-Da1	0.0000	0.0000	0.0000	-0.3257	0.0000	0.0000	0.0000	0.3257	0.0003
SNB-Da2	0.0000	0.0000	0.0000	-0.3257	0.0000	0.0000	0.0000	0.3257	0.0003
SNB-Db1	0.0000	0.0000	0.0000	-0.3257	0.0000	0.0000	0.0000	0.3257	0.0002
SNB-Db2	0.0000	0.0000	0.0000	-0.3257	0.0000	0.0000	0.0000	0.3257	0.0002
SNB-Ea1	0.0000	0.0000	0.0000	-0.4437	0.0000	0.0000	0.0000	0.4437	0.0002
SNB-Ea2	0.0000	0.0000	0.0000	-0.4437	0.0000	0.0000	0.0000	0.4437	0.0002
SNB-Eb1	0.0000	0.0000	0.0000	-0.4437	0.0000	0.0000	0.0000	0.4437	0.0001
SNB-Eb2	0.0000	0.0000	0.0000	-0.4437	0.0000	0.0000	0.0000	0.4437	0.0001
SNB-Fa1	0.0000	0.0000	0.0000	-0.5999	0.0000	0.0000	0.0000	0.5999	0.0001
SNB-Fa2	0.0000	0.0000	0.0000	-0.5999	0.0000	0.0000	0.0000	0.5999	0.0001
SNB-Ga1	0.0000	0.0000	0.0000	-0.6702	0.0000	0.0000	0.0000	0.6702	0.0001
SNB-Ga2	0.0000	0.0000	0.0000	-0.6702	0.0000	0.0000	0.0000	0.6702	0.0001
SNB-Ha1	0.0000	0.0000	0.0000	-0.7135	0.0000	0.0000	0.0000	0.7135	0.0002
SNB-Ha2	0.0000	0.0000	0.0000	-0.7135	0.0000	0.0000	0.0000	0.7135	0.0002
SNB-Ia1	0.0000	0.0000	0.0000	-0.8390	0.0000	0.0000	0.0000	0.8390	0.0001
SNB-Ia2	0.0000	0.0000	0.0000	-0.8390	0.0000	0.0000	0.0000	0.8390	0.0001

Moments for Angles Modeled as Beams:

Label	Angle Torsion (ft-lbs)	Origin X Moment (ft-lbs)	Origin Y Moment (ft-lbs)	Origin X Moment (ft-lbs)	Origin Y Moment (ft-lbs)	End X Moment (ft-lbs)	End Y Moment (ft-lbs)	End X Shear (lbs)	End Y Shear (lbs)
Rohn-LA1P	0.00	0.00	0.00	-0.11	-0.55	-3.60	-0.11	-0.74	-0.29
Rohn-LA1L	0.00	-0.08	0.05	0.05	3.33	1.42	0.68	0.38	0.38
Rohn-LA2P	0.00	0.17	0.10	2.94	1.82	0.62	0.13	1.73	1.73
Rohn-LA2L	0.00	0.54	3.60	0.13	5.06	2.37	1.57	-0.76	-0.76
Rohn-LA22	0.00	-2.94	-1.42	4.53	-2.50	-1.49	-0.86	-0.86	-0.86
Rohn-LA3P	0.00	-0.13	-5.06	0.03	-6.77	-2.10	1.07	2.36	2.36
Rohn-LA3L	0.00	-4.53	2.37	-5.98	2.99	-2.10	1.09	1.09	1.09
Rohn-LA32	-0.00	4.50	2.50	5.94	2.93	2.09	2.09	3.27	3.27
Rohn-LA4P	0.00	-0.03	6.77	-0.07	9.61	-0.02	-0.02	-0.003	-0.004
Rohn-LA4L	0.00	5.98	-2.98	7.79	-4.48	2.75	-1.49	-0.003	-0.004

Rohn-LA42	-0.00	-5.94	-2.93	-7.80	-4.41	-2.75	-1.47
Rohn-LB1P	0.00	0.07	-9.85	0.14	-11.76	0.04	-4.32
Rohn-LB11	0.01	-7.82	4.46	-9.71	7.34	-3.50	2.38
Rohn-LB12	-0.01	7.80	4.38	9.79	7.34	3.52	2.34
Rohn-LB2P	0.00	-0.14	11.76	-0.02	-13.56	-0.03	5.06
Rohn-LB21	0.01	9.71	-7.45	10.70	-6.53	4.08	-2.79
Rohn-LB22	-0.01	-9.79	-7.34	-10.66	-6.49	-4.09	-2.76
Rohn-LB3P	0.00	0.02	-13.56	0.02	-13.30	0.01	-5.37
Rohn-LB31	0.01	-10.70	6.54	-11.46	7.55	-4.43	2.82
Rohn-LB32	-0.01	10.66	6.49	11.50	7.55	4.43	2.81
Rohn-LB4P	0.00	-0.02	13.31	0.04	13.88	0.00	5.43
Rohn-LB41	0.01	-11.46	-7.55	11.28	-6.53	4.54	-2.78
Rohn-LB42	-0.01	11.50	-7.55	-11.21	-6.53	-4.54	-2.78
Rohn-LCLP	0.00	-0.04	-13.88	0.08	-3.60	0.01	-2.62
Rohn-LCL1	0.01	-11.28	6.35	-3.26	2.74	-2.18	1.36
Rohn-LCL2	-0.01	11.21	6.36	3.29	2.67	2.18	1.35
Rohn-LC2P	0.00	-0.08	3.60	-0.15	-11.11	-0.03	1.12
Rohn-LC21	0.01	3.26	-2.74	10.19	5.96	-1.04	0.48
Rohn-LC22	-0.01	-3.29	-2.67	-10.10	6.07	1.02	0.51
Rohn-LC3P	0.00	0.14	11.11	0.07	22.89	0.03	5.10
Rohn-LC31	0.01	-10.19	-5.96	19.41	-10.32	4.44	-2.44
Rohn-LC32	-0.01	10.10	-6.07	-19.27	-10.31	-4.41	-2.46
Rohn-LD1P	0.00	-0.07	-22.89	0.22	-9.23	0.02	-4.82
Rohn-LD11	0.01	-19.41	10.32	-8.80	5.56	-4.23	2.38
Rohn-LD12	-0.01	19.27	10.31	8.97	5.41	4.24	2.36
Rohn-LD2P	0.00	-0.22	9.23	-0.03	-21.98	-0.04	-1.91
Rohn-LD21	0.01	8.80	-5.55	19.17	12.47	-1.55	1.03
Rohn-LD22	-0.01	-8.97	-5.40	-19.31	12.58	1.55	1.07
Rohn-LD3P	0.00	0.03	21.98	0.12	38.90	0.02	9.13
Rohn-LD31	0.01	-19.17	-12.47	32.70	-18.62	7.78	-4.66
Rohn-LD32	-0.01	19.31	-12.58	-32.61	-18.70	-7.79	-4.69
Rohn-LE1P	0.00	-0.12	-38.90	-0.03	-22.45	-0.02	-9.20
Rohn-LE11	0.01	-32.70	18.62	-19.69	12.01	-7.86	4.60
Rohn-LE12	-0.01	32.61	18.71	19.73	12.07	7.85	4.62
Rohn-LE2P	0.00	0.03	22.45	0.05	-14.65	0.01	1.17
Rohn-LE21	0.01	-19.69	-12.01	-12.88	8.12	1.02	-0.58
Rohn-LE22	-0.01	19.73	-12.07	13.04	8.16	-1.00	-0.59
Rohn-LE3P	0.00	-0.05	14.65	0.20	69.10	0.02	12.57
Rohn-LE31	0.01	12.88	-8.12	58.83	-33.81	10.76	-6.29
Rohn-LE32	-0.01	-13.04	-8.15	-59.01	-34.15	-10.81	-6.35
Rohn-LF1P	0.00	-0.20	-69.10	-0.62	-112.44	-0.08	-18.14
Rohn-LF11	0.01	-58.83	33.81	-97.28	57.10	-15.60	9.08
Rohn-LF12	-0.01	59.01	34.15	96.99	57.65	15.59	9.17
Rohn-LF2P	0.00	0.62	112.44	0.35	129.61	0.10	24.19
Rohn-LF21	0.01	-97.28	-57.10	110.84	-64.08	20.80	-12.11
Rohn-LF22	-0.01	96.99	-57.65	-111.18	-64.68	-20.80	-12.22
Rohn-LG1P	0.00	-0.35	-129.61	-0.77	-138.02	-0.11	-26.74
Rohn-LG11	0.01	-110.84	64.08	-119.39	69.67	-23.01	13.37
Rohn-LG12	-0.01	111.18	64.68	118.95	70.30	23.00	13.49
Rohn-LG2P	0.00	0.77	138.02	0.24	149.42	0.10	28.72
Rohn-LG21	0.01	-119.39	-69.67	128.20	-74.16	24.74	-14.37
Rohn-LG22	-0.01	118.95	-70.30	-128.56	-74.64	-24.73	-14.48
Rohn-LH1P	0.00	-0.24	-149.42	-0.44	-163.69	-0.07	-31.29
Rohn-LH11	0.01	-128.20	74.16	-141.56	82.45	-26.96	15.65
Rohn-LH12	-0.01	128.56	74.64	141.29	82.80	26.97	15.73
Rohn-LH2P	0.00	0.44	163.69	0.08	198.35	0.05	36.18
Rohn-LH21	0.01	-141.56	-82.45	170.52	-98.68	31.19	-18.10
Rohn-LH22	-0.01	141.29	-82.80	-170.98	-99.03	-31.20	-18.17
Rohn-LI1P	0.00	-0.08	-198.35	-0.78	-269.84	-0.09	-46.79
Rohn-LI11	0.01	-170.52	98.68	-233.68	136.18	-40.39	23.47
Rohn-LI12	-0.01	170.98	99.03	233.05	136.72	40.37	23.56
Rohn-LI2P	0.00	0.78	269.84	0.54	275.29	0.13	54.47
Rohn-LI21	0.01	-233.68	-136.18	237.31	-137.83	47.06	-27.38
Rohn-LI22	-0.01	233.05	-136.72	-237.35	-138.47	-47.01	-27.50
Rohn-H1P	0.00	-0.08	-0.00	0.07	-0.00	-0.00	0.00
Rohn-H11	0.01	-0.05	0.00	0.11	0.00	0.01	0.00
Rohn-H12	-0.01	0.11	-0.00	-0.06	-0.00	-0.01	-0.00
Rohn-H2P	0.00	-0.13	-0.00	-0.03	-0.01	-0.02	-0.00
Rohn-H21	-0.00	-0.04	-0.00	0.03	0.00	-0.00	-0.00

Rohn-H22	0.01	0.04	0.01	0.14	0.00	0.02	0.00	0.02	0.00
SNB-LA1P	-0.00	-0.07	75.05	-0.05	14.16	-0.02	17.83		
SNB-LA1I	0.00	64.89	-37.51	12.23	-7.11	15.41	-8.92		
SNB-LA12	-0.00	-65.22	-37.63	-12.53	-7.22	-15.54	-8.96		
SNB-LA2P	0.00	0.05	-14.16	0.12	5.23	-0.02	-1.78		
SNB-LA21	0.00	-12.23	7.11	4.35	-2.91	-1.58	0.84		
SNB-LA22	-0.00	12.53	7.22	-4.45	-2.83	1.61	0.88		
SNB-LA3P	0.00	0.12	-5.23	-0.01	-21.64	0.02	-5.37		
SNB-LA31	0.00	-4.35	2.91	-18.23	11.07	-4.51	2.79		
SNB-LA32	-0.00	4.45	2.83	18.14	11.03	4.51	2.77		
SNB-LA4P	-0.00	0.01	21.64	0.03	64.83	0.01	17.28		
SNB-LA41	0.00	18.23	-11.07	54.76	-31.77	14.59	-8.56		
SNB-LA42	-0.00	-18.14	11.03	-54.63	-31.72	-14.54	-8.54		
SNB-LB1P	0.00	0.04	109.77	0.06	7.10	0.02	23.35		
SNB-LB11	0.03	94.99	-54.07	5.75	-1.38	20.13	-11.08		
SNB-LB12	-0.03	-94.83	-54.03	-5.61	-1.38	-20.07	-11.07		
SNB-LB2P	0.00	-7.09	0.04	29.66	0.00	0.00	4.51		
SNB-LB21	0.03	5.75	1.38	24.12	-13.60	3.67	-2.44		
SNB-LB22	-0.03	-5.61	-1.38	-24.00	-13.58	-3.68	-2.44		
SNB-LB3P	-0.00	-0.04	-29.66	0.08	-63.30	0.01	-18.98		
SNB-LB31	0.03	24.12	13.60	-56.54	34.70	16.12	9.65		
SNB-LB32	-0.03	-24.00	-13.58	56.66	34.67	16.12	9.64		
SNB-LB4P	0.00	-0.08	65.30	-0.01	178.87	-0.02	48.80		
SNB-LB41	0.03	56.54	-34.70	153.41	-88.96	41.96	-24.71		
SNB-LB42	-0.03	-56.66	-34.67	-153.35	-88.92	-41.97	-24.70		
SNB-LC1P	-0.00	0.00	100.86	0.02	38.65	0.00	20.93		
SNB-LC11	0.02	88.87	-51.06	33.42	-17.94	18.35	-10.35		
SNB-LC12	-0.02	-88.97	-51.11	-33.41	-17.96	-18.36	-10.36		
SNB-LC2P	-0.00	-0.02	-38.65	0.04	-71.71	0.00	-16.51		
SNB-LC21	0.02	-33.42	17.94	-62.52	37.06	-14.35	8.23		
SNB-LC22	-0.02	33.41	-17.96	62.52	37.01	14.35	8.22		
SNB-LC3P	-0.00	-0.04	71.71	-0.01	214.19	-0.01	42.90		
SNB-LC31	0.02	62.52	-37.06	184.33	-106.65	37.04	-21.56		
SNB-LC32	-0.02	-62.52	-37.01	-184.18	-106.55	-37.01	-21.54		
SNB-LD1P	-0.00	0.03	252.32	0.17	73.48	0.03	48.88		
SNB-LD11	0.02	219.78	-126.82	63.05	-34.62	42.44	-24.22		
SNB-LD12	-0.02	-219.86	-126.90	-62.87	-34.71	-42.42	-24.25		
SNB-LD2P	-0.00	-0.17	-73.48	0.08	-97.20	-0.01	-25.53		
SNB-LD21	0.02	-63.05	34.62	-84.38	50.44	-22.06	12.73		
SNB-LD22	-0.02	62.87	34.71	84.64	50.50	22.07	12.75		
SNB-LD3P	-0.00	-0.08	97.20	0.04	238.63	-0.01	50.39		
SNB-LD31	0.02	84.38	-50.44	204.74	-118.42	43.38	-25.34		
SNB-LD32	-0.02	-84.64	-50.50	-204.72	-118.45	-43.42	-25.35		
SNB-LE1P	-0.00	-0.09	361.80	0.21	100.78	0.02	69.40		
SNB-LE11	0.03	315.24	-182.10	86.75	-47.80	60.31	-34.49		
SNB-LE12	-0.03	-315.50	-182.14	-86.55	-47.93	-60.32	-34.52		
SNB-LE2P	-0.00	-0.21	-100.78	-0.11	-217.89	0.05	-47.67		
SNB-LE21	0.03	-86.75	47.80	-189.30	111.12	-41.29	23.77		
SNB-LE22	-0.03	86.55	47.93	189.60	111.42	41.31	23.84		
SNB-LE3P	-0.00	0.11	217.89	0.11	753.55	0.03	145.75		
SNB-LE31	0.03	189.30	-111.12	650.19	-376.47	125.95	-73.16		
SNB-LE32	-0.03	-189.60	-111.42	-650.87	-376.99	-126.10	-73.28		
SNB-LF1P	0.01	-0.23	193.53	-0.57	-227.48	-0.08	-3.39		
SNB-LF11	0.02	170.12	-97.61	-195.94	115.98	-2.58	1.84		
SNB-LF12	-0.02	-169.90	-97.23	195.71	116.51	2.58	1.93		
SNB-LF2P	0.01	0.57	227.48	0.15	729.27	0.07	95.60		
SNB-LF21	0.02	195.94	-115.98	628.23	-364.52	82.36	-48.01		
SNB-LF22	-0.02	-195.71	116.51	-629.13	-365.23	-82.42	-48.14		
SNB-LG1P	0.02	-0.21	749.04	-1.35	-332.75	-0.16	41.60		
SNB-LG11	0.02	652.05	-287.50	287.41	169.52	36.44	-20.56		
SNB-LG12	-0.04	-651.28	286.41	-286.41	170.51	-36.46	-20.40		
SNB-LG2P	0.02	1.35	332.75	0.39	1322.45	0.17	165.40		
SNB-LG21	0.02	287.41	-169.52	1141.41	-660.98	142.78	-82.99		
SNB-LG22	-0.04	-286.41	-170.50	-1142.50	-662.06	-142.79	-83.20		
SNB-LH1P	0.01	-0.40	562.74	-0.11	-367.42	-0.18	19.52		
SNB-LH11	0.01	491.02	-282.29	-317.34	186.08	17.36	-9.61		
SNB-LH12	-0.03	-489.96	-281.21	316.44	-187.22	-17.34	-9.39		
SNB-LH2P	0.01	1.43	367.42	0.54	1179.70	0.20	154.60		
SNB-LH21	0.01	317.34	-186.07	1017.89	-589.35	133.43	-77.49		

SNB-LH22	-0.03	-316.44	-187.21	-1018.94	-590.58	-133.44	-77.72
SNB-LI1P	0.01	-0.53	1065.38	-2.03	-231.06	-0.26	83.37
SNB-LI1L	0.01	926.24	-533.99	199.82	118.77	72.59	-41.49
SNB-LI1Z	0.01	-925.12	-532.73	198.26	120.21	-72.63	-41.22
SNB-LI2P	0.01	2.03	231.06	1.14	475.68	0.32	70.62
SNB-LI2L	0.01	199.82	-118.77	409.05	-238.32	60.84	-35.68
SNB-LI2Z	-0.01	-198.26	-120.21	-409.32	-239.79	-60.71	-35.97
SNB-H1bP	-0.01	43.40	-0.08	144.88	-0.04	93.19	-0.06
SNB-H1bL	-0.01	-144.88	0.04	-43.40	0.07	-93.14	0.06
SNB-H1cP	-0.00	144.85	-0.08	144.85	-0.07	93.10	-0.07
SNB-H1cL	0.00	-144.85	0.07	-43.51	0.07	-93.23	0.07
SNB-H1eP	0.01	43.43	-0.07	144.88	-0.09	93.20	-0.08
SNB-H1eL	0.01	-144.88	0.09	-43.27	0.08	-93.12	0.08
SNB-H2aP	-0.05	100.77	0.26	151.87	-0.27	93.47	0.20
SNB-H2aL	-0.05	-151.87	-0.27	-99.10	-0.23	-92.85	-0.21
SNB-H2cP	-0.00	100.18	0.24	151.74	0.26	93.20	0.18
SNB-H2cL	-0.00	-151.74	-0.26	-99.95	-0.24	-93.12	-0.18
SNB-H2eP	0.06	98.99	0.28	151.86	-0.26	92.81	0.20
SNB-H2eL	0.06	-98.99	-0.28	-151.86	0.26	-93.51	-0.19
SNB-H3aP	-0.00	161.51	-1.41	205.59	1.39	108.47	0.83
SNB-H3aL	-0.00	-161.51	1.41	-205.59	-1.41	-108.49	-0.83
SNB-H3cP	-0.00	161.54	-1.42	205.59	1.46	108.48	0.85
SNB-H3cL	-0.00	-205.59	1.42	-161.57	-1.42	-108.49	-0.85
SNB-H3eP	0.00	161.61	-1.41	205.59	1.39	108.50	0.83
SNB-H3eL	0.00	-161.61	1.41	-205.59	-1.42	-108.46	-0.83
SNB-H4aP	-0.01	269.33	-1.39	330.09	2.63	147.42	1.30
SNB-H4aL	-0.01	-269.33	1.39	-330.09	-2.63	-147.42	-1.30
SNB-H4cP	-0.01	330.09	-2.63	330.06	-2.65	147.45	-1.30
SNB-H4cL	-0.01	-330.09	2.63	-330.06	2.71	-147.45	1.32
SNB-H4eP	-0.00	330.06	-2.71	330.09	2.65	147.43	1.32
SNB-H4eL	-0.00	-330.06	2.71	-330.09	-2.65	-147.43	-1.32
SNB-H4fP	0.02	269.41	-2.63	269.36	3.71	162.79	1.57
SNB-H4fL	0.02	-269.41	2.63	-269.36	-3.71	-162.79	-1.57
SNB-H5aP	-0.00	346.71	-3.71	425.98	3.73	182.81	1.57
SNB-H5aL	-0.00	-346.71	3.71	-425.98	-3.73	-182.81	-1.57
SNB-H5cP	0.00	346.68	-3.73	425.97	3.79	182.78	1.58
SNB-H5cL	0.00	-346.68	3.73	-425.97	-3.73	-182.82	-1.58
SNB-H5eP	0.00	425.97	-3.79	346.87	3.73	162.83	1.57
SNB-H5eL	0.00	-425.97	3.79	-346.87	-3.73	-162.83	-1.57
SNB-H5fP	0.00	346.90	-3.71	346.61	3.73	162.76	1.57
SNB-H5fL	0.00	-346.90	3.71	-346.61	-3.73	-162.76	-1.57
SNB-H6aP	-0.03	546.92	-3.76	656.57	3.75	221.71	1.38
SNB-H6aL	-0.03	-546.92	3.76	-656.57	-3.76	-221.71	-1.38
SNB-H6cP	0.01	546.88	-3.77	656.52	3.82	221.69	1.40
SNB-H6cL	0.01	-546.88	3.77	-656.52	-3.77	-221.76	-1.40
SNB-H6eP	0.02	547.29	-3.76	656.59	3.75	221.78	1.38
SNB-H6eL	0.02	-547.29	3.76	-656.59	-3.77	-221.67	-1.39
SNB-H6fP	0.02	656.59	-3.75	546.70	3.77	221.67	1.38
SNB-H6fL	0.02	-656.59	3.75	-546.70	-3.77	-221.67	-1.38
SNB-H7aP	-0.02	853.55	-0.95	978.72	0.96	299.89	0.31
SNB-H7aL	-0.02	-853.55	0.95	-978.72	-0.96	-299.89	-0.31
SNB-H7cP	-0.02	978.72	-0.96	853.78	0.96	299.93	0.31
SNB-H7cL	-0.02	-978.72	0.96	-853.78	-0.96	-299.90	-0.32
SNB-H7eP	0.01	853.82	-0.99	978.72	0.95	299.92	0.32
SNB-H7eL	0.01	-853.82	0.99	-978.72	-0.95	-299.92	-0.32
SNB-H7fP	0.01	978.75	-0.96	853.47	0.96	299.84	0.32
SNB-H7fL	0.01	-978.75	0.96	-853.47	-0.96	-299.88	-0.31
SNB-H8aP	0.00	1088.42	1.05	1186.45	1.05	335.01	0.31
SNB-H8aL	0.00	-1088.42	-1.05	-1186.45	-1.05	-335.03	-0.31
SNB-H8cP	0.00	1088.47	-1.05	1088.56	1.08	335.02	0.31
SNB-H8cL	0.00	-1088.47	1.05	-1088.56	-1.05	-335.02	-0.31
SNB-H8eP	-0.01	1088.57	-1.04	1088.50	1.04	335.02	0.31
SNB-H8eL	-0.01	-1088.57	1.04	-1088.50	-1.04	-335.03	-0.31
SNB-H9aP	-0.01	1186.45	-1.04	1088.40	1.05	335.00	0.31
SNB-H9aL	-0.01	-1186.45	1.04	-1088.40	-1.05	-335.00	-0.31
SNB-H9cP	-0.00	1296.19	0.75	1368.60	0.75	356.63	0.20
SNB-H9cL	-0.00	-1296.19	-0.75	-1368.60	-0.75	-356.63	-0.20
SNB-H9eP	0.00	1296.32	0.76	1368.60	0.77	356.65	0.20
SNB-H9eL	0.00	-1296.32	-0.77	-1368.60	-0.76	-356.64	-0.20
SNB-H9fP	0.00	1368.60	-0.77	1296.26	0.74	356.65	0.20
SNB-H9fL	0.00	-1368.60	0.74	-1368.60	-0.75	-356.64	-0.20
SNB-H9gP	0.00	1296.34	0.74	1368.60	0.74	356.65	0.20
SNB-H9gL	0.00	-1296.34	-0.74	-1368.60	-0.74	-356.65	-0.20
SNB-H9iP	0.00	1368.60	-0.74	1296.21	0.75	356.64	0.20
SNB-H9iL	0.00	-1368.60	0.74	-1296.21	-0.75	-356.64	-0.20



\*\*\* Analysis Results for Load Case No. 7 "0.9DL" - Number of iterations in SAPS 9

Equilibrium Joint Positions and Rotations for Load Case "0.9DL":

