Robinson+Cole

KENNETH C. BALDWIN

280 Trumbull Street Hartford, CT 06103-3597 Main (860) 275-8200 Fax (860) 275-8299 kbaldwin@rc.com Direct (860) 275-8345

Also admitted in Massachusetts and New York

August 3, 2023

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 295 (a.k.a. 297) North Street, Plymouth, Connecticut

Dear Attorney Bachman:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains a wireless telecommunications facility at the above-referenced address (the "Property"). Cellco's facility consists of antennas and remote radio heads attached to a tower. Equipment associated with the facility is located on the ground adjacent to the tower. Cellco's facility was approved by the Siting Council ("Council") in October of 2003 (EM-VER-011-031001). A copy of the Council's exempt modification approval is included in Attachment 1.

Cellco's proposed modification involves the installation of two (2) interference mitigation filters ("filters") on Cellco's existing antenna platform and mounting assembly. The filter specification sheet is included in <u>Attachment 2</u>.

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 Plymouth's Chief Elected Official and Land Use Officer.

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

1. The proposed modifications will not result in an increase in the height of the existing tower. The filters will be installed on Cellco's existing antenna platform and mounting assembly.

Robinson+Cole

Melanie A. Bachman, Esq. August 3, 2023 Page 2

- 2. The proposed modifications will not involve any change to ground-mounted equipment and, therefore, will not require the extension of the site boundary.
- 3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
- 4. The installation of Cellco's new filters will not result in a change to radio frequency (RF) emissions from the facility. Therefore, no new RF emissions information is included in this filing.
- 5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
- 6. According to the attached Structural Analysis Report ("SA") and Antenna Mount Analysis Report ("MA"), the existing tower, foundation, antenna platform and mounting assembly can support Cellco's proposed modifications. A copy of the SA and MA are included in Attachment 3.

A copy of the parcel map and Property owner information is included in <u>Attachment 4</u>. A Certificate of Mailing verifying that this filing was sent to municipal officials and the property owner is included in <u>Attachment 5</u>.

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).

Sincerely,

Kenneth C. Baldwin

Kunie BMM

Enclosures Copy to:

Joseph T. Kildieff, Mayor Margus Laan, Director of Planning and Economic Development Raymond and Brenda Lagosz, Property Owners Kamoya Bautista, Verizon Wireless

ATTACHMENT 1



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@po.state.ct.us Web Site: www.state.ct.us/csc/index.htm

October 15, 2003

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

RE: EM-VER-111-031001 - Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 297 North Street, Plymouth, Connecticut.

Dear Attorney Baldwin:

At a public meeting held on October 14, 2003, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies with the condition that the modifications recommended in the Structural Analysis Report prepared by Daniel Blakeman (dated September 9, 2003) be implemented as part of the antenna installation.

The proposed modifications are to be implemented as specified here and in your notice dated October 1, 2003. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

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

Thank you for your attention and cooperation.

Very truly yours,

Pamela B. Katz, P.E.

Chairman

PBK/laf

c: Honorable David C. Mischke, Mayor, Town of Plymouth William Kuehn, Town Planner, Town of Plymouth Sheila R. Becker, Regional Director of Compliance, SBA, Inc. Thomas J. Regan, Esq., Brown Rudnick Berlack Israels Thomas F. Flynn III, Nextel Communications Stephen J. Humes, Esq., LeBoeuf, Lamb, Greene & MacRae

ATTACHMENT 2



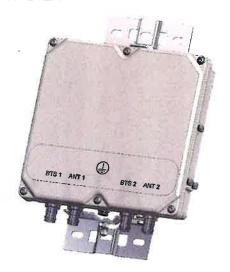
BSF0020F3V1-1

TWIN BANDSTOP 900MHZ INTERFERENCE MITIGATION FILTER

The BSF0020 is ideal for co-located 700, 850 and 900 networks. Utilising a 2.6MHz guardband the BSF0020 provides rejection of the 900 UL band while passing 700/850 UL and DL bands. Capable of being used in an outdoor environment the BSF0020 contains two identical bandstop filters. suitable for 2x2 MIMO configuration, offering excellent insertion loss, group delay and rejection.

FEATURES

- Passes full 700 and 850 bands
- · Low insertion loss
- · Rejection of 900MHz uplink
- DC/AISG pass
- Twin unit
- Dual twin mounting available



TECHNICAL SPECIFICATIONS

BAND NAME	700 PATH / 850 UPLINK PATH	850 DOWNLINK PATH						
Passband	698 - 849MHz	869 - 891 5MHz						
Insertion loss	0,1dB typical / 0,3dB maximum	0.5dB typical, 1.45dB maximum						
Return loss	24dB typical, 18dB minimum							
Maximum input power (Per Port)	100W average	200W average and 66W per 5MHz						
Rejection	894.1 - 896.5MHz							
ELECTRICAL		1 2 4 00 4 00						
Impedance	500	Ohms .						
Intermodulation products	-160dBc maximum in UL Band (assuming 20MHz Signal), with 2 x 43dBm carriers -153dBc maximum with 2 x 43dBm							
DC / AISG								
Passband	0 - 1	3MHz						
Insertion loss	0,3dB n	naximum						
Return loss	15dB n	ninimum						
Input voltage range	±3	13V						
DC current rating	2A continuous, 4A peak							
Compliance	3GPP TS	S 25.461						
ENVIRONMENTAL		MININE THE PARTY OF THE PARTY O						
For further details of environmental co	ompliance, please contact Kaelus.							
Temperature range	-20°C to +60°C -4°F to +140°F							
Ingress protection	IP	67						
Altitude	2600m	8530ft						
Lightning protection	RF port: ±5kA maximum (8/20us), IEC 61000-4-5 – Unit r	nust be terminated with some lightning protection circuits						
MTBF	>1,000,0	00 hours						
Compliance	ETSI EN 300 019 class 4.1H,	RoHS, NEBS GR-487-CORE						
MECHANICAL		A TORRESTORY						
Dimensions H x D x W	269 x 277 x 80mm 10.60 x 10.90 x 3.1	5in (Excluding brackets and connectors)						
Weight	8,0 kg 17,6 lb	.0 kg 17.6 lbs (no bracket)						
Finish	Powder coated, lig	ht grey (RAL7035)						
Connectors	RF: 4.3-1	0 (F) x 4						
Mounting	Optional pole/wall bracket supplied with two metal clamps 4							

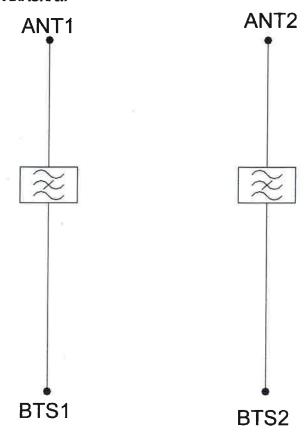


ORDERING INFORMATION

PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS		
BSF0020F3V1	TWIN, 2 in / 2 out	DC/AISG PASS NO BRACKET	4.3-10 (F)		
BSF0020F3V1-1	TWIN, 2 in / 2 out	DC/AISG PASS	4.3-10 (F)		
BSF0020F3V1-2	QUAD, 4 in / 4 out	DC/AISG PASS	4.3-10 (F)		

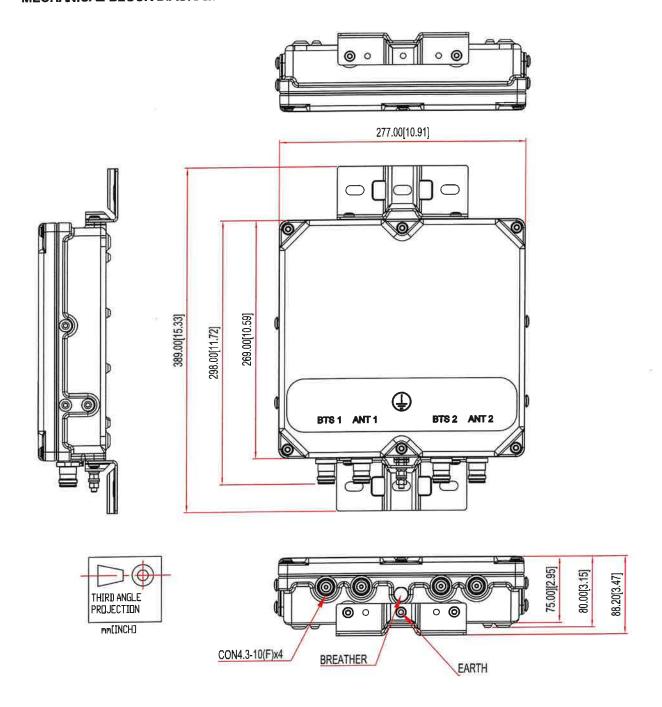


ELECTRICAL BLOCK DIAGRAM





MECHANICAL BLOCK DIAGRAM



ATTACHMENT 3



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

Structural Analysis Report

Existing 195 ft Monopole

Customer Name: SBA Communications Corp

Customer Site Number: CT01497-S

Customer Site Name: Plymouth 2 CT

Carrier Name: Verizon (App#: 232402, V#2)

Carrier Site ID / Name: 5000245391 / Plymouth NW CT

Site Location: 295 North Street

Plymouth, Connecticut

Litchfield County

Latitude: 41.693319 Longitude: -73.053711

Analysis Result:

Max Structural Usage: 95.3% [Pass]

Max Foundation Usage: 30.0% [Pass]

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

Report Prepared By: Wei-Hsiang Chen



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

Structural Analysis Report

Existing 195 ft Monopole

Customer Name: SBA Communications Corp

Customer Site Number: CT01497-S

Customer Site Name: Plymouth 2 CT

Carrier Name: Verizon (App#: 232402, V#2)

Carrier Site ID / Name: 5000245391 / Plymouth NW CT

Site Location: 295 North Street

Plymouth, Connecticut

Litchfield County

Latitude: 41.693319

Longitude: -73.053711

Analysis Result:

Max Structural Usage: 95.3% [Pass]

Max Foundation Usage: 30.0% [Pass]

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

Report Prepared By: Wei-Hsiang Chen

Introduction

The purpose of this report is to summarize the analysis results on the 195 ft Monopole to support the proposed antennas and transmission lines in addition to those currently installed. Any modification listed under Sources of Information was assumed completed and was included in this analysis.

Sources of Information

	1,4000
Tower Drawings	Fred A. Nudd Corporation, Project #7109, on November, 1999.
Foundation Drawing	Fred A. Nudd Corporation, Project #7109, on November 10, 1999.
Geotechnical Report	Jaworski Geotech, INC., Project #99338G, on November 8, 1999.
Modification Drawings	N/A
Mount Analysis	N/A

Analysis Criteria

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

116.0 mph (3-Sec. Gust) (Ultimate wind speed) Wind Speed Used in the Analysis:

50 mph (3-Sec. Gust) with 1" radial ice concurrent Wind Speed with Ice:

60 mph + 0" Radial ice Service Load Wind Speed:

TIA-222-H / 2021 IBC / 2022 Connecticut State Building Code Standard/Codes:

C **Exposure Category:** Ш **Risk Category:** 1 **Topographic Category:** 0 ft **Crest Height:**

 $S_S = 0.183$, $S_1 = 0.054$ Seismic Parameters:

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

Existing Antennas, Mounts and Transmission Lines

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

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
1		3	RFS APXVSPP18-C-A20 - Panel			
2		3	RFS APXVTM14-C-I20 - Panel			l'i
3		3	ALU 1900MHz RRH			
4	196.0	3	ALU 800 MHz RRH	T-arm w/ working	(4) 1 1/4"	Sprint
5		3	ALU TD-RRH8x20-25	platform		
6		3	ALU 800MHz Filter			
7		4	RFS ACU-A20-N			
8		3	Ericsson AIR6419 B41 - Panel			
9		3	RFS APXVAALL24_43-U-NA20 Panel			
10		3	Ericsson KRY 112 144/1 TMA	(3) T-Arms w/ Working	(9) 1 5/8" Coax	
11	175.0	3	Ericsson KRY 112 489/2 TMA	Platforms + Support Rail	(1) 1 5/8" Fiber	T-Mobile
12		6	Allen Telecom FE15501P77/75 TMA	Kit (MS-HR35-18) +T-Arm	(2) 1.9" Fiber	
13		3	Ericsson 4449 B71 + B85 RRH	Kit (MS-TAW-350RO)		
14		3	Ericsson 4460 B25 + B66 RRH			
XE:		6	JMA Wireless - MX06FRO660-03 - Panel	Modified		
026		3	Samsung - MT6407-77A - Panel	Low Profile Platform with	(6) 1 5/8"	
9	165.0	3	Samsung B5/B13 RRHBR04C RRU	(6) JMA 91900314, (3)	(1) 1 5/8"	Verizon
)5:		3 Samsung B2/B66A RRHBR049 RRU		SP219-96H and (1)	Hybrid	
ne:		1	Raycap RVZDC-6627-PF-48 - OVP	BBPM-K1		
21	70.0	1	Lucent 407577689 GPS	Stand Off	(1) 1/2" Coax	Sprint

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

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

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
15		6	JMA Wireless MX06FRO660-03 - Panel			
16	l II	3	Samsung MT6407-77A - Panel	Modified	(6) 1 5/8" (1) 1 5/8"	Verizon
17	165.0	3	Samsung B5/B13 RRHBR04C RRU	Low Profile Platform with		
18	105.0	3	Samsung B2/B66A RRHBR049 RRU	(6) JMA 91900314, (3)		
19		1	Raycap RVZDC-6627-PF-48 - OVP	SP219-96H and (1) BBPM-K1	Hybrid	,
20		2	Kaelus BSF0020F3V1-1 - Filter	DDLINI-VT		

All transmission lines are considered running inside of the pole shafts.

Analysis Results

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

	Pole shafts	Anchor Bolts	Base Plate
Max. Usage:	66.6%	57.9%	95.3%
Pass/Fail	Pass	Pass	Pass

Foundations

	Moment (Kip-Ft)	Shear (Kips)	Axial (Kips)
Analysis Reactions	3998.9	30.4	53.8

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

Service Load Condition (Rigidity):

Operational characteristics of the tower are found to be within the limits prescribed by TIA-222 for the installed antennas. The maximum twist/sway at the elevation of the proposed equipment is 1.4631 degrees under the operational wind speed as specified in the Analysis Criteria.

Conclusions

Based on the analysis results, the existing structure and its foundation were found to be adequate to safely support the existing and proposed equipment and meet the minimum requirements per the TIA-222 Standard under the design basic wind speed as specified in the Analysis Criteria.

Standard Conditions

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

Usage Diagram - Max Ratio 66,56% at 0.0ft

CT01497-S-SBA Structure:

Plymouth 2 CT Site Name:

195.00 (ft)

0.000 (ft) Base Elev:

Wind Load Factor:

Height:

EIA/TIA-222-H Code:

Exposure: C Gh: 1.1

Page: 1



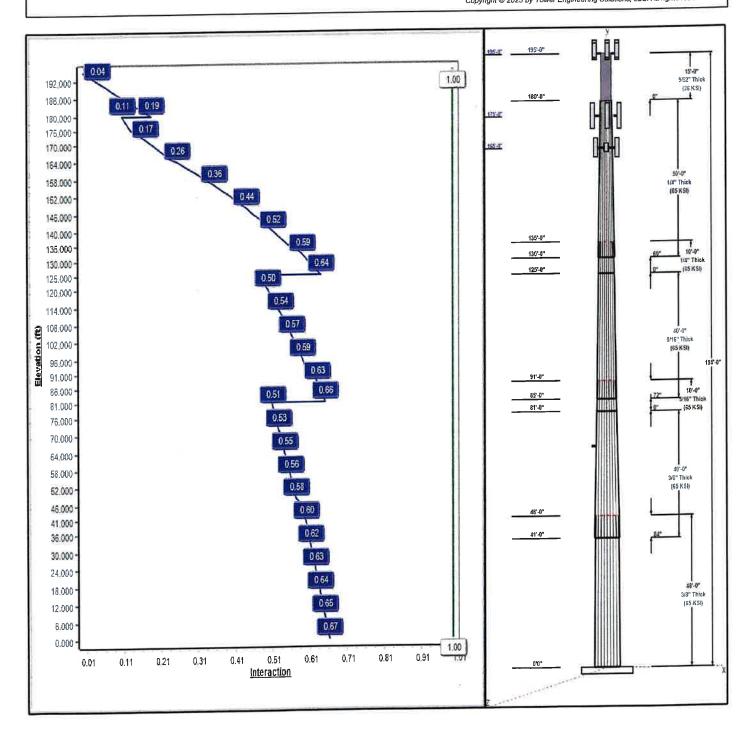
31

Dead Load Factor: 1.20 1.00

Load Case: 1.2D + 1.0W 116 mph Wind

Iterations:

Copyright © 2023 by Tower Engineering Solutions, LLC. All rights reserved.



Structure: CT01497-S-SBA

Type: Custom

Site Name: Plymouth 2 CT Height: 195.00 (ft)

Base Elev: 0.00 (ft)

Base Shape: 18 Sided

Taper: 0.23542

Page: 2

7/13/2023



			Shaft	Proper	ties					у	
	Length	Тор	Bottom	Thick	Joint		Crada	195'-0"	195'-0"	A. A.A	
Seq	(ft)	(in)	(in)	(in)	Туре	Тарег	Grade (ksi)	7 - 23-25		nu nu	
1	48.00	53.20	64.50	0.375		0.23542	65	-			15'-0" 9/32" Thick
2	40.00	46.18	55.60	0.375	Slip	0.23542	65	1	180'-0"	10.0	(36 KSI)
3	10.00	43.83	46.18	0.313	Butt	0.23542	65		180-0	n ini n	f 0"
4	40.00	36.45	45.86	0.313	Slip	0.23542	65	175:-0"			1
5	10.00	34.09	36.45	0.250	Butt	0.23542	65	1			
6	50.00	24.00	35.77	0.250	Slip	0.23542	65	165'-0"			
7	15.00	24.00	24.00	0.281	Butt	0.00000	36			nlithi	
		Dis	crete A	ppurte	nance	s		1			50'-0"
Attach	Force							7			1/4" Thick (65 KSI)
Elev (fl) Qty	Descrip	otion		Carrier					
195.00				PP18-C-A	20	Sprint		=			
195.00				W14-C-I20		Sprint			135'-0"		
195.00	196.00) 3		iz RRH (6	5MHz)	Sprint					
195.00	196.00) 3		•	-,	Sprint			130"-0"		10'-0"
195.00	196.00	3		18x20-25		Sprint			125'-0"	4444	0" (65 KSI)
195.00	196.00	3	ALU 800	DMHz Exte	rnal	Sprint				111111	
195.00	196.00	4	ACU-A2	20-N		Sprint					152
195.00	195.00	3	T-Arms	w/ Workin	9	Sprint		l h		MILE	
175.00		3	T-Arms	w/ Workin	9	T-Mobile				111111	
175.00				ALL24_43	U-NA20	T-Mobile					40'-0" 5/16" Thick
175.00			KRY 11:	2 144/1		T-Mobile		1		111814	(65 KSI)
175.00						T-Mobile		1			195'-0"
175.00						T-Mobile			91'-0"		-
175.00						T-Mobile		1	85'-0"		10'-0"
175.00			(3) T-Arı			T-Mobile		1	81'-0"	HHAM	5/16" Thick (65 KSI)
175.00 175.00		3				T-Mobile		1			
165.00		3 2				T-Mobile		1		IIIIIIIII	"
165.00		1		ਹਸਤਪ ।-। file Platfor		Verizon		1		-1 ////////	
165.00		6		RO660-03	111	Verizon Verizon					
165.00		3				Verizon		1		1111111	40'-0" 3/8" Thick
165.00		3		g B5/B13		Verizon					(65 KSI)
165.00		3		g B2/B66/		Verizon					
165.00	165.00	1		J		Verizon			46'-0"		t
165.00	165.00	1	9190031	14		Verizon		1	41'-0"		84"
70.00	70.00	1	Side Arn	n (L. Heav	y)	Sprint				mmm	
70.00	70.00	1	4075776	889 Gps		Sprint					.
		Lir	пеаг Ар	purten	ances]			48'-0"
Elev	Elev	Placer	nent Des	corintian		Corrier					3/8" Thick (65 KSI)
From (ft 0.00) To (ft) 195.00	Insid		l" Coax		Carrier		-			33,133
0.00	175.00	Insid		Coax Coax		Sprint T-Mobile					
0.00	175.00	Insid		B" Fiber		T-Mobile					
0.00	175.00	Insid		Fiber		T-Mobile		1	nene .		
0.00	165.00	Insid		" Coax		Verizon			0.0.	<u> </u>	
0.00	165.00	Insid		B" Hybrid		Verizon		1			37
0.00	70.00	Insid		Coax		Sprint		Z			
			Anch	or Bolt	S			1			
			Grado		-			J			

Grade

(ksi)

90.0

Arrangement

Radial

Qty 24

Specifications

2.00" A687

Structure: CT01497-S-SBA

Type:

Custom

Height:

Site Name: Plymouth 2 CT

195.00 (ft)

Base Elev: 0.00 (ft)

Base Shape: 18 Sided

Taper: 0.00000

7/13/2023

Page: 3

Base Plate											
Thickness (in)	Specifications (in)	Grade (ksi)	Geometry								
1 5000	54.5	60.0	Round								

Re	actions		
Load Case	Moment (FT-Kips)	Shear (Kips)	Axial (Kips)
1.2D + 1.0W 116 mph Wind	3998.9	30.4	53.8
0.9D + 1.0W 116 mph Wind	3946.0	30.4	40.4
1.2D + 1.0Di + 1.0Wi 50 mph Wind	1260.2	9.9	71.1
1.2D + 1.0Ev + 1.0Eh	125.4	0.7	55.6
0.9D + 1.0Ev + 1.0Eh	123.8	0.7	42.1
1.0D + 1.0W 60 mph Wind	949.8	7.3	44.9