Joint Label	X-Displ (ft)	Y-Displ (ft)	Z-Displ (ft)	X-Rot (deg)	Y-Rot (deg)	Z-Rot (deg)	X-Pos (ft)	Y-Pos (ft)	Z-Pos (ft)
RohnAP	0.001265	0.0001264	-0.00706	-0.0001	0.0007	0.0000	4.334	0.0001264	180
RohnBP	0.0008772	0.0001121	-0.006952	-0.0000	0.0008	0.0000	5.122	0.0001121	160
RohnCP	0.0005573	0.0001022	-0.006523	-0.0000	0.0007	0.0000	5.91	0.0001022	140
RohnDP	0.0003408	8.755e-005	-0.005869	-0.0000	0.0002	-0.0000	6.695	8.755e-005	120
RohnEP	0.0001944	6.92e-005	-0.004796	-0.0001	0.0002	-0.0000	7.481	6.92e-005	100
RohnFP	0.0001133	4.558e-005	-0.003869	-0.0001	0.0010	-0.0000	8.268	4.558e-005	80
RohnGP	5.312e-005	2.337e-005	-0.002948	-0.0001	-0.0002	-0.0000	9.055	2.337e-005	60
RohnHP	2.337e-005	8.745e-006	-0.002027	-0.0000	-0.0002	-0.0000	9.841	8.745e-006	40
RohnIP	7.339e-006	1.385e-006	-0.0009708	-0.0000	-0.0008	-0.0000	10.63	1.385e-006	20
RohnJP	0	0	0	0.0000	0.0000	0.0000	11.42	0	0
RohnAP	0.001268	0.0001255	-0.003364	-0.0001	-0.0040	-0.0000	2.334	0.0001255	180
RohnBP	0.0008806	0.0001121	-0.003294	-0.0000	-0.0024	-0.0000	3.122	0.0001121	160
RohnCP	0.0005602	0.0001018	-0.003133	-0.0000	-0.0030	-0.0000	3.909	0.0001018	140
RohnDP	0.000343	8.752e-005	-0.002853	-0.0000	-0.0056	-0.0000	4.695	8.752e-005	120
RohnEP	0.0001958	6.864e-005	-0.002398	-0.0001	-0.0034	-0.0000	5.481	6.864e-005	100
RohnFP	0.0001141	4.504e-005	-0.002065	-0.0001	-0.0057	-0.0000	6.268	4.504e-005	80
RohnGP	5.351e-005	2.36e-005	-0.001617	-0.0001	-0.0074	-0.0000	7.055	2.36e-005	60
RohnHP	2.352e-005	9.159e-006	-0.001144	-0.0000	-0.0065	-0.0000	7.841	9.159e-006	40
RohnIP	7.336e-006	1.738e-006	-0.0005603	-0.0000	-0.0053	-0.0000	8.628	1.738e-006	20
RohnJP	0	0	0	0.0000	0.0000	0.0000	9.415	0	0
RohnA1	0.00127	0.0001289	-0.00693	-0.0004	0.0012	-0.0000	-2.165	-3.752	180
RohnA2	0.00127	0.0001226	-0.006947	-0.0003	0.0013	-0.0000	-2.165	-3.753	180
RohnB1	0.0008819	0.0001144	-0.006779	-0.0002	0.0013	-0.0000	-2.56	-4.435	160
RohnB2	0.0008818	0.0001098	-0.006678	-0.0002	0.0013	-0.0000	-2.56	-4.435	160
RohnC1	0.0005533	0.0001019	-0.006395	-0.0000	0.0008	-0.0000	-2.954	-5.117	140
RohnC2	0.0005533	0.0001019	-0.006401	-0.0000	0.0008	-0.0000	-2.954	-5.117	140
RohnD1	0.0003254	8.089e-005	-0.005768	-0.0003	0.0007	-0.0000	-3.347	-5.798	120
RohnD2	0.0003254	8.089e-005	-0.005775	-0.0002	0.0007	-0.0000	-3.347	-5.798	120
RohnE1	0.000182	6.336e-005	-0.004725	-0.0001	0.0003	-0.0000	-3.74	-6.479	100
RohnE2	0.0001824	7.42e-005	-0.004874	-0.0000	0.0003	-0.0000	-3.74	-6.479	100
RohnF1	9.66e-005	4.677e-005	-0.003817	-0.0011	0.0008	-0.0000	-4.134	-7.16	80
RohnF2	9.708e-005	5.357e-005	-0.003839	-0.0010	0.0008	-0.0000	-4.134	-7.16	80
RohnG1	4.871e-005	2.142e-005	-0.00291	-0.0003	0.0003	-0.0000	-4.527	-7.842	60
RohnG2	4.85e-005	2.568e-005	-0.002929	-0.0002	0.0003	-0.0000	-4.527	-7.842	60
RohnH1	1.696e-005	5.737e-006	-0.002004	-0.0003	0.0002	-0.0000	-4.92	-8.523	40
RohnH2	1.655e-005	1.246e-005	-0.002015	-0.0002	0.0002	-0.0000	-4.92	-8.523	40
RohnI1	1.652e-006	1.198e-006	-0.0009604	-0.0007	0.0004	-0.0000	-5.315	-9.206	20
RohnI2	1.298e-006	4.58e-006	-0.0009652	-0.0007	0.0004	-0.0000	-5.315	-9.206	20
RohnJ1	0	0	0	0.0000	0.0000	0.0000	-5.71	-9.89	0
RohnJ2	0	0	0	0.0000	0.0000	0.0000	-5.71	-9.89	0
RohnA1	0.001269	0.0001257	-0.003296	-0.0045	0.0037	-0.0000	-1.165	-2.02	180
RohnA2	0.001268	0.0001254	-0.003299	-0.0044	0.0037	-0.0000	-1.165	-2.021	180
RohnB1	0.00088	0.0001118	-0.003209	-0.0030	0.0028	-0.0000	-1.56	-2.703	160
RohnB2	0.00088	0.0001125	-0.003212	-0.0030	0.0028	-0.0000	-1.56	-2.703	160
RohnC1	0.0005537	9.83e-005	-0.003053	-0.0033	0.0026	-0.0000	-1.953	-3.384	140
RohnC2	0.0005537	9.83e-005	-0.003057	-0.0032	0.0026	-0.0000	-1.953	-3.385	140
RohnD1	0.000326	7.806e-005	-0.002781	-0.0054	0.0036	-0.0000	-2.347	-4.066	120
RohnD2	0.000326	7.806e-005	-0.002791	-0.0053	0.0036	-0.0000	-2.347	-4.066	120
RohnE1	0.0001828	6.135e-005	-0.00236	-0.0033	0.0021	-0.0000	-2.74	-4.747	100
RohnE2	0.0001828	7.596e-005	-0.00236	-0.0031	0.0021	-0.0000	-2.74	-4.747	100
RohnF1	9.724e-005	3.553e-005	-0.002027	-0.0051	0.0031	-0.0000	-3.134	-5.428	80
RohnF2	9.724e-005	3.553e-005	-0.002039	-0.0050	0.0031	-0.0000	-3.134	-5.428	80
RohnG1	4.87e-005	2.097e-005	-0.00159	-0.0066	0.0039	-0.0000	-3.527	-6.11	60
RohnG2	4.869e-005	2.625e-005	-0.0016	-0.0065	0.0039	-0.0000	-3.527	-6.11	60
RohnH1	1.699e-005	5.51e-006	-0.001127	-0.0057	0.0033	-0.0000	-3.92	-6.79	40
RohnH2	1.694e-005	1.285e-005	-0.001134	-0.0057	0.0033	-0.0000	-3.92	-6.791	40
RohnI1	1.827e-006	-1.295e-006	-0.000525	-0.0046	0.0027	-0.0000	-4.314	-7.472	20
RohnI2	1.779e-006	4.854e-006	-0.0005558	-0.0046	0.0027	-0.0000	-4.314	-7.472	20
RohnJ1	0	0	0	0.0000	0.0000	0.0000	-4.708	-8.154	0
RohnJ2	0	0	0	0.0000	0.0000	0.0000	-4.708	-8.154	0

RohnBaS	0.001189	0.0001165	-0.007046	-0.0001	0.0012	0.0000	4.531	0.0001165	175
RohnABs	0.001076	0.0001152	-0.007024	-0.0000	0.0010	0.0000	4.728	0.0001152	170
RohnACs	0.001003	0.0001114	-0.006992	-0.0000	0.0012	0.0000	4.925	0.0001114	165
RohnBAs	0.0008234	0.0001106	-0.006871	-0.0000	0.0010	0.0000	5.319	0.0001106	155
RohnBBS	0.0007073	0.000108	-0.006786	-0.0000	0.0008	0.0000	5.516	0.000108	150
RohnBCs	0.0006663	0.0001052	-0.006657	-0.0000	0.0008	0.0000	5.713	0.0001052	145
RohnCAs	0.0005363	9.725e-005	-0.006353	-0.0000	-0.0000	0.0000	6.171	9.725e-005	133.3
RohnCBs	0.0004781	9.173e-005	-0.00614	-0.0000	0.0011	0.0000	6.434	9.173e-005	126.7
RohnDAs	0.0003784	8.275e-005	-0.005557	-0.0000	0.0005	0.0000	6.957	8.275e-005	113.3
RohnDBs	0.0003434	7.618e-005	-0.005175	-0.0001	0.0011	0.0000	7.22	7.618e-005	106.7
RohnEAs	0.000236	6.153e-005	-0.004499	-0.0001	0.0004	0.0000	7.743	6.153e-005	93.34
RohnEBS	0.0001836	5.38e-005	-0.004167	-0.0001	0.0010	0.0000	8.006	5.38e-005	86.66
RohnFAs	0.0003212	3.267e-005	-0.003411	-0.0001	0.0004	0.0000	8.662	3.267e-005	70
RohnFBS	0.0002629	1.402e-005	-0.00249	-0.0000	0.0001	0.0000	9.448	1.402e-005	50
RohnGAs	0.0002268	3.883e-006	-0.001501	-0.0000	0.0002	0.0000	10.24	3.883e-006	30
RohnGBS	0.0002249	-2.17e-007	-0.0004878	-0.0000	0.0001	0.0000	11.03	-2.17e-007	10
RohnHAs	0.001193	0.0001205	-0.003355	-0.0001	0.0025	0.0000	2.531	0.0001205	175
RohnHBS	0.001164	0.0001164	-0.003342	-0.0000	0.0004	0.0000	2.728	0.0001164	170
RohnIAs	0.001006	0.0001114	-0.00332	-0.0000	0.0022	0.0000	2.925	0.0001114	165
RohnIBS	0.0008266	0.0001101	-0.003251	-0.0000	0.0019	0.0000	3.319	0.0001101	155
RohnJAs	0.0007105	0.0001078	-0.003224	-0.0000	0.0004	0.0000	3.515	0.0001078	150
RohnJBs	0.0006694	0.000105	-0.00318	-0.0000	0.0019	0.0000	3.712	0.000105	145
RohnKAs	0.000539	9.739e-005	-0.00305	-0.0000	0.0006	0.0000	4.171	9.739e-005	133.3
RohnKBS	0.0004806	9.265e-005	-0.002951	-0.0000	0.0025	0.0000	4.433	9.265e-005	126.7
RohnLAs	0.0003804	8.219e-005	-0.002713	-0.0000	0.0009	0.0000	4.957	8.219e-005	113.3
RohnLBS	0.0003451	7.578e-005	-0.002552	-0.0001	0.0017	0.0000	5.22	7.578e-005	106.7
RohnMAs	0.0002371	6.107e-005	-0.002293	-0.0001	0.0004	0.0000	5.743	6.107e-005	93.34
RohnMBS	0.0001846	5.301e-005	-0.002178	-0.0001	0.0020	0.0000	6.006	5.301e-005	86.66
RohnNAs	0.0003218	3.311e-005	-0.001839	-0.0001	0.0034	0.0000	6.662	3.311e-005	70
RohnNBS	0.0002632	1.497e-005	-0.001379	-0.0000	0.0035	0.0000	7.448	1.497e-005	50
RohnOAs	0.0002268	4.036e-006	-0.0008499	-0.0000	0.0029	0.0000	8.235	4.036e-006	30
RohnOBS	0.0002249	-8.515e-008	-0.0002784	-0.0000	0.0012	0.0000	9.022	-8.515e-008	10
RohnPAs	0.001268	0.0001255	-0.003459	-0.0000	0.0002	0.0000	0.5845	-1.01	180
RohnPBS	0.001268	0.0001255	-0.003426	-0.0000	0.0037	0.0000	-1.165	0.0001255	180
RohnQAs	0.001268	0.0001255	-0.003461	-0.0022	0.0002	0.0000	0.5845	1.01	180
RohnQBS	0.000802	0.0001121	-0.003442	-0.0015	0.0001	0.0000	0.7811	-1.351	160
RohnRAs	0.000802	0.0001121	-0.003401	-0.0000	0.0028	0.0000	-1.56	0.0001121	160
RohnRBS	0.000802	0.0001121	-0.003444	-0.0015	0.0001	0.0000	0.7811	1.352	160
RohnSAs	0.000556	0.0001018	-0.003458	-0.0016	0.0002	0.0000	0.9776	-1.692	140
RohnSBS	0.000556	0.0001018	-0.00342	-0.0000	0.0026	0.0000	-1.953	0.0001018	140
RohnTAs	0.000556	0.0001019	-0.00346	-0.0016	0.0002	0.0000	0.9776	1.692	140
RohnTBS	0.0003318	8.744e-005	-0.003639	-0.0027	0.0010	0.0000	1.174	-2.033	120
RohnUAs	0.0003317	8.752e-005	-0.003609	-0.0000	0.0036	-0.0000	-2.347	8.752e-005	120
RohnUBS	0.0003318	8.76e-005	-0.003643	-0.0026	0.0010	0.0000	1.174	-2.033	120
RohnVAs	0.0001872	6.857e-005	-0.002947	-0.0017	0.0006	-0.0000	1.37	-2.373	100
RohnVBS	0.0001871	6.864e-005	-0.002928	-0.0001	0.0021	-0.0000	-2.74	6.864e-005	100
RohnWAs	0.0001872	6.872e-005	-0.002952	0.0015	0.0006	0.0000	1.37	2.373	100
RohnWBS	0.000103	4.956e-005	-0.003178	-0.0026	0.0013	0.0000	1.567	-2.714	80
RohnXAs	0.0001028	4.504e-005	-0.003165	-0.0001	0.0031	-0.0000	3.134	4.504e-005	80
RohnXBS	0.000103	5.035e-005	-0.003194	0.0023	0.0013	0.0000	1.567	2.714	80
RohnYAs	5.032e-005	2.339e-005	-0.003665	-0.0033	0.0018	-0.0000	1.764	-3.055	60
RohnYBS	5.032e-005	2.361e-005	-0.003657	-0.0000	0.0039	-0.0000	-3.527	2.361e-005	60
RohnZAs	1.92e-005	9.179e-005	-0.003671	0.0032	0.0018	0.0000	1.764	3.055	60
RohnZBS	1.916e-005	9.179e-005	-0.004095	-0.0029	0.0016	-0.0000	1.96	-3.395	40
RohnAa1	1.92e-005	9.219e-005	-0.004099	0.0028	0.0013	0.0000	-3.92	9.2e-005	40
RohnAb1	3.668e-006	1.764e-006	-0.004573	-0.0023	0.0013	-0.0000	2.157	-3.736	20
RohnAc1	3.662e-006	1.779e-006	-0.00457	-0.0000	0.0027	0.0000	4.314	1.779e-006	20
RohnAd1	3.688e-006	1.782e-006	-0.004574	0.0023	0.0013	0.0000	2.157	-3.736	20
RohnAa2	0.001168	0.0001038	-0.006911	0.0000	0.0010	-0.0000	-2.264	-3.923	175
RohnAb2	0.001164	0.0001347	-0.006921	-0.0001	0.0011	0.0000	-2.264	3.923	175
RohnAc2	0.001079	0.0001151	-0.00688	-0.0002	0.0012	-0.0000	-2.362	-4.094	170
RohnAd2	0.001078	0.0001174	-0.006883	0.0001	0.0012	0.0000	-2.362	4.094	170
RohnAa3	0.0009697	9.025e-005	-0.006833	0.0001	0.0011	-0.0000	-2.461	-4.264	165
RohnAb3	0.0009697	0.0001378	-0.006835	-0.0001	0.0011	0.0000	-2.461	4.264	165
RohnAc3	0.0007653	8.313e-005	-0.006711	-0.0000	0.0010	-0.0000	-2.461	-4.605	155
RohnAd3	0.0007658	0.0001373	-0.006714	-0.0000	0.0010	0.0000	-2.461	4.605	155
RohnAa4	0.0006983	0.0001054	-0.006637	-0.0001	0.0010	-0.0000	-2.587	-4.776	150
RohnAb4	0.0006983	0.0001103	-0.006641	0.0001	0.0010	0.0000	-2.587	4.776	150

Joint Label	X (kips)	Y (kips)	Z (kips)	Comp. Usage %	Uplift Usage %	Result. Force (kips)	Usage %	X-M. Moment (ft-k)	Usage %	Y-M. Moment (ft-k)	Usage %	Z-M. Moment (ft-k)	Usage %
RohnBc1	0.0006028	7.214e-005	-0.006518	-0.0001	0.0009	-0.0000	-2.855	-4.947	145				
RohnBc2	0.000603	0.0001379	-0.006524	-0.0000	0.0009	0.0000	2.855	4.947	145				
RohnCa1	0.0004384	4.401e-005	-0.006235	-0.0007	0.0010	-0.0000	-3.085	-5.344	133.3				
RohnCa2	0.0004385	0.0001503	-0.006243	0.0006	0.0010	0.0000	3.085	5.344	133.3				
RohnCb1	0.0003559	2.387e-005	-0.006028	-0.0004	0.0004	-0.0000	-3.216	-5.571	126.7				
RohnCb2	0.0003559	0.0001605	-0.006036	-0.0005	0.0004	0.0000	3.216	5.571	126.7				
RohnDa1	0.0002214	-6.054e-006	-0.005463	-0.0009	0.0009	-0.0000	-3.478	-6.025	113.3				
RohnDa2	0.0002221	0.0001704	-0.005473	0.0008	0.0009	0.0000	3.478	6.025	113.3				
RohnDb1	0.0001656	-2.306e-005	-0.005093	-0.0005	0.0000	-0.0000	-3.609	-6.252	106.7				
RohnDb2	0.000166	0.0001748	-0.005106	-0.0006	0.0000	0.0000	3.609	6.252	106.7				
RohnEa1	0.0001126	-7.897e-006	-0.004434	-0.0006	0.0006	-0.0000	-3.871	-6.706	93.34				
RohnEa2	0.000113	0.0001303	-0.004451	-0.0005	0.0006	0.0000	3.871	6.706	93.34				
RohnEb1	9.674e-005	5.177e-006	-0.004129	-0.0006	-0.0002	-0.0000	-4.003	-6.933	86.66				
RohnEb2	9.725e-005	0.0001015	-0.004148	-0.0007	-0.0002	0.0000	4.003	6.933	86.66				
RohnFa1	-5.096e-005	-0.0001789	-0.003366	-0.0001	0.0000	0.0000	-4.331	-7.501	70				
RohnFa2	-5.201e-005	0.0002461	-0.003386	-0.0003	0.0000	0.0000	4.331	7.501	70				
RohnGa1	-8.261e-005	-0.0001827	-0.00246	-0.0001	0.0001	0.0000	-4.724	-8.182	50				
RohnGa2	-8.411e-005	0.0002133	-0.002475	-0.0000	0.0001	0.0000	4.724	8.182	50				
RohnHa1	-0.0001198	-0.0002179	-0.001484	-0.0001	0.0000	-0.0000	-5.118	-8.864	30				
RohnHa2	-0.0001206	0.0002272	-0.001491	-0.0001	0.0000	0.0000	5.118	8.864	30				
RohnIa1	-0.0001117	-0.0001931	-0.0004827	-0.0000	-0.0000	-0.0000	-5.513	-9.548	10				
RohnIa2	-0.0001123	0.0001937	-0.000485	-0.0001	-0.0000	0.0000	5.513	9.548	10				
SNB-Aa1	0.001162	0.0001031	-0.003281	-0.0012	0.0004	0.0000	-1.264	-2.191	175				
SNB-Aa2	0.001162	0.0001374	-0.003284	-0.0013	0.0004	0.0000	1.264	2.191	175				
SNB-Ab1	0.001074	0.0001144	-0.003262	-0.0006	0.0015	-0.0000	-1.362	-2.362	170				
SNB-Ab2	0.001073	0.0001186	-0.003266	-0.0005	0.0015	0.0000	1.362	2.362	170				
SNB-Ac1	0.0009616	9.123e-005	-0.003237	-0.0009	0.0006	-0.0000	-1.461	-2.532	165				
SNB-Ac2	0.0009616	0.0001368	-0.00324	-0.0009	0.0006	0.0000	1.461	2.532	165				
SNB-Ba1	0.0007682	7.789e-005	-0.003175	-0.0008	0.0006	-0.0000	-1.658	-2.873	155				
SNB-Ba2	0.0007682	0.0001423	-0.003178	-0.0008	0.0006	0.0000	1.658	2.873	155				
SNB-Bb1	0.0006987	0.0001016	-0.003139	-0.0005	0.0012	-0.0000	-1.757	-3.044	150				
SNB-Bb2	0.0006987	0.0001139	-0.003143	-0.0004	0.0012	0.0000	1.757	3.044	150				
SNB-Bc1	0.0006031	6.864e-005	-0.003097	-0.0009	0.0003	-0.0000	-1.855	-3.214	145				
SNB-Bc2	0.0006031	0.0001413	-0.0031	-0.0009	0.0003	0.0000	1.855	3.214	145				
SNB-Ca1	0.0004366	4.197e-005	-0.002973	-0.0001	0.0007	-0.0000	-2.085	-3.611	133.3				
SNB-Ca2	0.0004368	0.0001524	-0.002978	-0.0000	0.0007	0.0000	2.085	3.611	133.3				
SNB-Cb1	0.000354	2.243e-005	-0.002878	-0.0016	-0.0003	-0.0000	-2.216	-3.839	126.7				
SNB-Cb2	0.0003543	0.0001624	-0.002884	-0.0016	-0.0003	0.0000	2.216	3.839	126.7				
SNB-Da1	0.0002199	-7.465e-006	-0.00265	-0.0003	0.0003	-0.0000	-2.478	-4.293	113.3				
SNB-Da2	0.0002201	0.0001715	-0.002658	-0.0004	0.0003	0.0000	2.478	4.293	113.3				
SNB-Db1	0.0001654	-2.485e-005	-0.002497	-0.0011	-0.0003	-0.0000	-2.609	-4.52	106.7				
SNB-Db2	0.0001654	0.0001764	-0.002506	-0.0012	-0.0003	0.0000	2.609	4.52	106.7				
SNB-Ea1	0.0001128	-9.338e-006	-0.002248	-0.0000	0.0002	-0.0000	-2.871	-4.974	93.34				
SNB-Ea2	0.0001127	0.0001315	-0.002259	-0.0002	0.0002	0.0000	2.871	4.974	93.34				
SNB-Eb1	9.723e-005	3.795e-006	-0.002137	-0.0015	-0.0007	-0.0000	-3.003	-5.201	86.66				
SNB-Eb2	9.705e-005	0.0001025	-0.002148	-0.0016	-0.0007	0.0000	3.003	5.201	86.66				
SNB-Fa1	-5.219e-005	-0.0001789	-0.001806	-0.0028	-0.0015	-0.0000	-3.331	-5.769	70				
SNB-Fa2	-5.285e-005	0.0002463	-0.001818	-0.0029	-0.0015	0.0000	3.331	5.769	70				
SNB-Ga1	-8.34e-005	-0.0001825	-0.001357	-0.0029	-0.0016	-0.0000	-3.724	-6.45	50				
SNB-Ga2	-8.408e-005	0.0002136	-0.001365	-0.0030	-0.0016	0.0000	3.724	6.45	50				
SNB-Ha1	-0.00012	-0.0002178	-0.0008371	-0.0024	-0.0014	-0.0000	-4.117	-7.132	30				
SNB-Ha2	-0.0001207	0.0002272	-0.0008424	-0.0025	-0.0014	0.0000	4.117	7.132	30				
SNB-Ia1	-0.0001117	-0.0001931	-0.0002745	-0.0011	-0.0006	-0.0000	-4.511	-7.813	10				
SNB-Ia2	-0.0001121	0.0001937	-0.0002761	-0.0011	-0.0006	0.0000	4.511	7.813	10				

Joint Support Reactions for Load Case "0.9DL":

Joint Label	X (kips)	Y (kips)	Z (kips)	Comp. Usage %	Uplift Usage %	Result. Force (kips)	Usage %	X-M. Moment (ft-k)	Usage %	Y-M. Moment (ft-k)	Usage %	Z-M. Moment (ft-k)	Usage %
RohnJP	-0.80	0.00	0.0	0.0	0.0	14.94	0.0	-0.00	0.0	-0.2	0.0	-0.00	0.0
SNB-JP	-0.41	0.00	0.0	0.0	0.0	13.89	0.0	-0.00	0.0	-0.4	0.0	-0.00	0.0
RohnJ1	0.40	0.0	0.0	0.0	0.0	14.77	0.0	-0.18	0.0	0.1	0.0	-0.00	0.0
RohnJ2	0.40	0.0	-0.69	0.0	0.0	14.86	0.0	0.18	0.0	0.1	0.0	-0.00	0.0
SNB-J1	0.21	0.0	0.35	0.0	0.0	13.71	0.0	-0.31	0.0	0.2	0.0	-0.00	0.0
SNB-J2	0.21	0.0	-0.36	0.0	0.0	13.79	0.0	0.31	0.0	0.2	0.0	-0.00	0.0

Joint Displacements, Loads and Member Forces on Joints for Load Case "0.9DL":

Label	External X Load (kips)	External Y Load (kips)	External Z Load (kips)	Member X Force (kips)	Member Y Force (kips)	Member Z Force (kips)	Member Force (kips)	Disp. (ft)	Y Disp. (ft)	Z Disp. (ft)
RohnAP	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.2657	0.0013	0.0001	-0.0071
RohnBP	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.9541	0.0009	0.0001	-0.0070
RohnCP	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.3841	0.0006	0.0001	-0.0065
RohnDP	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.4656	0.0003	0.0001	-0.0059
RohnEP	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.5771	0.0002	0.0001	-0.0048
RohnFP	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.7827	0.0001	0.0000	-0.0039
RohnGP	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0426	0.0001	0.0000	-0.0029
RohnHP	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0378	0.0000	0.0000	-0.0020
RohnIP	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.1643	0.0000	0.0000	-0.0010
RohnJP	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-14.2863	0.0000	0.0000	0.0000
RohnKP	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1397	0.0013	0.0001	-0.0034
RohnLP	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.3025	0.0009	0.0001	-0.0033
RohnMP	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.3841	0.0006	0.0001	-0.0031
RohnNP	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.4656	0.0003	0.0001	-0.0029
RohnOP	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.5771	0.0002	0.0001	-0.0024
RohnPP	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.7827	0.0001	0.0000	-0.0021
RohnQP	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.9526	0.0001	0.0000	-0.0016
RohnRP	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0378	0.0000	0.0000	-0.0011
RohnSP	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0378	0.0000	0.0000	-0.0011
RohnTP	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.1643	0.0000	0.0000	-0.0006
RohnUP	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-13.1534	0.0000	0.0000	0.0000
RohnVP	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.3552	0.0012	0.0001	-0.0070
RohnW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1868	0.0012	0.0001	-0.0070
RohnX	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1397	0.0011	0.0001	-0.0070
RohnY	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1877	0.0010	0.0001	-0.0070



RehncA2	0.0000	0.0000	-0.8083	0.0000	0.0000	0.8083	0.0004	0.0002	-0.0062
RohncB1	0.0000	0.0000	-1.2021	0.0000	0.0000	1.2021	0.0004	0.0000	-0.0060
RohncB2	0.0000	0.0000	-1.2021	0.0000	0.0000	1.2021	0.0004	0.0002	-0.0060
RohndA1	0.0000	0.0000	-1.0449	0.0000	0.0000	1.0449	0.0002	-0.0000	-0.0055
RohndA2	0.0000	0.0000	-1.0449	0.0000	0.0000	1.0449	0.0002	-0.0000	-0.0055
RohndB1	0.0000	0.0000	-0.2443	0.0000	0.0000	0.2443	0.0002	-0.0000	-0.0051
RohndB2	0.0000	0.0000	-0.2443	0.0000	0.0000	0.2443	0.0002	-0.0000	-0.0051
RohneA1	0.0000	0.0000	-0.3328	0.0000	0.0000	0.3328	0.0001	-0.0000	-0.0044
RohneA2	0.0000	0.0000	-0.3328	0.0000	0.0000	0.3328	0.0001	-0.0000	-0.0044
RohneB1	0.0000	0.0000	-0.3328	0.0000	0.0000	0.3328	0.0001	-0.0001	-0.0041
RohneB2	0.0000	0.0000	-0.3328	0.0000	0.0000	0.3328	0.0001	-0.0002	-0.0034
RohneF1	0.0000	0.0000	-0.4499	0.0000	0.0000	0.4499	-0.0001	0.0002	-0.0034
RohneF2	0.0000	0.0000	-0.4499	0.0000	0.0000	0.4499	-0.0001	0.0002	-0.0034
RohneG1	0.0000	0.0000	-0.5027	0.0000	0.0000	0.5027	-0.0001	0.0002	-0.0025
RohneG2	0.0000	0.0000	-0.5027	0.0000	0.0000	0.5027	-0.0001	0.0002	-0.0025
RohneH1	0.0000	0.0000	-0.5351	0.0000	0.0000	0.5351	-0.0001	0.0002	-0.0015
RohneH2	0.0000	0.0000	-0.5351	0.0000	0.0000	0.5351	-0.0001	0.0002	-0.0015
RohneI1	0.0000	0.0000	-0.6292	0.0000	0.0000	0.6292	-0.0001	0.0002	-0.0005
RohneI2	0.0000	0.0000	-0.6292	0.0000	0.0000	0.6292	-0.0001	0.0002	-0.0005
SNB-Ba1	0.0000	0.0000	-0.1397	0.0000	0.0000	0.1397	0.0012	0.0001	-0.0033
SNB-Ba2	0.0000	0.0000	-0.1397	0.0000	0.0000	0.1397	0.0012	0.0001	-0.0033
SNB-Ab1	0.0000	0.0000	-0.1397	0.0000	0.0000	0.1397	0.0011	0.0001	-0.0033
SNB-Ab2	0.0000	0.0000	-0.1397	0.0000	0.0000	0.1397	0.0011	0.0001	-0.0033
SNB-Ac1	0.0000	0.0000	-0.1397	0.0000	0.0000	0.1397	0.0010	0.0001	-0.0032
SNB-Ac2	0.0000	0.0000	-0.1397	0.0000	0.0000	0.1397	0.0010	0.0001	-0.0032
SNB-Ba1	0.0000	0.0000	-0.1628	0.0000	0.0000	0.1628	0.0008	0.0001	-0.0032
SNB-Ba2	0.0000	0.0000	-0.1628	0.0000	0.0000	0.1628	0.0008	0.0001	-0.0032
SNB-Bb1	0.0000	0.0000	-0.1628	0.0000	0.0000	0.1628	0.0007	0.0001	-0.0031
SNB-Bb2	0.0000	0.0000	-0.1628	0.0000	0.0000	0.1628	0.0007	0.0001	-0.0031
SNB-Bc1	0.0000	0.0000	-0.1628	0.0000	0.0000	0.1628	0.0006	0.0001	-0.0031
SNB-Bc2	0.0000	0.0000	-0.1628	0.0000	0.0000	0.1628	0.0006	0.0001	-0.0031
SNB-Ca1	0.0000	0.0000	-0.2213	0.0000	0.0000	0.2213	0.0004	0.0000	-0.0030
SNB-Ca2	0.0000	0.0000	-0.2213	0.0000	0.0000	0.2213	0.0004	0.0000	-0.0030
SNB-Cb1	0.0000	0.0000	-0.2213	0.0000	0.0000	0.2213	0.0004	0.0000	-0.0029
SNB-Cb2	0.0000	0.0000	-0.2213	0.0000	0.0000	0.2213	0.0004	0.0000	-0.0029
SNB-Da1	0.0000	0.0000	-0.2443	0.0000	0.0000	0.2443	0.0002	-0.0000	-0.0027
SNB-Da2	0.0000	0.0000	-0.2443	0.0000	0.0000	0.2443	0.0002	-0.0000	-0.0027
SNB-Db1	0.0000	0.0000	-0.2443	0.0000	0.0000	0.2443	0.0002	-0.0000	-0.0025
SNB-Db2	0.0000	0.0000	-0.2443	0.0000	0.0000	0.2443	0.0002	-0.0000	-0.0025
SNB-Ea1	0.0000	0.0000	-0.3328	0.0000	0.0000	0.3328	0.0001	-0.0000	-0.0022
SNB-Ea2	0.0000	0.0000	-0.3328	0.0000	0.0000	0.3328	0.0001	-0.0000	-0.0022
SNB-Eb1	0.0000	0.0000	-0.3328	0.0000	0.0000	0.3328	0.0001	-0.0001	-0.0021
SNB-Eb2	0.0000	0.0000	-0.3328	0.0000	0.0000	0.3328	0.0001	-0.0001	-0.0021
SNB-Fa1	0.0000	0.0000	-0.4499	0.0000	0.0000	0.4499	-0.0001	0.0002	-0.0018
SNB-Fa2	0.0000	0.0000	-0.4499	0.0000	0.0000	0.4499	-0.0001	0.0002	-0.0018
SNB-Ga1	0.0000	0.0000	-0.5027	0.0000	0.0000	0.5027	-0.0001	0.0002	-0.0014
SNB-Ga2	0.0000	0.0000	-0.5027	0.0000	0.0000	0.5027	-0.0001	0.0002	-0.0014
SNB-Ha1	0.0000	0.0000	-0.5351	0.0000	0.0000	0.5351	-0.0001	0.0002	-0.0008
SNB-Ha2	0.0000	0.0000	-0.5351	0.0000	0.0000	0.5351	-0.0001	0.0002	-0.0008
SNB-Ia1	0.0000	0.0000	-0.6292	0.0000	0.0000	0.6292	-0.0001	0.0002	-0.0003
SNB-Ia2	0.0000	0.0000	-0.6292	0.0000	0.0000	0.6292	-0.0001	0.0002	-0.0003

Moments for Angles Modeled as Beams:

Label	Angle Torsion (ft-lbs)	Origin X Moment (ft-lbs)	Origin Y Moment (ft-lbs)	Origin X Moment (ft-lbs)	Origin Y Moment (ft-lbs)	End X Moment (ft-lbs)	End Y Moment (ft-lbs)	End X Shear (lbs)	End Y Shear (lbs)
Rohr-LA1P	0.00	0.00	-0.08	-0.41	-2.62	-0.08	-0.54	-0.08	-0.54
Rohr-LA11	0.00	-0.06	0.04	-2.43	1.02	-0.50	0.21	-0.50	0.21
Rohr-LA12	-0.00	0.13	0.07	2.13	1.33	0.45	0.28	0.45	0.28
Rohr-LA2P	0.00	0.41	-2.62	0.10	3.70	0.10	1.26	0.10	1.26
Rohr-LA21	-0.00	2.43	-1.02	3.31	-1.73	1.15	-0.55	1.15	-0.55
Rohr-LA22	-0.00	-2.13	-1.33	-3.29	-1.83	-1.08	-0.63	-1.08	-0.63
Rohr-LA3P	0.00	-0.10	-3.70	0.02	-4.97	-0.02	-1.73	-0.02	-1.73
Rohr-LA31	0.00	-3.31	1.73	-4.40	2.19	-1.54	0.78	-1.54	0.78
Rohr-LA32	-0.00	3.29	1.83	4.37	1.15	1.53	0.79	1.53	0.79
Rohr-LA4P	0.00	-0.02	4.97	-0.05	7.06	-0.05	2.41	-0.05	2.41
Rohr-LA41	0.00	4.40	-2.19	5.74	-3.30	2.02	-1.10	2.02	-1.10

Rohn-LA42	-0.00	-4.37	-2.15	-5.74	-3.24	-2.02	-1.08
Rohn-LB1P	0.00	0.05	-7.26	0.10	-8.67	0.03	-3.18
Rohn-LB11	0.01	5.75	3.28	-7.15	5.51	-2.58	1.76
Rohn-LB12	-0.01	5.74	3.22	7.22	5.43	2.59	1.73
Rohn-LB2P	0.00	-0.10	8.67	-0.02	10.02	-0.02	3.74
Rohn-LB21	0.01	7.15	7.90	-4.83	3.01	-2.07	2.07
Rohn-LB22	-0.01	-7.22	-5.43	-7.87	-4.79	-3.02	-2.04
Rohn-LB3P	0.00	-0.02	-10.02	0.02	-9.83	0.01	-3.97
Rohn-LB31	0.01	-7.90	4.83	8.47	5.59	-3.27	2.08
Rohn-LB32	-0.01	7.87	4.79	-8.50	-3.27	2.07	2.07
Rohn-LB4P	0.00	-0.02	9.83	0.03	10.28	0.00	4.02
Rohn-LB41	0.01	8.47	-5.59	8.35	-4.70	3.36	-2.06
Rohn-LB42	-0.01	-8.50	-5.59	-8.30	-4.71	-3.36	-2.06
Rohn-LC1P	0.00	-0.03	-10.28	0.06	-2.66	0.00	-1.94
Rohn-LC11	0.01	-8.35	4.70	-2.40	2.03	-1.61	1.01
Rohn-LC12	-0.01	8.30	4.71	2.43	1.98	1.61	1.00
Rohn-LC2P	0.00	-0.06	2.66	-0.11	-8.29	-0.02	-0.84
Rohn-LC21	0.01	2.40	-2.03	7.61	4.45	-0.78	0.36
Rohn-LC22	-0.01	-2.43	1.98	-7.54	-4.45	0.76	0.38
Rohn-LC3P	0.00	0.11	8.29	0.05	17.08	0.02	3.81
Rohn-LC31	0.01	7.61	-4.45	14.48	-7.69	3.31	-1.82
Rohn-LC32	-0.01	-7.54	-4.53	-14.37	-7.69	-3.29	-1.83
Rohn-LD1P	0.00	-0.05	-17.08	0.16	-6.86	0.02	-3.59
Rohn-LD11	0.01	-14.48	7.69	-6.54	4.13	-3.15	1.77
Rohn-LD12	-0.01	14.37	7.69	6.67	4.02	3.16	1.76
Rohn-LD2P	0.00	-0.16	6.86	-0.02	-16.46	-0.03	-1.44
Rohn-LD21	0.01	6.54	-4.13	-14.36	9.34	-1.17	0.78
Rohn-LD22	-0.01	-6.67	4.02	14.47	9.42	1.17	0.81
Rohn-LD3P	0.00	0.02	16.47	0.09	29.11	0.02	6.84
Rohn-LD31	0.01	14.36	-9.34	24.47	-13.93	5.83	-3.49
Rohn-LD32	-0.01	-14.47	-9.42	-24.40	-14.00	-5.83	-3.51
Rohn-LE1P	0.00	-0.09	-29.11	-0.03	-16.80	-0.02	-6.89
Rohn-LE11	0.01	-24.47	13.93	-14.74	8.99	-5.88	3.44
Rohn-LE12	-0.01	24.40	14.76	14.00	9.03	5.88	3.45
Rohn-LE2P	0.00	0.03	16.80	0.04	-10.96	0.01	0.87
Rohn-LE21	0.01	14.74	-8.99	-9.63	6.07	0.76	-0.44
Rohn-LE22	-0.01	-14.76	9.03	9.75	6.10	-0.75	-0.44
Rohn-LE3P	0.00	-0.04	10.96	0.15	51.73	0.02	9.41
Rohn-LE31	0.01	9.63	-6.07	44.05	-25.31	8.05	-4.71
Rohn-LE32	-0.01	-9.75	-6.10	-44.18	-25.31	-8.05	-4.75
Rohn-LF1P	0.00	-0.15	-51.73	-0.46	-84.20	-0.06	-13.58
Rohn-LF11	0.01	-44.05	25.31	-72.84	42.76	-11.68	6.80
Rohn-LF12	-0.01	44.18	25.56	72.63	43.17	11.67	6.87
Rohn-LF2P	0.00	0.46	84.20	0.26	97.04	0.07	18.11
Rohn-LF21	0.01	72.84	-42.76	82.99	-47.98	15.57	-9.07
Rohn-LF22	-0.01	-72.63	43.17	-83.25	-48.43	-15.58	9.15
Rohn-LG1P	0.00	-0.26	-97.04	-0.58	-103.30	-0.08	-20.02
Rohn-LG11	0.01	-82.99	47.98	-89.35	52.15	-17.22	10.00
Rohn-LG12	-0.01	83.25	48.43	89.05	52.62	17.21	10.10
Rohn-LG2P	0.00	0.58	103.30	0.18	111.61	0.08	21.50
Rohn-LG21	0.01	89.36	-52.14	93.94	-55.49	18.52	-10.76
Rohn-LG22	-0.01	-89.03	-52.62	-96.20	-55.85	-18.51	-10.84
Rohn-LH1P	0.00	-0.18	-111.61	-0.33	-122.47	-0.05	-23.41
Rohn-LH11	0.01	-95.94	55.49	-105.92	61.69	-20.17	11.71
Rohn-LH12	-0.01	96.20	55.85	105.72	61.95	20.18	11.77
Rohn-LH2P	0.00	0.33	122.47	0.06	148.42	0.04	27.07
Rohn-LH21	0.01	105.92	-61.69	121.59	-73.83	23.33	-13.54
Rohn-LH22	-0.01	-105.72	-61.95	-121.93	-74.10	-23.35	-13.60
Rohn-LI1P	0.00	-0.06	-148.42	-0.59	-202.04	-0.06	-35.02
Rohn-LI11	0.01	-121.59	73.83	-174.97	101.97	-30.23	17.57
Rohn-LI12	-0.01	121.93	74.10	174.49	102.37	30.22	17.63
Rohn-LI2P	0.00	0.59	202.04	0.40	206.20	0.10	40.79
Rohn-LI21	0.01	174.97	-101.97	177.75	-103.24	35.25	-20.51
Rohn-LI22	-0.01	-174.49	-102.37	-177.79	-103.72	-35.20	20.59
Rohn-H1P	0.00	-0.06	-0.00	0.05	-0.00	-0.00	-0.00
Rohn-H11	0.00	0.04	0.00	0.08	0.00	0.01	0.00
Rohn-H12	-0.00	-0.08	-0.00	0.04	-0.00	-0.01	-0.00
Rohn-H2P	0.00	0.10	-0.00	-0.02	0.00	0.01	-0.00
Rohn-H21	-0.00	-0.03	-0.00	0.02	0.00	-0.00	-0.00

Rohn-H22	0.00	0.03	0.00	0.10	0.00	0.02	0.00	0.00	0.00
SNB-LA1P	-0.00	-0.04	56.37	-0.04	10.75	-0.02	13.41	-0.02	13.41
SNB-LA11	0.00	48.74	-28.17	9.29	-5.40	11.60	-6.71	-0.02	-6.71
SNB-LA12	-0.00	-48.99	-28.26	-0.51	-5.48	-11.69	-6.74	-0.01	-6.74
SNB-LA2P	-0.00	0.04	-10.75	-0.09	3.79	-0.01	0.66	-0.01	0.66
SNB-LA21	0.00	-9.29	5.40	3.14	-2.11	1.23	0.69	0.00	0.69
SNB-LA22	-0.00	9.51	-5.49	-3.22	-2.05	1.26	-0.37	0.02	-0.37
SNB-LA3P	-0.00	0.09	-3.79	-0.01	-16.09	0.02	2.07	0.00	2.07
SNB-LA31	0.00	-3.14	2.11	13.55	8.23	-3.34	2.05	0.00	2.05
SNB-LA32	-0.00	3.22	-2.05	-13.48	-8.20	3.34	-2.07	0.00	-2.07
SNB-LA4P	-0.00	0.01	16.09	0.02	48.44	0.01	12.89	0.00	12.89
SNB-LA41	0.00	13.55	-8.23	40.90	-23.73	10.88	-6.39	0.00	-6.39
SNB-LA42	-0.00	-13.48	-8.20	-40.81	-23.70	-10.85	-6.37	0.02	-6.37
SNB-LB1P	-0.00	0.03	82.55	0.05	5.63	0.02	17.62	0.00	17.62
SNB-LB11	0.02	71.44	-40.67	4.58	-1.19	13.19	-8.37	0.00	-8.37
SNB-LB12	-0.02	-71.33	-40.64	-4.47	-1.18	-15.15	-8.36	0.00	-8.36
SNB-LB2P	-0.00	0.05	-5.62	0.03	21.95	-0.00	3.26	0.00	3.26
SNB-LB21	0.02	-4.58	1.19	17.83	-10.05	2.65	-1.77	0.00	-1.77
SNB-LB22	-0.02	4.47	-1.18	-17.75	-10.04	-2.65	-1.77	0.00	-1.77
SNB-LB3P	-0.00	-0.03	-21.94	0.06	-48.68	0.01	-14.11	0.00	-14.11
SNB-LB31	0.02	-17.83	10.05	-42.15	25.87	-11.99	7.18	0.00	7.18
SNB-LB32	-0.02	17.75	-10.04	42.24	-25.85	11.99	-7.17	0.00	-7.17
SNB-LB4P	-0.00	-0.06	48.68	-0.01	133.93	-0.01	36.49	0.00	36.49
SNB-LB41	0.02	42.15	-25.87	114.86	-66.61	31.38	-18.48	0.00	-18.48
SNB-LB42	-0.02	-42.24	-25.85	-114.83	-66.58	-31.39	-18.47	0.00	-18.47
SNB-LC1P	-0.00	0.00	75.84	0.02	29.06	0.00	15.74	0.00	15.74
SNB-LC11	0.02	66.83	-38.39	25.12	-13.49	13.80	-7.78	0.00	-7.78
SNB-LC12	-0.02	-66.90	-38.44	-25.12	-13.51	-13.81	-7.79	0.00	-7.79
SNB-LC2P	-0.00	-0.02	-29.06	0.03	-53.74	0.00	-12.38	0.00	-12.38
SNB-LC21	0.02	-25.12	13.49	-46.85	27.77	-10.77	6.17	0.00	6.17
SNB-LC22	-0.02	25.12	-13.51	46.85	-27.73	10.77	-6.17	0.00	-6.17
SNB-LC3P	-0.00	0.03	53.74	-0.01	160.55	-0.01	32.15	0.00	32.15
SNB-LC31	0.02	46.85	-27.77	138.16	-79.94	27.76	-16.16	0.00	-16.16
SNB-LC32	-0.02	-46.85	-27.73	-138.05	-79.86	-27.74	-16.14	0.00	-16.14
SNB-LD1P	-0.00	0.02	189.40	0.13	55.21	0.02	36.70	0.00	36.70
SNB-LD11	0.02	164.98	-95.20	47.38	-26.02	31.86	-18.19	0.00	-18.19
SNB-LD12	-0.01	-165.04	-95.26	-47.24	-26.09	-31.85	-18.21	0.00	-18.21
SNB-LD2P	-0.00	-0.13	-55.21	0.06	-72.87	-0.01	-19.16	0.00	-19.16
SNB-LD21	0.02	-47.38	26.02	-63.26	37.82	-16.55	9.55	0.00	9.55
SNB-LD22	-0.01	47.24	-26.09	63.46	-37.86	16.56	-9.57	0.00	-9.57
SNB-LD3P	-0.00	-0.06	72.87	0.03	178.87	-0.00	37.77	0.00	37.77
SNB-LD31	0.02	63.26	-37.82	153.47	-88.76	32.52	-18.99	0.00	-18.99
SNB-LD32	-0.01	-63.46	-37.86	-153.46	-88.79	-32.55	-19.00	0.00	-19.00
SNB-LE1P	-0.00	-0.07	271.50	0.16	75.68	0.01	52.09	0.00	52.09
SNB-LE11	0.02	236.56	-136.65	65.14	-35.90	45.27	-25.89	0.00	-25.89
SNB-LE12	-0.02	-236.76	-136.68	-65.00	-36.00	-45.27	-25.91	0.00	-25.91
SNB-LE2P	-0.00	-0.16	-75.68	-0.08	-163.37	-0.04	-35.76	0.00	-35.76
SNB-LE21	0.02	-65.14	35.90	-141.93	83.31	-30.98	17.83	0.00	17.83
SNB-LE22	-0.02	65.00	-36.00	142.15	-83.54	30.99	-17.88	0.00	-17.88
SNB-LE3P	-0.00	0.08	163.37	0.09	565.04	0.03	109.29	0.00	109.29
SNB-LE31	0.02	141.93	-83.31	487.55	-282.29	94.44	-54.85	0.00	-54.85
SNB-LE32	-0.02	-142.15	-83.53	-488.06	-282.69	-94.55	-54.95	0.00	-54.95
SNB-LF1P	-0.01	-0.17	145.56	-0.43	-170.38	-0.06	-2.50	0.00	-2.50
SNB-LF11	0.01	127.77	-73.52	146.76	86.87	-1.90	1.35	0.00	1.35
SNB-LF12	-0.02	-127.61	-73.03	-146.59	-87.27	1.90	-1.42	0.00	-1.42
SNB-LF2P	0.01	0.43	170.38	0.11	546.65	0.05	71.65	0.00	71.65
SNB-LF21	0.01	146.76	-86.87	470.91	-273.24	61.72	-35.98	0.00	-35.98
SNB-LF22	-0.02	-146.59	-87.26	-471.59	-273.77	-61.77	-36.08	0.00	-36.08
SNB-LG1P	-0.01	-0.15	562.16	-1.01	-249.02	-0.12	31.29	0.00	31.29
SNB-LG11	0.01	489.35	-281.66	215.09	126.86	-27.41	-15.47	0.00	-15.47
SNB-LG12	-0.03	-488.78	-281.15	-214.34	-127.60	27.42	-15.34	0.00	-15.34
SNB-LG2P	0.01	1.01	249.02	0.29	991.21	0.13	123.93	0.00	123.93
SNB-LG21	0.01	215.09	-126.86	855.52	-495.42	106.98	-62.18	0.00	-62.18
SNB-LG22	-0.03	-214.34	-127.60	-856.34	-496.23	-106.99	-62.34	0.00	-62.34
SNB-LH1P	-0.01	-0.30	422.79	-1.07	-274.77	-0.14	14.79	0.00	14.79
SNB-LH11	0.01	368.89	-212.08	237.32	139.15	13.15	-7.29	0.00	-7.29
SNB-LH12	-0.02	-368.10	-211.28	-236.65	-140.01	-13.14	-7.12	0.00	-7.12
SNB-LH2P	0.01	1.07	274.77	0.40	883.89	0.15	115.78	0.00	115.78
SNB-LH21	0.01	237.32	-139.15	762.67	-441.58	99.92	-58.03	0.00	-58.03



SNB-LH22	-0.02	-236.65	-140.01	-763.45	-442.49	-99.93	-58.21
SNB-LI1P	0.01	-0.40	800.04	-1.52	-172.43	-0.19	62.71
SNB-LI11	0.00	695.54	-401.00	-149.12	86.64	54.60	-31.21
SNB-LI12	-0.01	-694.70	-400.05	147.95	89.72	-54.63	-31.01
SNB-LI2P	0.01	1.52	172.43	0.85	356.10	0.24	52.81
SNB-LI21	0.00	149.12	-88.64	306.22	-178.41	45.50	-26.68
SNB-LI22	-0.01	-147.95	-89.72	-306.43	-179.51	-45.40	-26.90
SNB-HI1ap	-0.01	32.60	-0.12	108.61	-0.09	69.89	-0.10
SNB-HI1p	-0.01	-108.61	0.09	-32.52	0.11	-69.85	0.10
SNB-HI1C	-0.00	32.48	-0.12	108.59	-0.11	69.82	-0.11
SNB-HI1CP	0.00	-108.59	0.11	-32.68	0.11	-69.92	0.11
SNB-HI2P	0.01	32.62	-0.11	108.61	-0.13	69.90	-0.12
SNB-HI2P	0.01	-108.61	0.13	-32.50	0.11	-69.84	0.12
SNB-HI2ap	-0.04	75.60	-0.16	113.88	0.16	70.10	0.12
SNB-HI2ap	-0.04	-75.60	0.16	-113.88	-0.17	-69.64	-0.12
SNB-HI2CP	0.00	75.16	-0.14	113.78	0.15	69.90	0.11
SNB-HI2CP	0.00	-75.16	0.14	-113.78	-0.15	-69.84	-0.11
SNB-HI2eP	0.04	74.27	0.17	113.87	0.15	69.61	0.12
SNB-HI2eP	0.04	-74.27	-0.17	-113.87	-0.15	-70.14	-0.11
SNB-H3aP	-0.00	121.12	1.05	154.22	1.03	81.36	0.62
SNB-H3aP	-0.00	-154.22	-1.05	-121.18	-1.05	-81.37	-0.62
SNB-H3CP	-0.00	121.14	1.05	154.22	1.09	81.36	0.63
SNB-H3CP	-0.00	-154.22	-1.09	-121.16	-1.05	-81.37	-0.63
SNB-H3eP	0.00	121.19	1.05	154.22	1.04	81.38	0.62
SNB-H3eP	0.00	-154.22	-1.04	-121.11	-1.05	-81.35	-0.62
SNB-H4aP	-0.01	202.04	1.98	247.61	1.96	110.59	0.97
SNB-H4aP	-0.01	-247.61	-1.98	-202.12	-1.98	-110.61	-0.97
SNB-H4CP	-0.00	202.13	1.98	247.59	2.02	110.60	0.98
SNB-H4CP	-0.00	-247.59	-2.02	-202.08	-1.98	-110.59	-0.98
SNB-H4eP	0.01	202.10	1.97	247.61	1.96	110.60	0.97
SNB-H4eP	0.01	-247.61	-1.96	-202.06	-1.97	-110.59	-0.97
SNB-H5aP	-0.00	260.06	2.78	319.51	2.77	122.10	1.17
SNB-H5aP	-0.00	-319.51	-2.77	-260.14	-2.79	-122.12	-1.17
SNB-H5CP	0.00	260.03	2.78	319.51	2.83	122.09	1.18
SNB-H5CP	0.00	-319.51	-2.83	-260.18	-2.78	-122.12	-1.18
SNB-H5eP	0.00	260.21	2.79	319.51	2.77	122.13	1.17
SNB-H5eP	0.00	-319.51	-2.77	-259.99	-2.79	-122.09	-1.17
SNB-H6aP	-0.02	410.25	2.81	492.49	2.80	166.30	1.03
SNB-H6aP	-0.02	-492.49	-2.80	-410.39	-2.81	-166.33	-1.03
SNB-H6CP	0.01	410.22	2.82	492.45	2.85	166.29	1.05
SNB-H6CP	0.01	-492.45	-2.85	-410.51	-2.82	-166.34	-1.04
SNB-H6eP	0.02	410.53	2.81	492.51	2.80	166.36	1.03
SNB-H6eP	0.02	-492.51	-2.80	-410.09	-2.82	-166.28	-1.04
SNB-H7aP	-0.01	640.20	0.71	734.06	0.71	224.93	0.23
SNB-H7aP	-0.01	-734.06	-0.71	-640.38	-0.71	-224.96	-0.23
SNB-H7CP	0.01	640.25	0.71	734.06	0.74	224.94	0.24
SNB-H7CP	0.01	-734.06	-0.74	-640.35	-0.71	-224.95	-0.24
SNB-H7eP	0.00	734.08	0.72	734.08	0.71	224.96	0.23
SNB-H7eP	0.00	-734.08	-0.71	-640.14	-0.72	-224.92	-0.23
SNB-H8aP	0.00	816.38	0.79	889.89	0.79	251.27	0.23
SNB-H8aP	0.00	-889.89	-0.79	-816.48	-0.79	-251.29	-0.23
SNB-H8CP	0.00	816.41	0.80	889.90	0.81	251.28	0.24
SNB-H8CP	0.00	-889.90	-0.81	-816.43	-0.80	-251.28	-0.24
SNB-H8eP	-0.00	816.49	0.79	889.89	0.78	251.29	0.23
SNB-H8eP	-0.00	-889.89	-0.78	-816.36	-0.79	-251.27	-0.23
SNB-H9aP	-0.00	1026.52	0.58	1026.52	0.58	267.49	0.15
SNB-H9aP	-0.00	-1026.52	-0.58	-972.21	-0.57	-267.51	-0.15
SNB-H9CP	0.00	972.31	0.58	1026.52	0.59	267.51	0.16
SNB-H9CP	0.00	-1026.52	-0.59	-972.27	-0.58	-267.50	-0.16
SNB-H9eP	0.00	972.33	0.57	1026.52	0.57	267.51	0.15
SNB-H9eP	0.00	-1026.52	-0.57	-972.23	-0.57	-267.50	-0.15

Printed capacities do not include the strength factor entered for each load case.  
 The Group Summary reports on the member and load case that resulted in maximum usage  
 which may not necessarily be the same as that which produces maximum force.