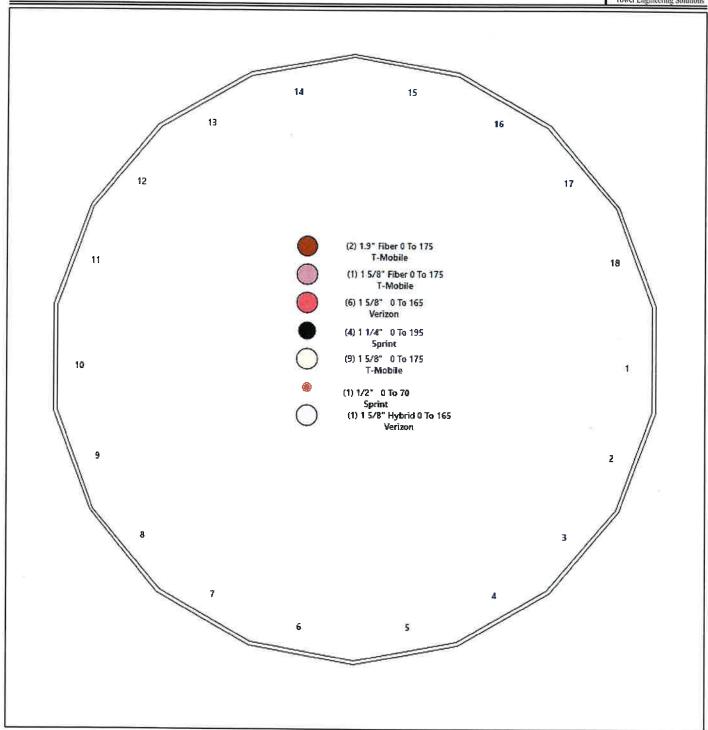
Structure: CT01497-S-SBA - Coax Line Placement

Type: Monopole

Site Name: Plymouth 2 CT Height: 195.00 (ft) 7/13/2023

TES

Page: 4



Shaft Properties

CT01497-S-SBA Structure:

Site Name: Plymouth 2 CT

Topography: 1

Height: 195.00 (ft)

Base Elev: 0.000 (ft)

Gh: 1.1 Code:

TIA-222-H

С Exposure:

Crest Height: 0.00

D - Stiff Soil Site Class:

Struct Class: ||

Page: 5

7/13/2023

Sec. No.	Shape	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Overlap (in)	Weight (lb)
1	18	48.000	0.3750	65		0.00	11,368
2	18	40.000	0.3750	65	Slip	84.00	8,183
3	18	10.000	0.3125	65	Flange	0.00	1,508
4	18	40.000	0.3125	65	Slip	72.00	5,514
5	18	10.000	0.2500	65	Flange	0.00	946
6	18	50.000	0.2500	65	Slip	60.00	4,001
7	R	15.000	0.2810	36	Flange	0.00	1,069
					Total Sha	ft Weight:	32.588

Bottom													
Sec.	Dia (in)	Elev (ft)	Area (sqin)	lx (in^4)	W/t Ratio	D/t Ratio	Dia (in)	Elev (ft)	Area (sqin)	lx (in^4)	W/t Ratio	D/t Ratio	Taper
1	64.50	0.00	76.32	39651.33	28.92	172.00	53.20	48.00	62.87	22166.3	23.60	141.8	0.235417
1	55.60	41.00	65.73	25324.08	24.73	148.26	46.18	81.00	54.52	14452.7	20.30	123.1	0.235417
2			45.49	12093.31	24.65		43.83	91.00	43.16	10325.2	23.32	140.2	0.235417
3	46.18	81.00				146.77	36.45	125.00	35.84	5912.81	19.15	116.6	0.235417
4	45.86	85.00	45.18	11844.57	24.47	140.77	-					400.0	0.235417
5	36.45	125.0	28.72	4754.83	24.30	145.79	34.09	135.00	26.85	3886.15	22.64	136.3	0.235417
6	35.77	130.0	28.18	4492.97	23.82	143.08	24.00	180.00	18.84	1343.00	15.52	96.00	0.235417
7	24.00	180.0	20.94	1473.63	0.00	85.41	24.00	195.00	20.94	1473.63	0.00	85.41	0.000000

Load Summary

Code:

Structure: CT01497-S-SBA

TIA-222-H

D - Stiff Soil

7/13/2023

Height:

Site Name: Plymouth 2 CT

195.00 (ft)

Exposure: С

Crest Height: 0.00

Base Elev: 0.000 (ft) Gh:

1.1

Site Class: Topography: 1

Struct Class: II

Page: 6



Discrete Appurtenances

					No Ice			Ice			
No.	Elev (ft)	Description	Qty	Weight (lb)	CaAa (sf)	CaAa Factor	Weight (lb)	CaAa (sf)	CaAa Factor	Hor. Ecc. (ft)	Vert Ecc (ft)
1	195.00	APXVSPP18-C-A20	3	57.00	8.02	0.83	175.30	9.932	0.85	0.00	1.00
2		APXVTM14-C-I20	3	56.20	6.34	0.77	159.07	7.086	0.79	0.00	1.00
3	195.00	1900MHz RRH (65MHz)	3	60.00	2.77	0.67	117.10	3.638	0.67	0.00	1.00
4	195.00	800 MHz RRH	3	53.00	2.49	0.67	103.62	3.273	0.67	0.00	1.00
5	195.00	TD-RRH8x20-25	3	70.00	4.05	0.67	140.71	4.592	0.67	0.00	1.00
6	195.00	ALU 800MHz External Notch Filt	3	8.80	0.78	0.67	20.87	1.223	0.71	0.00	1.00
7	195.00	ACU-A20-N	4	1.00	0.14	0.67	3.94	0.343	0.50	0.00	1.00
8		T-Arms w/ Working Platforms	3	500.00	16.00	0.75	977.76	27.466	0.75	0.00	0.00
9		T-Arms w/ Working Platforms	3	500.00	16.00	0.75	972.62	27.343	0.75	0.00	0.00
10	175.00	APXVAALL24_43-U-NA20	3	122.80	20.24	0.70	394.22	21.511	0.70	0.00	0.00
11	175.00	KRY 112 144/1	3					0.732	0.67	0.00	0.00
12	175.00	KRY 112 489/2	3	15.40 0.65 0.67 2				1.064	0.67	0.00	0.00
13	175.00	4449 B71 + B85	3	5,55				2.356	0.67	0.00	0.00
14	175.00	FE15501P77/75	6					1.165	0.67	0.00	0.00
15		(3) T-Arm Kit	1	500.00	16.00	0.75	901.73	26.587	0.75	0.00	0.00
16	175.00	AIR6419 B41	3	83.30	3.80	0.76	165.38	4.339	0.76	0.00	0.00
17	175.00	4460 B25 + B66	3	104.00	2.85	0.67	150.45	3.307	0.67	0.00	0.00
18	165.00	BSF0020F3V1-1	2	17.60	1.19	0.80	61.10	1.720	0.80	0.00	0.00
19	165.00	Low Profile Platform	1	1500.00	22.00	1.00	2380.96	33.887	1.00	0.00	0.00
20		MX06FRO660-03	6	60.00	9.87	0.88	232.06	10.779	0.88	0.00	0.00
21	165.00	MT6407-77A	3	79.40	4.69	0.70	154.42	5.321	0.70	0.00	0.00
22	165.00	Samsung B5/B13 RRHBR04C	3	70.30	1.88	0.67	103.03	2.251	0.67	0.00	0.00
23	165.00	Samsung B2/B66A RRHBR049	3				118.90	2.251	0.67	0.00	0.00
24	165.00	Raycap RVZDC-6627-PF-48	1	11110 1100 0.01			111.76	4.317	1.00	0.00	0.00
25	165.00	91900314	1				37.26	0.000	1.00	0.00	0.00
26	70.00	Side Arm (L. Heavy)	1				184.69	6.021	1.00	0.00	0.00
27	70.00	407577689 Gps	1	4.00	0.91	0.50	19.58	1.531	0.50	0.00	0.00
		Totals:	75	8,537.35			17,101.12				

Linear Appurtenances

Bottom	Тор				
Elev. (ft)	Elev. (ft)	Description	Exposed Width	Exposed	
0.00	195.00	(4) 1 1/4" Coax	0.00	Inside	
0.00	175.00	(9) 1 5/8" Coax	0.00	Inside	
0.00	175.00	(1) 1 5/8" Fiber	0.00	Inside	
0.00	175.00	(2) 1.9" Fiber	0.00	Inside	
0.00	165.00	(6) 1 5/8" Coax	0.00	Inside	
0.00	165.00	(1) 1 5/8" Hybrid	0.00	Inside	
0.00	70.00	(1) 1/2" Coax	0.00	Inside	

Shaft Section Properties

Structure: CT01497-S-SBA

Site Name: Plymouth 2 CT

Topography: 1

Height: 195.00 (ft)

Base Elev: 0.000 (ft)

Gh: 1.1

Code: TIA-222-H

Exposure: C

Crest Height: 0.00

Site Class: D - Stiff Soil

Struct Class: ||

7/13/2023 ((H)) ES

Page: 7 Tower Engineering Solut

Increment Length: 2 (ft)

Elev		Thick	Dia	Area (in^2)	lx (in^4)	W/t Ratio	D/t Ratio	Fpy (ksi)	S (in^3)	Weight (Ib)
(ft)	Description	(in)	(in) 64.500	76.322	39651.3	28.92	172.00		1210.	0.0
0.00		0.3750 0.3750	64.029	75.762	38784.3	28.70	170.74		1193.	517.5
2.00			63.558	75.702	37930.0	28.47	169.49		1175.	513.7
4.00		0.3750	63.087	74.641	37088.4	28.25	168.23		1157.	509.9
6.00		0.3750		74.041	36259.3	28.03	166.98		1140.	506.1
8.00		0.3750	62.617	73.520	35442.6	27.81	165.72		1123.	502.3
10.00		0.3750	62.146	72.960	34638.3	27.59	164.47		1106.	498.4
12.00		0.3750	61.675	72.399	33846.3	27.37	163.21		1089.	494.6
14.00		0.3750	61.204	71.839	33066.4	27.15	161.96		1072.	490.8
16.00		0.3750	60.733	71.839	32298.6	26.93	160.70		1055.	487.0
18.00		0.3750	60.262	70.718	31542.8	26.70	159.44		1039.	483.2
20.00		0.3750	59.792	70.718	30798.9	26.48	158.19		1022.	479.4
22.00		0.3750	59.321			26.26	156.93		1006.	475.6
24.00		0.3750	58.850	69.597	30066.7		155.68		990.1	471.7
26.00		0.3750	58.379	69.037	29346.3	26.04	154.42		974.0	467.9
28.00		0.3750	57.908	68.477	28637.4	25.82	153.17		958.1	464.1
30.00		0.3750	57.437	67.916		25.60			942.3	460.3
32.00		0.3750	56.967	67.356	27254.2	25.38	151.91		926.6	456.5
34.00		0.3750	56.496	66.795	26579.6	25.15	150.66			452.7
36.00		0.3750	56.025	66.235	25916.2	24.93	149.40		911.1	448.9
38.00		0.3750	55.554		25263.9	24.71	148.14		895.7	445.0
40.00		0.3750	55.083		24622.7	24.49	146.89		880.4	221.1
41.00	Bot - Section 2	0.3750	54.848	64.834		24.38	146.26		872.8	
42.00		0.3750	54.612	64.554	23992.5	24.27	145.63		865.3	443.3
44.00		0.3750	54.142	63.993	23373.0	24.05	144.38		850.3	880.9
46.00		0.3750	53.671	63.433		23.83	143.12		835.4	873.3
48.00	Top - Section 1	0.3750	53.950		23124.0	23.96	143.87	0.0	0.0	865.7
50.00		0.3750	53.479	63.205	22519.6	23.74	142.61		829.4	432.1
52.00		0.3750	53.008	62.645	21925.9	23.51	141.36		814.7	428.2
54.00		0.3750	52.537	62.084		23.29	140.10		800.1	424.4
56.00		0.3750	52.067	61.524		23.07	138.84		785.7	420.6
58.00		0.3750	51.596	60.963	20207.6	22.85	137.59		771.4	416.8
60.00		0.3750	51.125	60.403	196 5 5.5	22.63	136.33		757.2	413.0
62.00		0.3750	50.654	59.843	19113.5	22.41	135.08		743.2	409.2
64.00		0.3750	50.183	59.282	18581.5	22.19	133.82		729.3	405.4
66.00		0.3750	49.712	58.722	18059.6	21.96	132.57		715.5	401.5
68.00		0.3750	49.242	58.161	17547.4	21.74	131.31		701.9	397.7
70.00		0.3750	48.771	57.601	17045.1	21.52	130.06	76.1	688.4	393.9
70.00		0.3750	48.300	57.041	16552.4	21.30	128.80	76.3	675.0	390.1
		0.3750	47.829	56.480	16069.4	21.08	127.54	76.6	661.7	386.3
74.00		0.3750	47.358	55.920	15595.8	20.86	126.29	76.9	648.6	382.5
76.00		0.3750	46.887	55.360	15131.6	20.64	125.03	77.1	635.6	378.7
78.00		0.3750	46.417	54.799	14676.7	20.41	123.78	77.4	622.8	374.8
80.00	Tan Castian 2	0.3750	46.181		14452.7	20.30	123.15	77.5	616.4	186.0
81.00	Top - Section 2	0.3125	46.181		12093.3	24.36	147.78	72.4	515.8	
81.00	Bot - Section 3	0.3125	45.946	45.261	11908.1	24.51	147.03	72.6	510.5	154.4
82.00		0.3125	45.475	44.794	11543.3	24,25	145.52	72.9	500.0	306.4
84.00	Det. Continu 4	0.3125	45.240	44.560	11363.7	24.12	144.77	73.0	494.7	152.0
85.00	Bot - Section 4	0.3125	45.004	44.327	11186.0	23.98	144.01	73.2	489.6	304.6
86.00		0.3125	44.533	43.860		23.72	142.51		479.3	604.4
88.00		0.3125	44.062		10493.7	23.45	141.00		469.1	598.0
90.00		0.0120	77.002	.5.550				134		

Elev (ft)	Description	Thick (in)	Dia (in)	Area (in^2)	lx (in^4)	W/t Ratio	D/t Ratio	Fpy (kei)	S (in^3)	Weight (lb)
91.00	Top - Section 3	0.3125	44.452	43.779	10776.5	23.67	142.25	0.0		296.6
92.00		0.3125	44.217	43.546	10605.0	23.54	141.49		472.4	148,6
94.00		0.3125	43.746	43.079	10267.5	23.27	139.99		462.3	294.8
96.00		0.3125	43.275	42.612	9937.2	23.01	138.48	74.3	452.3	291.6
98.00		0.3125	42.804	42.145	9614.0	22.74	136.97	74.7	442.4	288.4
100.00		0.3125	42.333	41.678	9298.0	22.48	135.47		432.6	285.2
102.00		0.3125	41.862	41.211	8988.9	22.21	133.96		422.9	282.1
104.00		0.3125	41.392	40.744	8686.8	21.94	132.45		413.4	278.9
106.00 108.00		0.3125	40.921	40.277	8391.5	21.68	130.95		403.9	275.7
110.00		0.3125	40.450	39.810	8103.0	21.41	129,44		394.6	272.5
112.00		0.3125 0.3125	39.979	39.343	7821.2	21.15	127.93		385.3	269.3
114.00		0.3125	39.508 39.037	38.876 38.409	7546.0 72 77. 3	20.88	126.43		376.2	266.2
116.00		0.3125	38.567	37.942	7015.0	20.62 20.35	124.92 123.41		367.2 358.3	263.0
118.00		0.3125	38.096	37.475	6759.2	20.33	123.41		349.5	259.8 256.6
120.00		0.3125	37.625	37.008	6509.6	19.82	120.40	78.1		253.4
122.00		0,3125	37.154	36.541	6266.3	19.55	118.89		332.2	250.3
124.00		0.3125	36.683	36.074	6029.1	19.29	117.39		323.7	247.1
125.00	Top - Section 4	0.3125	36.448	35.841	5912.8	19.15	116.63		319.5	122.4
125.00	Bot - Section 5	0.2500	36.448	28.722	4754.8	23.94	145.79		256.9	
126.00		0.2500	36.212	28.535	4662.7	24.13	144.85		253.6	97.4
128.00		0.2500	35.742	28.162	4481.9	23.80	142.97	73.4	247.0	192.9
130.00	Bot - Section 6	0.2500	35.271	27.788	4305.9	23.47	141.08	73.8	240.5	190.4
132.00		0.2500	34.800	27.414	4134.6	23.13	139.20	74.2	234.0	378.4
134.00	T	0.2500	34.329	27.041	3967.8	22.80	137.32	74.6	227.7	373.3
135.00	Top - Section 5	0.2500	34.594	27.251	4060.9	22.99	138.37	0.0	0.0	184.7
136.00 138.00		0.2500	34.358	27.064	3978.0	22.82	137.43		228.0	92.4
140.00		0.2500	33.887	26.690	3815.5	22.49	135.55		221.8	182.9
142.00		0.2500 0.2500	33.417	26.317	3657.5	22.16	133.67		215.6	180.4
144.00		0.2500	32.946 32.475	25.943 25. 57 0	3504.0	21.83	131.78		209.5	177.8
146.00		0.2500	32.475	25.570 25.196	3354.8 3209.9	21.49 21.16	129.90 128.02		203.5 197.5	175.3
148.00		0.2500	31.533	24.822	3069.2	20.83	126.02		191.7	172.7 170.2
150.00		0.2500	31.062	24.449	2932.7	20.50	124.25		186.0	167.7
152.00		0.2500	30.592	24,075	2800.3	20.17	122.37		180.3	165.1
154.00		0.2500	30.121	23.702	2671.9	19.83	120.48		174.7	162.6
156.00		0.2500	29.650	23.328	2547.6	19.50	118.60		169.2	160.0
158.00		0.2500	29.179	22.954	2427.1	19.17	116.72		163.8	157.5
160.00		0.2500	28.708	22.581	2310.5	18.84	114.83	79.2	158.5	154.9
162.00		0.2500	28.237	22.207	2197.7	18.51	112.95	79.6	153.3	152.4
164.00		0.2500	27.767	21.834	2088.7	18.17	111.07	0.08	148.2	149.9
165.00		0.2500	27.531	21.647	2035.5	18.01	110.12	80.2	145.6	74.0
166.00		0.2500	27.296	21.460	1983.3	17.84	109.18		143.1	73.3
168.00		0.2500	26.825	21.087	1881.5	17.51	107.30		138.1	144.8
170.00 172.00		0.2500	26.354	20.713	1783.3	17.18	105.42		133.3	142.2
174.00		0.2500	25.883	20.339	1688.5	16.85	103.53		128.5	139.7
175.00		0.2500	25.412	19.966	1597.2	16.51	101.65		123.8	137.1
176.00		0.2500 0.2500	25.177	19.779	1552.7	16.35	100.71		121.5	67.6
178.00		0.2500	24.942	19.592	1509.2	16.18	99.77		119.2	67.0
180.00	Top - Section 6	0.2500	24.471 24.000	19.219 18.845	1424.5 1343.0	15.85 15.52	97.88		114.7	132.1
180.00	Bot - Section 7	0.2810	24.000	20.939	1473.6		96.00		110.2	129.5
182.00	· ·	0.2810	24.000	20.939	1473.6	13.80 0.00	85.41 85.41		122.8 122.8	142.5
184.00		0.2810	24.000	20.939	1473.6	0.00	85.41		122.8	142.5 142.5
186.00		0.2810	24.000	20.939	1473.6	0.00	85.41		122.8	142.5
188.00		0.2810	24.000	20.939	1473.6	0.00	85.41		122.8	142.5
190.00		0.2810	24.000	20.939	1473.6	0.00	85.41		122.8	142.5
192.00		0.2810	24.000	20.939	1473.6	0.00	85.41		122.8	142.5
194.00		0.2810	24.000	20.939	1473.6	0.00	85.41		122.8	142.5
195.00	No.	0.2810	24.000	20.939	1473.6	0.00	85.41	36.0	122.8	71.3

Increment Length: 2 (ft)

Elev	Description	Thick (in)	Dia (in)	Area (in^2)	lx (in^4)	W/t Ratio	D/t Ratio	Fpy (ksi)	S (in^3)	Weight (lb)
(ft)	Description	ķq								32588.3

Structure: CT01497-S-SBA

Site Name: Plymouth 2 CT Height: 195.00 (ft)

Base Elev: 0.000 (ft)

Gh: 1,1

Code:

TIA-222-H

Exposure: C

Crest Height: 0.00
Site Class: D - S

Site Class: D - Stiff Soil
Struct Class: ||

7/13/2023

Tower Engineering Solution

31

Page: 10

Load Case: 1.2D + 1.0W 116 mph Wind

Topography: 1

Dead Load Factor 1.20 Wind Load Factor 1.00



Iterations

Elev				qz	qzGh	С		Ice Thick	Tributary	A =	CfAa	Wind	Dead	Tot Dead
	escription	Kzt	Kz	(psf)	(psf)	(mph-ft)	Cf	(in)	(ft)	Aa (sf)	(sf)	(lb)	Load Ice (lb)	Load (lb)
0.00		1.00	0.85	27.004	29.70	575.12	0.630	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	27.004	29.70	570.92	0.630	0.000	2.00	10.876	6.85	203.5	0.0	621.0
4.00		1.00	0.85	27.004	29.70	566.72	0.630	0.000	2.00	10.796	6.80	202.0	0.0	616.4
6.00		1.00	0.85	27.004	29.70	562.53	0.630	0.000	2.00	10.717	6.75	200.5	0.0	611.9
8.00		1.00	0.85	27.004	29.70	558.33	0.630	0.000	2.00	10.637	6.70	199.1	0.0	607.3
10.00		1.00	0.85	27.004	29.70	554.13	0.630	0.000	2.00	10.557	6.65	197.6	0.0	602.7
12.00		1.00	0.85	27.004	29.70	549.93	0.630	0.000	2.00	10.478	6.60	196.1	0.0	598.1
14.00		1.00	0.85	27.004	29.70	545.73	0.630	0.000	2.00	10.398	6.55	194.6	0.0	593.5
16.00		1.00	0.86	27.338	30.07	544.87	0.630	0.000	2.00	10.318	6.50	195.5	0.0	589.0
18.00		1.00	0.88	28.024	30.83	547.39	0.630	0.000	2.00	10.239	6.45	198.8	0.0	584.4
20.00		1.00	0.90	28.652	31.52	549.17	0.630	0.000	2.00	10.159	6.40	201.7	0.0	579.8
22.00		1.00		29.233	32.16	550.34	0.630	0.000	2.00	10.079	6.35	204.2	0.0	575.2
24.00		1.00	0.94	29.774	32.75	550.99	0.630	0.000	2.00	9.999	6.30	206.3	0.0	570.7
26.00		1.00	0.95	30.280	33.31	551.21	0.630	0.000	2.00	9.920	6.25	208.2	0.0	566.1
28.00		1.00	0.97	30.756	33.83	551.05	0.630	0.000	2.00	9.840	6.20	209.7	0.0	561.5
30.00		1.00	0.98	31.206	34.33	550.55	0.630	0.000	2.00	9.760	6.15	211.1	0.0	556.9
32.00		1.00	1.00	31.633	34.80	549.76	0.630	0.000	2.00	9.681	6.10	212.2	0.0	552.4
34.00		1.00	1.01	32.039	35.24	548.71	0.630	0.000	2.00	9.601	6.05	213.2	0.0	547.8
36.00		1.00	1.02	32.427	35.67	547.42	0.630	0.000	2.00	9.521	6.00	214.0	0.0	543.2
38.00		1.00	1.03	32.798	36.08	545.92	0.630	0.000	2.00	9.442	5.95	214.6	0.0	538.6
40.00		1.00	1.04	33.154	36.47	544.22	0.630	0.000	2.00	9.362	5.90	215.1	0.0	534.1
41.00 Bot - Sed	ction 2	1.00	1.05	33.327	36.66	543.30	0.630	0.000	1.00	4.651	2.93	107.4	0.0	265.3
42.00		1.00	1.05	33.496	36.85	542.35	0.630	0.000	1.00	4.695	2.96	109.0	0.0	532.0
44.00		1.00	1.06	33.826	37.21	540.31	0.630	0.000	2.00	9.330	5.88	218.7	0.0	1057.1
46.00		1.00	1.07	34.144	37.56	538.12	0.630	0.000	2.00	9.250	5.83	218.9	0.0	1047.9
48.00 Top - Se	ction 1	1.00	1.08	34.451	37.90	535.80	0.630	0.000	2.00	9.170	5.78	218.9	0.0	1038.8
50.00		1.00	1.09	34.749	38.22	540.93	0.630	0.000	2.00	9.091	5.73	218.9	0.0	518.5
52.00		1.00	1.10	35.037	38.54	538.38	0.630	0.000	2.00	9.011	5.68	218.8	0.0	513.9
54.00		1.00	1.11	35.316	38.85	535.73	0.630	0.000	2.00	8.931	5.63	218.6	0.0	509.3
56.00		1.00	1.12	35.588	39.15	532.96	0.630	0.000	2.00	8.851	5.58	218.3	0.0	504.7
58.00		1.00	1.13	35.852	39.44	530.10	0.630	0.000	2.00	8.772	5.53	217.9	0.0	500.2
60.00		1.00	1.14	36.108	39.72	527.14	0.630	0.000	2.00	8.692	5.48	217.5	0.0	495.6
62.00		1.00	1.14	36.358	39.99	524.09	0.630	0.000	2.00	8.612	5.43	217.0	0.0	491.0
64.00		1.00	1.15	36.602	40.26			0.000	2.00	8.533	5.38	216.4	0.0	486.4
66.00		1.00	1.16	36.840	40.52	517.74	0.630	0.000	2.00	8.453	5.33	215.8	0.0	481.8
68.00		1.00	1.17	37.072	40.78	514.45	0.630	0.000	2.00	8.373	5.28	215.1	0.0	477.3
70.00 Appurten	nance(s)	1.00	1.17	37.299	41.03	511.09	0.630	0.000	2.00	8.294	5.23	214.4	0.0	472.7
72.00		1.00		37.521	41.27	507.66		0.000	2.00	8.214	5.17	213.6	0.0	468.1
74.00		1.00		37.738	41.51	504.16	0.630	0.000	2.00	8.134	5.12	212.7	0.0	463.5
76.00		1.00		37.951	41.75	500.60		0.000	2.00	8.055	5.07	211.8	0.0	463.5 459.0
78.00		1.00		38.159		496.98		0.000		7.975	5.02	210.9	0.0	459.0 454.4
80.00		1.00		38.363	42.20	493.30		0.000	2.00	7.895	4.97	209.9	0.0	454.4 449.8
81.00 Top - Sec	ction 2	1.00		38.463	42.31	491.44		0.000	1.00	3.918	2.47	104.4	0.0	
82.00		1.00		38.563	42.42	489.57		0.000	1.00	3.898	2.46	104.4	0.0	223.2
84.00		1.00		38.759	42.63	485.78		0.000	2.00		4.87	207.8	0.0	185.3
85.00 Bot - Sec	ction 4	1.00		38.856	42.74	483.87		0.000	1.00	3.838	2.42	103.3	0.0	367.7
86.00		1.00		38.951	42.85	481.95		0.000		3.871	2.44	103.5	0.0	182.4 365.5

Copyright © 2023 by Tower Engineering Solutions, LLC. All rights reserved.

CT01497-S-SBA Structure:

Code:

TIA-222-H

7/13/2023

Page: 11

(((図))

Tower Engineering Solutions

201.2

198.1

195.1

192.0

189.0

185.9

182.9

179.8

88.8

88.0

173.7

170.7

167.6

164.6

81.1

80.4

158.5

155.4

171.0

171.0

171.0

171.0

171.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

3.34

3.29

3.24

3.19

3.14

3.09

3.04

2.99

1.47

1.80

1.80

1.80

1.80

160.7

158.8

156.8

154.8

152.7

150.7

148.6

146.5

724

90.5

90.7

90.9

91.1

Site Name: Height:

Base Elev:

150.00

152.00

154 00

156.00

158.00

160.00

162.00

164.00

166.00

168 00

170.00

172.00

174.00

176.00

178.00

182.00

184.00

186.00

188.00

190.00

165.00 Appurtenance(s)

175.00 Appurtenance(s)

180.00 Top - Section 6

Plymouth 2 CT

195.00 (ft)

0.000 (ft)

С Exposure:

Struct Class:

Crest Height: 0.00

D - Stiff Soil Site Class:

Ш

Topography: 1.1 Gh: 0.630 208.4 0.0 725.3 2.00 7.682 4.84 0.000 43.05 478.06 1.23 39.140 1.00 88.00 717.6 207.2 0.0 0.630 2.00 7.603 4.79 0.000 474.13 1.24 39.326 43.26 1.00 90.00 356.0 0.0 0.630 0.000 1.00 3.771 2.38 103.0 472.14 1.00 1.24 39.418 43.36 91.00 Top - Section 3 178.3 0.0 476.89 0.630 0.000 1.00 3.752 2.36 102.7 39.508 43.46 1.00 1.24 92.00 0.0 353.7 204.7 472.88 0.630 0.000 2.00 7.443 4.69 1.25 39.688 43.66 1.00 94.00 203.4 0.0 349.9 7.364 4.64 0.630 0.000 2.00 39.864 43 85 468.83 1.00 1.25 96.00 346.1 7 284 4.59 202.1 0.0 2.00 0.630 0.000 44.04 464.73 1.00 1.26 40.037 98.00 0.0 342.3 7.204 4.54 200.7 0.630 0.000 2.00 460.60 40.208 44.23 100.00 1.00 1.27 338.5 199.3 0.0 0.000 2.00 7.125 4.49 0.630 456.43 40.376 44.41 1.00 1.27 102.00 334.6 0.630 0.000 2.00 7.045 4.44 197.9 0.0 452.22 1.28 40.541 44.60 1.00 104.00 330.8 0.0 6.965 4.39 196.5 447 97 0.630 0.000 2.00 40.704 44.77 1.00 1.28 106.00 0.0 327.0 195.0 443.69 0.630 0.000 2.00 6.886 4.34 44.95 1.29 40.865 1.00 108.00 4.29 0.0 323.2 193.5 0.630 0.000 2.00 6.806 45.13 439.37 1.29 41.023 1.00 110.00 319.4 4 24 191.9 0.0 6.726 435.02 0.630 0.000 2.00 41.179 45.30 1.00 1.30 112.00 0.0 315.6 4.19 190.4 0.630 2.00 6.646 430.64 0.000 1.30 41.333 45.47 1.00 114.00 0.630 6.567 4.14 188.8 0.0 311.8 0.000 2.00 426.23 41.484 45.63 1.31 1.00 116.00 308.0 0.630 2.00 6.487 4.09 187.2 0.0 0.000 421.78 1.31 41.634 45.80 1.00 118.00 304.1 4.04 185.5 0.0 417.30 0.630 0.000 2.00 6.407 41.781 45.96 1.00 1.32 120.00 300.3 0.0 0.630 0.000 2.00 6.328 3.99 183.9 412 80 1.32 41.927 46.12 1.00 122.00 0.0 296.5 182.2 3.94 0.630 2.00 6.248 46.28 408.27 0.000 1.32 42.071 1.00 124.00 146.8 3.094 1.95 90.4 0.0 0.630 0.000 1.00 46.36 405.99 1.00 1.33 42.142 125.00 Top - Section 4 0.0 116.9 1.94 89.9 0.630 1.00 3 074 403.71 0.000 1.33 42.213 46.43 1.00 126.00 2.00 6.089 3.84 178.7 0.0 231.5 0.630 399.12 0.000 1.33 42.353 46.59 128.00 1.00 228.5 3.79 176.9 0.0 0.630 0.000 2.00 6 009 1.34 42.491 46.74 394.50 1.00 130,00 Bot - Section 6 454.1 6.014 3.79 177.7 0.0 389.86 0.630 0.000 2.00 46.89 1.00 1.34 42.628 132.00 448.0 0.0 0.630 0.000 2.00 5.934 3.74 175.9 385 20 42.763 47.04 1.00 1.35 134.00 0.0 221.7 1.85 87 2 0.630 1.00 2.937 382.86 0.000 1.35 42.830 47.11 1.00 135.00 Top - Section 5 110.9 1 84 86.7 0.0 2.917 0.630 0.000 1.00 47.19 386.13 1.00 1.35 42.897 136.00 3.64 172.2 0.0 219.5 0.630 2.00 5.775 381.42 0.000 1.35 43.029 47.33 1.00 138.00 5.695 3.59 170.3 0.0 216.4 0.630 2.00 376.69 0.0001.36 43.160 47.48 140.00 1.00 213.4 168.5 0.0 0.630 2.00 5.616 3 54 0.00043.289 47.62 371.94 1.36 1.00 142.00 0.0 210.3 3.49 166.6 0.630 0.000 2.00 5.536 367.16 43.416 47.76 1.00 1.37 144.00 207.3 0.0 0.630 0.000 2.00 5.456 3.44 164.6 362.37 1.37 43.542 47.90 1.00 146.00 0.0 204.2 162.7 0.630 2.00 5.376 3.39 357.55 0.000 43.667 48 03 1.00 1.37 148.00

0.630

0.630

0.630

0.630

0.630

0.630

0.630

0.630

0.630

352.71

347.85

342.96

338.06

333.14

328.20

323.24

318.26

315.76

273.89

274.21

274.52

274.83

275.14

48.17

48.30

48.44

48.57

48.70

48.83

48.96

49.08

49.15

50.17

50.29

50.40

50.52

50.63

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.00

1.38

1.38

1.39

1.39

1.39

1.40

1.40

43.791

43.913

44.034

44.154

44.273

44.390

44.506

44.621

44.679

1.44 45.610

1.44 45.716

1.44 45.820

45.923

1.45

1 46 71.9 0.0 0.630 0.000 1.00 2.320 49.21 313.26 44.735 1.00 1.41 0.0 2.89 142.3 0.630 2.00 4 580 44.848 49.33 308.25 0.000 1.00 1.41 0.0 0.630 4.500 2.83 140.2 2.00 303.21 0.000 1.42 44.960 49.46 1.00 0.000 2.00 4.420 2.78 138.1 0.0 0.630 49.58 298.16 1.42 45.071 1.00 0.0 2.73 135.9 0.630 0.000 2.00 4.341 293.10 1.42 45.181 49.70 1.00 0.0 2.140 1.35 67.1 0.630 0.000 1.00 290.56 1.00 1.42 45.235 49.76 66.6 0.0 1.00 2.120 1.34 288.01 0.630 0.000 1.43 45.290 49.82 1.00 131.5 0.0 0.630 2.00 4.181 2.63 282.91 0.000 49.94 1.43 45.398 1.00 129.3 0.0 4.102 2.58 50.05 277.79 0.630 0.000 2.00 1.43 45.504 1.00 0.0 1.80 90.3

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

2.00

2.00

2.00

2.00

2.00

2.00

2.00

2.00

1.00

2.00

2.00

2.00

2.00

2.00

5.297

5.217

5 137

5.058

4.978

4.898

4.819

4.739

2.340

4.000

4.000

4.000

4.000

4.000

0.450 1,45 46.025 Copyright © 2023 by Tower Engineering Solutions, LLC. All rights reserved.

0.450

0.450

0.450

0.450

Structure: CT01497-S-SBA

Site Name: Plymouth 2 CT

Height: 195.00 (ft)

Base Elev: 0.000 (ft)

Code:

TIA-222-H

Exposure: С

Crest Height: 0.00

Site Class: D - Stiff Soil 7/13/2023

Gh: 1.1			Topography	: 1	Struct Class:						Page: 12	Tower Engineering Solution		
192.00		1.00	1.45 46.127	50.74	275.44	0.450	0.000	2.00	4.000	1.80	91.3	0.0	171.0	
194.00		1.00	1.46 46.228	50.85	275.74	0.450	0.000	2.00	4.000	1.80	91.5	0.0	171.0	
195.00 Appu	ırtenance(s)	1.00	1.46 46.278	50.91	275.89	0.450	0.000	1.00	2.000	0.90	45.8	0.0	85.5	
							Totals:	195.00			17.842.7	-	39.106.0	

Discrete Appurtenance Forces

CT01497-S-SBA Structure:

Site Name: Plymouth 2 CT

Height:

195.00 (ft)

Base Elev: 0.000 (ft)

Gh: 1.1 Code:

TIA-222-H

Exposure:

С Crest Height: 0.00

D - Stiff Soil Site Class:

Struct Class: II

7/13/2023

31

Page: 13

Load Case: 1.2D + 1.0W 116 mph Wind

Topography: 1

Dead Load Factor 1.20 1.00 **Wind Load Factor**



Iterations

						Orient		Total CaAa	Dead Load	Horiz Ecc	Vert Ecc	Wind FX	Mom Y	Mom Z
	Elev	Description	Qty	qz (psf)	qzGh (psf)	Factor x Ka	Ka	(sf)	(lb)	(ft)	(ft)	(lb)	(lb-ft)	(lb-ft)
No.	(ft)	The same of the sa		46.328	50.960	0.60	0.90	4.50	190.80	0.000	1.000	229.55	0.00	229.55
1		800 MHz RRH	3	46.328	50.960	0.75	0.90	17.97	205.20	0.000	1.000	915.90	0.00	915.90
2		APXVSPP18-C-A20	3	46.328	50.960	0.69	0.90	13.18	202.32	0.000	1,000	671.70	0.00	671.70
3		APXVTM14-C-I20	3	46.328	50.960	0.60	0.90	5.01	216.00	0.000	1.000	255.36	0.00	255.36
4		1900MHz RRH (65MHz)	3	46.278	50.900	0.56	0.75	27.00	1800.00	0.000	0.000	1374.45	0.00	0.00
5		T-Arms w/ Working	3	46.328	50.960	0.60	0.90	7.33	252.00	0.000	1.000	373.36	0.00	373.36
6		TD-RRH8x20-25	_	46.328	50.960	0.60	0.90	1.41	31.68	0.000	1.000	71.91	0.00	71.91
7		ALU 800MHz External	3 4	46.328	50.960	0.60	0.90	0.34	4.80	0.000	1.000	17.21	0.00	17.21
8		ACU-A20-N	4	45.235	49.759	0.56	0.75	9.00	600.00	0.000	0.000	447.83	0.00	0.00
9		(3) T-Arm Kit	6	45.235	49.759	0.54	0.80	2.28	126.00	0.000	0.000	113.62	0.00	0.00
10		FE15501P77/75	3	45.235	49.759	0.54	0.80	3.17	270.00	0.000	0.000	157.62	0.00	0.00
11		4449 B71 + B85	3	45.235	49.759	0.54	0.80	1.05	55.44	0.000	0.000	52.01	0.00	0.00
12		KRY 112 489/2	3	45.235	49.759	0.54	0.80	0.66	39.60	0.000	0.000	32.81	0.00	0.00
13		KRY 112 144/1	3	45.235	49.759	0.56	0.80	34.00	442.08	0.000	0.000	1691.96	0.00	0.00
14		APXVAALL24_43-U-NA20	3	45.235	49.759	0.54	0.80	4.58	374.40	0.000	0.000	228.04	0.00	0.00
15		4460 B25 + B66	3	45.235	49.759	0.61	0.80	6.93	299.88	0.000	0.000	344.89	0.00	0.00
16		AIR6419 B41	3	45.235	49.759	0.56	0.75	27.00	1800.00	0.000	0.000	1343.49	0.00	0.00
17		T-Arms w/ Working	3	44.679	49.146	0.56	0.80	7.88	285.84	0.000	0.000	387.23	0.00	0.00
18		MT6407-77A	1	44.679	49.146	1.00	1.00	22.00	1800.00	0.000	0.000	1081.22	0.00	0.00
19		Low Profile Platform	2	44.679		0.64	0.80	1.52	42.24	0.000	0.000	74.86	0.00	0.00
20		BSF0020F3V1-1	6	44.679		0.70	0.80	41.69	432.00	0.000	0.000	2048.96	0.00	0.00
21		MX06FRO660-03	3	44.679	49.146	0.54	0.80	3.02	253.08	0.000	0.000	148.57	0.00	0.00
22		Samsung B5/B13	3	44.679	49.146	0.54	0.80	3.02	303.84	0.000	0.000	148.57	0.00	0.00
23		Samsung B2/B66A	1	44.679	49.146		0.80	3.03	38.40	0.000	0.000	149.01	0.00	0.00
24		Raycap	1	44.679			1.00	0.00	30.42	0.000	0.000	0.00	0.00	0.00
25		91900314	1	37.299	41.029	1.00	1.00	3.50	144.00	0.000	0.000	143.60	0.00	0.00
26		Side Arm (L. Heavy)	1		41.029		1.00	0.46	4.80	0.000	0.000	18.67	0.00	0.00
_27	70.00	407577689 Gps		57.200	,1.020		Totals		10,244.82		1	2,522.39		

Total Applied Force Summary

Structure: CT01497-S-SBA

Site Name: Plymouth 2 CT

Height: 195.00 (ft)

Base Elev: 0.000 (ft)

Gh: 1.1

82.00

84.00

85.00

86.00

104.17

207.79

103.35

104.49

211.02

419.18

208.16

391.22

Code: TIA-222-H

Exposure: C

Crest Height: 0.00 Site Class: D - Stiff Soil

Struct Class: II

7/13/2023

((III)) LES Tower Engineering Solution

31

Page: 14

Load Case: 1.2D + 1.0W 116 mph Wind

Topography: 1

Dead Load Factor 1.20 Wind Load Factor 1.00



Iterations

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00			
2.00		203.53	0.00	0.00	0.00
4.00			672.85	0.00	0.00
6.00		202.04	668.27	0.00	0.00
8.00		200.55	663.70	0.00	0.00
		199.06	659.12	0.00	0.00
10.00		197.57	654.54	0.00	0.00
12.00		196.08	649.97	0.00	0.00
14.00		194.58	645.39	0.00	0.00
16.00		195.48	640.81	0.00	0.00
18.00		198.84	636.24	0.00	0.00
20.00		201.72	631.66	0.00	0.00
22.00		204.19	627.08	0.00	0.00
24.00		206.32	622.51	0.00	0.00
26.00		208.15	617.93	0.00	0.00
28.00		209.73	613.35	0.00	0.00
30.00		211.07	608.78	0.00	0.00
32.00		212.21	604.20	0.00	
34.00		213.17	599.62		0.00
36.00				0.00	0.00
38.00		213.96	595.05	0.00	0.00
40.00		214.60	590.47	0.00	0.00
41.00		215.10	585.89	0.00	0.00
		107.42	291.23	0.00	0.00
42.00		108.98	557.90	0.00	0.00
44.00		218.70	1108.93	0.00	0.00
46.00		218.87	1099.78	0.00	0.00
48.00		218.94	1090.63	0.00	0.00
50.00		218.91	570.30	0.00	0.00
52.00		218.79	565.73	0.00	0.00
54.00		218.58	561.15	0.00	0.00
56.00		218.30	556.57	0.00	0.00
58.00		217.94	552.00	0.00	0.00
60.00		217.50	547.42	0.00	0.00
62.00		217.00	542.84	0.00	0.00
64.00		216.44	538.27	0.00	0.00
66.00		215.81	533.69	0.00	
68.00		215.12			0.00
70.00	(2) attachments		529.11	0.00	0.00
72.00	(Z) attachments	376.65	673.34	0.00	0.00
		213.58	519.58	0.00	0.00
74.00		212.73	515.00	0.00	0.00
76.00		211.84	510.42	0.00	0.00
78.00		210.89	505.85	0.00	0.00
80.00		209.90	501.27	0.00	0.00
81.00		104.43	248.92	0.00	0.00
82 NO		404.47			

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

Total Applied Force Summary

Structure: CT01497-S-SBA

Site Name: Plymouth 2 CT

Height: 1

195.00 (ft)

Code:

TIA-222-H

Exposure: C

Crest Height: 0.00

Site Class:

D - Stiff Soil



7/13/2023

Base Elev:	0.000 (ft)			Site Cla	ass: D - Stiff		T i i Coloriu
Gh:	1.1	Topo	graphy: 1	Struct (Class: II	Page: 15	Tower Engineering Solution
				0.00	0.00		
88.00		208.38 207.19	776.71 769.08	0.00	0.00		
90.00		103.02	381.68	0.00	0.00		
91.00		103.02	204.02	0.00	0.00		
92.00		204.72	405.17	0.00	0.00		
94.00		203.42	401.36	0.00	0.00		
96.00		202.10	397.55	0.00	0.00		
98.00		200.74	393.73	0.00	0.00		
100.00 102.00		199.35	389.92	0.00	0.00		
104.00		197.93	386.10	0.00	0.00		
106.00		196.47	382.29	0.00	0.00		
108.00		194.99	378.48	0.00	0.00		
110.00		193.48	374.66	0.00	0.00		
112.00		191.94	370.85	0.00	0.00		
114.00		190.38	367.04	0.00	0.00		
116.00		188.79	363.22	0.00	0.00		
118.00		187.17	359.41	0.00	0.00		
120.00		185.52	355.59	0.00	0.00		
122.00		183.85	351.78	0.00	0.00		
124.00		182.16	347.97	0.00	0.00		
125.00		90.36	172.55	0.00	0.00		
126.00		89.93	142.63	0.00	0.00		
128.00		178.71	282.97	0.00	0.00 0.00		
130.00		176.94	279.92	0.00	0.00		
132.00		177.66	505.52	0.00	0.00		
134.00		175.86	499.41	0.00	0.00		
135.00		87.18	247.42	0.00 0.00	0.00		
136.00		86.72	136.62	0.00	0.00		
138.00		172.20	270.95 267.90	0.00	0.00		
140.00		170.34	264.85	0.00	0.00		2
142.00		168.46 166.56	261.80	0.00	0.00		
144.00		164.64	258.75	0.00	0.00		
146.00		162.70	255.70	0.00	0.00		
148.00		160.74	252.65	0.00	0.00		
150.00		158.77	249.60	0.00	0.00		
152.00		156.77	246.54	0.00	0.00		
154.00 156.00		154.76	243.49	0.00	0.00		
158.00		152.73	240.44	0.00	0.00		
160.00		150.69	237.39	0.00	0.00		
162.00		148.62	234.34	0.00	0.00		
164.00		146.54	231.29	0.00	0.00		
	0) attachments	4110.86	3300.32	0.00	0.00		
166.00	-,	71.91	104.93	0.00	0.00		<u>:</u> *
168.00		142.33	207.57	0.00	0.00		
170.00		140.21	204.52	0.00	0.00		
172.00		138.06	201.47	0.00	0.00		
174.00		135.91	198.42	0.00	0.00		
	8) attachments	4479.36	4105.47	0.00	0.00		
176.00		66.55	83.55	0.00	0.00		
178.00		131.54	164.81	0.00	0.00		
180.00		129.34	161.76	0.00	0.00		
182.00		90.31	177.34	0.00	0.00		
184.00		90.52	177.34	0.00	0.00 0.00		
186.00		90.72	177.34	0.00	0.00		
188.00		90.93	177.34	0.00 0.00	0.00		
190.00		91.13	177.34		Solutions, LLC. All	rights reserved.	
		Сору	rignt © 2023 by Tow	er Engineenny	GOIGGOIIS, LEO. AII	,,g , 000, , = =.	