**Group Summary (Compression Portion):**

Group Label	Group Angle Desc. Type	Angle Size	Steel Strength (ksi)	Max Use In Comp. %	Max In Comp. %	Comp. Member	Comp. Force (kips)	Comp. Control Load Case	I/R Capacity (kips)	Comp. Shear Capacity (kips)	Conn. Comp. Bearing Capacity (kips)	RLX	RLZ	I/R Length Member (ft)	Curve No. Of Bolts Comp.		
Rohn-D1	SAE	1.75X1.75X0.1875	36.0	39.87	39.87	Rohn-DA61	-1.9241: 1.2D +	1.2D +	4.825	12.433	13.050	0.500	0.500	170.38	9.740	4	
Rohn-D2	SAE	2X2X0.1875	36.0	84.67	84.67	Rohn-DB61	-4.8991: 1.2D +	1.2D +	5.786	12.433	13.050	0.500	0.500	166.50	10.934	4	
Rohn-D3	SAE	2.5X2.5X0.1875	36.0	79.74	79.74	Rohn-DC41	-6.7521: 1.2D +	1.2D +	8.468	12.433	13.050	0.500	0.500	155.13	12.798	4	
Rohn-D4	SAE	2.5X2.5X0.25	36.0	84.74	84.74	Rohn-DD21	-8.2851: 1.2D +	1.2D +	9.776	12.433	17.400	0.500	0.500	165.83	13.570	4	
Rohn-D5	SAE	3X3X0.25	50.0	76.24	76.24	Rohn-DE61	-9.4791: 1.2D +	1.2D +	13.033	12.433	19.500	0.500	0.500	157.99	15.589	4	
Rohn-D6	SAE	3.5X3.5X0.25	50.0	91.97	91.97	Rohn-DF32	-11.4341: 1.2D +	1.2D +	15.227	12.433	19.500	0.500	0.500	158.34	18.315	4	
Rohn-D7	SAE	4X4X0.25	50.0	80.02	80.02	Rohn-DH12	-9.9501: 1.2D +	1.2D +	19.124	12.433	19.500	0.500	0.500	151.38	20.058	4	
Rohn-L1	Pipe	Pipe3EH	50.0	10.72	10.72	Rohn-LA4P	-11.1471: 1.2D +	1.2D +	103.968	0.000	0.000	1.000	1.000	52.67	5.004	1	
Rohn-L2	Pipe	Pipe3.5EH	50.0	28.98	28.98	Rohn-LB4P	-38.4671: 1.2D +	1.2D +	132.756	0.000	0.000	1.000	1.000	45.84	5.004	1	
Rohn-L3	Pipe	Pipe5EH	50.0	50.76	50.76	Rohn-LC3P	-76.3891: 1.2D +	1.2D +	150.478	0.000	0.000	1.000	1.000	54.04	6.665	1	
Rohn-L4	Pipe	Pipe5MD	50.0	80.43	80.43	Rohn-LD3P	-127.7781: 1.2D +	1.2D +	158.870	0.000	0.000	1.000	1.000	42.54	6.665	1	
Rohn-L5	Pipe	Pipe5EH	50.0	76.59	76.59	Rohn-LE3P	-171.9681: 1.2D +	1.2D +	224.520	0.000	0.000	1.000	1.000	43.23	6.665	1	
Rohn-L6	Pipe	Pipe6EH	50.0	78.92	78.92	Rohn-LF1P	-192.3891: 1.2D +	1.2D +	243.786	0.000	0.000	1.000	1.000	54.10	10.008	1	
Rohn-L7	Pipe	Pipe6EH	50.0	91.06	91.06	Rohn-LG2P	-239.6901: 1.2D +	1.2D +	283.178	0.000	0.000	1.000	1.000	54.59	10.008	1	
Rohn-L8	Pipe	Pipe8EH	50.0	81.91	81.91	Rohn-LI1P	-322.2241: 1.2D +	1.2D +	393.385	0.000	0.000	1.000	1.000	40.57	10.008	1	
Rohn-H1	SAE	1.75X1.75X0.1875	36.0	2.54	2.54	Rohn-H12	-0.2061: 1.2D +	1.2D +	8.108	0.000	0.000	1.000	1.000	131.28	7.505	4	
SNB-D1	SAE	2X2X0.3125	36.0	11.96	11.81	SNB-DA72	-1.4681: 1.2D +	1.2D +	13.391	12.433	21.750	0.500	0.500	117.38	7.240	1	
SNB-D2	SAE	2X2X0.3125	36.0	28.50	28.50	SNB-DB72	-3.5441: 1.2D +	1.2D +	13.020	12.433	17.400	0.500	0.500	127.05	8.279	4	
SNB-D3	SAE	2.5X2.5X0.3125	36.0	75.48	75.48	SNB-DD61	-9.3851: 1.2D +	1.2D +	16.821	12.433	21.750	0.500	0.500	140.03	11.412	4	
SNB-D4	SAE	3X3X0.5	36.0	70.13	70.13	SNB-DE12	-12.3541: 1.2D +	1.2D +	41.188	17.901	41.760	0.500	0.500	121.07	11.784	4	
SNB-D5	SAE	4X4X0.5	36.0	67.44	67.44	SNB-DE41	-12.0732: 0.9D +	0.9D +	57.545	17.901	41.760	0.500	0.500	119.15	15.529	4	
SNB-D6	SAE	4X4X0.625	36.0	88.18	88.18	SNB-DH12	-15.7832: 0.9D +	0.9D +	59.660	17.901	52.200	0.500	0.500	132.03	17.142	4	
SNB-D7	SAE	5X5X0.625	36.0	7.62	7.62	SNB-LA4P	-8.8331: 1.2D +	1.2D +	115.987	0.000	0.000	1.000	1.000	55.09	5.004	1	
SNB-L1	Pipe	P3-437	36.0	45.68	45.68	SNB-LC3P	-77.7741: 1.2D +	1.2D +	170.256	0.000	0.000	1.000	1.000	56.33	6.665	1	
SNB-L2	Pipe	P4-494	36.0	81.20	81.20	SNB-LD3P	-136.3791: 1.2D +	1.2D +	167.960	0.000	0.000	1.000	1.000	43.23	6.665	1	
SNB-L3	Pipe	P5-562	36.0	90.97	90.97	SNB-LE2P	-267.6021: 1.2D +	1.2D +	294.167	0.000	0.000	1.000	1.000	55.86	10.008	1	
SNB-L4	Pipe	Pipe8XS	36.0	97.93	97.93	SNB-LH2P	-403.8181: 1.2D +	1.2D +	412.353	0.000	0.000	1.000	1.000	10.42	10.008	1	
SNB-L5	Pipe	Pipe10XS	36.0	93.12	93.12	SNB-LI2P	-478.7921: 1.2D +	1.2D +	514.179	0.000	0.000	0.500	0.500	16.54	10.008	1	
SNB-L6	Pipe	0.1X0.1X1	36.0	0.03	0.01	Connect I2	-2.8142: 0.9D +	0.9D +	28912.070	0.000	0.000	1.000	1.000	2.40	2.002	1	
Connect Towers	Pipe	P3-435	36.0	2.13	2.13	SNB-H4CP	-2.5502: 0.9D +	0.9D +	119.859	0.000	0.000	1.000	1.000	44.46	4.066	1	
SNB-H1	Pipe	P4-494	36.0	3.85	3.85	SNB-H9CP	-6.2802: 0.9D +	0.9D +	163.108	0.000	0.000	1.000	1.000	63.14	7.472	1	
SNB-H2	Pipe	2X2X0.375	36.0	0.00	0.00				0.000	0.000	0.000	0.000	0.000	0.00	0.000	0	
Rohn-D8	SAE	2X2X0.375	36.0	1.64	1.64	SNB-WL-D2P	-0.2212: 0.9D +	0.9D +	13.417	0.000	0.000	1.000	1.000	124.79	4.066	4	
WLAC-1	SAE	2X2X0.25	36.0	3.19	3.19	SNB-WL-T2P	-0.3131: 1.2D +	1.2D +	9.810	0.000	0.000	1.000	1.000	183.36	7.472	4	
WLAC-2	SAE	2.5X2.5X0.3125	36.0	3.19	3.19				0.000	0.000	0.000	1.000	1.000	0.00	0.000	0	
R-D1-MOD	MODIFICATION - L1.75X1.75X3/16	SAE	1.75X1.75X0.1875	50.0	0.00	0.00			0.000	0.000	0.000	0.000	0.000	0.00	0.000	0	
R-D2-MOD	MODIFICATION - L2X2x3/16	SAE	2X2X0.1875	50.0	0.00	0.00			0.000	0.000	0.000	0.000	0.000	0.00	0.000	0	
R-D3-MOD	MODIFICATION - L2.5X2.5x1/4	SAE	2.5X2.5X0.25	50.0	85.12	85.12	Rohn-DC61	-8.8261: 1.2D +	1.2D +	10.368	12.433	19.500	0.500	0.500	161.02	13.177	4
R-D4-MOD	MODIFICATION - L3x3x1/4	SAE	3X3X0.25	50.0	79.91	79.91	Rohn-DD41	-9.9361: 1.2D +	1.2D +	16.211	12.433	19.500	0.500	0.500	141.66	13.977	4
R-D5-MOD	MODIFICATION - L3X3x1/4	SAE	3X3X0.25	50.0	0.00	0.00			0.000	0.000	0.000	0.000	0.000	0.00	0.000	0	
R-D6-MOD	MODIFICATION - L3.5X3.5x5/16	SAE	3.5X3.5X0.3125	50.0	0.00	0.00			0.000	0.000	0.000	0.000	0.000	0.00	0.000	0	
R-D7-MOD	MODIFICATION - L4X4x5/16	SAE	4X4X0.3125	50.0	77.10	77.10	Rohn-DH32	-11.9831: 1.2D +	1.2D +	22.091	15.542	24.375	0.500	0.500	156.66	20.653	4
S-D1-MOD	MODIFICATION - L2X2x5/16	SAE	2X2X0.3125	50.0	0.00	0.00			0.000	0.000	0.000	0.000	0.000	0.00	0.000	0	
S-D2-MOD	MODIFICATION - L2X2x1/4	SAE	2X2X0.25	50.0	0.00	0.00			0.000	0.000	0.000	0.000	0.000	0.00	0.000	0	
S-D3-MOD	MODIFICATION - L2.5X2.5x5/16	SAE	2.5X2.5X0.3125	50.0	0.00	0.00			0.000	0.000	0.000	0.000	0.000	0.00	0.000	0	
S-D4-MOD	MODIFICATION - L3.5X3.5x3/8	SAE	3.5X3.5X0.375	50.0	0.00	0.00			0.000	0.000	0.000	0.000	0.000	0.00	0.000	0	
S-D5-MOD	MODIFICATION - L4X4x0.5	SAE	4X4X0.5	50.0	0.00	0.00			0.000	0.000	0.000	0.000	0.000	0.00	0.000	0	
S-D6-MOD	MODIFICATION - L5X5x3/8	SAE	5X5X0.375	50.0	64.45	64.45	SNB-DH32	-14.4222: 0.9D +	0.9D +	70.032	22.376	35.100	0.500	0.500	107.27	17.700	1
S-D7-MOD	MODIFICATION - L6X6x3/8	SAE	6X6X0.375	50.0	88.55	88.55	SNB-DI32	-19.8132: 0.9D +	0.9D +	95.638	22.376	35.100	0.500	0.500	94.99	18.841	1

**Group Summary (Tension Portion):**

Group Summary (Tension Portion):

URS Connecticut - 4-carir



1.2\*DL 5.66 Rohn-LD3p Angle  
0.9DL 4.25 Rohn-LD3p Angle

\*\*\* Weight of structure (lbs):  
Weight of Angles\*Section DLF: 61800.0  
Weight of Equipment: 12631.6  
Total: 74431.6

\*\*\* End of Report

"0 DEG" "+60 DEG" "-60 DEG" "+90 DEG" "-90 DEG" "180 DEG" Max Tension														
														(Kips)
Rohn-L1	Rohn-LA1P	0	0	0	0	0	0	0	0	0	0	0	0	0.724
Rohn-L1	Rohn-LA11	0.136	0.544	0	0.457	0	0	0	0	0	0	0	0	0.544
Rohn-L1	Rohn-LA12	0.19	0	0.681	0	0	0.541	0	0	0	0	0	0	0.681
Rohn-L1	Rohn-LA2P	0	0	0	0	0	0	0	2.866	0	0	0	0	2.866
Rohn-L1	Rohn-LA21	1.337	3.058	0	2.623	0	0	0	0	3.058	0	0	0	3.058
Rohn-L1	Rohn-LA22	1.103	0	2.769	0	2.379	0	0	0	2.769	0	0	0	2.769
Rohn-L1	Rohn-LA3P	0	0	0	0	0	0	0	5.911	0	0	0	0	5.911
Rohn-L1	Rohn-LA31	2.729	6.009	0	5.174	0	0	0	6.009	0	0	0	0	6.009
Rohn-L1	Rohn-LA32	2.566	0	5.745	0	4.959	0	0	0	5.745	0	0	0	5.745
Rohn-L1	Rohn-LA4P	0	0	0	0	0	0	0	0	9.192	0	0	0	9.192
Rohn-L1	Rohn-LA41	4.146	8.712	0	7.475	0	0	0	0	8.712	0	0	0	8.712
Rohn-L1	Rohn-LA42	4.244	0	8.805	0	7.522	0	0	0	8.805	0	0	0	8.805
Rohn-L2	Rohn-LB1P	0	0	0	0	0	0	0	12.811	0	0	0	0	12.811
Rohn-L2	Rohn-LB11	6.153	13.063	0	11.245	0	0	0	0	13.063	0	0	0	13.063
Rohn-L2	Rohn-LB12	6.245	0	13.06	0	11.207	0	0	0	13.06	0	0	0	13.06
Rohn-L2	Rohn-LB2P	0	0	0	0	0	0	0	17.68	0	0	0	0	17.68
Rohn-L2	Rohn-LB21	8.54	18.046	0	15.64	0	0	0	0	18.046	0	0	0	18.046
Rohn-L2	Rohn-LB22	8.695	0	18.086	0	15.612	0	0	0	18.086	0	0	0	18.086
Rohn-L2	Rohn-LB3P	0	0	0	0	0	0	0	23.309	0	0	0	0	23.309
Rohn-L2	Rohn-LB31	11.034	23.605	0	20.383	0	0	0	0	23.605	0	0	0	23.605
Rohn-L2	Rohn-LB32	11.2	0	23.628	0	20.328	0	0	0	23.628	0	0	0	23.628
Rohn-L2	Rohn-LB4P	0	0	0	0	0	0	0	31.258	0	0	0	0	31.258
Rohn-L2	Rohn-LB41	15.015	31.542	0	27.281	0	0	0	0	31.542	0	0	0	31.542
Rohn-L2	Rohn-LB42	15.195	0	31.558	0	27.208	0	0	0	31.558	0	0	0	31.558
Rohn-L3	Rohn-LC1P	0	0	0	0	0	0	0	39.147	0	0	0	0	39.147
Rohn-L3	Rohn-LC11	18.931	39.503	0	34.212	0	0	0	0	39.503	0	0	0	39.503
Rohn-L3	Rohn-LC12	19.156	0	39.549	0	34.147	0	0	0	39.549	0	0	0	39.549
Rohn-L3	Rohn-LC2P	0	0	0	0	0	0	0	49.616	0	0	0	0	49.616
Rohn-L3	Rohn-LC21	23.834	49.756	0	43.058	0	0	0	0	49.756	0	0	0	49.756
Rohn-L3	Rohn-LC22	24.067	0	49.783	0	42.95	0	0	0	49.783	0	0	0	49.783
Rohn-L3	Rohn-LC3P	0	0	0	0	0	0	0	63.24	0	0	0	0	63.24
Rohn-L3	Rohn-LC31	30.324	63.434	0	54.85	0	0	0	0	63.434	0	0	0	63.434
Rohn-L3	Rohn-LC32	30.504	0	63.369	0	54.666	0	0	0	63.369	0	0	0	63.369

Bolt Tension Factored Tensile Capacity	Capacity	LRFD	Bolt Dia	# Bolts	Cap Percentage
29.8	29.8	119.2 OK	4	0.75	11%
29.8	29.8	119.2 OK	4	0.75	11%
29.8	29.8	119.2 OK	4	0.75	11%
29.8	29.8	119.2 OK	4	0.75	15%
29.8	29.8	119.2 OK	4	0.75	15%
29.8	29.8	119.2 OK	4	0.75	15%
29.8	29.8	119.2 OK	4	0.75	20%
29.8	29.8	119.2 OK	4	0.75	20%
29.8	29.8	119.2 OK	4	0.75	20%
29.8	29.8	119.2 OK	4	0.75	26%
29.8	29.8	119.2 OK	4	0.75	26%
29.8	29.8	119.2 OK	4	0.75	26%
40.6	40.6	162.4 OK	4	0.875	24%
40.6	40.6	162.4 OK	4	0.875	24%
40.6	40.6	162.4 OK	4	0.875	24%
40.6	40.6	162.4 OK	4	0.875	31%
40.6	40.6	162.4 OK	4	0.875	31%
40.6	40.6	162.4 OK	4	0.875	31%
40.6	40.6	162.4 OK	4	0.875	39%
40.6	40.6	162.4 OK	4	0.875	39%
40.6	40.6	162.4 OK	4	0.875	39%

Rohn-L4 Rohn-LD1P	0	0	0	0	0	0	0	0	0	77.52	77.52	212 OK	53	37%
Rohn-L4 Rohn-LD11	37.384	77.728	0	67.265	0	0	0	0	0	0	77.728	212 OK	53	37%
Rohn-L4 Rohn-LD12	37.645	0	77.73	0	67.135	0	0	0	0	0	77.73	212 OK	53	37%
Rohn-L4 Rohn-LD2P	0	0	0	0	0	0	0	0	0	92.759	92.759	212 OK	53	44%
Rohn-L4 Rohn-LD21	44.646	92.927	0	80.358	0	0	0	0	0	0	92.927	212 OK	53	44%
Rohn-L4 Rohn-LD22	44.968	0	92.978	0	80.246	0	0	0	0	0	92.978	212 OK	53	44%
Rohn-L4 Rohn-LD3P	0	0	0	0	0	0	0	0	0	109.448	109.448	212 OK	53	52%
Rohn-L4 Rohn-LD31	53.182	109.722	0	94.994	0	0	0	0	0	0	109.722	212 OK	53	52%
Rohn-L4 Rohn-LD32	53.493	0	109.749	0	94.858	0	0	0	0	0	109.749	212 OK	53	52%
Rohn-L5 Rohn-LE1P	0	0	0	0	0	0	0	0	0	123.139	123.139	212 OK	53	58%
Rohn-L5 Rohn-LE11	59.91	123.351	0	106.809	0	0	0	0	0	0	123.351	212 OK	53	58%
Rohn-L5 Rohn-LE12	60.236	0	123.389	0	106.676	0	0	0	0	0	123.389	212 OK	53	58%
Rohn-L5 Rohn-LE2P	0	0	0	0	0	0	0	0	0	136.363	136.363	212 OK	53	64%
Rohn-L5 Rohn-LE21	66.505	136.571	0	118.283	0	0	0	0	0	0	136.571	212 OK	53	64%
Rohn-L5 Rohn-LE22	66.808	0	136.575	0	118.124	0	0	0	0	0	136.575	212 OK	53	64%
Rohn-L5 Rohn-LE3P	0	0	0	0	0	0	0	0	0	149.74	149.74	212 OK	53	71%
Rohn-L5 Rohn-LE31	73.271	149.932	0	129.956	0	0	0	0	0	0	149.932	212 OK	53	71%
Rohn-L5 Rohn-LE32	73.691	0	150.057	0	129.869	0	0	0	0	0	150.057	212 OK	53	71%
Rohn-L6 Rohn-LF1P	0	0	0	0	0	0	0	0	0	168.17	168.17	318 OK	53	53%
Rohn-L6 Rohn-LF11	82.359	168.362	0	145.923	0	0	0	0	0	0	168.362	318 OK	53	53%
Rohn-L6 Rohn-LF12	82.64	0	168.332	0	145.689	0	0	0	0	0	168.332	318 OK	53	53%
Rohn-L6 Rohn-LF2P	0	0	0	0	0	0	0	0	0	189.868	189.868	318 OK	53	60%
Rohn-L6 Rohn-LF21	93.387	190.015	0	164.79	0	0	0	0	0	0	190.015	318 OK	53	60%
Rohn-L6 Rohn-LF22	93.698	0	190.001	0	164.565	0	0	0	0	0	190.001	318 OK	53	60%
Rohn-L7 Rohn-LG1P	0	0	0	0	0	0	0	0	0	209.98	209.98	318 OK	53	66%
Rohn-L7 Rohn-LG11	103.297	210.148	0	182.269	0	0	0	0	0	0	210.148	318 OK	53	66%
Rohn-L7 Rohn-LG12	103.599	0	210.117	0	182.002	0	0	0	0	0	210.117	318 OK	53	66%
Rohn-L7 Rohn-LG2P	0	0	0	0	0	0	0	0	0	229.354	229.354	318 OK	53	72%
Rohn-L7 Rohn-LG21	113.159	229.543	0	199.142	0	0	0	0	0	0	229.543	318 OK	53	72%
Rohn-L7 Rohn-LG22	113.365	0	229.392	0	198.799	0	0	0	0	0	229.392	318 OK	53	72%
Rohn-L7 Rohn-LH1P	0	0	0	0	0	0	0	0	0	248.08	248.08	318 OK	53	78%
Rohn-L7 Rohn-LH11	122.383	248.247	0	215.39	0	0	0	0	0	0	248.247	318 OK	53	78%
Rohn-L7 Rohn-LH12	122.655	0	248.154	0	215.082	0	0	0	0	0	248.154	318 OK	53	78%
Rohn-L7 Rohn-LH2P	0	0	0	0	0	0	0	0	0	267.443	267.443	318 OK	53	84.10%
Rohn-L7 Rohn-LH21	132.224	267.604	0	232.272	0	0	0	0	0	0	267.604	318 OK	53	84.15%
Rohn-L7 Rohn-LH22	132.51	0	267.513	0	231.962	0	0	0	0	0	267.513	318 OK	53	84.12%
Rohn-L8 Rohn-LI1P	0	0	0	0	0	0	0	0	0	284.562	284.562	424 OK	53	67%
Rohn-L8 Rohn-LI11	140.643	284.715	0	247.133	0	0	0	0	0	0	284.715	424 OK	53	67%
Rohn-L8 Rohn-LI12	140.949	0	284.634	0	246.827	0	0	0	0	0	284.634	424 OK	53	67%
Rohn-L8 Rohn-LI2P	0	0	0	0	0	0	0	0	0	299.567	299.567	424 OK	53	71%
Rohn-L8 Rohn-LI21	148.151	299.715	0	260.19	0	0	0	0	0	0	299.715	424 OK	53	71%
Rohn-L8 Rohn-LI22	148.469	0	299.638	0	259.884	0	0	0	0	0	299.638	424 OK	53	71%



SNB-L4	SNB-LE1P	0	0	0	0	0	0	0	0	145.588	145.588	4	1	53	212 OK	69%
SNB-L4	SNB-LE11	72.584	145.812	0	126.699	0	0	0	0	145.812	145.812	4	1	53	212 OK	69%
SNB-L4	SNB-LE12	72.966	0	145.844	0	126.519	0	0	0	145.844	145.844	4	1	53	212 OK	59%
SNB-L4	SNB-LE2P	0	0	0	0	0	0	0	171.097	171.097	171.097	4	1	53	212 OK	81%
SNB-L4	SNB-LE21	85.41	171.323	0	148.884	0	0	0	0	171.323	171.323	4	1	53	212 OK	81%
SNB-L4	SNB-LE22	85.809	0	171.33	0	148.663	0	0	0	171.33	171.33	4	1	53	212 OK	81%
SNB-L4	SNB-LE3P	0	0	0	0	0	0	0	190.836	190.836	190.836	4	1	53	212 OK	90%
SNB-L4	SNB-LE31	95.634	191.056	0	166.104	0	0	0	0	191.056	191.056	4	1	53	212 OK	90%
SNB-L4	SNB-LE32	95.978	0	191.009	0	165.844	0	0	0	191.009	191.009	4	1	53	212 OK	90%
SNB-L4	SNB-LF1P	0	0	0	0	0	0	215.579	0	215.579	215.579	6	1	53	318 OK	68%
SNB-L4	SNB-LF11	107.641	215.797	0	187.515	0	0	0	0	215.797	215.797	6	1	53	318 OK	68%
SNB-L4	SNB-LF12	108.006	0	215.746	0	187.229	0	0	0	215.746	215.746	6	1	53	318 OK	68%
SNB-L4	SNB-LF2P	0	0	0	0	0	0	244.856	0	244.856	244.856	6	1	53	318 OK	77%
SNB-L4	SNB-LF21	122.568	245.079	0	213.056	0	0	0	0	245.079	245.079	6	1	53	318 OK	77%
SNB-L4	SNB-LF22	122.933	0	245.003	0	212.733	0	0	0	245.003	245.003	6	1	53	318 OK	77%
SNB-L5	SNB-LG1P	0	0	0	0	0	0	274.497	0	274.497	274.497	6	1	53	318 OK	86%
SNB-L5	SNB-LG11	137.317	274.712	0	238.804	0	0	0	0	274.712	274.712	6	1	53	318 OK	86%
SNB-L5	SNB-LG12	137.685	0	274.634	0	238.469	0	0	0	274.634	274.634	6	1	53	318 OK	86%
SNB-L5	SNB-LG2P	0	0	0	0	0	0	307.203	0	307.203	307.203	6	1	53	318 OK	96.60%
SNB-L5	SNB-LG21	154.035	307.405	0	267.358	0	0	0	0	307.405	307.405	6	1	53	318 OK	96.67%
SNB-L5	SNB-LG22	154.464	0	307.342	0	267.003	0	0	0	307.342	307.342	6	1	53	318 OK	96.65%
SNB-L5	SNB-LH1P	0	0	0	0	0	0	337.988	0	337.988	337.988	6	1	53	318 No Good - Replace Bolt	106%
SNB-L5	SNB-LH11	169.299	338.182	0	294.091	0	0	0	0	338.182	338.182	6	1	53	318 No Good - Replace Bolt	106%
SNB-L5	SNB-LH12	169.739	0	338.122	0	293.733	0	0	0	338.122	338.122	6	1	53	318 No Good - Replace Bolt	106%
SNB-L5	SNB-LH2P	0	0	0	0	0	0	369.807	0	369.807	369.807	6	1	53	318 No Good - Replace Bolt	116%
SNB-L5	SNB-LH21	185.64	369.997	0	321.885	0	0	0	0	369.997	369.997	6	1	53	318 No Good - Replace Bolt	116%
SNB-L5	SNB-LH22	186.092	0	369.928	0	321.51	0	0	0	369.928	369.928	6	1	53	318 No Good - Replace Bolt	116%
SNB-L6	SNB-LI1P	0	0	0	0	0	0	402.128	0	402.128	402.128	8	1	53	424 OK	95%
SNB-L6	SNB-LI11	201.804	402.309	0	350.012	0	0	0	0	402.309	402.309	8	1	53	424 OK	95%
SNB-L6	SNB-LI12	202.272	0	402.24	0	349.63	0	0	0	402.24	402.24	8	1	53	424 OK	95%
SNB-L6	SNB-LI2P	0	0	0	0	0	0	438.404	0	438.404	438.404	8	1	53	424 No Good - Replace Bolt	103%
SNB-L6	SNB-LI21	220.514	438.578	0	381.735	0	0	0	0	438.578	438.578	8	1	53	424 No Good - Replace Bolt	103%
SNB-L6	SNB-LI22	221.001	0	438.51	0	381.346	0	0	0	438.51	438.51	8	1	53	424 No Good - Replace Bolt	103%

**Replaced Existing A325 Bolts with A490 Bolts**

		Bolt Tension Capacity		Bolt Tension Capacity		Factored Tensile Capacity		Cap Percentage	
		Capacity		Capacity		Capacity		Percentage	
		LRFD		LRFD		Capacity		Cap Percentage	
		# Bolts Dia Bolt		# Bolts Dia Bolt		Capacity		Percentage	
SNB-L5	SNB-LH1P	0	0	0	0	337.988	66.6	399.6 OK	85%
SNB-L5	SNB-LH11	169.299	338.182	0	294.091	0	66.6	399.6 OK	85%
SNB-L5	SNB-LH12	169.739	0	338.122	0	338.122	66.6	399.6 OK	85%
SNB-L5	SNB-LH2P	0	0	0	0	369.807	66.6	399.6 OK	93%
SNB-L5	SNB-LH21	185.64	369.997	0	321.885	0	66.6	399.6 OK	93%
SNB-L5	SNB-LH22	186.092	0	369.928	0	369.928	66.6	399.6 OK	93%
SNB-L6	SNB-LI1P	0	0	0	0	402.128	66.6	532.8 OK	75%
SNB-L6	SNB-LI11	201.804	402.309	0	350.012	0	66.6	532.8 OK	76%
SNB-L6	SNB-LI12	202.272	0	402.24	0	402.24	66.6	532.8 OK	75%
SNB-L6	SNB-LI2P	0	0	0	0	438.404	66.6	532.8 OK	82%
SNB-L6	SNB-LI21	220.514	438.578	0	381.735	0	66.6	532.8 OK	82%
SNB-L6	SNB-LI22	221.001	0	438.51	0	438.51	66.6	532.8 OK	82%



## **CONNECTION BETWEEN TOWERS EVALUATION**



Job 180' ROHN SSV Tower w/ SNB Reinf. - Greenwich Project No. Revision 4 Page \_\_\_\_\_ of \_\_\_\_\_  
Description Tower to Tower Connection Force Computed by MCD Sheet \_\_\_\_\_ of \_\_\_\_\_  
TIA-222-G All Load Cases and with Ice Forces Checked by \_\_\_\_\_ Date 07/31/19  
Date \_\_\_\_\_

**SUMMARY OF CONNECTION FORCES FOR ALL WIND ANGLES AND LOAD COMBINATIONS**

Loads Without Ice (V.asd wind Speed = 101 MPH)

Wind Angle	Force @ "Connection"
0 Deg	7.1481 kips
+60 Deg	5.5872 kips
-60 Deg	5.5922 kips
+90 Deg	6.0271 kips
-90 Deg	6.0291 kips

Loads With Design Ice 2.25 inch ("V" wind Speed = 50 MPH)

Wind Angle	Force @ "Connection"
0 Deg	8.9903 kips
+60 Deg	8.1373 kips
-60 Deg	8.1383 kips
+90 Deg	8.6773 kips
-90 Deg	8.6823 kips

Job	<u>180' ROHN SSV Tower w/ SNB Reinf. - Greenwich</u>	Project No.	<u>Revision 4</u>	Sheet	<u>1</u> of <u>1</u>
Description	<u>Tower Connection - TIA-222-G Loads on Connection</u>	Computed by	<u>MCD</u>	Date	<u>07/31/19</u>
		Checked by	<u>                    </u>	Date	<u>                    </u>

Bolt Diameter	$Dia_{bolt} := \frac{3}{4} \text{ in}$	
Bolt Shear Capacity	$Capacity_{bolt} := 6.64 \text{ kip}$	Per AISC 15th Edition p. 7-24 for 3/4" A325 slip critical bolt (Considered as Long Slotted Hole) - LRFD
Shear Plane Area	$Area_{plate} := \frac{3}{8} \text{ in} \cdot \left( \frac{3}{4} \text{ in} + 1 \text{ in} \right)$	$Area_{plate} = 0.6563 \text{ in}^2$
Yield Strength of Plate	$F_{yplate} := 36 \text{ ksi}$	$\phi := 1.0$ LRFD Reduction Factor - AISC Chapter J
Plate Capacity	$Capacity_{plate} := 0.6 Area_{plate} \cdot F_{yplate} \cdot \phi$	$Capacity_{plate} = 14.175 \text{ kip}$
U-Bolt Size	$Dia_{ubolt} := \frac{1}{2} \text{ in}$	
U-Bolt Area	$Area_{ubolt} := 2 \cdot \pi \left( \frac{Dia_{ubolt}}{2} \right)^2$	$Area_{ubolt} = 0.3927 \text{ in}^2$
	$F_{yubolt} := 58 \text{ ksi}$	
	$\phi_{w} := 0.75$	LRFD Reduction Factor - AISC Chapter J
	$Capacity_{ubolt} := (0.75 Area_{ubolt} \cdot F_{yubolt}) \cdot \phi$	$Capacity_{ubolt} = 12.8118 \text{ kip}$
Connection Capacity	$Capacity_{connection} := \min(Capacity_{bolt}, Capacity_{plate}, Capacity_{ubolt})$	
	$Capacity_{connection} = 6.64 \text{ kip}$	
Max Connection Spacing	$Spacing := 5 \text{ ft}$	
Connection Capacity per Foot	$Capacity_{LF} := \frac{Capacity_{connection}}{Spacing}$	$Capacity_{LF} = 1.328 \frac{\text{kip}}{\text{ft}}$
Max Connection Force (Tension):	$F_{max} := 8.9903 \text{ kip}$	NOTE: Force obtained from TIA-222-G Load Combination #3 (PLS-TOWER program)
Connection Spacing in PLS-Tower	$Spacing_{PLS.Tower} := 10 \text{ ft}$	
Connection Force per Foot	$Force_{LF} := \frac{F_{max}}{Spacing_{PLS.Tower}}$	$Force_{LF} = 0.899 \text{ kip}$
Percent Capacity	$Percent_{capacity} := \frac{Force_{LF}}{Capacity_{LF}}$	$Percent_{capacity} = 67.7\%$

## FOUNDATION EVALUATION



Job 180' ROHN SSV Tower w/ SNB Reinf. - Greenwich  
 Description Overturning Moment Calculation  
TIA-222-G Load Case #2

Project No. \_\_\_\_\_  
 Computed by \_\_\_\_\_  
 Checked by \_\_\_\_\_

Revision 4  
MCD

Page \_\_\_\_\_ of \_\_\_\_\_  
 Sheet \_\_\_\_\_ of \_\_\_\_\_  
 Date 07/31/19  
 Date \_\_\_\_\_

From PLS-Tower Output Summary

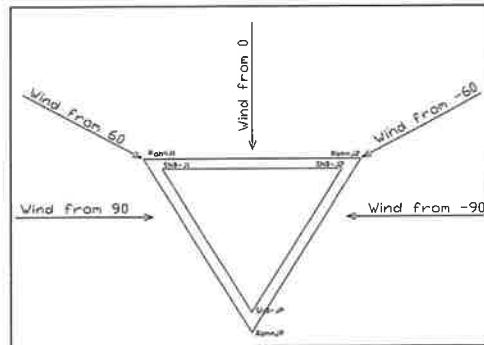
Summary of Joint Support Reactions For All Load Cases:

Load Case	Joint Label	Long. Force (kips)	Tran. Force (kips)	Vert. Force (kips)	Shear Force (kips)	Tran. Moment (ft-k)	Long. Moment (ft-k)	Vert. Moment (ft-k)	Bending Moment (ft-k)	Found. Usage %
"-90"	2: 0.9D + 1.0Dg + 1.6Wo RohnJP	-0.64	3.89	14.64	3.95	-0.36	-0.21	0.01	0.42	0
	2: 0.9D + 1.0Dg + 1.6Wo SNB-JP	-0.26	6.4	13.63	6.41	0.64	-0.37	0.05	0.74	0
	2: 0.9D + 1.0Dg + 1.6Wo RohnJ1	10.99	22.09	295.57	24.67	-3.91	2.44	0.01	4.61	0
	2: 0.9D + 1.0Dg + 1.6Wo RohnJ2	-10.29	20.94	-265.94	23.33	-3.7	-2.04	0.02	4.23	0
	2: 0.9D + 1.0Dg + 1.6Wo SNB-J1	18.56	38.53	426.37	42.77	-9.48	6.04	-0.03	11.24	0
	2: 0.9D + 1.0Dg + 1.6Wo SNB-J2	-18.3	38.08	-398.37	42.25	-9.08	-5.44	-0.02	10.59	0
"-60"	2: 0.9D + 1.0Dg + 1.6Wo RohnJP	-14.32	3.35	175.32	14.71	-0.21	-2.73	0.01	2.74	0
	2: 0.9D + 1.0Dg + 1.6Wo SNB-JP	-24.45	5.46	249.58	25.05	0.73	-6.59	0.05	6.63	0
	2: 0.9D + 1.0Dg + 1.6Wo RohnJ1	4.76	13.82	175.56	14.61	-2.32	1.45	0.01	2.74	0
	2: 0.9D + 1.0Dg + 1.6Wo RohnJ2	-13.59	22.96	-306.61	26.68	-4.14	-2.56	0.01	4.87	0
	2: 0.9D + 1.0Dg + 1.6Wo SNB-J1	7.53	23.93	249.98	25.09	-5.34	3.94	-0.05	6.64	0
	2: 0.9D + 1.0Dg + 1.6Wo SNB-J2	-24.08	41.7	-457.94	48.16	-10.53	-6.08	0	12.16	0
"0"	2: 0.9D + 1.0Dg + 1.6Wo RohnJP	-29.23	0.11	347.71	29.23	-0.06	-5.45	-0.01	5.45	0
	2: 0.9D + 1.0Dg + 1.6Wo SNB-JP	-50.83	0	503.36	50.83	0	-13.3	0	13.3	0
	2: 0.9D + 1.0Dg + 1.6Wo RohnJ1	-9.58	-10.2	-151.56	13.99	1.95	-1.46	0	2.44	0
	2: 0.9D + 1.0Dg + 1.6Wo RohnJ2	-9.78	10.11	-151.89	14.07	-1.9	-1.56	-0.01	2.46	0
	2: 0.9D + 1.0Dg + 1.6Wo SNB-J1	-17.53	-18.77	-230.61	25.69	5.49	-2.76	-0.03	6.14	0
	2: 0.9D + 1.0Dg + 1.6Wo SNB-J2	-17.55	18.81	-231.11	25.72	-5.5	-2.77	0.03	6.16	0
"60"	2: 0.9D + 1.0Dg + 1.6Wo RohnJP	-14.35	-3.24	175.73	14.71	0.16	-2.73	-0.02	2.74	0
	2: 0.9D + 1.0Dg + 1.6Wo SNB-JP	-24.49	-5.46	250.14	25.09	-0.73	-6.6	-0.05	6.64	0
	2: 0.9D + 1.0Dg + 1.6Wo RohnJ1	-13.5	-23.01	-306.69	26.68	4.17	-2.51	-0.01	4.86	0
	2: 0.9D + 1.0Dg + 1.6Wo RohnJ2	4.66	-13.85	175.23	14.61	2.35	1.4	-0.01	2.73	0
	2: 0.9D + 1.0Dg + 1.6Wo SNB-J1	-24.08	-41.7	-458.01	48.16	10.54	-6.08	0	12.16	0
	2: 0.9D + 1.0Dg + 1.6Wo SNB-J2	7.51	-23.9	249.49	25.05	5.33	3.94	0.05	6.63	0
"90"	2: 0.9D + 1.0Dg + 1.6Wo RohnJP	-0.67	-3.89	15.12	3.95	0.36	-0.22	-0.01	0.42	0
	2: 0.9D + 1.0Dg + 1.6Wo SNB-JP	-0.3	-6.4	14.26	6.41	-0.65	-0.39	-0.05	0.75	0
	2: 0.9D + 1.0Dg + 1.6Wo RohnJ1	-10.3	-20.95	-266.25	23.34	3.7	-2.04	-0.02	4.23	0
	2: 0.9D + 1.0Dg + 1.6Wo RohnJ2	10.98	-22.07	295.4	24.66	3.91	2.44	-0.01	4.61	0
	2: 0.9D + 1.0Dg + 1.6Wo SNB-J1	-18.31	-38.1	-398.77	42.27	9.09	-5.44	0.01	10.6	0
	2: 0.9D + 1.0Dg + 1.6Wo SNB-J2	18.55	-38.51	426.13	42.75	9.47	6.04	0.03	11.24	0
"0.9*DL"	0.9DL RohnJP	-0.8	0	14.92	0.8	0	-0.21	0	0.21	0
	0.9DL SNB-JP	-0.41	0	13.89	0.41	0	-0.36	0	0.36	0
	0.9DL RohnJ1	0.4	0.69	14.77	0.8	-0.18	0.1	0	0.21	0
	0.9DL RohnJ2	0.4	-0.69	14.84	0.8	0.18	0.1	0	0.21	0
	0.9DL SNB-J1	0.21	0.35	13.71	0.41	-0.31	0.18	0	0.35	0
	0.9DL SNB-J2	0.21	-0.36	13.78	0.41	0.31	0.18	0	0.36	0

Load Case	Joint Label	Vert. Tower Forces (k)	Leg Moment Arm (ft)	Moment (ft-k)	Total Moment (ft-k)	Shear (k)	Total Shear (k)
-90 deg	RohnJP	-0.28	0.00	0.00	14183.0	3.95	143.4
-90 deg	SNB-JP	-0.26	0.00	0.00		6.41	
-90 deg	RohnJ1	280.8	11.42	3206.74		24.67	
-90 deg	RohnJ2	-280.78	-11.42	3206.51		23.33	
-90 deg	SNB-J1	412.66	9.42	3887.26		42.77	
-90 deg	SNB-J2	-412.15	-9.42	3882.45		42.25	
-60 deg	RohnJP	160.4	6.60	1058.64	14056.3	14.71	154.3
-60 deg	SNB-JP	235.69	5.44	1282.15		25.05	
-60 deg	RohnJ1	160.79	6.60	1061.21		14.61	
-60 deg	RohnJ2	-321.45	-13.18	4236.71		26.68	
-60 deg	SNB-J1	236.27	5.44	1285.31		25.09	
-60 deg	SNB-J2	-471.72	-10.88	5132.31		48.16	
0 deg	RohnJP	332.79	13.18	4386.17	14571.1	29.23	159.5
0 deg	SNB-JP	489.47	10.88	5325.43		50.83	
0 deg	RohnJ1	-166.33	-6.60	1097.78		13.99	
0 deg	RohnJ2	-166.73	-6.60	1100.42		14.07	
0 deg	SNB-J1	-244.32	-5.44	1329.10		25.69	
0 deg	SNB-J2	-244.89	-5.44	1332.20		25.72	
+60 deg	RohnJP	160.81	6.60	1061.35	14056.5	14.71	154.3
+60 deg	SNB-JP	236.25	5.44	1285.20		25.09	
+60 deg	RohnJ1	-321.46	-13.18	4236.84		26.68	
+60 deg	RohnJ2	160.39	6.60	1058.57		14.61	
+60 deg	SNB-J1	-471.72	-10.88	5132.31		48.16	
+60 deg	SNB-J2	235.71	5.44	1282.26		25.05	
+90 deg	RohnJP	0.2	0.00	0.00	14183.1	3.95	143.4
+90 deg	SNB-JP	0.37	0.00	0.00		6.41	
+90 deg	RohnJ1	-281.02	-11.42	3209.25		23.34	
+90 deg	RohnJ2	280.56	11.42	3204.00		24.66	
+90 deg	SNB-J1	-412.48	-9.42	3885.56		42.27	
+90 deg	SNB-J2	412.35	9.42	3884.34		42.75	

Forces taken from PLS-Tower output with 0.9\*DL Only load case subtracted from Vertical Tower Forces

Dimensions taken from CAD drawing





From PLS-Tower Output Summary

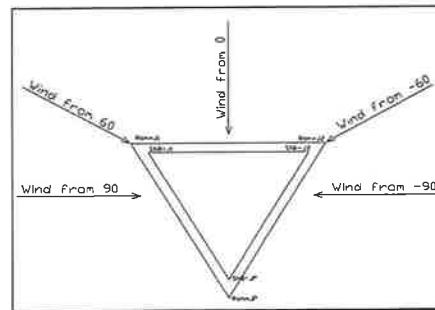
Summary of Joint Support Reactions For All Load Cases:

Load Case	Joint Label	Long. Force (kips)	Tran. Force (kips)	Vert. Force (kips)	Shear Force (kips)	Tran. Moment (ft-k)	Long. Moment (ft-k)	Vert. Moment (ft-k)	Bending Moment (ft-k)	Found. Usage %
"-90"	3: 1.2D + 1.0Dg + 1.0 Di + 1.0 Wi + 1.0 Ti RohnJP	-1.09	1.54	188.79	1.88	0.03	1.15	0.01	1.15	0
	3: 1.2D + 1.0Dg + 1.0 Di + 1.0 Wi + 1.0 Ti SNB-JP	2.4	2.16	218.94	3.23	0.44	3.46	0.02	3.49	0
	3: 1.2D + 1.0Dg + 1.0 Di + 1.0 Wi + 1.0 Ti RohnJ1	4.68	9.53	294.91	10.62	-0.37	0.28	0	0.46	0
	3: 1.2D + 1.0Dg + 1.0 Di + 1.0 Wi + 1.0 Ti RohnJ2	-3.59	7.64	82.38	8.44	-2.38	-1.4	0	2.76	0
	3: 1.2D + 1.0Dg + 1.0 Di + 1.0 Wi + 1.0 Ti SNB-J1	5.44	11.56	372.08	12.78	-0.31	0.47	-0.01	0.56	0
	3: 1.2D + 1.0Dg + 1.0 Di + 1.0 Wi + 1.0 Ti SNB-J2	-7.84	15.73	65.45	17.57	-6.35	-3.89	-0.01	7.45	0
"-60"	3: 1.2D + 1.0Dg + 1.0 Di + 1.0 Wi + 1.0 Ti RohnJP	-6.57	1.32	250.15	6.7	0.05	0.22	0.01	0.23	0
	3: 1.2D + 1.0Dg + 1.0 Di + 1.0 Wi + 1.0 Ti SNB-JP	-6.32	1.86	307.44	6.59	0.41	1.17	0.02	1.24	0
	3: 1.2D + 1.0Dg + 1.0 Di + 1.0 Wi + 1.0 Ti RohnJ1	2.19	6.32	249.93	6.69	0.23	-0.05	0	0.24	0
	3: 1.2D + 1.0Dg + 1.0 Di + 1.0 Wi + 1.0 Ti RohnJ2	-4.95	8.53	66	9.86	-2.6	-1.51	0	3	0
	3: 1.2D + 1.0Dg + 1.0 Di + 1.0 Wi + 1.0 Ti SNB-J1	1.56	6.4	307.18	6.59	1.22	-0.23	-0.02	1.25	0
	3: 1.2D + 1.0Dg + 1.0 Di + 1.0 Wi + 1.0 Ti SNB-J2	-9.92	17.19	41.85	19.85	-6.98	-4.03	0	8.05	0
"0"	3: 1.2D + 1.0Dg + 1.0 Di + 1.0 Wi + 1.0 Ti RohnJP	-12.28	-0.01	313.75	12.28	0	-0.73	0	0.73	0
	3: 1.2D + 1.0Dg + 1.0 Di + 1.0 Wi + 1.0 Ti SNB-JP	-15.27	0	398.14	15.27	0	-1.19	0	1.19	0
	3: 1.2D + 1.0Dg + 1.0 Di + 1.0 Wi + 1.0 Ti RohnJ1	-3.35	-3.15	127.28	4.6	1.82	-1.02	0	2.08	0
	3: 1.2D + 1.0Dg + 1.0 Di + 1.0 Wi + 1.0 Ti RohnJ2	-3.33	3.16	127.4	4.59	-1.82	-1.01	0	2.08	0
	3: 1.2D + 1.0Dg + 1.0 Di + 1.0 Wi + 1.0 Ti SNB-J1	-7.28	-8.83	129.15	11.44	5.18	-2.58	-0.01	5.79	0
	3: 1.2D + 1.0Dg + 1.0 Di + 1.0 Wi + 1.0 Ti SNB-J2	-7.28	8.83	129.26	11.44	-5.18	-2.57	0.01	5.79	0
"60"	3: 1.2D + 1.0Dg + 1.0 Di + 1.0 Wi + 1.0 Ti RohnJP	-6.57	-1.33	250.22	6.7	-0.05	0.22	-0.01	0.23	0
	3: 1.2D + 1.0Dg + 1.0 Di + 1.0 Wi + 1.0 Ti SNB-JP	-6.33	-1.86	307.54	6.59	-0.41	1.17	-0.02	1.24	0
	3: 1.2D + 1.0Dg + 1.0 Di + 1.0 Wi + 1.0 Ti RohnJ1	-4.96	-8.52	65.81	9.86	2.59	-1.52	0	3	0
	3: 1.2D + 1.0Dg + 1.0 Di + 1.0 Wi + 1.0 Ti RohnJ2	2.19	-6.31	250.05	6.68	-0.23	-0.04	0	0.24	0
	3: 1.2D + 1.0Dg + 1.0 Di + 1.0 Wi + 1.0 Ti SNB-J1	-9.93	-17.19	41.64	19.85	6.98	-4.03	0	8.06	0
	3: 1.2D + 1.0Dg + 1.0 Di + 1.0 Wi + 1.0 Ti SNB-J2	1.56	-6.4	307.29	6.58	-1.23	-0.23	0.01	1.25	0
"90"	3: 1.2D + 1.0Dg + 1.0 Di + 1.0 Wi + 1.0 Ti RohnJP	-1.09	-1.53	188.88	1.88	-0.04	1.15	-0.01	1.15	0
	3: 1.2D + 1.0Dg + 1.0 Di + 1.0 Wi + 1.0 Ti SNB-JP	2.4	-2.16	219.05	3.22	-0.44	3.46	-0.02	3.49	0
	3: 1.2D + 1.0Dg + 1.0 Di + 1.0 Wi + 1.0 Ti RohnJ1	-3.59	-7.65	82.15	8.45	2.38	-1.4	0	2.76	0
	3: 1.2D + 1.0Dg + 1.0 Di + 1.0 Wi + 1.0 Ti RohnJ2	4.68	-9.53	295.06	10.62	0.36	0.28	0	0.46	0
	3: 1.2D + 1.0Dg + 1.0 Di + 1.0 Wi + 1.0 Ti SNB-J1	-7.85	-15.73	65.18	17.58	6.35	-3.9	0.01	7.45	0
	3: 1.2D + 1.0Dg + 1.0 Di + 1.0 Wi + 1.0 Ti SNB-J2	5.44	-11.56	372.23	12.78	0.31	0.47	0.01	0.56	0
"1.2*DL"	1.2*DL RohnJP	-2.09	0	30.92	2.09	0	-0.35	0	0.35	0
	1.2*DL SNB-JP	-0.06	0	18.69	0.06	0	-0.67	0	0.67	0
	1.2*DL RohnJ1	1.05	1.81	30.73	2.09	-0.3	0.17	0	0.34	0
	1.2*DL RohnJ2	1.05	-1.81	30.92	2.09	0.3	0.17	0	0.35	0
	1.2*DL SNB-J1	0.03	0.05	18.46	0.06	-0.58	0.33	0	0.67	0
	1.2*DL SNB-J2	0.03	-0.05	18.66	0.06	0.58	0.34	0	0.67	0