Total Applied Force Summary

Structure: CT01497-S-SBA

Code:

TIA-222-H

Site Name: Plymouth 2 CT

Exposure:

Height:

195.00 (ft)

C

7/13/2023

Base Elev: 0.000 (ft)

Crest Height: 0.00 D - Stiff Soil Site Class:

((明))

Tower Engineering Solutions

Gh: 1.1

Topography: 1

Struct Class: ||

2,534.98

Page: 16

192.00 91.33 177.34 0.00 194.00 91.53 177.34 0.00 0.00 195.00 (25) attachments 3955.25 2991.47 0.00 2534.98

Totals:

30,365.09

53,841.94

0.00

Calculated Forces

Structure: CT01497-S-SBA
Site Name: Plymouth 2 CT

195.00 (ft)

Base Elev: 0.000 (ft)

Gh: 1.1

Height:

Topography: 1

Code: TIA-222-H

Exposure: C

Crest Height: 0.00

Site Class: D - Stiff Soil

Struct Class: ||

7/13/2023

IES

Page: 17

Iterations

31

Load Case: 1.2D + 1.0W 116 mph Wind

Dead Load Factor 1.20 Wind Load Factor 1.00

Seg	Pu	Vu	Tu	Mu MZ	Mu MX	Resultant Moment	phi Pn	phi Vn	phi Tn	phi Mn	Total Deflect	Rotation Sway	Rotation Twist	Stress
Elev	FY (-)	FX (-) (kips)	MY (-)		(ft-kips)	(ft-kips)	(kips)	(kips)	(ft-kips)	(ft-kips)	(in)	(deg)	(deg)	Ratio
(ft)	(kips) -53.83	-30.39	0.00	-3998.9	0.00	3998.90	4628.91	1339.45	7126.38	6119.66	0.00	0.000	0.000	0.666
0.00		-30.24	0.00	-3938.1	0.00	3938.12	4612.68	1329.62	7022.11	6053.16	0.01	-0.057	0.000	0.663
2.00	-53.12 -52.42	-30.24	0.00	-3877.6	0.00	3877.64	4596.18	1319.78	6918.62	5986.64	0.05	-0.114	0.000	0.660
4.00	-52.42 -51.73	-29.94	0.00	-3817.4	0.00	3817.47	4579.43	1309.95	6815.89	5920.10	0.11	-0.172	0.000	0.657
6.00	-51.73 -51.04	-29.79	0.00	-3757.5	0.00	3757.59	4562.40	1300.11	6713.93	5853.55	0.19	-0.230	0.000	0.654
8.00	-51.04	-29.64	0.00	-3698.0	0.00	3698.01	4545.12	1290.28	6612.74	5787.00	0.30	-0.289	0.000	0.651
10.00	-49.68	-29.49	0.00	-3638.7	0.00	3638.73	4527.57	1280.44	6512.31	5720.46	0.44	-0.348	0.000	0.648
12.00 14.00	-49.00	-29.35	0.00	-3579.7	0.00	3579.74	4509.77	1270.61	6412.66	5653.92	0.60	-0.407	0.000	0.645
	-48.34	-29.20	0.00	-3521.0	0.00	3521.05	4491.69	1260.77	6313.77	5587.41	0.78	-0.466	0.000	0.641
16.00	-46.54	-29.04	0.00	-3462.6	0.00	3462.66	4473.36	1250.94	6215.65	5520.93	0.99	-0.527	0.000	0.638
18.00	-47.07 -47.01	-28.88	0.00	-3404.5	0.00	3404.58	4454.76	1241.10	6118.30	5454.49	1.22	-0.587	0.000	0.635
20.00 22.00	-46.35	-28.72	0.00	-3346.8	0.00	3346.82	4435.90	1231.27	6021.72	5388.08	1.48	-0.648	0.000	0.632
	-46.33 -45.70	-28.56	0.00	-3289.3	0.00	3289.38	4416.78	1221.43	5925.90	5321.73	1.77	-0.709	0.000	0.629
24.00	-45.76	-28.39	0.00	-3232.2	0.00	3232.27	4397.40	1211.60	5830.86	5255.44	2.08	-0.7 7 1	0.000	0.626
26.00	-44.42	-28.22		-3175.4	0.00	3175.49	4377.75	1201.76	5736.58	5189.22	2.41	-0.833	0.000	0.623
28.00	-44.42	-28.05	0.00	-3119.0	0.00	3119.05	4357.84	1191.93	5643.07	5123.07	2.78	-0.896	0.000	0.619
30.00	-43.15	-27.87	0.00	-3062.9	0.00	3062.96	4337.67	1182.09	5550.33	5057.01	3.17	-0.959	0.000	0.616
32.00	-43.15 -42.52	-27.70	0.00	-3007.2	0.00	3007.21	4317.23	1172.26	5458.36	4991.03	3.58	-1.022	0.000	0.613
34.00	-42.52	-27.52		-2951.8	0.00	2951.82	4296.53	1162.42	5367.16	4925.16	4.02	-1.086	0.000	0.610
36.00	-41.90 -41.28	-27.34		-2896.7	0.00	2896.79	4275.57	1152.59	5276.73	4859.38	4.49	-1.150	0.000	0.606
38.00	-41.28	-27.15		-2842.1	0.00	2842.11	4254.35	1142.76	5187.06	4793.73	4.99	-1.215	0.000	0.603
40.00	-40.38	-27.13		-2814.9	0.00	2814.96	4243.64	1137.84	5142.51	4760.94	5.25	-1.247	0.000	0.601
41.00	-40.36	-26.97	0.00	-2787.9	0.00	2787.91	4232.86	1132.92	5098.16	4728.19	5.51	-1.280	0.000	0.600
42.00	-38.66	-26.77	0.00	-2733.9	0.00	2733.97	4211.11	1123.09	5010.03	4662.78	6.06	-1.346	0.000	0.596
44.00 46.00	-37.54	-26.57		-2680.4	0.00	2680.44	4189.10	1113.25	4922.67	4597.51	6.64	-1.411	0.000	0.593
	-36.42	-26.36		-2627.3	0.00	2627.31	4202.19	1119.08	4974.38	4636.19	7.25	-1.478	0.000	0.576
48.00 50.00	-35.83	-26.17		-2574.5	0.00	2574.58	4180.07	1109.25	4887.33	4570.98	7.88	-1.545	0.000	0.572
52.00	-35.24	-25.98		-2522.2	0.00	2522.24	4157.69	1099.41	4801.05	4505.91	8.54	-1.609	0.000	0.569
54.00	-34.66	-25.78		-2470.2	0.00	2470.29	4135.04	1089.58	4715.54	4441.00	9.23	-1.674	0.000	0.565
56.00	-34.08	-25.58		-2418.7	0.00	2418.73	4112.14	1079.74	4630.79	4376.25	9.94	-1.739	0.000	0.562
58.00	-33.50	-25.39		-2367.5	0.00	2367.57	4088.97	1069.91	4546.82	4311.67	10.69	-1.804	0.000	0.558
60.00	-32.93	-25.19		-2316.7	0.00	2316.79	4065.54	1060.07	4463.61	4247.27	11.46	-1.870	0.000	0.554
	-32.37	-24.99		-2266.4	0.00	2266.41	4041.84	1050.24	4381.17	4183.06	12.26	-1.937	0.000	0.550
62.00 64.00	-32.37	-24.80		-2216.4	0.00	2216.43	4017.89	1040.40	4299.50	4119.03	13.08	-2.003	0.000	0.547
66.00	-31.26	-24.60		-2166.8	0.00	2166.84	3993.67	1030.57	4218.60	4055.21	13.93	-2.071	0.000	0.543
68.00	-30.71	-24.40		-2117.6		2117.64	3969.18	1020.73	4138.47	3991.60	14.82	-2.138	0.000	0.539
70.00	-30.02	-24.03		-2068.8	0.00	2068.84	3944.44	1010.90	4059.10	3928.21	15.73	-2.206	0.000	0.535
70.00	-29.48	-23.84		-2020.7	0.00	2020.78	3919.43	1001.06	3980.51	3865.04	16.67	-2.274	0.000	0.531
74.00	-28.94	-23.64		-1973.1	0.00	1973.11	3894.16	991.23	3902.68	3802.10	17.63	-2.343	0.000	0.527
76.00	-28.42				0.00	1925.84	3868.63	981.39	3825.62	3739.40	18.63	-2.412	0.000	0.523
78.00		-23.24		-1878.9		1878.96	3842.83	971.56	3749.33	3676.95	19.65	-2.481	0.000	0.519
		-23.03		-1832.4		1832.48	3816.78	961.72	3673.81	3614.75	20.71	-2.551	0.000	0.515
80.00		-22.93		-1809.4		1809.45	3803.65	956.81		3583.75	21.25		0.000	0.513
81.00		-22.93		-1809.4		1809.45	2964.89		3038.55	2801.11	21.25		0.000	0.656
81.00		-22.85		-1786.5		1786.52	2956.04		3007.44	2778.31	21.79		0.000	0.653
82.00 84.00		-22.65		-1740.8		1740.82	2938.13	786.13	2945.70	2732.80	22.91	-2.706	0.000	0.647
		-22.56				1718.17	2929.08		2915.07		23.48		0.000	0.644
85.00		-22.46				1695.61	2919.97	777.94	2884.60	2687.40	24.06	-2.791	0.000	0.641
86.00	-20.03	-22.40	, 0.00	.500.0					~					

Calculated Forces

Structure: CT01497-S-SBA

Site Name: Plymouth 2 CT

Height: 195.00 (ft)

Base Elev: 0.000 (ft)

Code: TIA-222-H

Exposure: C **Crest Height:** 0.00

Site Class: D - Stiff Soil

One classic

IES -ino Solutions

7/13/2023

Gh:		1.1		Тор	ography:	1 :	Struct Cla	ss: II			Pa	ge: 18	Tower Engineer	ring Solutions
88.00	-25.03	-22.25	0.00	-1650.6	0.00	1650.69	2901.54	769.74	2824.14	2642.11	25.25	-2.876	0.000	0.634
90.00	-24.24	-22.04	0.00	-1606.1	0.00	1606.18	2882.85	761.55		2596.94	26.47	-2.962	0.000	0.628
91.00	-23.85	-21.93	0.00	-1584.1	0.00	1584.14	2898.33	768.33	2813.78	2634.30	27.10	-3.005	0.000	0.610
92.00	-23.63	-21.84	0.00	-1562.2	0.00	1562.21	2889.00	764.23	2783.84	2611.72	27.73	-3.049	0.000	0.607
94.00	-23.20	-21.65	0.00	-1518.5	0.00	1518.53	2870.13	756,03	2724.45	2566.64	29.03	-3.131	0.000	0.601
96.00	-22.78	-21.46	0.00	-1475.2	0.00	1475.23	2851.00	747.84	2665.70	2521.69	30.35	-3.214	0.000	0.594
98.00	-22.37	-21.27	0.00	-1432.3	0.00	1432.31	2831.61	739.64	2607.60	2476.90	31.72	-3.297	0.000	0.587
100.00	-21.96	-21.08	0.00	-1389.7	0.00	1389.78	2811.95	731.45	2550.13	2432.25	33,12	-3.381	0.000	0.580
102.00	-21.55	-20.88	0.00	-1347.6	0.00	1347.63	2792.03	723.25	2493.30	2387.76	34.55	-3.465	0.000	0.573
104.00	-21.14	-20.69	0.00	-1305.8	0.00	1305.87	2771.85	715.06	2437.12	2343.44	36.02	-3.549	0.000	0.566
106.00	-20.75	-20.50	0.00	-1264.4	0.00	1264.48	2751.41	706.86	2381.57	2299.29	37.52	-3.633	0.000	0.558
108.00	-20.35	-20.32	0.00	-1223.4	0.00	1223.47	2730.70	698.66	2326.66	2255.33	39.06	-3.717	0.000	0.551
110.00	-19.96	-20.13	0.00	-1182.8	0.00	1182.84	2709.73	690.47	2272.40	2211.55	40.64	-3.802	0.000	0.543
112.00		-19.94	0.00	-1142.5	0.00	1142.58	2688.50	682.27	2218.77	2167.98	42.25	-3.886	0.000	0.535
114.00	-19.19	-19.75	0.00	-1102.7	0.00	1102.71	2667.01	674.08	2165.79	2124.61	43.89	-3.971	0.000	0.527
116.00 118.00	-18.81 -18.44	-19.57	0.00	-1063.2	0.00	1063.20	2645.25	665.88	2113.44	2081.45	45.57	-4.056	0.000	0.519
120.00		-19.38 -19.20	0.00	-1024.0	0.00	1024.06	2623.23	657.69	2061.74	2038.51	47.29	-4.140	0.000	0.510
120.00	-10.07	-19.20	0.00	-985.30	0.00	985.30	2600.95	649.49	2010.67	1995.80	49.04	-4.225	0.000	0.502
124.00		-18.83	0.00	-946.90	0.00	946.90	2578.41	641.29	1960.25	1953.33	50.83	-4.309	0.000	0.493
125.00	-17.17		0.00	-908.87 -890.05	0.00	908.87	2555.60	633.10	1910.47	1911.10	52.65	-4.394	0.000	0.483
125.00	-17.17	-18.74	0.00	-890.05 -890.05	0.00	890.05	2544.10	629.00	1885.82	1890.08	53.57	-4.436	0.000	0.479
126.00	-17.01	-18.66	0.00	-871.31	0.00	890.05	1882.48	504.07	1513.88	1403.39	53.57	-4.436	0.000	0.645
128.00	-16.71	-18.49	0.00	-834.00	0.00 0.00	871.31	1875.26	500.79	1494.25	1388.85	54.51	-4.478	0.000	0.638
130.00	-16.41	-18.32	0.00	-797.03	0.00	834.00	1860.60	494.24	1455.38	1359.83	56.40	-4.582	0.000	0.624
132.00	-15.89	-18.13	0.00	-760.40	0.00	797.03 760.40	1845.69 1830.51	487.68	1417.02	1330.91	58.34	-4.686	0.000	0.609
134.00	-15.38	-17.93	0.00	-724.14	0.00	724.14	1815.07	481.12	1379.17	1302.09	60.33	-4.789	0.000	0.594
135.00		-17.84	0.00	-706.21	0.00	706.21	1823.78	474.57 478.25	1341.84 1362.76	1273.39 1289.51	62.35	-4.891	0.000	0.579
136.00	-14.98	-17.76	0.00	-688.38	0.00	688.38	1816.04	474.97	1344.14	1209.51	63.38	-4.942	0.000	0.557
138.00		-17.59	0.00	-652.87	0.00	652.87	1800.35	468.42	1307.29	1275.17	64.42 66.53	-4.993	0.000	0.549
140.00	-14.41	-17.42	0.00	-617.70	0.00	617.70	1784.40	461.86	1270.94	1240.57	68.68	-5.089 -5.184	0.000 0.000	0.533
142.00	-14.14	-17.25	0.00	-582.87	0.00	582.87	1768.19	455.30	1235.12	1189.78	70.87	-5.164 -5.27 7	0.000	0.517 0.499
144.00	-13.87	-17.08	0.00	-548.37	0.00	548.37	1751.71	448.75	1199.80	1161.59	73.10	-5.369	0.000	0.499
146.00	-13.60	-16.91	0.00	-514.22	0.00	514.22	1734.98	442.19	1165.00	1133,55	75.37	-5.459	0.000	0.463
148.00	-13.33	-16.75	0.00	-480.39	0.00	480.39	1717.98	435.63	1130.70	1105.67	77.67	-5.548	0.000	0.444
150.00	-13.07	-16.58	0.00	-446.90	0.00	446.90	1700.71	429.08	1096.92	1077.96	80.01	-5.633	0.000	0.424
152.00	-12.82	-16.42	0.00	-413.74	0.00	413.74	1683.19	422.52	1063.66	1050.42	82.38	-5.717	0.000	0.403
154.00	-12.56	-16.25	0.00	-380.91	0.00	380.91	1665.40	415.96	1030.90	1023.06	84.79	-5.798	0.000	0.381
156.00	-12.32	-16.09	0.00	-348.41	0.00	348.41	1647.35	409.41	998.66	995.89	87.23	-5.875	0.000	0.359
158.00	-12.07	-15.93	0.00	-316.23	0.00	316.23	1629.04	402.85	966.93	968.91	89.71	-5.950	0.000	0.335
160.00	-11.83	-15.77	0.00	-284.37	0.00	284.37	1610.46	396.29	935.71	942.14	92.21	-6.020	0.000	0.311
162.00	-11.60		0.00	-252.84	0.00	252.84	1591.62	389.74	905.01	915.58	94.74	-6.086	0.000	0.285
164.00	-11.37		0.00	-221.62	0.00	221.62	1572.52	383.18	874.81	889.24	97.30	-6.148	0.000	0.258
165.00		-11.01	0.00	-206.17	0.00	206.17	1562.88	379.90	859.91	876.15	98.59	-6.177	0.000	0.242
166.00		-10.93	0.00	-195.16	0.00	195.16	1553.16	376.62	845.13	863.13	99.88	-6.205	0.000	0.232
168.00		-10.78	0.00	-173.30	0.00	173.30	1533.53	370.07	815.96	837.25	102.49	-6.258	0.000	0.213
170.00		-10.62	0.00	-151.74	0.00	151.74	1513.65	363.51	787.30	811.61	105.12	-6.307	0.000	0.193
172.00		-10.47	0.00	-130.50	0.00	130.50	1493.49	356.96	759.16	786.22	107.76	-6.352	0.000	0.172
174.00		-10.31	0.00	-109.56	0.00	109.56	1473.08	350.40	731.53	761.10	110.43	-6.392	0.000	0.150
175.00	-4.06	-5.41	0.00	-99.25	0.00	99.25	1462.77	347.12	7 17.90	748.63	111.77	-6.411	0.000	0.136
176.00	-3.99	-5.33	0.00	-93.84	0.00	93.84	1452.40	343.84	704.41	736.23	113.11	-6.429	0.000	0.130
178.00	-3.83	-5.19	0.00	-83.18	0.00	83.18	1427.84	337.29	677.80	709.84	115.80	-6.462	0.000	0.120
180.00	-3.69	-5.04	0.00	-72.80	0.00	72.80	1400.09	330.73	651.70	682.38	118.51	-6.493	0.000	0.110
180.00	-3.69	~5.04 4.03	0.00	-72.80	0.00	72.80	678.42	203.53	25205.7	396.30	118.51	-6.493	0.000	0.190
182.00	-3.52	-4.93 4.93	0.00	-62.72	0.00	62.72	678.42	203.53	25205.7	396.30	121.23	-6.522	0.000	0.164
184.00 186.00	-3.35 -3.18	-4.82 -4.71	0.00	-52.85	0.00	52.85	678.42		25205.7	396.30	123.96	-6.544	0.000	0.139
100.00	-5.16	-4.7 (0.00	-43.21	0.00	43.21	678.42	203.53	25205.7	396.30	126.70	-6.563	0.000	0.114

Calculated Forces

Exposure:

Structure: CT01497-S-SBA

Site Name: Plymouth 2 CT

Height: 195.00 (ft)