Load Case	Joint Label	Vert. Tower Forces (k)	Leg Moment Arm (ft)	Moment (ft-k)	Total Moment (ft-k)	Shear (k)	Total Shear (k)
-90 deg	RohnJP	157.87	0.00	0.00	5319.6	1.88	54.5
-90 deg	SNB-JP	200.25	0.00	0.00		3.23	
-90 deg	RohnJ1	264.18	11.42	3016.94		10.62	
-90 deg	RohnJ2	51.46	-11.42	-587.67		8.44	
-90 deg	SNB-J1	353.62	9.42	3331.10		12.78	
-90 deg	SNB-J2	46.79	-9.42	-440.76		17.57	
-60 deg	RohnJP	219.23	6.60	1446.92	5320.4	6.70	56.3
-60 deg	SNB-JP	288.75	5.44	1570.80		6.59	
-60 deg	RohnJ1	219.2	6.60	1446.72		6.69	
-60 deg	RohnJ2	35.08	-13.18	-462.35		9.86	
-60 deg	SNB-J1	288.72	5.44	1570.64		6.59	
-60 deg	SNB-J2	23.19	-10.88	-252.31		19.85	
0 deg	RohnJP	282.83	13.18	3727.70	5378.3	12.28	59.6
0 deg	SNB-JP	379.45	10.88	4128.42		15.27	
0 deg	RohnJ1	96.55	-6.60	-637.23		4.60	
0 deg	RohnJ2	96.48	-6.60	-636.77		4.59	
0 deg	SNB-J1	110.69	-5.44	-602.15		11.44	
0 deg	SNB-J2	110.6	-5.44	-601.66		11.44	
+60 deg	RohnJP	219.3	6.60	1447.38	5320.6	6.70	56.3
+60 deg	SNB-JP	288.85	5.44	1571.34		6.59	
+60 deg	RohnJ1	35.08	-13.18	-462.35		9.86	
+60 deg	RohnJ2	219.13	6.60	1446.26		6.68	
+60 deg	SNB-J1	23.18	-10.88	-252.20		19.85	
+60 deg	SNB-J2	288.63	5.44	1570.15		6.58	
+90 deg	RohnJP	157.96	0.00	0.00	5319.8	1.88	54.5
+90 deg	SNB-JP	200.36	0.00	0.00		3.22	
+90 deg	RohnJ1	51.42	-11.42	-587.22		8.45	
+90 deg	RohnJ2	264.14	11.42	3016.48		10.62	
+90 deg	SNB-J1	46.72	-9.42	-440.10		17.58	
+90 deg	SNB-J2	353.57	9.42	3330.63		12.78	

Forces taken from PLS-Tower output with 1.2\*DL Only load case subtracted from Vertical Tower Forces

Dimensions taken from CAD drawing







Job	180' ROHN SSV Tower w/ SNB Reinf. - Greenwich	Project No.	Revision 4	Page	_____ of _____
Description	Overturning Moment Calculation	Computed by	MCD	Sheet	_____ of _____
	TIA-222-G Load Case #4	Checked by		Date	07/31/19
				Date	_____

From PLS-Tower Output Summary

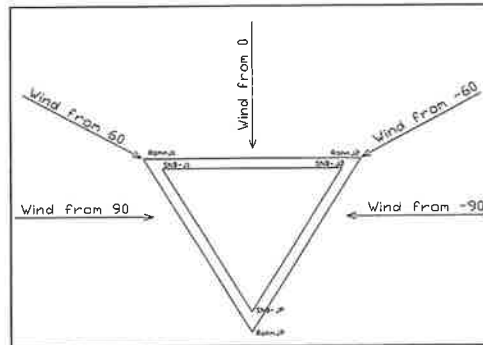
Summary of Joint Support Reactions For All Load Cases:

Load Case	Joint Label	Long. Force (kips)	Tran. Force (kips)	Vert. Force (kips)	Shear Force (kips)	Tran. Moment (ft-k)	Long. Moment (ft-k)	Vert. Moment (ft-k)	Bending Moment (ft-k)	Found. Usage %	
"-90"	4: 1.2D + 1.0Dg + 1.0E	RohnJP	-1.07	0.1	19.89	1.07	0.04	-0.28	0	0.28	0
	4: 1.2D + 1.0Dg + 1.0E	SNB-JP	-0.55	0.15	18.52	0.57	0.18	-0.48	0.01	0.51	0
	4: 1.2D + 1.0Dg + 1.0E	RohnJ1	1.14	2.02	38.37	2.32	-0.43	0.29	0	0.52	0
	4: 1.2D + 1.0Dg + 1.0E	RohnJ2	-0.07	0.19	1.1	0.2	0.04	-0.01	0	0.04	0
	4: 1.2D + 1.0Dg + 1.0E	SNB-J1	1.29	2.37	44.84	2.7	-0.89	0.62	0	1.08	0
"-60"	4: 1.2D + 1.0Dg + 1.0E	SNB-J2	-0.74	1.43	-8.19	1.61	-0.07	-0.14	0	0.15	0
	4: 1.2D + 1.0Dg + 1.0E	RohnJP	-1.79	0.09	30.67	1.79	0.04	-0.42	0	0.42	0
	4: 1.2D + 1.0Dg + 1.0E	SNB-JP	-1.79	0.13	33.86	1.8	0.15	-0.82	0.01	0.84	0
	4: 1.2D + 1.0Dg + 1.0E	RohnJ1	0.84	1.58	30.47	1.79	-0.33	0.25	0	0.42	0
	4: 1.2D + 1.0Dg + 1.0E	RohnJ2	-0.21	0.33	-1.79	0.39	0	-0.01	0	0.01	0
"0"	4: 1.2D + 1.0Dg + 1.0E	SNB-J1	0.79	1.61	33.62	1.79	-0.63	0.55	-0.01	0.84	0
	4: 1.2D + 1.0Dg + 1.0E	SNB-J2	-0.97	1.68	-12.3	1.94	-0.19	-0.11	0	0.22	0
	4: 1.2D + 1.0Dg + 1.0E	RohnJP	-2.52	0	41.46	2.52	0	-0.56	0	0.56	0
	4: 1.2D + 1.0Dg + 1.0E	SNB-JP	-3.04	0	49.2	3.04	0	-1.17	0	1.17	0
	4: 1.2D + 1.0Dg + 1.0E	RohnJ1	0.11	0.32	8.9	0.34	-0.09	0.11	0	0.14	0
"60"	4: 1.2D + 1.0Dg + 1.0E	RohnJ2	0.1	-0.33	8.99	0.34	0.1	0.1	0	0.14	0
	4: 1.2D + 1.0Dg + 1.0E	SNB-J1	-0.46	-0.54	2.94	0.71	-0.03	0.2	-0.01	0.2	0
	4: 1.2D + 1.0Dg + 1.0E	SNB-J2	-0.45	0.54	3.04	0.71	0.03	0.2	0.01	0.2	0
	4: 1.2D + 1.0Dg + 1.0E	RohnJP	-1.79	-0.08	30.67	1.79	-0.04	-0.42	0	0.42	0
	4: 1.2D + 1.0Dg + 1.0E	SNB-JP	-1.79	-0.12	33.86	1.8	-0.16	-0.82	-0.01	0.84	0
"90"	4: 1.2D + 1.0Dg + 1.0E	RohnJ1	-0.21	-0.34	-1.89	0.39	0	-0.01	0	0.01	0
	4: 1.2D + 1.0Dg + 1.0E	RohnJ2	0.84	-1.58	30.56	1.79	0.33	0.25	0	0.42	0
	4: 1.2D + 1.0Dg + 1.0E	SNB-J1	-0.97	-1.68	-12.4	1.94	0.19	-0.11	0	0.22	0
	4: 1.2D + 1.0Dg + 1.0E	SNB-J2	0.79	-1.61	33.72	1.8	0.63	0.55	0.01	0.84	0
	4: 1.2D + 1.0Dg + 1.0E	RohnJP	-1.07	-0.1	19.89	1.07	-0.04	-0.28	0	0.28	0
"1.2*DL"	4: 1.2D + 1.0Dg + 1.0E	SNB-JP	-0.55	-0.14	18.52	0.57	-0.18	-0.48	-0.01	0.51	0
	4: 1.2D + 1.0Dg + 1.0E	RohnJ1	-0.07	-0.19	1	0.2	-0.04	-0.01	0	0.04	0
	4: 1.2D + 1.0Dg + 1.0E	RohnJ2	1.14	-2.02	38.46	2.32	0.43	0.29	0	0.52	0
	4: 1.2D + 1.0Dg + 1.0E	SNB-J1	-0.74	-1.43	-8.29	1.61	0.07	-0.14	0	0.16	0
	4: 1.2D + 1.0Dg + 1.0E	SNB-J2	1.29	-2.37	44.95	2.7	0.89	0.62	0	1.08	0
	1.2*DL	RohnJP	-1.07	0	19.88	1.07	0	-0.28	0	0.28	0
	1.2*DL	SNB-JP	-0.55	0	18.52	0.55	0	-0.48	0	0.48	0
	1.2*DL	RohnJ1	0.53	0.92	19.69	1.06	-0.24	0.14	0	0.27	0
	1.2*DL	RohnJ2	0.53	-0.92	19.78	1.06	0.24	0.14	0	0.27	0
	1.2*DL	SNB-J1	0.27	0.47	18.28	0.55	-0.41	0.24	0	0.47	0
1.2*DL	SNB-J2	0.28	-0.47	18.38	0.55	0.41	0.24	0	0.47	0	

Load Case	Joint Label	Vert. Tower Forces (k)	Leg Moment Arm (ft)	Moment (ft-k)	Total Moment (ft-k)	Shear (k)	Total Shear (k)
-90 deg	RohnJP	0.01	0.00	0.00	927.1	1.07	8.5
-90 deg	SNB-JP	0	0.00	0.00		0.57	
-90 deg	RohnJ1	18.68	11.42	213.33		2.32	
-90 deg	RohnJ2	-18.68	-11.42	213.33		0.20	
-90 deg	SNB-J1	26.56	9.42	250.20		2.70	
-90 deg	SNB-J2	-26.57	-9.42	250.29		1.61	
-60 deg	RohnJP	10.79	6.60	71.21	927.4	1.79	9.5
-60 deg	SNB-JP	15.34	5.44	83.45		1.80	
-60 deg	RohnJ1	10.78	6.60	71.15		1.79	
-60 deg	RohnJ2	-21.57	-13.18	284.29		0.39	
-60 deg	SNB-J1	15.34	5.44	83.45		1.79	
-60 deg	SNB-J2	-30.68	-10.88	333.80		1.94	
0 deg	RohnJP	21.58	13.18	284.42	927.6	2.52	7.7
0 deg	SNB-JP	30.68	10.88	333.80		3.04	
0 deg	RohnJ1	-10.79	-6.60	71.21		0.34	
0 deg	RohnJ2	-10.79	-6.60	71.21		0.34	
0 deg	SNB-J1	-15.34	-5.44	83.45		0.71	
0 deg	SNB-J2	-15.34	-5.44	83.45		0.71	
+60 deg	RohnJP	10.79	6.60	71.21	927.5	1.79	9.5
+60 deg	SNB-JP	15.34	5.44	83.45		1.80	
+60 deg	RohnJ1	-21.58	-13.18	284.42		0.39	
+60 deg	RohnJ2	10.78	6.60	71.15		1.79	
+60 deg	SNB-J1	-30.68	-10.88	333.80		1.94	
+60 deg	SNB-J2	15.34	5.44	83.45		1.80	
+90 deg	RohnJP	0.01	0.00	0.00	927.3	1.07	8.5
+90 deg	SNB-JP	0	0.00	0.00		0.57	
+90 deg	RohnJ1	-18.69	-11.42	213.44		0.20	
+90 deg	RohnJ2	18.68	11.42	213.33		2.32	
+90 deg	SNB-J1	-26.57	-9.42	250.29		1.61	
+90 deg	SNB-J2	26.57	9.42	250.29		2.70	

Forces taken from PLS-Tower output with 1.2\*DL Only load case subtracted from Vertical Tower Forces

Dimensions taken from CAD drawing





Job 180' ROHN SSV Tower w/ SNB Reinf. - Greenwich  
 Description Overturing Moment Calculation  
TIA-222-G Load Case #5

Project No. \_\_\_\_\_  
 Computed by \_\_\_\_\_  
 Checked by \_\_\_\_\_

Revision 4  
MCD

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 Date 07/31/19  
 Date \_\_\_\_\_

From PLS-Tower Output Summary

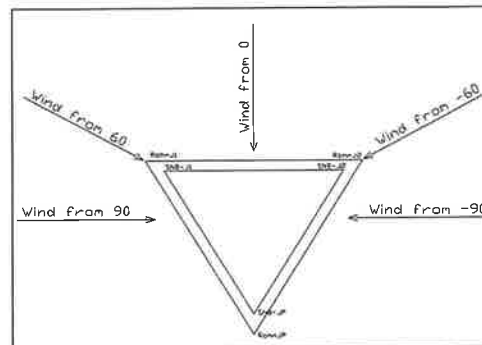
Summary of Joint Support Reactions For All Load Cases:

Load Case	Joint Label	Long. Force (kips)	Tran. Force (kips)	Vert. Force (kips)	Shear Force (kips)	Tran. Moment (ft-k)	Long. Moment (ft-k)	Vert. Moment (ft-k)	Bending Moment (ft-k)	Found. Usage %
"-90"	5: 0.9D + 1.0Dg + 1.0E RohnJP	-0.8	0.1	14.92	0.81	0.04	-0.21	0	0.21	0
	5: 0.9D + 1.0Dg + 1.0E SNB-JP	-0.41	0.15	13.89	0.44	0.18	-0.36	0.01	0.4	0
	5: 0.9D + 1.0Dg + 1.0E RohnJ1	1	1.79	33.42	2.06	-0.37	0.25	0	0.45	0
	5: 0.9D + 1.0Dg + 1.0E RohnJ2	-0.21	0.41	-3.82	0.46	-0.02	-0.04	0	0.05	0
	5: 0.9D + 1.0Dg + 1.0E SNB-J1	1.22	2.26	40.24	2.57	-0.78	0.56	0	0.96	0
"-60"	5: 0.9D + 1.0Dg + 1.0E SNB-J2	-0.81	1.55	-12.75	1.75	-0.17	-0.2	0	0.26	0
	5: 0.9D + 1.0Dg + 1.0E RohnJP	-1.53	0.09	25.69	1.53	0.03	-0.35	0	0.35	0
	5: 0.9D + 1.0Dg + 1.0E SNB-JP	-1.66	0.13	29.21	1.66	0.15	-0.7	0.01	0.72	0
	5: 0.9D + 1.0Dg + 1.0E RohnJ1	0.71	1.35	25.54	1.52	-0.27	0.22	0	0.35	0
	5: 0.9D + 1.0Dg + 1.0E RohnJ2	-0.34	0.56	-6.7	0.66	-0.06	-0.04	0	0.07	0
"0"	5: 0.9D + 1.0Dg + 1.0E SNB-J1	0.72	1.49	29.02	1.66	-0.53	0.49	-0.01	0.72	0
	5: 0.9D + 1.0Dg + 1.0E SNB-J2	-1.04	1.8	-16.85	2.08	-0.3	-0.17	0	0.34	0
	5: 0.9D + 1.0Dg + 1.0E RohnJP	-2.25	0	36.46	2.25	0	-0.49	0	0.49	0
	5: 0.9D + 1.0Dg + 1.0E SNB-JP	-2.9	0	44.53	2.9	0	-1.05	0	1.05	0
	5: 0.9D + 1.0Dg + 1.0E RohnJ1	-0.03	0.09	4	0.1	-0.04	0.07	0	0.08	0
"60"	5: 0.9D + 1.0Dg + 1.0E RohnJ2	-0.03	-0.1	4.06	0.1	0.04	0.07	0	0.08	0
	5: 0.9D + 1.0Dg + 1.0E SNB-J1	-0.52	-0.66	-1.61	0.84	0.07	0.14	-0.01	0.15	0
	5: 0.9D + 1.0Dg + 1.0E SNB-J2	-0.52	0.66	-1.54	0.84	-0.07	0.14	0.01	0.16	0
	5: 0.9D + 1.0Dg + 1.0E RohnJP	-1.53	-0.08	25.69	1.53	-0.04	-0.35	0	0.35	0
	5: 0.9D + 1.0Dg + 1.0E SNB-JP	-1.66	-0.13	29.21	1.66	-0.16	-0.7	-0.01	0.72	0
"90"	5: 0.9D + 1.0Dg + 1.0E RohnJ1	-0.34	-0.56	-6.77	0.66	0.06	-0.04	0	0.07	0
	5: 0.9D + 1.0Dg + 1.0E RohnJ2	0.71	-1.35	25.6	1.53	0.27	0.22	0	0.35	0
	5: 0.9D + 1.0Dg + 1.0E SNB-J1	-1.04	-1.8	-16.93	2.08	0.3	-0.17	0	0.34	0
	5: 0.9D + 1.0Dg + 1.0E SNB-J2	0.72	-1.49	29.1	1.66	0.53	0.49	0.01	0.72	0
	5: 0.9D + 1.0Dg + 1.0E RohnJP	-0.8	-0.1	14.92	0.81	-0.04	-0.21	0	0.21	0
"0.9*DL"	5: 0.9D + 1.0Dg + 1.0E SNB-JP	-0.41	-0.14	13.89	0.44	-0.18	-0.36	-0.01	0.4	0
	5: 0.9D + 1.0Dg + 1.0E RohnJ1	-0.21	-0.42	-3.89	0.46	0.02	-0.05	0	0.05	0
	5: 0.9D + 1.0Dg + 1.0E RohnJ2	1.01	-1.8	33.49	2.06	0.37	0.25	0	0.45	0
	5: 0.9D + 1.0Dg + 1.0E SNB-J1	-0.81	-1.55	-12.83	1.75	0.17	-0.2	0	0.26	0
	5: 0.9D + 1.0Dg + 1.0E SNB-J2	1.22	-2.26	40.31	2.57	0.78	0.56	0	0.96	0
	0.9DL RohnJP	-0.8	0	14.92	0.8	0	-0.21	0	0.21	0
	0.9DL SNB-JP	-0.41	0	13.89	0.41	0	-0.36	0	0.36	0
	0.9DL RohnJ1	0.4	0.69	14.77	0.8	-0.18	0.1	0	0.21	0
	0.9DL RohnJ2	0.4	-0.69	14.84	0.8	0.18	0.1	0	0.21	0
	0.9DL SNB-J1	0.21	0.35	13.71	0.41	-0.31	0.18	0	0.35	0
0.9DL SNB-J2	0.21	-0.36	13.78	0.41	0.31	0.18	0	0.36	0	

Load Case	Joint Label	Vert. Tower Forces (k)	Leg Moment Arm (ft)	Moment (ft-k)	Total Moment (ft-k)	Shear (k)	Total Shear (k)
-90 deg	RohnJP	0	0.00	0.00	925.9	0.81	8.1
-90 deg	SNB-JP	0	0.00	0.00		0.44	
-90 deg	RohnJ1	18.65	11.42	212.98		2.06	
-90 deg	RohnJ2	-18.66	-11.42	213.10		0.46	
-90 deg	SNB-J1	26.53	9.42	249.91		2.57	
-90 deg	SNB-J2	-26.53	-9.42	249.91		1.75	
-60 deg	RohnJP	10.77	6.60	71.08	925.9	1.53	9.1
-60 deg	SNB-JP	15.32	5.44	83.34		1.66	
-60 deg	RohnJ1	10.77	6.60	71.08		1.52	
-60 deg	RohnJ2	-21.54	-13.18	283.90		0.66	
-60 deg	SNB-J1	15.31	5.44	83.29		1.66	
-60 deg	SNB-J2	-30.63	-10.88	333.25		2.08	
0 deg	RohnJP	21.54	13.18	283.90	926.2	2.25	7.0
0 deg	SNB-JP	30.64	10.88	333.36		2.90	
0 deg	RohnJ1	-10.77	-6.60	71.08		0.10	
0 deg	RohnJ2	-10.78	-6.60	71.15		0.10	
0 deg	SNB-J1	-15.32	-5.44	83.34		0.84	
0 deg	SNB-J2	-15.32	-5.44	83.34		0.84	
+60 deg	RohnJP	10.77	6.60	71.08	926.0	1.53	9.1
+60 deg	SNB-JP	15.32	5.44	83.34		1.66	
+60 deg	RohnJ1	-21.54	-13.18	283.90		0.66	
+60 deg	RohnJ2	10.76	6.60	71.02		1.53	
+60 deg	SNB-J1	-30.64	-10.88	333.36		2.08	
+60 deg	SNB-J2	15.32	5.44	83.34		1.66	
+90 deg	RohnJP	0	0.00	0.00	926.0	0.81	8.1
+90 deg	SNB-JP	0	0.00	0.00		0.44	
+90 deg	RohnJ1	-18.66	-11.42	213.10		0.46	
+90 deg	RohnJ2	18.65	11.42	212.98		2.06	
+90 deg	SNB-J1	-26.54	-9.42	250.01		1.75	
+90 deg	SNB-J2	26.53	9.42	249.91		2.57	

Forces taken from PLS-Tower output with 0.9\*DL Only load case subtracted from Vertical Tower Forces

Dimensions taken from CAD drawing



Job  
Description

180' ROHN SSV Tower w/ SNB Reinf. - Greenwich  
Overturning Moment Calculation  
Maximum Forces - All 5 Load Cases

Project No.  
Computed by  
Checked by

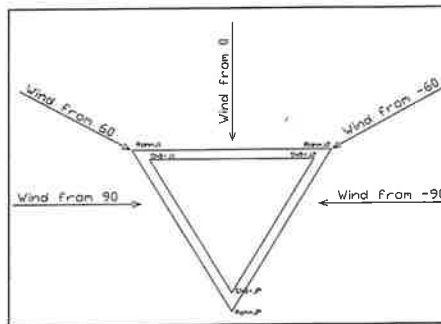
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Date 07/31/19  
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Load Case	Load Case 1	Load Case 1	Load Case 2	Load Case 2	Load Case 3	Load Case 3	Load Case 4	Load Case 4	Load Case 5	Load Case 5
Load Case	Total Moment (ft-k)	Total Shear (k)	Total Moment (ft-k)	Total Shear (k)	Total Moment (ft-k)	Total Shear (k)	Total Moment (ft-k)	Total Shear (k)	Total Moment (ft-k)	Total Shear (k)
Wo -90 deg	14201	143.5	14183	143.4	5320	54.5	927.1	8.5	925.9	8.1
Wo -60 deg	14074	154.7	14056.3	154.3	5320	56.3	927.4	9.5	925.9	9.1
Wo 0 deg	14589	159.2	14576.1	159.5	5378	59.6	927.6	7.7	926.2	7
Wo 60 deg	14074	154.7	14056.5	154.3	5321	56.3	927.5	9.5	926	9.1
Wo 90 deg	14201	143.4	14183.1	143.4	5320	54.5	927.3	8.5	926	8.1

Maximum Moment = 14589 kip\*ft

Maximum Shear = 159.5 kip



## PIER AND MAT FOUNDATION ANALYSIS - 3 PIERS

### TOWER FORCES:

Moment Caused by Tower  $M_t := 14589 \text{ kip}\cdot\text{ft}$   
 Shear at Base of Tower  $S_t := 159.5 \text{ kip}$   
 Max Compressive Force  $C_t := 814 \text{ kip}$   
 Max Uplift  $U_t := 738 \text{ kip}$   
 Height of Tower  $H_t := 180 \text{ ft}$   
 Width of Tower at Base  $W_t := 22.833 \text{ ft}$   
 Weight of Tower  $WT_{t\_0.9} := 86.21 \text{ kip}$   
 $WT_{t\_1.2} := 114.95 \text{ kip}$

### FOOTING DIMENSIONS:

Width of Footing  $W_f := 36.5 \text{ ft}$   
 Overall Depth of Footing  $D_f := 3.5 \text{ ft}$   
 Thickness of Footing  $T_f := 6.0 \text{ ft}$   
 Reinforcement Cover:  $Cvr := 3 \text{ in}$

NOTE: Information for "Weight of Tower" obtained from Load Combination Calculation Excel Sheets Summation of Factored DL.

### MATERIAL PROPERTIES:

Compressive Strength of Concrete  $f_c := 3000 \text{ psi}$   
 Yield Strength of Steel Reinforcement  $f_y := 60000 \text{ psi}$   
 Internal Friction Angle of Soil  $\phi_s := 36 \text{ deg}$   
 Allowable Bearing Capacity  $q_s := 4000 \text{ psf}$   
 Ultimate Bearing Capacity  $R_s := 2 \cdot q_s$

Unit Weight of Soil  $\gamma_s := 130 \text{ pcf}$   
 Unit Weight of Concrete  $\gamma_c := 150 \text{ pcf}$   
 Depth to Neglect  $n := 0 \text{ ft}$   
 Cohesion of Clay Type Soil  $c_m := 0 \text{ ksf}$   
 Note: Use 0 for Sandy Soil

Coefficient of Lateral Soil Pressure  $K_p := \frac{1 + \sin(\phi_s)}{1 - \sin(\phi_s)}$   $K_p = 3.8518$

What is Position of Center of Tower with respect to Center of Pad?   
 1=Offset  $Pos_{tower} := 2$   
 2=Not Offset

### STEEL REINFORCING:

#### PAD REINFORCEMENT (Considering Uplift Moment Resistance):

Bar Size  $BS_{pad} := 8$       Bar Diameter  $d_{bpad} := 1.00 \text{ in}$   
 Number of Bars  $NB_{pad} := 44$       Bar Area  $A_{bpad} := 0.95 \text{ in}^2$

NOTE: Area is for #8 @ 10in for uplift control ONLY.

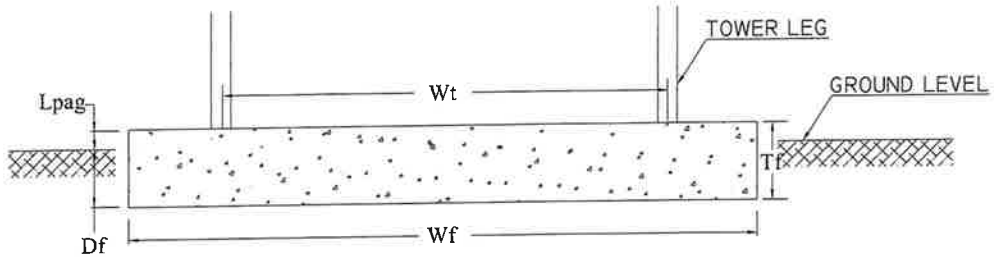


Job 180' ROHN SSV Tower w/ SNB Reinf. - Greenwich  
 Description Foundation Analysis (TIA-222-G)

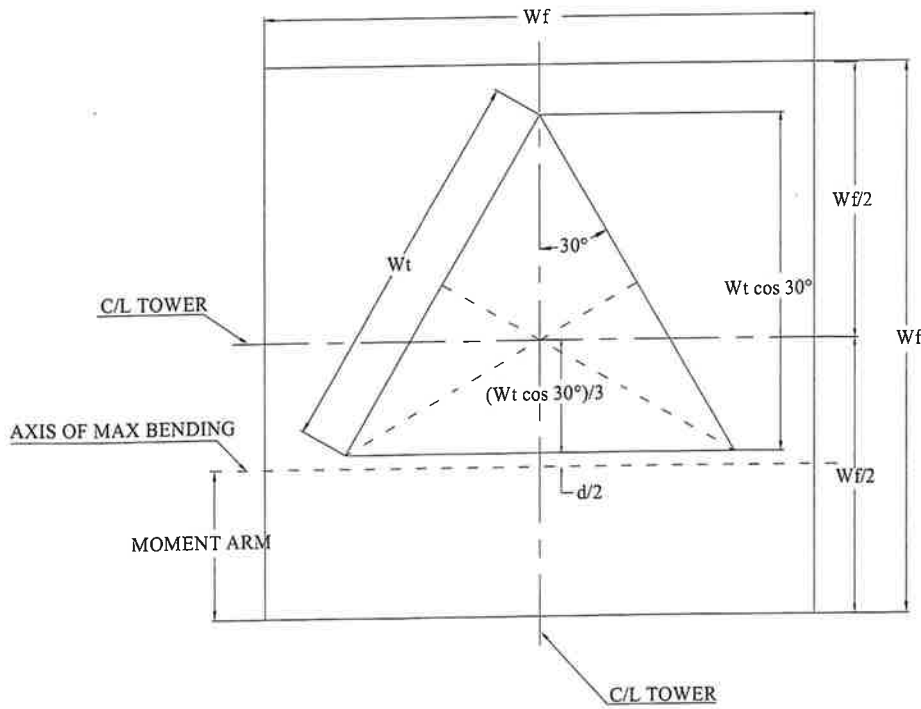
Project No. Revision 4  
 Computed by MCD  
 Checked by                     

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 Date                     

**FOUNDATION OVERVIEW**



**ELEVATION**



**PLAN**

Job	<u>180' ROHN SSV Tower w/ SNB Reinf. - Greenwich</u>	Project No.	<u>Revision 4</u>	Sheet	<u>3</u> of <u>7</u>
Description	<u>Foundation Analysis (TIA-222-G)</u>	Computed by	<u>MCD</u>	Date	<u>07/31/19</u>
		Checked by	<u>    </u>	Date	<u>    </u>

## STABILITY OF FOOTING

NOTE: Reduction factor is implemented as 0.75 for pull-out/uplift of foundation. Reduction factor shall be applied to Overturning Moment in this case

Passive Pressure:	$P_{pn} := K_p \cdot \gamma_s \cdot n + c \cdot 2 \cdot \sqrt{K_p}$ $P_{pt} := K_p \cdot \gamma_s \cdot (D_f - T_f) + c \cdot 2 \cdot \sqrt{K_p}$ $P_{top} := \text{if}[n < (D_f - T_f), P_{pt}, P_{pn}]$ $P_{bot} := K_p \cdot \gamma_s \cdot D_f + c \cdot 2 \cdot \sqrt{K_p}$ $P_{ave} := \frac{P_{top} + P_{bot}}{2}$	$P_{pn} = 0 \text{ ksf}$ $P_{pt} = -1.2518 \text{ ksf}$ $P_{top} = 0 \text{ ksf}$ $P_{bot} = 1.7526 \text{ ksf}$ $P_{ave} = 0.8763 \text{ ksf}$
Shear:	$T_{pp} := \text{if}[n < (D_f - T_f), T_f, (D_f - n)]$ $A_{pp} := W_f \cdot T_{pp}$	$T_{pp} = 3.5 \text{ ft}$ $A_{pp} = 127.75 \text{ ft}^2$
Ultimate Shear:	$S_u := P_{ave} \cdot A_{pp}$	$S_u = 111.9465 \text{ kip}$
Weight of Concrete Pad:	$WT_c := (W_f^2 \cdot T_f) \cdot \gamma_c$	$WT_c = 1199.025 \text{ kip}$
Weight of Soil above Footing:	$WT_{s1} := 0$	$WT_{s1} = 0 \text{ kip}$
Weight of Soil Wedge at back face:	$WT_{s2} := \left[ \frac{(D_f - n)^2 \cdot \tan(\phi_s)}{2} \cdot W_f \right] \cdot \gamma_s$	$WT_{s2} = 21.1156 \text{ kip}$
Distance to center of Tower Leg from Edge of Footing:	$X_{t1} := \frac{W_f}{2} - \frac{W_t \cdot \cos(30 \text{ deg})}{2}$ $X_t := \text{if}(\text{Pos}_{tower} = 1, X_{t1}, X_{t2})$	$X_{t2} := \frac{W_f}{2} - \frac{W_t \cdot \cos(30 \text{ deg})}{3}$ $X_t = 11.6587 \text{ ft}$
Additional Offset of Footing:	$X_{off1} := \frac{W_f}{2} - \left( \frac{W_t \cdot \cos(30 \text{ deg})}{3} + X_t \right)$ $X_{off} := \text{if}(\text{Pos}_{tower} = 1, X_{off1}, X_{off2})$	$X_{off2} := 0$ $X_{off} = 0 \text{ ft}$
Resisting Moment:	$M_r := \left[ 0.9(WT_c + WT_{s1}) \right] \cdot \frac{W_f}{2} + \left[ WT_t \cdot 0.9 \cdot \left( \frac{W_f}{2} - X_{off} \right) \right] + 0.90 \cdot \left( S_u \cdot \frac{T_{pp}}{3} \right) \dots$ $+ WT_{s2} \cdot 0.90 \cdot \left( W_f + \frac{T_{pp} \cdot \tan(\phi_s)}{3} \right)$	$M_r = 22094.6177 \text{ kip} \cdot \text{ft}$
Overturning Moment:	$M_{ot} := M_t + S_t \cdot (T_f) + WT_{t\_1.2} \cdot X_{off}$	$M_{ot} = 15546 \text{ kip} \cdot \text{ft}$
Factor of Safety:	$\text{Ratio}_{Stability} := \frac{M_r}{M_{ot} \cdot \phi_{OT}}$ $\text{StabilityCheck} := \text{if}(M_r \cdot \phi_{OT} > M_{ot}, \text{"Okay"}, \text{"No Good"})$	$\text{Ratio}_{Stability} = 0.938$ $\text{StabilityCheck} = \text{"Okay"}$



Job	180' ROHN SSV Tower w/ SNB Reinf. - Greenwich	Project No.	Revision 4	Sheet	4 of 7
Description	Foundation Analysis (TIA-222-G)	Computed by	MCD	Date	07/31/19
		Checked by		Date	

### BEARING PRESSURE CHECK:

$$LOAD_{tot} := (WT_c + WT_{sl}) \cdot 0.9 + WT_{t\_0.9} \quad LOAD_{tot} = 1165.3325 \cdot kip$$

$$A_{mat} := W_f^2 \quad A_{mat} = 1332.25 \cdot ft^2$$

$$S := \frac{W_f^3}{6} \quad S = 8104.5208 \cdot ft^3$$

$$P_{max} := \frac{LOAD_{tot}}{A_{mat}} + \frac{M_{ot}}{S} \quad P_{max} = 2.7929 \cdot ksf$$

$$P_{min} := \frac{LOAD_{tot}}{A_{mat}} - \frac{M_{ot}}{S} \quad P_{min} = -1.0435 \cdot ksf$$

$$MaxPressure := \text{if}(P_{max} < 0.75R_s, \text{"Okay"}, \text{"No Good"}) \quad MaxPressure = \text{"Okay"}$$

$$MinPressure := \text{if}[(P_{min} \ge 0) \cdot (P_{min} < 0.75 \cdot R_s), \text{"Okay"}, \text{"No Good"}] \quad MinPressure = \text{"No Good"}$$

Distance to Resultant of Pressure Distribution:

$$X_p := \frac{P_{max}}{P_{max} - P_{min}} \cdot \frac{1}{3} \quad X_p = 8.8574 \cdot ft$$

Distance to Kern:  $X_k := \frac{W_f}{3} \quad X_k = 12.1667 \cdot ft$

Since Resultant Force is Not in Kern, Area to which Pressure is Applied Must be Reduced.

Eccentricity:  $e := \frac{M_{ot}}{LOAD_{tot}} \quad e = 13.3404$

Adjusted Soil Pressure:  $q_a := \frac{2 \cdot LOAD_{tot}}{3 \cdot W_f \cdot \left(\frac{W_f}{2} - e\right)} \quad q_a = 4.3353 \cdot ksf$

Revised Maximum:  $q_{max} := \text{if}(X_p < X_k, q_a, P_{max}) \quad q_{max} = 4.3353 \cdot ksf$

$$PressureCheck := \text{if}(q_{max} < 0.75 \cdot R_s, \text{"Okay"}, \text{"No Good"}) \quad PressureCheck = \text{"Okay"}$$

**CHECK PUNCHING AND BEAM SHEAR:**

**Beam Shear:** (Critical section located at a distance d from the face of Pier) (ACI 11.3.1.1)

$$\phi_c := 0.75 \quad (\text{ACI 9.3.2.3})$$

$$T_f := 4 \text{ ft} \quad \leftarrow \text{OVERRIDE - Original Footing Thickness}$$

$$d := T_f - C_{vr} - .5 \cdot \text{in} \quad d = 44.5 \cdot \text{in}$$

Factored load:

$$FL := \frac{C_t}{W_f^2} \quad FL = 0.611 \cdot \text{ksf}$$

$$V_{req} := \frac{FL \cdot (X_t - d) \cdot W_f}{\phi_c} \quad V_{req} = 236.4048 \cdot \text{kip}$$

ACI 11.3.1.1

$$V_{Avail} := 2 \cdot \sqrt{f_c \cdot \text{psi}} \cdot W_f \cdot d \quad V_{Avail} = 2135.1321 \cdot \text{kip}$$

$$\text{BeamShearCheck} := \text{if}(V_{req} < V_{Avail}, \text{"Okay"}, \text{"No Good"}) \quad \text{BeamShearCheck} = \text{"Okay"}$$

**Punching Shear:** (Critical Section Located at a distance of d/2 from the face of pier) (ACI 11.12.2.1)

$$b_o := (d) \cdot \pi \quad b_o = 11.6501 \cdot \text{ft}$$

$$V_{req} := FL \cdot \frac{W_f^2 - (d)^2 \cdot \frac{\pi}{4}}{\phi_c} \quad V_{req} = 1076.5345 \cdot \text{kip}$$

$$V_{Avail} := 4 \cdot \sqrt{f_c \cdot \text{psi}} \cdot b_o \cdot d \quad V_{Avail} = 1362.9832 \cdot \text{kip}$$

$$\text{PunchingShearCheck} := \text{if}(V_{req} < V_{Avail}, \text{"Okay"}, \text{"No Good"}) \quad \text{PunchingShearCheck} = \text{"Okay"}$$

Job	180' ROHN SSV Tower w/ SNB Reinf. - Greenwich	Project No.	Revision 4	Sheet	6 of 7
Description	Foundation Analysis (TIA-222-G)	Computed by	MCD	Date	07/31/19
		Checked by		Date	

**TENSILE REINFORCEMENT IN PAD:**  $\phi_m := 0.90$  per ACI 9.3.2.2

**Applied Moments:** *NOTE: Existing 2 feet of concrete over original foundation considered in uplift reduction for design calculations shown below*

$$0.9 \cdot \frac{\gamma_c \cdot (2ft \cdot 32.5ft \cdot 32.5ft)}{3} = 95.0625 \cdot kip$$

$$M_{nT} := [(U_t - 95kip) \cdot (W_t \cdot \sin(60 \cdot deg)) + S_t \cdot (D_f)] - WT_{t,1.2} \cdot X_{off} \quad T_{t,1.2} := 4ft \quad \leftarrow \text{OVERRIDE - Previously Modified Thickness}$$

$$M_{nS} := -1 \cdot \left[ \frac{1}{2} \cdot \left( \frac{W_f}{2} + \frac{W_t}{3} \cdot \cos(30 \cdot deg) \right)^2 \cdot 0.9W_t \cdot [\gamma_s \cdot (T_{pp} - T_f)] + 0.9WT_{s2} \cdot \left[ \left( \frac{W_f}{2} + \frac{W_t}{3} \cdot \cos(30 \cdot deg) \right) + (D_f - n) \cdot \tan(\phi_s) \right] \right]$$

$$M_{nC} := -1 \cdot \left[ \frac{1}{2} \cdot \left( \frac{W_f}{2} + \frac{W_t}{3} \cdot \cos(30 \cdot deg) \right)^2 \cdot 0.9W_t \cdot (\gamma_c \cdot T_f) \right] \quad d := 56.5in \quad \leftarrow \text{OVERRIDE - Previously Modified Thickness}$$

Design Moment:  $M_n := \frac{M_{nT} + M_{nS} + M_{nC}}{\phi_m} \quad M_n = 10400.3519 \cdot kips \cdot ft$

**Required Reinforcement:**

ACI 10.2.7.3  $\beta := \text{if} \left[ f_c \leq 4000 \cdot \text{psi}, .85, \text{if} \left[ f_c \geq 8000 \cdot \text{psi}, .65, .85 - \left( \frac{f_c - 4000}{1000} \right) \cdot .05 \right] \right] \quad \beta = 0.85$

Effective Width:  $b_{eff} := W_t \cdot \cos(30 \cdot deg) + 0ft \quad b_{eff} = 237.2875 \cdot in$

$$A_s := \frac{M_n}{\phi_m \cdot f_y \cdot d} \quad A_s = 40.906 \cdot in^2$$

$$a := \frac{A_s \cdot f_y}{\beta \cdot f_c \cdot b_{eff}} \quad a = 4.0562 \cdot in$$

$$A_{s,req} := \frac{M_n}{f_y \cdot \left( d - \frac{a}{2} \right)} \quad A_s = 38.1861 \cdot in^2$$

$$\rho := \frac{A_s}{b_{eff} \cdot d} \quad \rho = 0.0028$$

**Temperature and Shrinkage:**  $\rho_{sh} := \text{if} (f_y \geq 60000 \cdot \text{psi}, 0.0018, 0.0020) \quad \rho_{sh} = 0.0018$   
(ACI 7.12.2.1b)

Area Required:  $A_s := \text{if} \left( \rho \geq \rho_{sh}, A_s, \rho_{sh} \cdot \frac{b_{eff}}{2} \cdot d \right) \quad A_s = 38.1861 \cdot in^2$

Area Provided:  $A_{s,prov} := A_{bpad} \cdot NB_{pad} \quad A_{s,prov} = 41.8 \cdot in^2$

PadReinforcement := if(A<sub>s,prov</sub> > A<sub>s</sub>, "Okay", "No Good") **PadReinforcement = "Okay"**

Job	<u>180' ROHN SSV Tower w/ SNB Reinf. - Greenwich</u>	Project No.	<u>Revision 4</u>	Sheet	<u>7</u> of <u>7</u>
Description	<u>Foundation Analysis (TIA-222-G)</u>	Computed by	<u>MCD</u>	Date	<u>07/31/19</u>
		Checked by		Date	

**DEVELOPMENT LENGTH OF PAD REINFORCEMENT:**

**TENSION (ACI 12.2.3)**

Bar Spacing: 
$$B_{sPad} := \frac{W_f - 2 \cdot C_{vr} - N B_{pad} \cdot d_{bpad}}{N B_{pad} - 1}$$
  $B_{sPad} = 9.0233 \cdot \text{in}$

- Development Length Factors:
- Reinforcement Location Factor  $\alpha := 1.0$
  - Coating Factor  $\beta := 1.0$
  - Concrete strength Factor  $\lambda := 1.0$
  - Reinforcement Size Factor  $\gamma := 1.0$

Spacing or Cover Dimension: 
$$c := \text{if} \left( C_{vr} < \frac{B_{sPad}}{2}, C_{vr}, \frac{B_{sPad}}{2} \right)$$
  $c = 3 \cdot \text{in}$

Transverse Reinforcement IndeAs allowed by ACI 12.2.4  $k_{tr} := 0$

Development Length: 
$$L_{dbt} := \frac{3}{40} \cdot \frac{f_y}{\sqrt{f_c \cdot \text{psi}}} \cdot \frac{\alpha \cdot \beta \cdot \gamma \cdot \lambda}{c + k_{tr}} \cdot d_{bpad}$$
  $L_{dbt} = 27.3861 \cdot \text{in}$

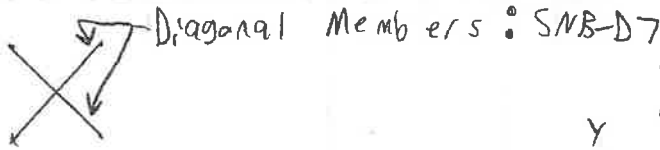
$L_{dbmin} := 12 \cdot \text{in}$

Minimum Development Length: 
$$L_{dbtCheck} := \text{if} (L_{dbt} \geq L_{dbmin}, "Use L.dbt", "Use L.dbmin")$$
  $L_{dbtCheck} = "Use L.dbt"$

(ACI 12.2.1)

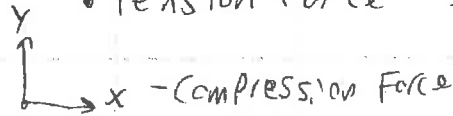
Available Length in Pad: 
$$L_{Pad} := \frac{W_f}{2} - \frac{W_t}{2} - C_{vr}$$
  $L_{Pad} = 79.002 \cdot \text{in}$

$$L_{padTension} := \text{if} (L_{Pad} > L_{dbt}, "Okay", "No Good")$$
  **$L_{padTension} = "Okay"$**



- Compression force = 21.355 kIP
- Tension force = 21.030 kIP

• Convert to "xy" Plane forces



21.355 kIP

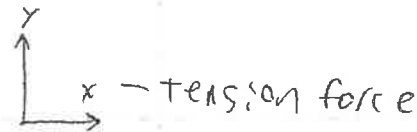


$\theta = 32.06^\circ$  (CADD measured from PLS-tower "dxf" model)

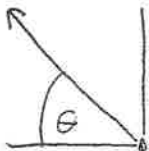
- $21.355 \text{ kIP} \cdot \sin(32.06^\circ) = 11.336 \text{ kIPS}$
- $21.355 \text{ kIP} \cdot \cos(32.06^\circ) = \underline{18.0982 \text{ kIPS}}$

- for conservative considerations, Assume 18.0982 kIPS is controlling compressive force.

• Convert to "xy" Plane forces



21.030 kIP



- $21.030 \text{ kIP} \cdot \sin(32.06^\circ) = 11.16287 \text{ kIPS}$
- $21.030 \text{ kIP} \cdot \cos(32.06^\circ) = \underline{17.8228 \text{ kIPS}}$

- for conservative considerations, Assume 17.8228 kIPS is controlling tension force

Prior to tower modification - Bolt Shear Check  $\rightarrow$  (1)  $\frac{3}{4}$  A490N  $\rightarrow$  22.5 kIPS  
Single Shear Assumed

$22.5 \text{ kIPS} > 18.0982 \text{ kIPS} \therefore$  Bolt @ connection  $\rightarrow$  OK 90.4%

- For Anchor age Details, the following shall apply:

-  $V$  (Shear) =  $17,0982 \text{ kips} / 4 \text{ Anchors} = \underline{4.275 \text{ kips}}$   
(conservative value 5)

-  $U$  (Uplift) =  $17,8228 \text{ kips} / 4 \text{ Anchors} = \underline{4.457 \text{ kips}}$

- Apply (4) HILTI HIT-RESOUV3 Epoxy Anchoring System

- Consider "cracked concrete"

- for  $7/8"$   $\phi$  Anchor @  $7/8"$  effective embedment  $\& \text{ } f'_c \text{ concrete} = 3000 \text{ psi}$ ,  
(Hilti table 26)

- epoxy tension capacity/anchor =  $13,375 \text{ lbs}$  (prior to reduction factor)
- epoxy shear capacity/anchor =  $28,810 \text{ lbs}$  (prior to reduction factor)

- Apply "HAS-E" Anchor Bolts (table 29) (Steel)

- Tension capacity/Anchor =  $21,755 \text{ lbs}$  (LRFD capacity - Act 17.4.1.2  $\& \text{ } 17.3.3$ )
- Shear capacity/Anchor =  $12,050 \text{ lbs}$  (LRFD capacity) - Act 17.5.1.2b

- Apply Hilti Reductions to epoxy Anchors [table 39]  $\& \text{ } S = 6:1 \text{ } \therefore$

- tension capacity =  $13,375 \text{ lbs} \times 0.61 = \underline{8,158 \text{ lbs/anchor}} = \phi N_n$
- shear capacity =  $28,810 \text{ lbs} \times 0.55 = \underline{15,845 \text{ lbs/anchor}} = \phi V_n$

- Apply Anchors Per Interaction Equation - Act 17.6.3  $\& \text{ } \text{HILTI} \text{ } \text{EQ } 3.1.6.7$

$$\frac{N_u}{\phi N_n} + \frac{V_u}{\phi V_n} \leq 1.2 \rightarrow \left( \frac{4.4557}{8.158} \right) + \left( \frac{4.525}{15.845} \right) \leq 1.2 \rightarrow 0.832 \leq 1.2 \text{ } \textcircled{OK}$$

0.546                      0.286                      69.8%

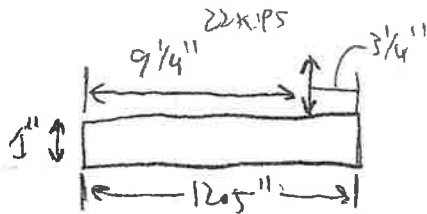
- NOTE: HILTI applications follow the Design criteria from  $\text{IBC } 2015$

Section 1901.3  $\& \text{ } \text{Act } 318-14$

(Reference: ICC-ES Report "ESR-3814" - January 2017)

• tension/compression force applied to Baseplate = 22 kips

- Per Design Sketch SK-5 - Determine Plastic Bending Capacity of Baseplate



$$M_{\text{Applied}} = \frac{P \cdot a \cdot b}{l} = \frac{22 \text{ kips} \times 9.25'' \times 3.25''}{12.5''} = 52.91 \text{ k-in}$$

- Plate Plastic capacity =  $M_p = \sigma \times Z = 0.9 \times 50 \text{ ksi} \times \frac{b \cdot d^2}{4}$

$$= 0.9 \times 50 \text{ ksi} \times \frac{(12.5 \text{ in}) \times (1 \text{ in})^2}{4}$$

$$M_p = \underline{140.625 \text{ k-in}}$$

• Note: plate LTB is NOT considered for plate "minor" axis bend:

$$\frac{53 \text{ k-in}}{140.625 \text{ k-in}} = 37.7\% \therefore \text{OK}$$



### 3.2.4 HIT-RE 500 V3 Epoxy Adhesive Anchoring System

**Table 26 - Hilti HIT-RE 500 V3 adhesive design strength with concrete / bond failure for threaded rod in cracked concrete<sup>1,2,3,4,5,6,7,8,9,11</sup>**

Nominal anchor diameter in.	Effective embedment in. (mm)	Tension $\phi_N$				Shear $\phi_V$			
		$f'_c = 2,500$ psi (17.2 MPa) lb (kN)	$f'_c = 3,000$ psi (20.7 MPa) lb (kN)	$f'_c = 4,000$ psi (27.6 MPa) lb (kN)	$f'_c = 6,000$ psi (41.4 MPa) lb (kN)	$f'_c = 2,500$ psi (17.2 MPa) lb (kN)	$f'_c = 3,000$ psi (20.7 MPa) lb (kN)	$f'_c = 4,000$ psi (27.6 MPa) lb (kN)	$f'_c = 6,000$ psi (41.4 MPa) lb (kN)
3/8	2-3/8 (60)	2,020 (9.0)	2,215 (9.8)	2,500 (11.1)	2,655 (11.8)	2,180 (9.7)	2,385 (10.6)	2,690 (12.0)	2,880 (12.7)
	3-3/8 (86)	3,310 (14.7)	3,400 (15.1)	3,550 (15.8)	3,770 (16.8)	7,125 (31.7)	7,325 (32.6)	7,645 (34.0)	8,125 (36.1)
	4-1/2 (114)	4,410 (19.6)	4,535 (20.2)	4,735 (21.1)	5,030 (22.4)	9,500 (42.3)	9,765 (43.4)	10,195 (45.3)	10,835 (48.2)
	7-1/2 (191)	7,350 (32.7)	7,555 (33.6)	7,890 (35.1)	8,385 (37.3)	15,835 (70.4)	16,275 (72.4)	16,990 (75.6)	18,055 (80.3)
	10 (254)	10,200 (45.3)	10,500 (46.8)	10,900 (48.3)	11,400 (50.8)	22,000 (97.9)	22,500 (100.7)	23,100 (103.6)	24,000 (107.2)
1/2	2-3/4 (70)	2,520 (11.2)	2,760 (12.3)	3,185 (14.2)	3,805 (17.4)	5,425 (24.1)	5,945 (26.4)	6,865 (30.5)	8,405 (37.4)
	4-1/2 (114)	5,275 (23.5)	5,780 (25.7)	6,260 (27.8)	6,855 (30.5)	11,360 (50.5)	12,445 (55.4)	13,485 (60.0)	14,330 (63.7)
	6 (152)	7,780 (34.6)	7,995 (35.6)	8,350 (37.1)	8,870 (39.5)	16,755 (74.5)	17,220 (76.8)	17,980 (80.0)	18,110 (81.5)
	10 (254)	12,985 (57.7)	13,325 (59.3)	13,915 (61.8)	14,785 (65.8)	27,930 (124.2)	28,705 (127.7)	29,870 (133.3)	31,850 (141.7)
	15 (381)	19,470 (86.6)	19,965 (88.5)	20,600 (91.9)	21,475 (95.9)	42,945 (190.6)	44,065 (196.8)	45,430 (202.7)	48,110 (213.8)
5/8	3-1/8 (79)	3,050 (13.6)	3,345 (14.9)	3,960 (17.2)	4,730 (21.0)	6,575 (29.2)	7,200 (32.0)	8,315 (37.0)	10,185 (45.3)
	5-5/8 (143)	7,370 (32.8)	8,075 (35.9)	9,325 (41.5)	10,315 (45.9)	15,875 (70.6)	17,390 (77.4)	20,080 (89.3)	22,215 (98.5)
	7-1/2 (191)	11,350 (50.5)	12,395 (55.1)	12,940 (57.6)	13,755 (61.2)	24,440 (108.7)	26,895 (118.7)	27,875 (124.0)	29,620 (131.8)
	12-1/2 (318)	20,100 (89.4)	20,660 (91.9)	21,570 (95.9)	22,920 (102.0)	43,295 (192.6)	44,495 (197.9)	46,460 (206.7)	49,370 (219.6)
	18 (762)	30,150 (134.3)	30,965 (137.7)	32,015 (142.8)	33,405 (148.8)	66,810 (297.9)	68,990 (306.9)	71,310 (316.9)	74,040 (329.6)
3/4"	3-1/2 (89)	3,620 (16.1)	3,965 (17.6)	4,575 (20.4)	5,605 (24.9)	7,790 (34.7)	8,535 (38.0)	9,855 (43.8)	12,070 (53.7)
	6-3/4 (171)	9,890 (43.1)	10,615 (47.2)	12,255 (54.5)	14,735 (65.5)	20,870 (92.8)	22,860 (101.7)	26,395 (117.4)	31,740 (141.2)
	9 (229)	14,920 (66.4)	16,340 (72.7)	18,480 (82.2)	21,130 (93.8)	29,130 (128.8)	31,195 (138.8)	35,820 (158.2)	42,320 (188.2)
	15 (381)	28,715 (127.7)	29,510 (131.3)	30,815 (137.1)	32,745 (145.7)	61,850 (275.1)	63,565 (282.7)	66,370 (295.2)	70,530 (313.7)
	21 (841)	42,060 (187.4)	43,115 (191.1)	44,415 (197.1)	46,005 (205.0)	92,010 (409.0)	94,030 (418.0)	97,040 (431.0)	101,060 (449.0)
7/8"	3-1/2 (89)	3,620 (16.1)	3,965 (17.6)	4,575 (20.4)	5,605 (24.9)	7,790 (34.7)	8,535 (38.0)	9,855 (43.8)	12,070 (53.7)
	7-7/8 (200)	12,210 (54.3)	13,375 (59.5)	15,445 (68.7)	18,915 (84.1)	26,300 (117.0)	28,810 (128.2)	33,265 (148.0)	40,740 (181.2)
	10-1/2 (267)	18,800 (83.6)	20,590 (91.6)	23,780 (105.8)	26,530 (118.0)	40,490 (180.1)	44,355 (197.3)	51,215 (227.8)	57,140 (254.2)
	17-1/2 (445)	38,775 (172.5)	39,850 (177.3)	41,805 (185.1)	44,215 (196.7)	83,510 (371.5)	86,825 (388.6)	89,810 (402.8)	95,230 (423.8)
	24 (609)	57,640 (255.8)	59,540 (264.8)	62,445 (277.8)	66,315 (294.8)	132,630 (589.6)	137,650 (609.6)	142,665 (631.6)	148,460 (659.6)
1	4 (102)	4,420 (19.7)	4,840 (21.5)	5,590 (24.8)	6,845 (30.4)	9,520 (42.3)	10,430 (46.4)	12,040 (53.6)	14,750 (65.6)
	9 (229)	14,920 (66.4)	16,340 (72.7)	18,480 (82.2)	21,130 (93.8)	29,130 (128.8)	31,195 (138.8)	35,820 (158.2)	42,320 (188.2)
	12 (305)	22,985 (102.2)	25,180 (111.8)	29,050 (129.2)	34,650 (154.1)	49,465 (220.0)	54,180 (241.0)	62,570 (278.3)	74,830 (332.0)
	20 (508)	49,415 (219.8)	52,045 (231.5)	54,340 (241.7)	57,760 (256.9)	106,435 (473.4)	112,100 (498.5)	117,045 (520.5)	124,385 (553.3)
	28 (711)	73,820 (329.6)	77,665 (344.8)	81,215 (360.0)	85,565 (379.8)	171,130 (759.8)	178,210 (789.8)	185,285 (829.8)	194,465 (869.8)
1-1/4"	5 (127)	6,175 (27.5)	6,785 (30.1)	7,815 (34.8)	9,570 (42.6)	13,305 (59.2)	14,575 (64.8)	16,830 (74.8)	20,610 (91.7)
	11-1/4 (286)	20,850 (92.7)	22,840 (101.6)	26,370 (117.3)	32,295 (143.7)	44,905 (199.7)	48,905 (218.6)	56,800 (252.7)	69,555 (309.4)
	15 (381)	32,095 (142.8)	35,180 (156.4)	40,800 (180.6)	49,725 (221.2)	69,135 (307.5)	75,730 (336.9)	87,445 (389.0)	107,100 (476.4)
	25 (609)	69,060 (307.2)	75,665 (336.5)	80,800 (359.4)	85,865 (381.9)	148,750 (661.7)	162,945 (724.8)	174,030 (774.1)	184,945 (822.7)
	36 (914)	103,635 (460.8)	111,245 (492.8)	121,205 (538.8)	133,635 (594.8)	267,270 (1188.8)	284,415 (1259.8)	301,560 (1339.8)	318,705 (1419.8)