Base Elev: 0.000 (ft)

Code:

TIA-222-H

С

Crest Height: 0.00

Site Class:

D - Stiff Soil Struct Class: II

7/13/2023

Gh:		1.1		Topography:		1 3	Struct Class.				90. 10			
					2.00	33.78	678.42	203.53	25205.7	396.30	129.45	-6.577	0.000	0.090
188.00	-3.02	-4.61	0.00	-33.78	0.00						132.20	-6.589	0.000	0.067
190.00	-2.85	-4.49	0.00	-24.57	0.00	24.57	678.42	203.53	25205.7	396.30				0.044
		-4.38	0.00	-15.58	0.00	15.58	678.42	203.53	25205.7	396.30	134.96	-6.596	0.000	•
192.00	-2.68					6.81	678.42	203.53	25205.7	396.30	137.72	-6.601	0.000	0.021
194.00	-2.52	-4.27	0.00	-6.81	0.00					396.30	139.10	-6.602	0.000	0.007
195.00	0.00	-3.96	0.00	-2.53	0.00	2.53	678.42	203.53	25205.7	390.30	138.10	-0.002	0.000	9.00

Structure: CT01497-S-SBA

Site Name: Plymouth 2 CT Height: 195.00 (ft)

Base Elev: 0.000 (ft)

Gh: 1.1

Code:

TIA-222-H

Exposure: C

Crest Height: 0.00 Site Class: D - S

Site Class: D - Stiff Soil
Struct Class: ||

7/13/2023

((III)) <u>IES</u> Tower Engineering Solution

Page: 20

Load Case: 0.9D + 1.0W 116 mph Wind

Topography: 1

Dead Load Factor 0.90 Wind Load Factor 1.00



Iterations

Tot	
iterations	31

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	lce Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (Ib)	Tot Dead Load (lb)	
0.00		1.00	0.85	27.004	29.70	575.12	0.630	0.000	0.00	0.000	0.00	0.0	0.0	0.0	
2.00		1.00	0.85	27.004	29.70	570.92	0.630	0.000		10.876	6.85	203.5	0.0	465.8	
4.00		1.00	0.85	27.004	29.70	566.72	0.630	0.000	2.00	10.796	6.80	202.0	0.0	462.3	
6.00		1.00	0.85	27.004	29.70	562.53	0.630	0.000		10.717	6.75	200.5	0.0	458.9	
8.00		1.00	0.85	27.004	29.70	558.33	0.630	0.000		10.637	6.70	199.1	0.0	455.5	
10.00		1.00	0.85	27.004	29.70	554.13	0.630	0.000	2.00	10.557	6.65	197.6	0.0	452.0	
12.00		1.00	0.85	27.004	29.70	549.93	0.630	0.000	2.00	10.478	6.60	196.1	0.0	448.6	
14.00		1.00	0.85	27.004	29.70	545.73	0.630	0.000	2.00	10.398	6.55	194.6	0.0	445.2	
16.00		1.00	0.86	27.338	30.07	544.87	0.630	0.000	2.00	10.318	6.50	195.5	0.0	441.7	
18.00		1.00	0.88	28.024	30.83	547.39	0.630	0.000	2.00	10.239	6.45	198.8	0.0	438.3	
20.00		1.00	0.90	28.652	31.52	549.17	0.630	0.000	2.00	10.159	6.40	201.7	0.0	434.9	
22.00		1.00	0.92	29.233	32.16	550.34	0.630	0.000	2.00	10.079	6.35	204.2	0.0	431.4	
24.00		1.00	0.94	29.774	32.75	550.99	0.630	0.000	2.00	9.999	6.30	206.3	0.0	428.0	
26.00		1.00	0.95	30.280	33.31	551.21	0.630	0.000	2.00	9.920	6.25	208.2	0.0	424.6	
28.00		1.00	0.97	30.756	33.83	551.05	0.630	0.000	2.00	9.840	6.20	209.7	0.0	421.1	
30.00		1.00	0.98	31.206	34.33	550.55	0.630	0.000	2.00	9.760	6.15	211.1	0.0	417.7	
32.00		1.00	1.00	31.633	34.80	549.76	0.630	0.000	2.00	9.681	6.10	212.2	0.0	414.3	
34.00		1.00	1.01	32.039	35.24	548.71	0.630	0.000	2.00	9.601	6.05	213.2	0.0	410.8	
36.00		1.00	1.02	32.427	35.67	547.42	0.630	0.000	2.00	9.521	6.00	214.0	0.0	407.4	
38.00		1.00		32.798	36.08	545.92	0.630	0.000	2.00	9.442	5.95	214.6	0.0	404.0	
40.00		1.00	1.04	33.154	36.47	544.22	0.630	0.000	2.00	9.362	5.90	215.1	0.0	400.5	
	- Section 2	1.00		33.327	36.66	543.30	0.630	0.000	1.00	4.651	2.93	107.4	0.0	199.0	
42.00		1.00		33.496	36.85	542.35	0.630	0.000	1.00	4.695	2.96	109.0	0.0	399.0	
44.00		1.00		33.826	37.21	540.31	0.630	0.000	2.00	9.330	5.88	218.7	0.0	792.8	
46.00		1.00		34.144	37.56	538.12	0.630	0.000	2.00	9.250	5.83	218.9	0.0	786.0	
	- Section 1	1.00		34.451	37.90	535.80	0.630	0.000	2.00	9.170	5.78	218.9	0.0	779.1	
50.00		1.00		34.749	38.22	540.93	0.630	0.000	2.00	9.091	5.73	218.9	0.0	388.8	
52.00		1.00		35.037	38.54	538.38	0.630	0.000	2.00	9.011	5.68	218.8	0.0	385.4	
54.00		1.00		35.316	38.85	535.73	0.630	0.000	2.00	8.931	5.63	218.6	0.0	382.0	
56.00		1.00		35.588	39.15	532.96	0.630	0.000	2.00	8.851	5.58	218.3	0.0	378.5	
58.00		1.00		35.852	39.44	530.10	0.630	0.000	2.00	8.772	5.53	217.9	0.0	375.1	
60.00		1.00		36.108	39.72	527.14	0.630	0.000	2.00	8.692	5.48	217.5	0.0	371.7	
62.00		1.00		36.358	39.99	524.09	0.630	0.000	2.00	8.612	5.43	217.0	0.0	368.3	
64.00		1.00		36.602	40.26	520.95	0.630	0.000	2.00	8.533	5.38	216.4	0.0	364.8	
66.00		1.00		36.840	40.52	517.74	0.630	0.000	2.00	8.453	5.33	215.8	0.0	361.4	
68.00		1.00		37.072	40.78	514.45	0.630	0.000	2.00	8.373	5.28	215.1	0.0	358.0	
	urtenance(s)	1.00		37.299	41.03	511.09	0.630	0.000	2.00	8.294	5.23	214.4	0.0	354.5	
72.00		1.00		37.521	41.27	507.66	0.630	0.000	2.00	8.214	5.17	213.6	0.0	351.1	
74.00		1.00		37.738	41.51	504.16	0.630	0.000	2.00	8.134	5.12	212.7	0.0	347.7	
76.00		1.00		37.951	41.75	500.60	0.630	0.000	2.00	8.055	5.07	211.8	0.0	344.2	
78.00		1.00		38.159	41.97	496.98	0.630	0.000	2.00	7.975	5.02	210.9	0.0	340.8	
80.00	0 11 0	1.00		38.363	42.20	493.30	0.630	0.000	2.00	7.895	4.97	209.9	0.0	337.4	
81.00 Top	- Section 2	1.00		38.463	42.31	491.44	0.630	0.000	1.00	3.918	2.47	104.4	0.0	167.4	
82.00		1.00		38.563	42.42	489.57	0.630	0.000	1.00	3.898	2.46	104.2	0.0	139.0	
84.00 85.00 Det	Castian 4	1.00		38.759	42.63	485.78	0.630	0.000	2.00	7.736	4.87	207.8	0.0	275.8	
85.00 Bot -	Section 4	1.00		38.856	42.74	483.87	0.630	0.000	1.00	3.838	2.42	103.3	0.0	136.8	
86.00		1.00	1.23	38.951	42.85	481.95	0.630	0.000	1.00	3.871	2.44	=104.5	0.0	274.1	

Copyright © 2023 by Tower Engineering Solutions, LLC. All rights reserved.

TIA-222-H Code: Structure: CT01497-S-SBA

С Exposure: Site Name: Plymouth 2 CT Crest Height: 0.00 Height: 195.00 (ft)

D - Stiff Soil Site Class: **Base Elev:** 0.000 (ft)



Gh: 1.1	(14)	Topography:	1	Str	uct Cla	ass: II				Page: 21	Tower Er	ngineering Solutions
88.00	1.00	1.23 39.140	43.05	478.06	0.630	0.000	2.00	7.682	4.84	208.4	0.0	543.9
90.00	1.00	1.24 39.326	43.26	474.13	0.630	0.000	2.00	7.603	4.79	207.2	0.0	538.2
91.00 Top - Section 3	1.00	1.24 39.418	43.36	472.14	0.630	0.000	1.00	3.771	2.38	103.0	0.0	267.0 133.7
92.00	1.00	1.24 39.508	43.46	476.89	0.630	0.000	1.00	3.752	2.36	102.7	0.0 0.0	265.3
94.00	1.00	1.25 39.688	43.66	472.88	0.630	0.000	2.00	7.443	4.69	204.7	0.0	262.4
96.00	1.00	1.25 39.864	43.85	468.83	0.630	0.000	2.00	7.364	4.64	203.4	0.0	259.6
98.00	1.00	1.26 40.037	44.04	464.73	0.630	0.000	2,00	7.284	4.59	202.1 200.7	0.0	256.7
100.00	1.00	1.27 40.208	44.23	460.60	0.630	0.000	2.00	7.204	4.54	199.3	0.0	253.8
102.00	1.00	1.27 40.376	44.41	456.43	0.630	0.000	2.00	7.125 7.045	4.49 4.44	197.9	0.0	251.0
104.00	1.00	1.28 40.541	44.60	452.22	0.630	0.000	2.00 2.00	6.965	4.39	196.5	0.0	248.1
106.00	1.00	1.28 40.704	44.77	447.97	0.630 0.630	0.000	2.00	6.886	4.34	195.0	0.0	245.3
108.00	1.00	1.29 40.865	44.95	443.69	0.630	0.000	2.00	6.806	4.29	193.5	0.0	242.4
110.00	1.00	1.29 41.023	45.13	439.37	0.630	0.000	2.00	6.726	4.24	191.9	0.0	239.5
112.00	1.00	1.30 41.179	45.30	435.02	0.630	0.000	2.00	6.646	4.19	190.4	0.0	236.7
114.00	1.00	1,30 41.333	45.47	430.64 426.23	0.630	0.000	2.00	6.567	4.14	188.8	0.0	233.8
116.00	1.00	1.31 41.484	45.63	420.23	0.630	0.000	2.00	6.487	4.09	187.2	0.0	231.0
118.00	1.00	1.31 41.634	45.80	421.76	0.630	0.000	2.00	6.407	4.04	185.5	0.0	228.1
120.00	1.00	1.32 41.781	45.96	417.30	0.630	0.000	2.00	6.328	3.99	183.9	0.0	225.2
122.00	1.00	1.32 41.927	46.12	408.27	0.630	0.000	2.00	6.248	3.94	182.2	0.0	222.4
124.00	1.00	1.32 42.071	46.28	405.99	0.630	0.000	1.00	3.094	1.95	90.4	0.0	110.1
125.00 Top - Section 4	1.00	1.33 42.142	46.36	403.71	0.630	0.000	1.00	3.074	1.94	89.9	0.0	87.7
126.00	1.00	1.33 42.213	46.43	399.12	0.630	0.000	2.00	6.089	3.84	178.7	0.0	173.6
128.00	1.00	1.33 42.353	46.59	394.50	0.630	0.000	2.00	6.009	3.79	176.9	0.0	171.3
130.00 Bot - Section 6	1.00	1.34 42.491	46.74 46.89	389.86	0.630	0.000	2.00	6.014	3.79	177.7	0.0	340.5
132.00	1.00	1.34 42.628	46.69	385.20	0.630	0.000	2.00	5.934	3.74	175.9	0.0	336.0
134.00	1.00	1.35 42.763	47.11	382.86	0.630	0.000	1.00	2.937	1.85	87.2	0.0	166.3
135.00 Top - Section 5	1.00	1.35 42.830 1.35 42.897	47.19	386.13	0.630	0.000	1.00	2.917	1.84	86.7	0.0	83.2
136.00	1.00	1.35 42.697	47.13	381.42	0.630	0.000	2.00	5.775	3.64	172.2	0.0	164.6
138.00	1.00	1.36 43.160	47.48	376.69	0.630	0.000	2.00	5.695	3.59	170.3	0.0	162.3
140.00	1.00	1.36 43.180	47.62	371.94	0.630	0.000	2.00	5.616	3.54	168.5	0.0	160.0
142.00	1.00	1.37 43.416	47.76	367.16	0.630	0.000	2.00	5.536	3.49	166.6	0.0	157.8
144.00	1.00	1.37 43.542	47.90	362.37	0.630	0.000	2.00	5.456	3.44	164.6	0.0	155.5
146.00	1.00 1.00	1.37 43.667	48.03	357.55	0.630	0.000	2.00	5.376	3.39	162.7	0.0	153.2
148.00	1.00	1.38 43.791	48.17	352.71	0.630	0.000	2.00	5.297	3.34	160.7	0.0	150.9
150.00	1.00	1.38 43.913	48.30	347.85	0.630	0.000	2.00	5.217	3.29	158.8	0.0	148.6
152.00	1.00	1.39 44.034	48.44	342.96	0.630	0.000	2.00	5.137	3.24	156.8	0.0	146.3
154.00	1.00	1.39 44.154	48.57	338.06	0.630	0.000	2.00	5.058	3.19	154.8	0.0	144.0
156.00	1.00	1.39 44.273	48.70	333.14	0.630	0.000	2.00	4.978	3.14	152.7	0.0	141.7
158.00	1.00	1.40 44.390	48.83	328.20	0.630	0.000	2.00	4.898	3.09	150.7	0.0	139.5
160.00	1.00	1.40 44.506	48.96	323.24	0.630	0.000	2.00	4.819	3.04	148.6	0.0	137.2
162.00	1.00	1.40 44.621	49.08	318.26	0.630	0.000	2.00	4.739	2.99	146.5	0.0	134.9
164.00	1.00	1.41 44.679	49.15	315.76	0.630	0.000	1.00	2.340	1.47	72.4	0.0	66.6
165.00 Appurtenance(s) 166.00	1.00	1.41 44.735	49.21	313.26	0.630	0.000	1.00	2.320	1.46	71.9	0.0	66.0
168.00	1.00	1.41 44.848	49.33	308.25	0.630	0.000	2.00	4.580	2.89	142.3	0.0	130.3
170.00	1.00	1.42 44.960	49.46	303.21	0.630	0.000	2.00	4.500	2.83	140.2	0.0	128.0
172.00	1.00	1.42 45.071	49.58	298.16	0.630	0.000	2.00	4.420	2.78	138.1	0.0	125.7
174.00	1.00	1.42 45.181	49.70	293.10	0.630	0.000	2.00	4.341	2.73	135.9	0.0	123.4
175.00 Appurtenance(s)	1.00	1.42 45.235	49.76	290.56	0.630	0.000	1.00	2.140	1.35	67.1	0.0	60.9
176.00 Apparterial 176.00	1.00	1.43 45.290	49.82	288.01	0.630	0.000	1.00	2.120	1.34	66.6	0.0	60.3
178.00	1.00	1.43 45.398	49.94	282.91	0.630	0.000	2.00	4.181	2.63	131.5	0.0	118.9
180.00 Top - Section 6	1.00	1.43 45.504	50.05	277.79	0.630	0.000	2.00	4.102	2.58	129.3	0.0	116.6
182.00	1.00	1.44 45.610	50.17	273.89	0.450	0.000	2.00	4.000	1.80	90.3	0.0	128.3
184.00	1.00	1.44 45.716	50.29	274.21	0.450	0.000	2.00	4.000	1.80	90.5	0.0	128.3
186.00	1.00	1.44 45.820	50.40	274.52	0.450	0.000	2.00	4.000	1.80	90.7	0.0	128.3
188.00	1.00	1.45 45.923	50.52	274.83	0.450	0.000	2.00	4.000	1.80	90.9	0.0	128.3
190.00	1.00	1.45 46.025	50.63	275.14	0.450	0.000	2.00	4.000	1.80	91.1	0.0	128.3
		Copyright © 202	3 by Tov	ver Engine	ering So	olutions, LL	C. All right	s reserve	ed.			

Structure: CT01497-S-SBA Code: TIA-222-H 7/13/2023

Site Name: Plymouth 2 CT Exposure: С Height: 195.00 (ft) Crest Height: 0.00

1.46 46.278

Base Elev: 0.000 (ft) Site Class: D - Stiff Soil

50.91

Gh: 1.1 Topography: 1 Struct Class: II Page: 22 192.00 1.00 1.45 46.127 50.74 275.44 0.450 0.000 2.00 4.000 1.80 91.3 0.0 128.3 194.00 1.00 1.46 46.228 50.85 275.74 0.450 0.000 2.00 4.000 1.80 91.5 0.0 128.3 195.00 Appurtenance(s) 1.00

0.000

1.00

2.000

275.89 0.450

0.90 Totals: 195.00 17,842.7 29,329.5

45.8

((開))

0.0

64.1

Discrete Appurtenance Forces

CT01497-S-SBA Structure:

Site Name: Plymouth 2 CT

Height:

195.00 (ft)

Base Elev: 0.000 (ft)

1.1 Gh:

Code:

TIA-222-H

D - Stiff Soil

C

Exposure:

Crest Height: 0.00

Site Class:

Struct Class: ||

7/13/2023

Page: 23

Iterations

31

Load Case: 0.9D + 1.0W 116 mph Wind

Dead Load Factor

0.90

Topography: 1

1.00 Wind Load Factor

		1	
		L	X
7	1	0	

	Elev (ft)			qz	qzGh	Factor		CaAa	Load	Ecc	Ecc	FX	Υ	Z
No.		Description	Qty	(psf)	(psf)	x Ka	Ka	(sf)	(lb)	(ft)	(ft)	(lb)	(lb-ft)	(lb-ft)
		800 MHz RRH	3	46.328	50.960	0.60	0.90	4.50	143.10	0.000	1.000	229,55	0.00	229.55 915.90
		APXVSPP18-C-A20	3	46.328	50,960	0.75	0.90	17.97	153.90	0.000	1.000	915.90	0.00	671.70
		APXVTM14-C-I20	3	46.328	50.960	0.69	0.90	13.18	151.74	0.000	1.000	671.70	0.00	255.36
		1900MHz RRH (65MHz)	3	46.328	50.960	0.60	0.90	5.01	162.00	0.000	1.000	255.36	0.00	0.00
		T-Arms w/ Working	3	46.278	50.906	0.56	0.75	27.00	1350.00	0.000	0.000	1374.45	0.00	373.36
		TD-RRH8x20-25	3	46.328	50.960	0.60	0.90	7.33	189.00	0.000	1.000	373.36	0.00	71.91
		ALU 800MHz External	3	46.328	50.960	0.60	0.90	1.41	23.76	0.000	1.000	71.91	0.00 0.00	17.21
		ACU-A20-N	4	46.328	50.960	0.60	0.90	0.34	3.60	0.000	1.000	17.21	0.00	0.00
		(3) T-Arm Kit	1	45.235	49.759	0.56	0.75	9.00	450.00	0.000	0.000	447.83	0.00	0.00
		FE15501P77/75	6	45.235	49.759	0.54	0.80	2.28	94.50	0.000	0.000	113.62		0.00
		4449 B71 + B85	3	45.235	49.759	0.54	0.80	3.17	202.50	0.000	0.000	157.62	0.00 0.00	0.00
		KRY 112 489/2	3	45.235	49.759	0.54	0.80	1.05	41.58	0.000	0.000	52.01	0.00	0.00
		KRY 112 144/1	3	45.235	49.759	0.54	0.80	0.66	29.70	0.000	0.000	32.81	0.00	0.00
		APXVAALL24_43-U-NA20	3	45.235	49.759	0.56	0.80	34.00	331.56	0.000	0.000	1691.96 228.04	0.00	0.00
		4460 B25 + B66	3	45.235	49.759	0.54	0.80	4.58	280.80	0.000	0.000	344.89	0.00	0.00
		AIR6419 B41	3	45.235	49.759	0.61	0.80	6.93	224.91	0.000	0.000	1343.49	0.00	0.00
	175.00	T-Arms w/ Working	3	45.235	49.759	0.56	0.75	27.00	1350.00	0.000	0.000	387.23	0.00	0.00
		MT6407-77A	3	44.679	49.146	0.56	0.80	7.88	214.38	0.000	0.000	1081.22	0.00	0.00
		Low Profile Platform	1	44.679	49.146	1.00	1.00	22.00	1350.00	0.000	0.000	74.86	0.00	0.00
		BSF0020F3V1-1	2	44.679	49.146	0.64	0.80	1.52	31.68	0.000	0.000 0.000	2048.96	0.00	0.00
		MX06FRO660-03	6	44.679	49.146	0.70	0.80	41.69	324.00	0.000		148.57	0.00	0.00
		Samsung B5/B13	3	44.679	49.146	0.54	0.80	3.02	189.81	0.000	0.000 0.000	148.57	0.00	0.00
		Samsung B2/B66A	3	44.679	49.146	0.54	0.80	3.02	227.88	0.000	_	149.01	0.00	0.00
		Raycap	1	44.679		0.80	0.80	3.03	28.80	0.000	0.000	0.00	0.00	0.00
		91900314	1	44.679	49.146	1.00	1.00	0.00	22.82	0.000	0.000	143.60	0.00	0.00
26		Side Arm (L. Heavy)	1	37.299	41.029		1.00	3.50	108.00	0.000	0.000	18.67	0.00	0.00
27		407577689 Gps	1_	37.299	41.029	0.50	1.00	0.46	3.60	0.000	0.000	2.522.39	0.00	0.00

Totals:

7,683.62

12,522.39

Structure: CT01497-S-SBA

Site Name: Plymouth 2 CT

195.00 (ft)

Base Elev: 0.000 (ft)

Gh: 1.1

Height:

Topography: 1

Code:

TIA-222-H

Exposure: C Crest Height: 0.00

Site Class:

Struct Class: ||

D - Stiff Soil

7/13/2023

Page: 24

((曜))

Load Case: 0.9D + 1.0W 116 mph Wind

Dead Load Factor 0.90 **Wind Load Factor** 1.00

Iterations

31

		Lateral	Axial	Torsion	Moment	
Elev		FX (-)	FY (-)	MY	MZ	
(ft)	Description	(lb)	(lb)	(lb-ft)	(lb-ft)	
0.00		0.00	0.00	0.00	0.00	•
2.00		203.53	504.64	0.00	0.00	
4.00		202.04	501.20	0.00	0.00	
6.00		200.55	497.77	0.00	0.00	
8.00		199.06	494.34	0.00	0.00	
10.00		197.57	490.91	0.00	0.00	
12.00		196.08	487.47	0.00	0.00	
14.00		194.58	484.04	0.00	0.00	
16.00		195.48	480.61	0.00	0.00	
18.00		198.84	477.18	0.00	0.00	
20.00		201.72	473.74	0.00	0.00	
22.00		204.19	470.31	0.00	0.00	
24.00		206.32	466.88	0.00	0.00	
26.00		208.15	463.45	0.00	0.00	
28.00		209.73	460.02	0.00	0.00	
30.00		211.07	456.58	0.00	0.00	
32.00		212.21	453.15	0.00	0.00	
34.00		213.17	449.72	0.00	0.00	
36.00		213.96	446.29	0.00	0.00	
38.00		214.60	442.85	0.00	0.00	
40.00		215.10	439.42	0.00		
41.00		107.42	218.42	0.00	0.00 0.00	
42.00		108.98	418.42	0.00	0.00	
44.00		218.70	831.70	0.00		
46.00		218.87	824.84	0.00	0.00	
48.00		218.94	817.97	0.00	0.00	
50.00		218.91	427.73		0.00	
52.00		218.79	427.73	0.00	0.00	
54.00		218.58	424.2 9 420.86	0.00	0.00	
56.00		218.30		0.00	0.00	
58.00		217.94	417.43	0.00	0.00	
60.00			414.00	0.00	0.00	
62.00		217.50	410.56	0.00	0.00	
64.00		217.00	407.13	0.00	0.00	
66.00		216.44	403.70	0.00	0.00	
68.00		215.81	400.27	0.00	0.00	
	(2) attaches to	215.12	396.84	0.00	0.00	
70.00	(2) attachments	376.65	505.00	0.00	0.00	
72.00		213.58	389.68	0.00	0.00	
74.00		212.73	386.25	0.00	0.00	
76.00		211.84	382.82	0.00	0.00	
78.00		210.89	379.39	0.00	0.00	
80.08		209.90	375.95	0.00	0.00	
81.00		104.43	186.69	0.00	0.00	
82.00		104.17	158.27	0.00	0.00	
84.00		207.79	314.39	0.00	0.00	
85.00		103.35	156.12	0.00	0.00	
86.00		104.49	293.41	0.00	0.00	

Structure: CT01497-S-SBA

Code: TIA-222-H

7/13/2023

Site Name: Plymouth 2 CT

Exposure: C
Crest Height: 0.00

/13/2023 **((料))**

Height: 195.00 (ft)

Site Class: D - Stiff Soil

Page: 25 Tower Engineering Solution

Base Ele	v: 0.000 (ft)			Site Clas	s: D-S
		Topo	graphy: 1	Struct C	lass:
Gh:	1.1			0.00	0.00
88.00		208.38	582.53	0.00 0.00	0.00
90.00		207.19	576.81 286.26	0.00	0.00
91.00		103.02	153.01	0.00	0.00
92.00		102.71	303.88	0.00	0.00
94.00		204.72	301.02	0.00	0.00
96.00		203.42 202.10	298.16	0.00	0.00
98.00		202.10	295.30	0.00	0.00
100.00		199.35	292.44	0.00	0.00
102.00		197.93	289.58	0.00	0.00
104.00		196.47	286.72	0.00	0.00
106.00		194.99	283.86	0.00	0.00
108.00		193.48	281.00	0.00	0.00
110.00		191.94	278.14	0.00	0.00
112.00 114.00		190.38	275.28	0.00	0.00
116.00		188.79	272.42	0.00	0.00
118.00		187.17	269.56	0.00	0.00
120.00		185.52	266.70	0.00	0.00
		183.85	263.84	0.00	0.00
122.00 124.00		182.16	260.98	0.00	0.00
125.00		90.36	129.42	0.00	0.00
126.00		89.93	106.97	0.00	0.00
128.00		178.71	212.23	0.00	0.00
130.00		176.94	209.94	0.00	0.00
132.00		177.66	379.14	0.00	0.00
134.00		175.86	374.56	0.00	0.00
135.00		87.18	185.56	0.00	0.00
136.00		86.72	102.47	0.00	0.00
138.00		172.20	203.21	0.00	0.00
140.00		170.34	200.93	0.00	0.00
142.00		168.46	198.64	0.00	0.00
144.00		166.56	196.35	0.00	0.00
146.00		164.64	194.06	0.00	0.00
148.00		162.70	191.77	0.00	0.00
150.00		160.74	189.49	0.00	0.00
152.00		158.77	187.20	0.00	0.00
154.00		156.77	184.91	0.00	0.00
156.00		154.76	182.62	0.00	0.00 0.00
158.00		152.73	180.33	0.00	0.00
160.00		150.69	178.04	0.00	0.00
162.00		148.62	175.76	0.00	0.00
164.00		146.54	173.47	0.00 0.00	0.00
165.00	(20) attachments	4110.86	2475.24	0.00	0.00
166.00		71.91	78.70	0.00	0.00
168.00		142.33	155.68	0.00	0.00
170.00		140.21	153.39	0.00	0.00
172.00		138.06	151.10	0.00	0.00
174.00		135.91	148.81	0.00	0.00
175.00	(28) attachments	4479.36	3079.10	0.00	0.00
176.00		66.55	62.66	0.00	0.00
178.00		131.54	123.61	0.00	0.00
180.00		129.34	121.32 133.00	0.00	0.00
182.00		90.31	133.00	0.00	0.00
184.00		90.52	133.00	0.00	0.00
186.00		90.72 90.93	133.00	0.00	0.00
188.00		90.93	133.00	0.00	0.00
190.00		Onu	ight © 2023 by To		Solutions, LLC

Structure: CT01497-S-SBA

Site Name: Plymouth 2 CT

195.00 (ft)

Base Elev: 0.000 (ft)

Height:

Gh:

Code: TIA-222-H

Exposure: С

Crest Height: 0.00

Site Class: D - Stiff Soil

Struct Class: ||

Page: 26



Gh:	1.1	Тор	ography: 1	Struc	t Class: i
192.00		91.33	133.00	0.00	0.00
194.00		91.53	133.00	0.00	0.00
195.00	(25) attachments	3955.25	2243.60	0.00	2534.98
Totals:		30,365.09	40,381.45	0.00	2,534.98

CT01497-S-SBA Structure:

Site Name: Plymouth 2 CT

Height:

195.00 (ft)

Load Case: 0.9D + 1.0W 116 mph Wind

Dead Load Factor

Wind Load Factor

Base Elev: 0.000 (ft)

1.1 Gh:

Topography: 1

0.90 1.00 Code:

TIA-222-H

D - Stiff Soil

Exposure:

С

Crest Height: 0.00 Site Class:

Struct Class: ||

7/13/2023

Page: 27

	Iterations	3
X		

Seg Elev	Pu FY (-)	Vu FX (-)	Tu MY (-)	Mu MZ	Mu MX	Resultant Moment	phi Pn	phi Vn	phi Tn	phi Mn	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
(ft)	(kips)	(kips)	(ft-kips)	(ft-kips)		(ft-kips)	(kips)	(kips)	(ft-kips) 7126.38	(ft-kips) 6119.66	0.00	0.000	0.000	0.654
0.00	-40.37	-30.38	0.00	-3946.0	0.00	3946.01	4628.91	1339.45	7022.11	6053.16	0.01	-0.056	0.000	0.651
2.00	-39.83	-30.22	0.00	-3885.2	0.00	3885.25	4612.68	1329.62 1319.78	6918.62	5986.64	0.05	-0.113	0.000	0.648
4.00	-39.30	-30.06	0.00	-3824.8	0.00	3824.81	4596.18	1309.95	6815.89	5920.10	0.11	-0.170	0.000	0.645
6.00	-38.77	-29.89	0.00	-3764.7	0.00	3764.70	4579.43	1309.95	6713.93	5853.55	0.19	-0.227	0.000	0.642
8.00	-38.25	-29.73	0.00	-3704.9	0.00	3704.91	4562.40 4545.12	1290.28	6612.74	5787.00	0.30	-0.285	0.000	0.639
10.00	-37.73	-29.57	0.00	-3645.4	0.00	3645.46	4545.12	1280.44	6512.31	5720.46	0.43	-0.343	0.000	0.636
12.00	-37.21	-29.41	0.00	-3586.3	0.00	3586.32	4527.57	1270.61	6412.66	5653.92	0.59	-0.401	0.000	0.633
14.00	-36.70	-29.25	0.00	-3527.5	0.00	3527.51	4491.69	1260.77	6313.77	5587.41	0.77	-0.460	0.000	0.629
16.00	-36.19	-29.09	0.00	-3469.0	0.00	3469.01	4473.36	1250.77	6215.65	5520.93	0.98	-0.519	0.000	0.626
18.00	-35.69	-28.92	0.00	-3410.8	0.00	3410.84		1241.10	6118.30	5454.49	1.21	-0.579	0.000	0.623
20.00	-35.19	-28.75	0.00	-3353.0	0.00	3353.00	4454.76 4435.90	1231.27	6021.72	5388.08	1.46	-0.639	0.000	0.620
22.00	-34.69	-28.58	0.00	-3295.5	0.00	3295.51		1221.43	5925.90	5321.73	1.74	-0.699	0.000	0.617
24.00	-34.19	-28.40	0.00	-3238.3	0.00	3238.35	4416.78	1211.60	5830.86	5255.44	2.05	-0.760	0.000	0.614
26.00	-33.70	-28.22	0.00	-3181.5	0.00	3181.55	4397.40	1201.76	5736.58	5189.22	2.38	-0.821	0.000	0.610
28.00	-33.21	-28.04	0.00	-3125.1	0.00	3125.10	4377.75	1191.93	5643.07	5123.07	2.74	-0.882	0.000	0.607
30.00	-32.73	-27.86	0.00	-3069.0	0.00	3069.02	4357.84	1182.09	5550.33	5057.01	3.12	-0.944	0.000	0.604
32.00	-32.25	-27.68	0.00	-3013.3	0.00	3013.30	4337.67	1172.26		4991.03	3.53	-1.007	0.000	0.601
34.00	-31.78	-27,49	0.00	-2957.9	0.00	2957.95	4317.23	1162.42		4925.16	3.97	-1.069	0.000	0.597
36.00	-31.30	-27.30	0.00	-2902.9	0.00	2902.97	4296.53	1152.42		4859.38	4.43	-1.133	0.000	0.594
38.00	-30.83	-27.11	0.00	-2848.3	0.00	2848.37	4275.57	1142.76		4793.73	4.92	-1.196	0.000	0.591
40.00	-30.38	-26.91	0.00	-2794.1	0.00	2794.14	4254.35	1137.84		4760.94	5.17	-1.228	0.000	0.589
41.00	-30.15	-26.82	0.00	-2767.2	0.00	2767.23	4243.64	1137.04		4728.19	5.43	-1.261	0.000	0.587
42.00	-29.71	-26.73	0.00	-2740.4		2740.41	4232.86	1123.09	5010.03	4662.78	5.97	-1.325	0.000	0.584
44.00	-28.85	-26.52	0.00	-2686.9	0.00	2686.96	4211.11	1113.25		4597.51	6.54	-1.390	0.000	0.580
46.00	-28.00	-26.32	0.00	-2633.9	0.00	2633.91	4189.10	1119.08		4636.19	7.14	-1.455	0.000	0.564
48.00	-27.16	-26.11	0.00	-2581.2	0.00	2581.28	4202.19	1109.25		4570.98	7.76	-1.520	0.000	0.560
50.00	-26.71	-25.91	0.00	-2529.0	0.00	2529.07	4180.07	109.23	4801.05	4505.91	8.41	-1.584	0.000	0.557
52.00	-26.26	-25.71	0.00	-2477.2		2477.26	4157.69	1089.41	4715.54	4441.00	9.09	-1.647	0.000	0.553
54.00	-25.82	-25.50	0.00	-2425.8		2425.85	4135.04	1009.30		4376.25	9.80	-1.711	0.000	0.549
56.00	-25.38	-25.30	0.00	-2374.8		2374.84	4112.14	10/9./4	4546.82	4311.67	10.53	-1.776	0.000	0.546
58.00	-24.94	-25.10	0.00	-2324.2		2324.23	4088.97	1060.07	4463.61	4247.27	11.28		0.000	0.542
60.00	-24.51	-24.90	0.00	-2274.0		2274.04	4065.54	1050.07		4183.06	12.07	-1.905	0.000	0.538
62.00	-24.09	-24.69	0.00	-2224.2		2224.24	4041.84	1030.24		4119.03	12.88	-1.971	0.000	0.534
64.00	-23.66	-24.49		-2174.8		2174.85	4017.89 3993.67	1040.40		4055.21	13.72		0.000	0.531
66.00	-23.24	-24.29	0.00	-2125.8		2125.87	_	1020.73		3991.60	14.59	-2.103	0.000	0.527
68.00	-22.82	-24.09	0.00	-2077.2		2077.29	3969.18	1020.73	4059.10	3928.21	15.48	-2.170	0.000	0.523
70.00	-22.31	-23.72	0.00	-2029.1		2029.12	3944.44	1010.90		3865.04	16.41	-2.237	0.000	0.519
72.00	-21.90	-23.51	0.00	-1981.6		1981.69	3919.43		3902.68	3802.10	17.36	-2.304	0.000	0.515
74.00	-21.49	-23.31	0.00	-1934.6		1934.66	3894.16	991.23			18.34		0.000	0.511
76.00	-21.09	-23.11	0.00	-1888.0	0.00	1888.04	3868.63	981.39			19.35		0.000	0.507
78.00	-20.69	-22.91	0.00	-1841.8	0.00	1841.82	3842.83	971.56			20.38		0.000	0.503
80.00	-20.31	-22.70	0.00	-1796.0		1796.01	3816.78		3673.81		20.91		0.000	0.501
81.00	-20.11	-22.60	0.00			1773.31	3803.65	956.81			20.91		0.000	0.641
81.00	-20.11	-22.60	0.00			1773.31	2964.89	798.43			21.45		0.000	0.638
82.00	-19.93	-22.51	0.00			1750.71	2956.04	794.33			22.55		0.000	0.632
84.00	-19.61	-22.31	0.00	-1705.6		1705.69	2938.13	786.13			23.11		0.000	0.629
85.00		-22.21				1683.38	2929.08	782.04			23.68		0.000	0.625
86.00	-19.13	-22.11	0.00	-1661.1	0.00	1661.17	2919.97	777.94	2004.00	2001.40	20.00	2.1.40		

CT01497-S-SBA Structure:

Code: TIA-222-H 7/13/2023

Site Name: Plymouth 2 CT 195.00 (ft) Height:

Exposure: C

Crest Height: 0.00

Tower Engineering Solutions

((HI))

Base Elev: 0.000 (ft) Site Class: D - Stiff Soil

Gh: 1.1 Topography: 1 Struct Class: Ш Page: 28 88.00 -18.52 -21.90 0.00 -1616.9 0.00 1616.94 2901.54 769.74 2824.14 2642.11 24.85 -2.827 0.000 0.619 90.00 -17.93 -21.69 0.00 -1573.1 0.00 1573.14 2882.85 761.55 2764.32 2596.94 26.05 -2.911 0.000 0.613 91.00 -17.64 -21.58 -1551.4 0.00 0.00 1551.45 2898.33 768.33 2813.78 2634 30 26.66 -2.9530.000 0.596 92.00 -17.47-21.49 0.00 -1529.8 0.00 1529.86 2889.00 764.23 2783.84 2611.72 27.28 -2.995 0.000 0.593 94.00 -17.14 -21.30 0.00 -1486.8 0.00 1486.88 2870.13 756.03 2724.45 2566.64 28.56 -3.0760.000 0.586 96.00 -16.82 -21,10 0.00 -1444.2 0.00 1444.29 2851.00 747.84 2665.70 2521.69 29.86 -3.1580.000 0.579 98.00 -16.51 -20.91 0.00 -1402.0 0.00 1402.09 2831.61 739.64 2607.60 2476.90 31.20 -3.239 0.000 0.573 -20.71 100.00 -16.190.00 -1360.2 0.00 1360.27 2811.95 731.45 2550.13 2432.25 32.58 -3.321 0.000 0.566 102.00 -15.88 -20.52 0.00 -1318.80.00 1318.85 2792.03 723.25 2493 30 2387.76 33.98 -3.4030.000 0.559 104.00 -15.58 -20.33 0.00 -1277.80.00 1277.81 2771.85 715.06 2437.12 2343 44 35.43 -3.485 0.000 0.552 106.00 -15.28-20.130.00 -1237.10.00 1237.16 2751.41 706.86 2381.57 2299.29 36.90 -3.5670.000 0.544 108.00 -14.98 -19.94 0.00 -1196.9 0.00 1196.90 2730.70 698.66 2326.66 2255,33 38.42 -3.6500.000 0.537 110.00 -14.68 -19.750.00 -1157.0 0.00 1157.01 2709.73 690.47 2272.40 2211.55 39.96 -3.7320.000 0.529 112.00 -14.39 -19.56 0.00 -1117.5 0.00 1117.50 2688.50 682.27 2218.77 2167.98 41.54 -3.8150.000 0.522 114.00 -14.10-19.380.00 -1078.3 0.00 1078.38 2667.01 674.08 2165.79 2124.61 43.16 -3.8980.000 0.514 116.00 -13.81 -19.19 0.00 -1039.60.00 1039.62 2645.25 665.88 2113.44 2081.45 44.81 -3.9810.000 0.506 118.00 -13.53-19.00 0.00 -1001.2 0.00 1001.25 2623.23 657.69 2061.74 2038.51 46 49 -4.0640.000 0.497 120.00 -13.25-18.82 0.00 -963.24 0.00 963,24 2600.95 649,49 2010.67 1995.80 48.21 -4 146 0.000 0.489 122.00 -12.97 -18.63 0.00 -925.60 0.00 925.60 2578.41 641.29 1960.25 1953.33 49.96 -4.2290.000 0.480 124.00 -12.70-18.45 0.00 -888.34 0.00 888.34 2555.60 633.10 1910.47 1911.10 51.75 -4.3110.000 0.471 125.00 -12.57-18.36 0.00 -869.89 0.00 869.89 2544 10 629.00 1885.82 1890.08 52.66 -4.353 0.000 0.466 125.00 -12.57-18.360.00 -869.89 0.00 869.89 1882.48 504.07 1513.88 1403.39 52.66 -4.353 0.000 0.628 126.00 -12.45 -18.27 0.00 -851.53 0.00 851.53 1875.26 500.79 1494.25 1388.85 53.57 -4.394 0.000 0.621 128.00 -12.22-18.100.00 -814.99 0.00 814.99 1860.60 494.24 1455.38 1359.83 55.44 -4 496 0.000 0.607 130.00 -11.99 -17.93 0.00 -778.78 0.00 778.78 1845.69 487.68 1417.02 1330.91 57.34 -4.597 0.000 0.593 132.00 -11.59 -17.74 0.00 -742.93 0.00 742.93 1830.51 481.12 1379.17 1302.09 59.28 -4.697 0.000 0.578 134.00 -11.21-17.550.00 -707.44 0.00 707.44 1815.07 474.57 1341.84 1273.39 61.27 -4.797 0.000 0.563 135.00 -11.02 -17.460.00 -689.89 0.00 689.89 1823.78 478 25 1289.51 1362.76 62.28 -4.847 0.000 0.542 136.00 -10.90 -17.380.00 -672.44 0.00 672.44 1816.04 474.97 1344 14 1275.17 63.30 -4.8970.000 0.535 138.00 -10.69 -17.200.00 -637.69 0.00 637.69 1800.35 468.42 1307.29 1246.57 65.37 -4.991 0.000 0.519 140.00 -10.48 -17.030.00 -603.28 0.00 603.28 1784.40 461.86 1270.94 1218.11 67.48 -5.083 0.000 0.502 142.00 -10.27-16.86 0.00 -569.21 0.00 569.21 1768.19 455.30 1235.12 1189.78 69.63 -5.175 0.000 0.486 144.00 -10.06-16.70 0.00 -535.48 0.00 535.48 1751.71 448.75 1199.80 1161.59 71.81 -5.2640.000 0.468 146.00 -9.86 -16.530.00 -502.09 0.00 502.09 1734.98 442.19 1165.00 1133.55 74.03 -5.352 0.000 0.450 148.00 -9.66 -16.360.00 435.63 -469.030.00 469.03 1717.98 1130.70 76.29 1105.67 -5.438 0.000 0.431 150.00 -9.46 -16.20 0.00 -436.30 0.00 436.30 1700.71 429.08 1096.92 1077 96 78.58 -5.522 0.000 0.412 152.00 -9.27-16.04 0.00 -403.91 0.00 403.91 1683.19 422.52 1063.66 1050.42 80.91 -5.604 0.000 0.391 154.00 -9.08 -15.87 0.00-371.83 0.00 371.83 1665.40 415.96 1030.90 1023.06 83.27 -5.683 0.000 0.370 156.00 -8.89 -15.71 0.00 -340.09 0.00 340.09 1647.35 409.41 998.66 995.89 85.67 -5.759 0.000 0.348 158.00 -8.71 -15.55 0.00 -308.66 0.00 308.66 1629.04 402.85 966.93 968.91 88.09 -5.8310.000 0.325 160.00 -8.53-15.400.00 -277.55 0.00 277.55 1610.46 396.29 935.71 942.14 90.54 -5.900 0.000 0.301 162.00 -8.35 -15.240.00 -246.76 0.00 246.76 1591.62 389.74 905 01 915.58 93.03 -5.964 0.000 0.276 164.00 -8.18 -15.08 0.00 -216.28 0.00 216.28 1572.52 383.18 874.81 889.24 95.53 -6.024 0.000 0.250 165.00 -6.15 -10.74 0.00 -201.20 0.00 201.20 1562.88 379.90 859.91 876.15 96.80 -6.053 0.000 0.234 166.00 -6.07 -10.66 0.00 -190.46 0.00 190.46 1553.16 376.62 845.13 863.13 98.07 -6.080 0.000 0.225 168.00 -5.92 -10.51 0.00 -169.14 0.00 169.14 1533.53 370.07 815.96 837.25 100.62 -6.1320.000 0.207 170.00 -5.78 -10.360.00 -148.13 0.00 148.13 1513.65 363.51 787.30 811.61 103.19 -6.180 0.000 0.187 -5.63 -10.21 172.00 0.00 -127.410.00 127.41 1493.49 356.96 759.16 786.22 105.79 -6.223 0.000 0.167 -5.49 174.00 -10.060.00 -107.000.00 107.00 1473.08 350.40 731.53 761.10 108.40 -6.263 0.000 0.145 175.00 -2.92 -5.27 0.00 -96.94 0.00 96.94 1462.77 347.12 717.90 748.63 109.71 -6.281 0.000 0.132 176.00 -2.86-5.20 0.00 -91.67 0.00 91.67 1452.40 343.84 704.41 736.23 111 02 -6.2980.000 0.127 178.00 -2.75 -5.06 0.00 -81.27 0.00 81.27 1427.84 337.29 677.80 709.84 113.67 -6.3310.000 0.117 180.00 -2.64-4.92 0.00 -71.16 0.00 71.16 1400.09 330.73 651.70 682.38 116.32 -6.361 0.000 0.106 180.00 -2.64-4.920.00 -71.16 0.00 71.16 678.42 203.53 25205.7 396.30 116.32 -6.361 0.000 0.184 182.00 -2.52-4.810.00 -61.33 0.00 61.33 678.42 203.53 25205.7 396.30 118.98 -6.390 0.000 0.159 184.00 -2.40-4.71 0.00 -51.71 0.00 51.71 678.42 203.53 25205.7 396.30 121.66 -6.4110.000 0.135 186.00 -2.27 -4.60 0.00 -42.29 0.00 42.29 678.42 203.53 25205.7 396.30 124.34 -6.4300.000 0.111