1 See Section 3.1.8 for explanation on development of load values.  
 2 See Section 3.1.8.6 to convert design strength value to ASD value.  
 3 Linear interpolation between embedment depths and concrete compressive strengths is not permitted.  
 4 Apply spacing, edge distance, and concrete thickness factors in tables 30-41 as necessary to the above values. Compare to the steel values in table 29. The lesser of the values is to be used for the design.  
 5 Data is for temperature range A: Max. short term temperature = 130°F (55°C), max. long term temperature = 110°F (43°C). For temperature range B: Max. short term temperature = 176°F (80°C), max. long term temperature = 110°F (43°C) multiply above values by 0.89. Short term elevated concrete temperatures are those that occur over brief intervals, e.g., as a result of diurnal cycling. Long term concrete temperature are roughly constant over significant periods of time.  
 6 Tabular values are for dry or water saturated concrete conditions. For water-filled drilled holes multiply design strength by 0.51. For submerged (under water) applications multiply design strength by 0.44.  
 7 Tabular values are for short term loads only. For sustained loads including overhead use, see Section 3.1.8.8.  
 8 Tabular values are for normal-weight concrete only. For lightweight concrete multiply design strength by  $\lambda_c$  as follows: For sand-lightweight,  $\lambda_c = 0.51$ . For all-lightweight,  $\lambda_c = 0.45$ .  
 9 Tabular values are for holes drilled in concrete with carbide tipped hammer drill bit. Diamond core drilling is not permitted in cracked concrete conditions except as indicated in note 10.  
 10 Diamond core drilling with Hilti TE-YRT roughening tool is permitted for 3/4", 7/8", and 1 1/4" diameter anchors for dry and water-saturated concrete conditions. See Table 28  
 11 Tabular values are for static loads only. For seismic loads, multiply cracked concrete tabular values in tension and shear by  $\alpha_{sm}$  indicated below.  
 See section 3.1.8.7 for additional information on seismic applications.  
 3/8-in. diameter -  $\alpha_{sm} = 0.69$   
 1/2-in. diameter -  $\alpha_{sm} = 0.70$   
 5/8-in. diameter -  $\alpha_{sm} = 0.71$   
 3/4-in. diameter and larger -  $\alpha_{sm} = 0.75$





### 3.2.4 HIT-RE 500 V3 Epoxy Adhesive Anchoring System

**Table 29 - Steel design strength for Hilti HIT-V and HAS threaded rods<sup>1</sup>**

Nominal anchor diameter in.	HIT-V ASTM A307 Grade A <sup>2</sup>			HAS-E ISO 898 Class 5.8 <sup>2</sup>			HAS-E-B ASTM A193 B7 <sup>3</sup>			HAS-R stainless steel ASTM F593 - AISI 304/316 SS <sup>2</sup>		
	Tensile <sup>4</sup> $\phi N_{ts}$ lb (kN)	Shear <sup>5</sup> $\phi V_{sa}$ lb (kN)	Seismic Shear <sup>6</sup> $\phi V_{sa,eq}$ lb (kN)	Tensile <sup>4</sup> $\phi N_{ts}$ lb (kN)	Shear <sup>5</sup> $\phi V_{sa}$ lb (kN)	Seismic Shear <sup>6</sup> $\phi V_{sa,eq}$ lb (kN)	Tensile <sup>4</sup> $\phi N_{ts}$ lb (kN)	Shear <sup>5</sup> $\phi V_{sa}$ lb (kN)	Seismic Shear <sup>6</sup> $\phi V_{sa,eq}$ lb (kN)	Tensile <sup>4</sup> $\phi N_{ts}$ lb (kN)	Shear <sup>5</sup> $\phi V_{sa}$ lb (kN)	Seismic Shear <sup>6</sup> $\phi V_{sa,eq}$ lb (kN)
3/8	3,025 (13.5)	1,675 (7.5)	1,175 (5.2)	3,655 (16.3)	2,020 (9.0)	1,415 (6.3)	7,265 (32.3)	3,775 (16.8)	2,645 (11.8)	5,040 (22.4)	2,790 (12.4)	1,955 (8.7)
1/2	5,535 (24.6)	3,065 (13.6)	2,145 (9.5)	6,690 (29.8)	3,705 (16.5)	2,595 (11.5)	13,300 (59.2)	6,915 (30.8)	4,840 (21.5)	9,225 (41.0)	5,110 (22.7)	3,575 (15.9)
5/8	8,815 (39.2)	4,880 (21.7)	3,415 (15.2)	10,650 (47.4)	5,900 (26.2)	4,130 (18.4)	21,190 (94.3)	11,020 (49.0)	7,715 (34.3)	14,690 (65.3)	8,135 (36.2)	5,695 (25.3)
3/4	13,045 (58.0)	7,225 (32.1)	5,060 (22.5)	15,765 (70.1)	8,730 (38.8)	6,110 (27.2)	31,360 (139.5)	16,305 (72.5)	11,415 (50.8)	18,480 (82.2)	10,235 (45.5)	7,165 (31.9)
7/8	-	-	-	21,755 (96.8)	12,050 (53.6)	8,435 (37.5)	43,285 (192.5)	22,505 (100.1)	15,755 (70.1)	25,510 (113.5)	14,125 (62.8)	9,890 (44.0)
1	23,620 (105.1)	13,085 (58.2)	9,160 (40.7)	28,540 (127.0)	15,865 (70.3)	11,065 (49.2)	56,785 (252.6)	29,525 (131.3)	20,670 (91.9)	33,465 (148.9)	18,535 (82.4)	12,975 (57.7)
1-1/4	-	-	-	45,670 (203.1)	25,295 (112.5)	17,705 (78.8)	90,850 (404.1)	47,240 (210.1)	33,070 (147.1)	53,540 (238.2)	29,655 (131.9)	20,760 (92.3)

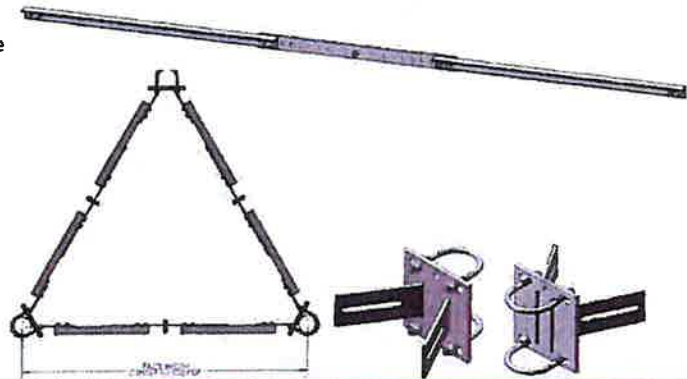
- 1 See Section 3.1.8.6 to convert design strength value to ASD value.
- 2 HIT-V, HAS-E, and HAS-R threaded rods are considered brittle steel elements. HIT-V does not comply with % elongation requirements of ASTM A307 Grade A steel. HAS-E does not comply with % elongation requirements of ISO 898-1.
- 3 HAS-E-B7 rods are considered ductile steel elements.
- 4 Tensile =  $\phi A_{s,N} f_{ts}$  as noted in ACI 318 Chapter 17.
- 5 Shear =  $\phi 0.80 A_{s,V} f_{sa}$  as noted in ACI 318 Chapter 17.
- 6 Seismic Shear =  $\alpha_{V,sa} \phi V_{sa}$  : Reduction for seismic shear only. See section 3.1.8.7 for additional information on seismic applications.



$L=15'$  +/- ; take field  
ver. field

**\* Tapered Self-Support Tower Sub-Hizontals**

- Designed to strengthen tower legs by reducing their KL/r value
- Complete kits contain (6) Angles, (3) Brackets, (3) Center Plates, (6) 5/8" U-bolts, (27) 5/8" Bolts
- All material is minimum A36, Hardware is A325X, Hot-Dip Galvanized
- Connections use Squirter® F959 DTI washers to ensure proper installed bolt tension
- Double bolted angle connections at both ends
- Brackets center themselves on legs with the welded solid rods on backside
- Specify leg butterfly bracket kit + angle / center plate kit [Qty: (3) per Kit]



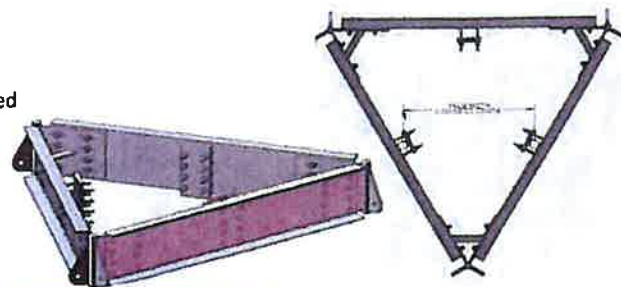
Sub Horizontal Angle & Center Plate						
Mfr	Tower Face Width Range (ft)	Center Plate Size	Sub-Horizontal Size	Φ Pn (kips)	Leg Pu* (kips)	Kit #
	5 - 6	3/8" x 3"	2" x 2" x 3/16"	20.00	800	RSH-0605-06
	6 - 7	3/8" x 3"	2" x 2" x 3/16"	18.00	720	RSH-0606-07
	7 - 9	3/8" x 3"	2" x 2" x 1/4"	13.75	550	RSH-0607-09
	9 - 11	3/8" x 3"	2" x 2" x 1/4"	9.50	380	RSH-0609-11
	11 - 13	3/8" x 3"	2-1/2" x 2-1/2" x 1/4"	12.13	485	RSH-0611-13
	13 - 15	1/2" x 4"	2-1/2" x 2-1/2" x 1/4"	8.50	340	RSH-0613-15
	15 - 17	1/2" x 4"	3" x 3" x 1/4"	16.50	660	RSH-0615-17
	17 - 19	1/2" x 4"	3" x 3" x 1/4"	12.50	500	RSH-0617-19
	19 - 21	5/8" x 4"	3-1/2" x 3-1/2" x 1/4"	16.00	640	RSH-0619-21
	21 - 23	5/8" x 4"	3-1/2" x 3-1/2" x 1/4"	12.88	515	RSH-0621-23
	23 - 25	5/8" x 4"	4" x 4" x 1/4"	15.88	635	RSH-0623-25

Leg Butterfly Bracket		
Leg Ø Range (O.D.) (in)	U-Bolt Size	Kit #
1.5 - 2.5	5/8" x 2-9/16"	RSH-0515-25
2.5 - 3.5	5/8" x 3-9/16"	RSH-0525-35
3.5 - 4.5	5/8" x 4-9/16"	RSH-0535-45
4.5 - 6.75	5/8" x 6-13/16"	RSH-0545-68
6.75 - 8.625	5/8" x 8-11/16"	RSH-0568-86
8.625 - 10.75	5/8" x 10-13/16"	RSH-0586-00

\*CAPACITY BASED ON FULLY LOADING HORIZONTAL WITH 2.5% OF LEG COMPRESSION  
NOTE: Order (1) RSH-05###-## kit and (1) RSH-06###-## kit for (1) full sub-horizontal assembly

**Guyed Tower Torque Arm**

- Designed to provide torsion resistance to guyed towers when needed
- Kits contain all materials to bolt torque arm onto tower
- All material is minimum A572-50, Hardware is A325X, Hot-Dip Galvanized
- Connections use Squirter F959 DTI washers to ensure proper installed bolt tension
- Fits guyed towers with 1.25" - 3.5" OD Legs
- Add split pipe sleeve kit if tower leg is 2" SCH 40, 2.5" SCH 40 or 3" SCH 40 [Qty: (3) per kit]
- Use split pipe sleeves to avoid crimping thin wall pipe legs



Mfr	Face Width (C-C) (in)	EHS WIRE SIZE									
		< 5/16"	3/8"	7/16"	1/2"	9/16"	5/8"	11/16"	3/4"	7/8"	1"
	18	RTA-1135-18			RTA-1235-18						
	24	RTA-1135-24			RTA-1235-24						
	30	RTA-1135-30			RTA-1235-30						
	33	RTA-1135-33			RTA-1235-33						
	36	RTA-1235-36									
	39	RTA-1235-39							RTA-1335-39		
	41	RTA-1235-41							RTA-1335-41		
	42	RTA-1235-42							RTA-1335-42		
	45	RTA-1235-45							RTA-1335-45		
	48	RTA-1235-48							RTA-1335-48		
	54	RTA-1235-54							RTA-1335-54		
	57	RTA-1235-57							RTA-1335-57		
	60	RTA-1235-60							RTA-1335-60		
	72	RTA-1235-72			RTA-1335-72						

LIGHT      MEDIUM      HEAVY



Towers with SCH 40 Pipe Legs: Split Pipe Sleeves	
Leg OD	Kit #
2.375"	RGA-1000-23
2.875"	RGA-1000-28
3.5"	RGA-1000-35

#### About AECOM

AECOM (NYSE: ACM) is a global provider of professional technical and management support services to a broad range of markets, including transportation, facilities, environmental, energy, water and government. With approximately 45,000 employees around the world, AECOM is a leader in all of the key markets that it serves. AECOM provides a blend of global reach, local knowledge, innovation, and collaborative technical excellence in delivering solutions that enhance and sustain the world's built, natural, and social environments. A Fortune 500 company, AECOM serves clients in more than 100 countries and has annual revenue in excess of \$6 billion.

More information on AECOM and its services can be found at [www.aecom.com](http://www.aecom.com).

500 Enterprise Drive, Suite 3B  
Rocky Hill, CT 06067  
860-529-8882  
Fax: 860-529-3991

# **ATTACHMENT 5**



Printed 05/10/2018 Card No. 1 of 1

Tax ID 199/018 TRANSFER OF OWNERSHIP

OWNERSHIP AQUARION WATER COMPANY OF

CONNECTICUT 660 LINDELEY STREET BRIDGEFORD, CT 06606

PARCEL NUMBER 11-1142

Parent Parcel Number

Property Address BUTTERNUT HOLLOW ROAD 0024

Neighborhood 2860 PARKWAY NORTH

Property Class 430 Hydro Plant

TAXING DISTRICT INFORMATION

Jurisdiction 57 Greenwich, CT

Area 001

Corporation 057

District 11

Section & Plat 239

Routing Number 1067B0011

Site Description

Topography:

Public Utilities: Electric

Street or Road:

Neighborhood:

Zoning: RA-2 Single Family 2 1 Primary Commercial RA-2 490 Forest 2 2 PA-490 Forest 2 Legal Acres: 3 Open Space AQ 161.9900

RA10: Reduce unit val on Forest Land (21) frm \$25,600/ac to \$3,000/ac BP12: 11-1118 (\$521k) instl recycle line frm dwrg bldg to plant wtr intk line, new gen, modif for effluent dischrg, 7 gas unit hrs, 2 oil tanks, piping, Chg evb"frm 2000 to 2005. Remaining is PP. BP15: 15-0565 - nvc \$157,690 Roof & elec DRB: Water treatment facility; surface reservoir approx. 80% of parcel GEN: 2012 val mtld chg per LE (see land, RV12, & VO memos). LAMB: For 10/12 redcl com'l portion of land, forest land and open spc Previously, per 10/5/04 Forest Land Application, revised 148.48 acres of OpenSpace (with a -40% wetlands influence factor) to 110.75 acres of open Space (with no influence factor) and 51.24 acres of Forest Land - TG/RCS, 11/17/04. O/O: Owner-Occupied Commercial P: 20 spcs

Table with columns: Date, Description, Amount. Rows: 05/21/2002 CONNECTICUT-AMERICAN WATER CO \$0 Bk/Pg: 3862, 102; 04/12/1977 NA \$0 Bk/Pg: 1012, 120

VALUATION RECORD

Table with columns: Assessment Year, 2010 BAA, 2012 List, 2013 List, 2015 Prelim, 2015 Final, 2017 List. Rows: VALUATION, Market, VALUATION, 70% Assessed

LAND DATA AND CALCULATIONS

Table with columns: Rating, Measured, Table, Prod. Factor, Soil ID, Acroage, Depth, Effective, Frontage, Perimeter, Base Rate, Adjusted Rate, Extended Value, Influence Factor, Value. Rows: Zoning, RA-2 Single Family 2, 2 PA-490 Forest 2, 3 Open Space AQ

Supplemental Cards

TRUE TAX VALUE 9672500

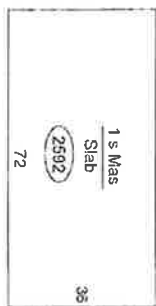
Supplemental Cards TOTAL LAND VALUE 9672500

IMPROVEMENT DATA

BUTTERNUT HOLLOW ROAD 0024

PHYSICAL CHARACTERISTICS

ROOFING	Build-up			
RAJIS	B	1	2	0
Frame	Yes			
Brick				
Metal				
Guard				
FRAMING				
R Conc	B	1	2	0
		0	2592	0
FINISH				
UF	UF	SP	FO	PD
1	0	0	0	2592
Total	0	0	0	2592
HEATING AND AIR CONDITIONING				
Heat	B	1	2	0
		0	2592	0



Dewatering Bldg

Water Treatment Plant w/ max design capacity of 2.3 MGD



08 09

- 1 Thickening Tank sammas clarifying tanks 06
- 2-540k gal retention basins 07



SPECIAL FEATURES

Description Value

C : Remcd 2012

SUMMARY OF IMPROVEMENTS

ID	Use	Story	Const	Year	Year	Base	Feat-	Adj	Size or	Computed	PhysObs	Market	%	Value
		Hgt	Type	Const	Year	Rate	ures	Rate	Area	Value	Depr	Depr	Adj	Comp
C	Remcd	0.00	85	1999	2005	0.00	N	0.00	2592	0	0	0	150	100
01	PAYING	0.00	85	1999	2006	3.45	N	3.38	20000	67600	0	0	100	100
02	UTILSHED	1.00	1	1960	1985	44.50	N	66.75	14x 16	14950	13	3	100	100
03	ELEVTRANK	123.00	51C	1960	1985	3.08	N	4.62	500000	2310000	11	3	100	100
04	FENGECL	8.00	51C	1970	1990	24.75	N	36.23	1603	58080	11	3	100	100
05	Clfr. Tk	0.00		1999	2006	0.00	N	0.00	0	0	0	0	100	100
06	TKing Tk	0.00		1999	2006	0.00	N	0.00	0	0	0	0	100	100
07	Ret. Bas	0.00		1999	2006	0.00	N	0.00	0	0	0	0	100	100
08	Rxli Bld	0.00	51C	2007	2007	0.00	N	0.00	0	50000	4	4	100	100
09	FENGECL	6.00	51C	2007	2007	18.50	N	27.75	132	3860	4	4	100	100

(LCM: 150.00)

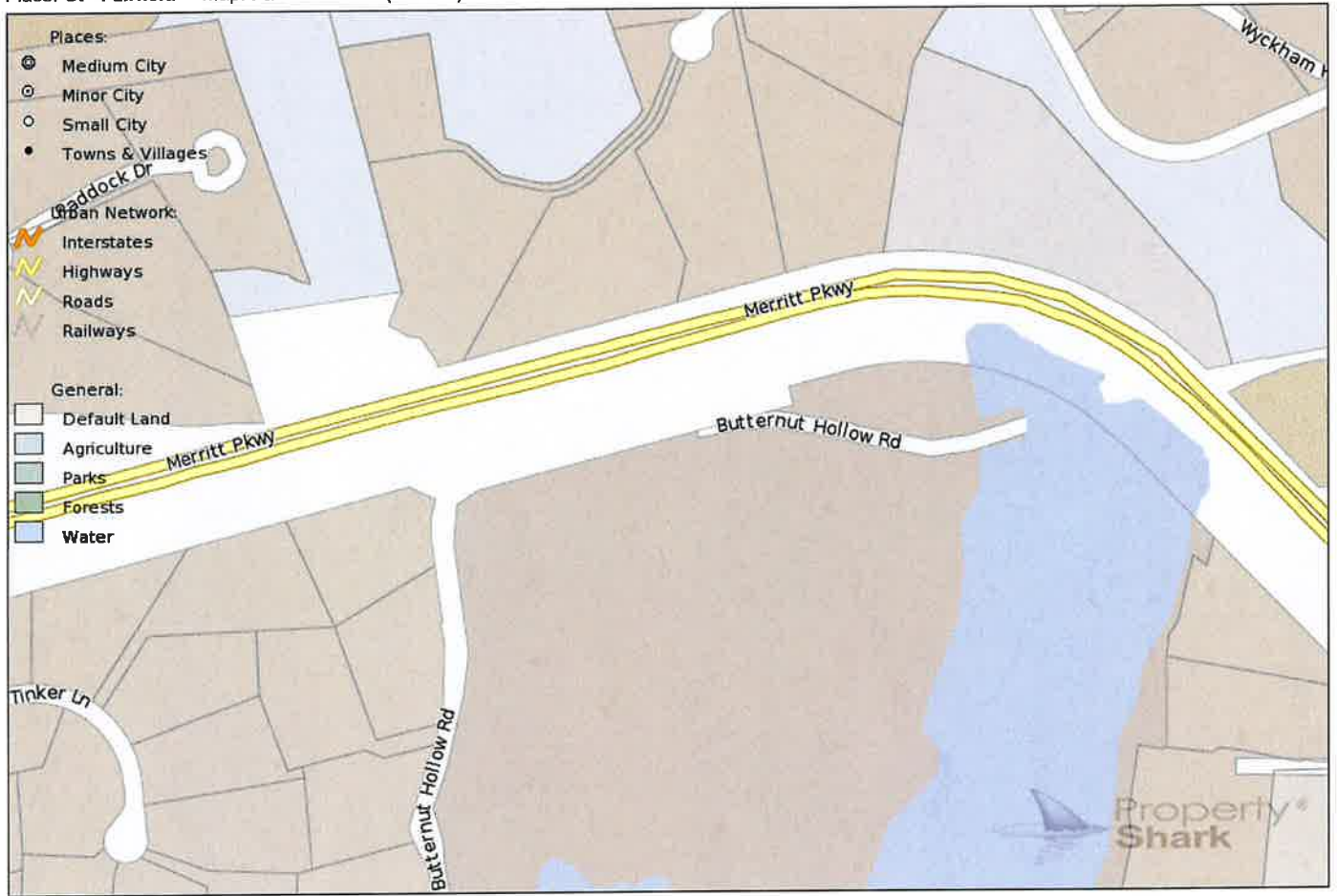
Data Collector/Date  
bd 04/19/2012

Appraiser/Date  
TOG 10/01/2015

Neighborhood  
Reigh 2800 AV

Supplemental Cards  
TOTAL IMPROVEMENT VALUE

5407900



Add notes here ...



# **ATTACHMENT 6**



# Certificate of Mailing — Firm

Name and Address of Sender	TOTAL NO. of Pieces Listed by Sender	TOTAL NO. of Pieces Received at Post Office™	Affix Stamp Here Postmark with Date of Receipt.			
Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103	Postmaster, per (name of receiving employee)					
USPS® Tracking Number Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift	
1.	Peter Tesei, First Selectman Town of Greenwich 101 Field Point Road Greenwich, CT 06830					
2.	Katie DeLuca, Director of Planning and Zoning Town of Greenwich 101 Field Point Road Greenwich, CT 06830					
3.	Aquarion Water Company of Connecticut 600 Lindley Street Bridgeport, CT 06606					
4.	State of Connecticut Department of Transportation 2800 Berlin Turnpike Newington, CT 06131					
5.						
6.						