Structure: CT01497-S-SBA

Code:

TIA-222-H

7/13/2023

Site Name: Plymouth 2 CT

Exposure:

Height:

195.00 (ft)

С Crest Height: 0.00

Base Elev: 0.000 (ft)

Site Class: D - Stiff Soil

Gh:		1.1		Topography:		1	1 Struct Class: II				Pa	ge. 29		
			2.00	00.00	0.00	33.08	678.42	203.53	25205.7	396.30	127.04	-6.444	0.000	0.087
188.00	-2.15	-4.50	0.00	-33.08		24.08	678.42	203.53	25205.7	396.30	129.73	-6.455	0.000	0.064
190.00	-2.03	-4 .39	0.00	-24.08	0.00		678.42	203.53	25205.7	396.30	132.43	-6.463	0.000	0.042
192.00	-1.91	-4.29	0.00	-15.29	0.00	15.29		203.53	25205.7	396.30	135.13	-6.467	0.000	0.020
194.00	-1.78	-4.18	0.00	-6.72	0.00	6.72	678.42			396.30	136.49	-6.468	0.000	0.007
195.00	0.00	-3.96	0.00	-2.53	0.00	2.53	678.42	203.53	25205.7	390.30	130.48	-0.400	0.000	0.00.

Structure: CT01497-S-SBA

Site Name: Plymouth 2 CT

Height: 195.00 (ft)

Base Elev: 0.000 (ft)

Gh: 1.1

Code: TIA-222-H

Exposure: C **Crest Height:** 0.00

Site Class: D - Stiff Soil

Struct Class: II

7/13/2023

((III)) IES Tower Engineering Solutions

Page: 30

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Topography: 1

Dead Load Factor 1.20 Wind Load Factor 1.00



Iterations 30

Elev (ft) De	escription	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (Ib)
0.00		1.00	0.85	5.017	E 50		_				<u> </u>			
2.00		1.00	0.85		5.52	0.00	1.200	0.000	0.00	0.000	0.00	0.0	0.0	0.0
4.00		1.00	0.85	5.017	5.52	0.00	1.200	0.756		11.128	13.35	73.7	121.4	742.4
6.00		1.00	0.85	5.017	5.52	0.00	1.200	0.810	2.00		13.28	73.3	129.3	745.7
8.00		1.00	0.85	5.017	5.52	0.00	1.200	0.843		10.998	13.20	72.8	133.7	745.6
10.00		1.00	0.85	5.017 5.017	5.52 5.52	0.00	1.200 1.200	0.868		10.926	13.11	72.4	136.7	744.0
12.00		1.00	0.85	5.017	5.52	0.00	1.200	0.887		10.853	13.02	71.9	138.8	741.5
14.00		1.00	0.85	5.017				0.904		10.779	12.93	71.4	140.3	738.4
16.00		1.00	0.86	5.079	5.52 5.59	0.00	1.200	0.918		10.704	12.84	70.9	141.4	735.0
18.00		1.00	0.88	5.207	5.73	0.00	1.200	0.930		10.628	12.75	71.3	142.3	731.3
20.00		1.00	0.90	5.323	5.86	0.00	1.200	0.941		10.552	12.66	72.5	142.9	727.3
22.00		1.00	0.92	5.431	5.97	0.00	1.200	0.951		10.476	12.57	73.6	143.3	723.1
24.00		1.00	0.94	5.532	6.08	0.00	1.200	0.960		10.399	12.48	74.6	143.6	718.8
26.00		1.00	0.95	5.626	6.19	0.00	1.200	0.969		10.322	12.39	75.4	143.7	714.4
28.00		1.00	0.97	5.714	6.29	0.00	1.200	0.976		10.245	12.29	76.1	143.8	709.9
30.00		1.00	0.98	5.798	6.38	0.00	1.200	0.984		10.168	12.20	76.7	143.7	705.2
32.00		1.00	1.00	5.877	6.46	0.00	1.200	0.991		10.091	12.11	77.2	143.6	700.5
34.00		1.00	1.01	5.953	6.55	0.00	1.200	0.997		10.013	12.02	77.7	143.3	695.7
36.00		1.00	1.02	6.025	6.63	0.00	1.200	1.003	2.00	9.935	11.92	78.1	143.1	690.8
38.00		1.00	1.02	6.094	6.70	0.00	1.200	1.009	2.00	9.858	11.83	78.4	142.7	685.9
40.00		1.00	1.04	6.160	6.78	0.00	1.200	1.014	2.00	9.780	11.74	78.7	142.3	680.9
41.00 Bot - Sec	ction 2	1.00	1.05	6.192	6.81	0.00	1.200	1.019	2.00	9.702	11.64	78.9	141.9	675.9
42.00		1.00	1.05	6.223	6.85	0.00	1.200	1.022 1.024	1.00	4.821	5.79	39.4	70.8	336.1
44.00		1.00	1.06	6.285	6.91	0.00	1.200		1.00	4.865	5.84	40.0	71.6	603.6
46.00		1.00	1.07	6.344	6.98	0.00	1.200	1.029	2.00	9.673	11.61	80.2	142.8	1199.9
48.00 Top - Se	ction 1	1.00	1.08	6.401	7.04	0.00	1.200	1.034 1.038	2.00	9.594	11.51	80.3	142.2	1190.1
50.00		1.00	1.09	6.456	7.10	0.00	1.200		2.00	9.516	11.42	80.4	141.6	1180.4
52.00		1.00	1.10	6.510	7.16	0.00	1.200	1.042 1.047	2.00	9.438	11.33	80.4	141.0	659.4
54.00		1.00	1.11	6.561	7.22	0.00	1.200	1.047	2.00 2.00	9.360	11.23	80.4	140.3	654.2
56.00		1.00	1.12	6.612	7.27	0.00	1.200			9.281	11.14	80.4	139.6	648.9
58.00		1.00	1.13	6.661	7.33	0.00	1.200	1.054 1.058	2.00	9.203	11.04	80.3	138.9	643.6
60.00		1.00	1.14	6.709	7.38	0.00	1.200	1.062	2.00	9.124	10.95	80.2	138.2	638.3
62.00		1.00	1.14	6.755	7.43	0.00	1.200	1.062	2.00	9.046	10.86	80.1	137.4	633.0
64.00		1.00	1.15	6.800	7.48	0.00	1.200	1.068	2.00	8.967	10.76	80.0	136.6	627.6
66.00		1.00	1.16	6.845	7.53	0.00	1.200	1.006	2.00 2.00	8.889 8.810	10.67	79.8	135.8	622.3
68.00		1.00	1.17	6.888	7.58	0.00	1.200	1.072	2.00	8.732	10.57	79.6	135.0	616.9
70.00 Appurten	ance(s)	1.00	1.17	6.930	7.62	0.00	1.200	1.073	2.00	8.653	10.48	79.4	134.2	611.4
72.00	()	1.00	1.18	6.971	7.67	0.00	1.200	1.076	2.00	8.574	10.38	79.2	133.3	606.0
74.00		1.00	1.19	7.011	7.71	0.00	1.200	1.084	2.00		10.29	78.9	132.4	600.5
76.00		1.00	1.19	7.051	7.76	0.00	1.200	1.087	2.00	8.496	10.19	78.6	131.5	595.1
78.00		1.00	1.20	7.090	7.80	0.00	1.200	1.090	2.00	8.417	10.10	78.3	130.6	589.6
80.00		1.00	1.21	7.127	7.84	0.00	1.200	1.090	2.00	8.338 8.259	10.01	78.0	129.7	584.1
81.00 Top - Sec	ction 2	1.00	1.21	7.146	7.86	0.00	1.200	1.093	1.00		9.91	77.7	128.7	578.6
82.00		1.00	1.21	7.165	7.88	0.00	1.200	1.094	1.00	4.100 4.080	4.92 4.90	38.7	64.1	287.3
84.00		1.00	1.22	7.201	7.92	0.00	1.200	1.095	2.00	4.080 8.102		38.6	63.9	249.2
85.00 Bot - Sec	tion 4	1.00	1.22	7.219	7.94	0.00	1.200	1.098	2.00 1.00	4.021	9.72	77.0	126.8	494.6
86.00		1.00	1.23	7.237	7.96	0.00	1.200	1.101	1.00	4.021	4.83 4.87	38.3 38.7	63.2	245.6
		_			50	3.00	50	1.101	1.00	+.004	4.07	36.7	63.8	429.3

Copyright © 2023 by Tower Engineering Solutions, LLC. All rights reserved.

Structure: CT01497-S-SBA

Site Name: Plymouth 2 CT

Height: 195.00 (ft)

Base Elev: 0.000 (ft)

Code: TIA-222-H

Exposure: C **Crest Height:** 0.00

Site Class: D - Stiff Soil



88.00	Gh: 1.1	•)	Topog	raphy:	1	Stru	ıct Cla	ass:				Page: 31	Tower l	Engineering Solutions
90.00 1.00 1.24 7.30 8.04 0.00 1.20 1.10 1.00 3.96 4.75 36.2 6.25 418.5 8.20 1.00	i 	1.00	1 23	7.272	8.00	0.00	1,200	1.103	2.00	8.050	9.66	77.3	126.6	
Section 100						0.00	1.200	1.106	2.00	7.971	9.57	76.9		
Section 100					8.06	0.00	1.200	1.107	1.00	3.956				
94.00 100	·			7.340	8.07									
88.00 1.00 1.25 7.400 8.16 0.00 1.200 1.115 2.00 7.758 8.19 7.62 12.15 47.5 80.00 1.00 1.26 7.470 8.25 0.00 1.200 1.115 2.00 7.577 8.99 7.47 12.04 462.7 80.00 1.00 1.27 7.470 8.25 0.00 1.200 1.117 2.00 7.577 8.99 7.47 12.04 462.7 80.00 1.00 1.28 7.582 8.29 0.00 1.200 1.119 2.00 7.577 8.90 7.38 118.3 452.9 80.00 1.00 1.28 7.582 8.32 0.00 1.200 1.124 2.00 7.419 8.90 7.38 118.3 452.9 80.00 1.00 1.29 7.592 8.38 0.00 1.200 1.128 2.00 7.201 8.25 117.2 119.3 457.8 80.00 1.00 1.29 7.592 8.38 0.00 1.200 1.128 2.00 7.201 8.25 117.2 119.3 457.8 80.00 1.00 1.20 7.579 8.45 0.00 1.200 1.130 2.00 7.103 8.52 71.7 113.9 433.3 80.01 1.00 1.30 7.571 8.45 0.00 1.200 1.130 2.00 7.103 8.52 71.7 113.9 433.3 80.01 1.00 1.30 7.573 8.45 0.00 1.200 1.130 2.00 6.945 8.33 70.7 111.6 423.4 80.01 1.00 1.31 7.707 8.47 0.00 1.200 1.138 2.00 6.945 8.33 70.7 111.6 423.4 80.01 1.00 1.32 7.783 8.64 0.00 1.200 1.138 2.00 6.866 8.24 71.1 110.5 418.5 80.01 1.00 1.32 7.780 8.67 0.00 1.200 1.138 2.00 6.866 8.24 71.1 110.5 418.5 80.01 1.00 1.32 7.780 8.67 0.00 1.200 1.140 2.00 6.829 7.98 6.84 0.00 1.200 1.140 2.00 6.829 7.98 6.84 0.00 1.200 1.140 2.00 6.829 7.98 6.84 0.00 1.200 1.140 2.00 6.829 7.98 6.84 0.00 1.200 1.140 2.00 6.829 7.98 6.84 0.00 1.200 1.140 2.00 6.829 7.98 6.84 0.00 1.200 1.140 2.00 6.829 7.98 6.84 0.00 1.200 1.200 1.140 2.00 6.829 7.98 6.84 0.00 1.200 1.140 2.00 6.829 7.98 6.84 0.00 1.200 1.140 2.00 6.829 7.98 6.84 0.00 1.200 1.140 2.00 6.829 7.98 6.84 0.00 1.200 1.140 2.00 6.829 7.98 6.84 0.00 1.20			1.25	7.374	8.11									
198.00		1.00	1.25	7.406	8.15									
100.00		1.00	1.26	7.439	8.18									
102.00		1.00	1.27	7.470	8.22									
104.00		1.00	1.27											
106.00	104.00	1.00	1.28											
108.00	106,00	1.00	1.28											
110.00	108.00	1.00	1.29											
114.00	110.00													
114.00	112.00	1.00												
116.00	114.00													
118.00	116.00													
122.00	118.00													
122.00 1.00 1.32 7.816 8.60 0.00 1.200 1.142 2.00 6.629 7.95 68.4 107.1 403.6 124.00 124.00 1.00 1.32 7.816 8.63 0.00 1.200 1.142 1.00 3.265 3.92 33.8 53.3 0.169.9 128.00 1.00 1.33 7.839 8.661 0.00 1.200 1.143 1.00 3.265 3.92 33.8 53.3 169.9 128.00 1.00 1.34 7.895 8.68 6.63 0.00 1.200 1.145 1.00 1.206 7.76 67.2 104.8 336.3 132.00 1.00 1.34 7.920 8.71 0.00 1.200 1.145 2.00 6.470 7.76 67.2 104.8 336.3 132.00 1.00 1.34 7.920 8.71 0.00 1.200 1.145 2.00 6.397 7.68 66.3 10.36 332.0 132.00 1.00 1.34 7.920 8.71 0.00 1.200 1.145 2.00 6.397 7.68 66.3 10.26 132.00 13.40 1.00 1.34 7.920 8.74 0.00 1.200 1.149 2.00 6.397 7.68 66.3 10.26 132.00 13.00 1.00 1.34 7.920 8.74 0.00 1.200 1.150 1.00 1.37 7.945 8.75 0.00 1.200 1.150 1.00 1.319 3.75 3.29 51.0 272.7 135.00 10p - Section 5 1.00 1.35 7.957 8.75 0.00 1.200 1.150 1.00 3.199 3.75 3.29 51.0 272.7 136.00 1.00 1.36 8.043 8.85 0.00 1.200 1.154 2.00 6.159 7.39 65.0 100.3 319.8 136.00 1.00 1.36 8.043 8.85 0.00 1.200 1.155 2.00 6.000 7.20 6.50 7.20 6.50 100.3 319.8 134.4 0.00 1.00 1.38 8.159 8.97 0.00 1.200 1.159 2.00 5.922 7.11 63.1 96.6 307.0 144.00 1.00 1.37 8.066 8.87 0.00 1.200 1.159 2.00 5.922 7.11 63.1 96.6 307.0 144.00 1.00 1.38 8.159 8.97 0.00 1.200 1.165 2.00 5.685 6.23 6.00 9.30 2.94 2.00 1.00 1.30 8.255 9.05 0.00 1.200 1.165 2.00 5.665 6.23 6.04 91.7 92.89 4.50 0.00 1.00 1.30 8.139 8.81 0.00 0.00 1.200 1.165 2.00 5.665 6.23 6.04 91.7 92.89 4.50 0.00 1.00 1.30 8.255 9.05 0.00 1.200 1.167 2.00 5.566 6.33 5.04 91.7 92.89 4.50 0.00 1.00 1.30 8.255 9.05 0.00 1.200 1.167 2.00 5.665 6.33 5.04 91.7 92.89 4.50 0.00 1.00 1.30 8.255 9.05 0.00 1.200 1.167 2.00 5.566 6.33 5.04 91.7 92.89 91.50 0.00 1.00 1.00 1.00 1.00 1.00 1.00	120.00													
124.00	122.00													
125.00 Top - Section 4														200.1
128.00 1.00 1.33 7.895 8.66 0.00 1.200 1.145 2.00 6.470 7.76 67.2 104.8 336.3 128.00 128.00 1.00 1.34 7.895 8.68 0.00 1.200 1.147 2.00 6.397 7.68 66.9 103.8 332.0 132.00 1.00 1.34 7.895 8.68 0.00 1.200 1.149 2.00 6.397 7.68 66.9 103.8 352.0 132.00 132.00 1.00 1.35 7.995 8.75 0.00 1.200 1.150 2.00 6.397 7.68 66.9 103.8 557.9 134.00 1.00 1.35 7.995 8.75 0.00 1.200 1.150 2.00 6.397 7.68 66.9 103.6 350.6 133.6 0.00 1.00 1.35 7.995 8.77 0.00 1.200 1.150 2.00 6.397 3.73 32.7 50.7 161.6 138.00 1.00 1.35 7.994 8.79 0.00 1.200 1.152 1.00 3.199 3.73 32.7 50.7 161.6 138.00 1.00 1.35 7.994 8.79 0.00 1.200 1.155 1.00 3.199 3.73 32.7 50.7 161.6 138.00 1.00 1.36 8.043 8.85 0.00 1.200 1.155 2.00 6.800 7.39 65.0 100.3 319.8 142.00 1.00 1.36 8.043 8.85 0.00 1.200 1.155 2.00 6.080 7.39 65.0 100.3 319.8 142.00 1.00 1.37 8.066 8.87 0.00 1.200 1.155 2.00 6.080 7.30 66.4 99.1 315.5 142.00 1.00 1.37 8.098 8.90 0.00 1.200 1.1616 2.00 5.843 7.01 62.4 98.4 302.7 148.00 1.00 1.37 8.098 8.90 0.00 1.200 1.160 2.00 5.843 7.01 62.4 98.4 302.7 148.00 1.00 1.38 8.159 8.97 0.00 1.200 1.166 2.00 5.685 6.82 61.0 93.0 294.2 148.00 1.00 1.39 8.131 8.92 0.00 1.200 1.165 2.00 5.685 6.82 61.0 93.0 294.2 148.00 1.00 1.39 8.213 9.02 0.00 1.200 1.166 2.00 5.685 6.82 61.0 93.0 294.2 148.00 1.00 1.39 8.213 9.02 0.00 1.200 1.166 2.00 5.685 6.82 61.0 93.0 294.2 148.00 1.00 1.39 8.225 9.05 0.00 1.200 1.166 2.00 5.685 6.82 61.0 93.0 294.2 148.00 1.00 1.39 8.203 9.02 0.00 1.200 1.167 2.00 5.685 6.82 61.0 93.0 294.2 148.00 1.00 1.30 8.247 9.07 0.00 1.200 1.167 2.00 5.685 6.82 61.0 93.0 294.2 148.00 1.00 1.00 1.40 8.290 9.12 0.00 1.200 1.170 2.00 5.896 6.35 57.7 90.5 285.6 156.00 1.00 1.40 8.290 9.12 0.00 1.200 1.177 2.00 5.289 6.35 57.6 86.8 272.7 166.00 1.00 1.41 8.311 9.14 0.00 1.200 1.177 2.00 5.289 6.35 57.6 86.8 272.7 166.00 1.00 1.41 8.314 9.14 0.00 1.200 1.177 2.00 5.256 6.35 5.97 5.8 68.8 272.7 166.00 1.00 1.41 8.314 9.14 0.00 1.200 1.177 2.00 4.972 5.97 5.47 81.7 255.4 18.00 1.00 1.42 8.394 9.21 0.00 1.200 1.178 2.00 5.395 6.35 5.9 5.9 38.3 118.7 125.00														
128.00														336.3
130.00 Bet - Section 6														332.0
132.00													103.8	557.9
135.00 Top - Section 5													102.6	550.6
136.00 Top - Section 5												32.9	51.0	272.7
138.00												32.7	50.7	161.6
140.00											7.39	65.0	100.3	319.8
142.00										6.080	7.30	64.4	99.1	315.5
144.00										6.001	7.20	63.7	97.9	311.3
146.00										5.922	7.11	63.1	96.6	307.0
148.00 1.00 1.37 8.113 8.92 0.00 1.200 1.162 2.00 5.764 6.92 61.7 94.2 298.4 150.00 1.00 1.38 8.136 8.95 0.00 1.200 1.165 2.00 5.665 6.82 61.0 93.0 294.2 152.00 1.00 1.38 8.159 8.97 0.00 1.200 1.165 2.00 5.605 6.73 60.4 91.7 288.9 154.00 1.00 1.39 8.225 9.05 0.00 1.200 1.167 2.00 5.526 6.63 59.7 90.5 285.6 156.00 1.00 1.39 8.225 9.05 0.00 1.200 1.170 2.00 5.368 6.44 58.3 88.0 277.0 160.00 1.00 1.40 8.247 9.07 0.00 1.200 1.172 2.00 5.210 6.25 56.9 85.5 268.4 162.00									2.00	5.843	7.01	62.4	95.4	
180.00							1.200	1.162	2.00	5.764	6.92	61.7	94.2	
152.00							1.200	1.163	2.00	5.685	6.82	61.0	93.0	
154.00						0.00	1.200	1.165	2.00	5.605	6.73	60.4	91.7	
156.00						0.00	1.200	1.167	2.00	5.526	6.63	59.7		
158.00						0.00	1.200	1.168	2.00	5.447	6.54	59.0		
160.00					9.05	0.00	1.200	1.170	2.00	5.368	6.44	58.3		
162.00					9.07	0.00	1.200	1.171	2.00		6.35			
164.00					9.10	0.00	1.200	1.172	2.00	5.210	6.25			
165.00 Appurtenance(s) 1.00 1.41 8.301 9.13 0.00 1.200 1.175 1.00 2.535 3.04 27.8 41.8 130.6 166.00 1.00 1.41 8.311 9.14 0.00 1.200 1.175 1.00 2.516 3.02 27.6 41.5 129.5 168.00 1.00 1.41 8.332 9.17 0.00 1.200 1.177 2.00 4.972 5.97 54.7 81.7 255.4 170.00 1.00 1.42 8.353 9.19 0.00 1.200 1.178 2.00 4.893 5.87 53.9 80.4 251.1 172.00 1.00 1.42 8.374 9.21 0.00 1.200 1.180 2.00 4.813 5.78 53.2 79.1 246.8 174.00 1.00 1.42 8.394 9.23 0.00 1.200 1.181 2.00 4.734 5.68 52.5 77.9 242.4 175.00 Appurtenance(s) 1.00 1.42 8.404 9.24 0.00 1.200 1.182 1.00 2.337 2.80 25.9 38.6 119.8 176.00 1.00 1.43 8.414 9.26 0.00 1.200 1.182 1.00 2.318 2.78 25.7 38.3 118.7 178.00 1.00 1.43 8.434 9.28 0.00 1.200 1.184 2.00 4.576 5.49 50.9 75.3 233.8 180.00 Top - Section 6 1.00 1.44 8.474 9.32 0.00 1.200 1.185 2.00 4.395 5.27 49.2 73.0 244.0 184.00 1.00 1.44 8.494 9.34 0.00 1.200 1.187 2.00 4.396 5.27 49.2 73.0 244.0 186.00 1.00 1.44 8.494 9.34 0.00 1.200 1.187 2.00 4.396 5.28 49.4 73.2 244.2 188.00 1.00 1.45 8.532 9.39 0.00 1.200 1.190 2.00 4.397 5.28 49.6 73.3 244.3 190.00 1.00 1.45 8.551 9.41 0.00 1.200 1.190 2.00 4.397 5.28 49.6 73.3 244.3 190.00 1.00 1.45 8.551 9.41 0.00 1.200 1.191 2.00 4.397 5.28 49.6 73.3 244.3 190.00 1.00 1.45 8.551 9.41 0.00 1.200 1.191 2.00 4.397 5.28 49.6 73.3 244.3				8.290	9.12	0.00	1.200	1.174	2.00	5.130	6.16			
166.00 1.00 1.41 8.311 9.14 0.00 1.200 1.175 1.00 2.516 3.02 27.6 41.5 129.5 168.00 1.00 1.41 8.332 9.17 0.00 1.200 1.177 2.00 4.972 5.97 54.7 81.7 255.4 170.00 1.00 1.42 8.353 9.19 0.00 1.200 1.178 2.00 4.893 5.87 53.9 80.4 251.1 172.00 1.00 1.42 8.374 9.21 0.00 1.200 1.180 2.00 4.813 5.78 53.2 79.1 246.8 174.00 1.00 1.42 8.394 9.23 0.00 1.200 1.181 2.00 4.734 5.68 52.5 77.9 242.4 175.00 Appurtenance(s) 1.00 1.42 8.404 9.24 0.00 1.200 1.182 1.00 2.337 2.80 25.9 38.6 119.8 176.00 1.00 1.43 8.414 9.26 0.00 1.200 1.182 1.00 2.318 2.78 25.7 38.3 118.7 178.00 1.00 1.43 8.434 9.28 0.00 1.200 1.184 2.00 4.576 5.49 50.9 75.3 233.8 180.00 Top - Section 6 1.00 1.43 8.454 9.30 0.00 1.200 1.185 2.00 4.497 5.40 50.2 74.0 229.4 182.00 1.00 1.44 8.474 9.32 0.00 1.200 1.186 2.00 4.395 5.27 49.2 73.0 244.0 184.00 1.00 1.44 8.494 9.34 0.00 1.200 1.186 2.00 4.395 5.27 49.2 73.0 244.0 186.00 1.00 1.44 8.494 9.34 0.00 1.200 1.187 2.00 4.396 5.28 49.4 73.2 244.2 186.00 1.00 1.44 8.513 9.36 0.00 1.200 1.189 2.00 4.396 5.28 49.4 73.2 244.2 186.00 1.00 1.45 8.532 9.39 0.00 1.200 1.190 2.00 4.397 5.28 49.6 73.3 244.3 190.00 1.00 1.45 8.551 9.41 0.00 1.200 1.191 2.00 4.397 5.28 49.6 73.3 244.3 190.00 1.00 1.45 8.551 9.41 0.00 1.200 1.191 2.00 4.397 5.28 49.6 73.3 244.3					9.13	0.00	1.200	1.175	1.00					
168.00					9.14	0.00	1.200	1.175						
170.00				8.332	9.17			1.177	2.00					
172.00 1.00 1.42 8.374 9.21 0.00 1.200 1.180 2.00 4.813 5.78 53.2 79.1 240.8 174.00 174.00 1.00 1.42 8.394 9.23 0.00 1.200 1.181 2.00 4.734 5.68 52.5 77.9 242.4 175.00 Appurtenance(s) 1.00 1.42 8.404 9.24 0.00 1.200 1.182 1.00 2.337 2.80 25.9 38.6 119.8 176.00 1.00 1.43 8.414 9.26 0.00 1.200 1.182 1.00 2.318 2.78 25.7 38.3 118.7 178.00 1.00 1.43 8.434 9.28 0.00 1.200 1.184 2.00 4.576 5.49 50.9 75.3 233.8 180.00 Top - Section 6 1.00 1.43 8.454 9.30 0.00 1.200 1.185 2.00 4.497 5.40 50.2 74.0 229.4 182.00 184.00 1.00 1.44 8.474 9.32 0.00 1.200 1.186 2.00 4.395 5.27 49.2 73.0 244.0 186.00 1.00 1.44 8.494 9.34 0.00 1.200 1.187 2.00 4.396 5.27 49.3 73.1 244.1 186.00 1.00 1.44 8.513 9.36 0.00 1.200 1.189 2.00 4.396 5.28 49.4 73.2 244.2 188.00 1.00 1.45 8.532 9.39 0.00 1.200 1.190 2.00 4.397 5.28 49.6 73.3 244.3				8.353	9.19	0.00		1.178						
174.00			1.42	8.374	9.21	0.00								
175.00 Appurtenance(s) 1.00 1.42 8.404 9.24 0.00 1.200 1.182 1.00 2.337 2.60 25.3 36.0 118.7 176.00 1.00 1.43 8.414 9.26 0.00 1.200 1.182 1.00 2.318 2.78 25.7 38.3 118.7 178.00 178.00 1.00 1.43 8.434 9.28 0.00 1.200 1.184 2.00 4.576 5.49 50.9 75.3 233.8 180.00 Top - Section 6 1.00 1.43 8.454 9.30 0.00 1.200 1.185 2.00 4.497 5.40 50.2 74.0 229.4 182.00 1.00 1.44 8.474 9.32 0.00 1.200 1.186 2.00 4.395 5.27 49.2 73.0 244.0 186.00 1.00 1.44 8.494 9.34 0.00 1.200 1.187 2.00 4.396 5.27 49.3 73.1 244.1 186.00 1.00 1.44 8.513 9.36 0.00 1.200 1.189 2.00 4.396 5.28 49.4 73.2 244.2 188.00 1.00 1.45 8.532 9.39 0.00 1.200 1.190 2.00 4.397 5.28 49.5 73.2 244.2 190.00		1.00	1.42	8.394	9.23									
176.00 1.00 1.43 8.414 9.26 0.00 1.200 1.182 1.00 2.318 2.76 23.7 36.3 113.8 178.00 1.00 1.43 8.434 9.28 0.00 1.200 1.184 2.00 4.576 5.49 50.9 75.3 233.8 180.00 Top - Section 6 1.00 1.43 8.454 9.30 0.00 1.200 1.185 2.00 4.497 5.40 50.2 74.0 229.4 182.00 1.00 1.44 8.474 9.32 0.00 1.200 1.186 2.00 4.395 5.27 49.2 73.0 244.0 184.00 1.00 1.44 8.494 9.34 0.00 1.200 1.187 2.00 4.396 5.27 49.3 73.1 244.1 186.00 1.00 1.44 8.513 9.36 0.00 1.200 1.189 2.00 4.396 5.28 49.4 73.2 244.2 188.00 1.00 1.45 8.532 9.39 0.00 1.200 1.190 <t< td=""><td></td><td>1.00</td><td>1.42</td><td>8.404</td><td>9.24</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>		1.00	1.42	8.404	9.24									
178.00 1.00 1.43 8.434 9.28 0.00 1.200 1.184 2.00 4.576 5.49 50.9 73.3 235.8 180.00 Top - Section 6 1.00 1.43 8.454 9.30 0.00 1.200 1.185 2.00 4.497 5.40 50.2 74.0 229.4 182.00 1.00 1.44 8.474 9.32 0.00 1.200 1.186 2.00 4.395 5.27 49.2 73.0 244.0 184.00 1.00 1.44 8.494 9.34 0.00 1.200 1.187 2.00 4.396 5.27 49.3 73.1 244.1 186.00 1.00 1.44 8.513 9.36 0.00 1.200 1.189 2.00 4.396 5.28 49.4 73.2 244.2 188.00 1.00 1.45 8.532 9.39 0.00 1.200 1.190 2.00 4.397 5.28 49.5 73.2 244.2 190.00 1.00 1.45 8.551 9.41 0.00 1.200 1.191 <t< td=""><td>• • • • • • • • • • • • • • • • • • • •</td><td>1.00</td><td>1.43</td><td>8.414</td><td>9.26</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	• • • • • • • • • • • • • • • • • • • •	1.00	1.43	8.414	9.26									
180.00 Top - Section 6 1.00 1.43 8.454 9.30 0.00 1.200 1.185 2.00 4.497 5.40 50.2 73.0 224.0 182.00 1.00 1.44 8.474 9.32 0.00 1.200 1.186 2.00 4.395 5.27 49.2 73.0 244.0 184.00 1.00 1.44 8.494 9.34 0.00 1.200 1.187 2.00 4.396 5.27 49.3 73.1 244.1 186.00 1.00 1.44 8.513 9.36 0.00 1.200 1.189 2.00 4.396 5.28 49.4 73.2 244.2 188.00 1.00 1.45 8.532 9.39 0.00 1.200 1.190 2.00 4.397 5.28 49.5 73.2 244.2 190.00 1.00 1.45 8.551 9.41 0.00 1.200 1.191 2.00 4.397 5.28 49.6 73.3 244.3		1.00	1.43	8.434	9.28									
182.00 1.00 1.44 8.474 9.32 0.00 1.200 1.186 2.00 4.395 5.27 49.2 73.0 244.0 184.00 1.00 1.44 8.494 9.34 0.00 1.200 1.187 2.00 4.396 5.27 49.3 73.1 244.1 186.00 1.00 1.44 8.513 9.36 0.00 1.200 1.189 2.00 4.396 5.28 49.4 73.2 244.2 188.00 1.00 1.45 8.532 9.39 0.00 1.200 1.190 2.00 4.397 5.28 49.5 73.2 244.2 190.00 1.00 1.45 8.551 9.41 0.00 1.200 1.191 2.00 4.397 5.28 49.6 73.3 244.3		1.00	1.43											
184.00 1.00 1.44 8.494 9.34 0.00 1.200 1.187 2.00 4.396 5.27 49.3 73.1 244.1 186.00 1.00 1.44 8.513 9.36 0.00 1.200 1.189 2.00 4.396 5.28 49.4 73.2 244.2 188.00 1.00 1.45 8.532 9.39 0.00 1.200 1.190 2.00 4.397 5.28 49.5 73.2 244.2 190.00 1.00 1.45 8.551 9.41 0.00 1.200 1.191 2.00 4.397 5.28 49.6 73.3 244.3	•		1.44											
186.00 1.00 1.44 8.513 9.36 0.00 1.200 1.189 2.00 4.396 5.28 49.5 73.2 244.2 188.00 1.00 1.45 8.532 9.39 0.00 1.200 1.190 2.00 4.397 5.28 49.5 73.2 244.2 190.00 1.00 1.45 8.551 9.41 0.00 1.200 1.191 2.00 4.397 5.28 49.6 73.3 244.3		1.00	1.44											
188.00 1.00 1.45 8.532 9.39 0.00 1.200 1.190 2.00 4.397 5.28 49.5 73.3 244.3 190.00 1.00 1.45 8.551 9.41 0.00 1.200 1.191 2.00 4.397 5.28 49.6 73.3 244.3		1.00												
190.00 1.00 1.45 8.551 9.41 0.00 1.253 1.131 2.55 1.651		1.00												
	190.00	1.00	1.45	8.551	9.41	0.00	1.200						, 0.0	_,

Structure: CT01497-S-SBA

Site Name: Plymouth 2 CT Height: 195.00 (ft)

Base Elev: 0.000 (ft)

Code: TIA-222-H

Exposure: С Crest Height: 0.00

Site Class: D - Stiff Soil

7/13/2023

((開))

Gh:	1.1		Topography: 1 Struct Class: II									Page: 32	Tower	Tower Engineering Soluti		
192.00		1.00	1.45	8.570	9.43	0.00	1.200	1.193	2.00	4.398	5.28	49.7	73.4	244.4	=	
194.00		1.00	1.46	8.589	9.45	0.00	1.200	1.194	2.00	4.398	5.28	49.9	73.5	244.5		
195.00 Appurt	enance(s)	1.00	1.46	8.598	9.46	0.00	1.200	1.194	1.00	2.199	2.64	25.0	36.8	122.3		
								Totals:	195.00			6,750.8	-	50,339,5		

Discrete Appurtenance Forces

CT01497-S-SBA Structure:

Site Name: Plymouth 2 CT

195.00 (ft) Height:

Base Elev: 0.000 (ft)

Gh: 1.1 Topography: 1

TIA-222-H Code:

Exposure: С Crest Height: 0.00

Site Class: D - Stiff Soil

Struct Class: II

7/13/2023

Page: 33

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20 1.00 Wind Load Factor



Iterations

30

	Elev			qz	qzGh	Orient Factor		Total CaAa	Dead Load	Horiz Ecc	Vert Ecc	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
No.	(ft)	Description	Qty	(psf)	(psf)	х Ка	Ка	(sf)	(lb)	(ft)	(ft)	56.05	0.00	56.05
1	195.00	800 MHz RRH	3	8.607	9.468	0.60	0.90	5.92	279.35	0.000	1.000	215.81	0.00	215.81
2	195.00	APXVSPP18-C-A20	3	8.607	9.468	0.77	0.90	22.79	411.59	0.000	1.000	143.11	0.00	143.11
3		APXVTM14-C-I20	3	8.607	9.468	0.71	0.90	15.12	510.93	0.000	1.000	62.31	0.00	62.31
4		1900MHz RRH (65MHz)	3	8.607	9.468	0.60	0.90	6.58	315.61	0.000	1.000	438.36	0.00	0.00
5		T-Arms w/ Working	3	8.598	9.458	0.56	0.75	46.35	2573.29	0.000	0.000		0.00	78.66
6		TD-RRH8x20-25	3	8.607	9.468	0.60	0.90	8.31	464.14	0.000	1.000	78.66	0.00	22.19
7		ALU 800MHz External	3	8.607	9.468	0.64	0.90	2.34	52.90	0.000	1.000	22.19	0.00	5.85
8		ACU-A20-N	4	8.607	9.468	0.45	0.90	0.62	11.36	0.000	1.000	5.85	0.00	0.00
9	175.00	(3) T-Arm Kit	1	8.404	9.245	0.56	0.75	14.96	851.73	0.000	0.000	138.26	0.00	0.00
10		FE15501P77/75	6	8.404	9.245	0.54	0.80	3.75	202.54	0.000	0.000	34.65	0.00	0.00
11		4449 B71 + B85	3	8.404	9.245	0.54	0.80	3.79	220.36	0.000	0.000	35.02	0.00	0.00
.12		KRY 112 489/2	3	8.404	9.245	0.54	0.80	1.71	76.23	0.000	0.000	15.82	0.00	0.00
13		KRY 112 144/1	3	8.404	9.245	0.54	0.80	1.18	52.20	0.000	0.000	10.88	0.00	0.00
14		APXVAALL24_43-U-NA20	3	8.404	9.245	0.56	0.80	36.14	1256.34	0.000	0.000	334.09	0.00	0.00
15		4460 B25 + B66	3	8.404	9.245	0.54	0.80	5.32	447.75	0.000	0.000	49.15	0.00	0.00
16		AIR6419 B41	3	8.404	9.245	0.61	0.80	7.91	529.63	0.000	0.000	73.16	0.00	0.00
17	175.00	T-Arms w/ Working	3	8.404	9.245	0.56	0.75	46.14	2557.86	0.000	0.000	426.56	0.00	0.00
18		MT6407-77A	3	8.301	9.131	0.56	0.80	8.94	510.91	0.000	0.000	81.62	0.00	0.00
19		Low Profile Platform	1	8.301	9.131	1.00	1.00	33.89	2380.96	0.000	0.000	309.42		0.00
20		BSF0020F3V1-1	2	8.301	9.131	0.64	0.80	2.20	137.45	0.000	0.000	20.10	0.00	0.00
21		MX06FRO660-03	6	8.301	9.131	0.70	0.80	45.53	1464.38	0.000	0.000	415.75		0.00
22		Samsung B5/B13	3	8.301	9.131	0.54	0.80	3.62	316.48	0.000	0.000	33.05	0.00	0.00
23		Samsung B2/B66A	3	8.301	9.131	0.54	0.80	3.62	301.74	0.000	0.000	33.05		0.00
24		Raycap	1	8.301	9.131	0.80	0.80	3.45	118.16	0.000	0.000	31.54	0.00	0.00
25		91900314	1	8.301	9.131	1.00	1.00	0.00	41.18	0.000	0.000	0.00	0.00	0.00
26		Side Arm (L. Heavy)	1	6.930	7.623	1.00	1.00	6.02	178.69	0.000	0.000	45.89	0.00	
27		407577689 Gps	1	6.930	7.623	0.50	1.00	0.77	13.18	0.000	0.000	5.83	0.00	0.00

Totals:

16,276.94

3,116.19

Structure: CT01497-S-SBA

Site Name: Plymouth 2 CT Height: 195.00 (ft)

Base Elev: 0.000 (ft)

Gh: 1.1

Code:

TIA-222-H

Exposure: C

Crest Height: 0.00

Site Class: D - Stiff Soil

Struct Class: ||

7/13/2023

Page: 34

((III))
IES
Tower Engineering Solutions

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Topography: 1

Dead Load Factor 1.20 Wind Load Factor 1.00



Iterations

30

El.		Lateral	Axial	Torsion	Moment	
Elev (ft)	Description	FX (-) (lb)	FY (-) (lb)	MY (lb-ft)	MZ	
0.00		0.00			(lb-ft)	_
2.00		73.69	0.00 794.27	0.00	0.00	
4.00		73.29	794.27 797.57	0.00 0.00	0.00 0.00	
6.00		72.83	797.43	0.00	0.00	
8.00		72.36	795.79	0.00	0.00	
10.00		71.88	793.31	0.00	0.00	
12.00		71.38	790.26	0.00	0.00	
14.00		70.89	786.83	0.00	0.00	
16.00		71.26	783.09	0.00	0.00	
18.00		72.52	779.13	0.00	0.00	
20.00		73.61	774.98	0.00	0.00	
22.00		74.55	770.67	0.00	0.00	
24.00		75.37	766.24	0.00	0.00	
26.00		76.08	761.70	0.00	0.00	
28.00		76.69	757.06	0.00	0.00	
30.00		77.22	752.33	0.00	0.00	
32.00		77.68	747.54	0.00	0.00	
34.00		78.07	742.68	0.00	0.00	
36.00		78.39	737.76	0.00	0.00	
38.00		78.66	732.78	0.00	0.00	
40.00		78.88	727.76	0.00	0.00	
41.00		39.41	362.04	0.00	0.00	
42.00		39.97	629.54	0.00	0.00	
44.00		80.24	1251.69	0.00	0.00	
46.00		80.34	1241.98	0.00	0.00	
48.00		80.40	1232.23	0.00	0.00	
50.00		80.43	711.28	0.00	0.00	
52.00		80.42	706.04	0.00	0.00	
54.00		80.39	700.78	0.00	0.00	
56.00		80.32	695.49	0.00	0.00	
58.00		80.23	690.18	0.00	0.00	
60.00		80.11	684.84	0.00	0.00	
62.00		79.96	679.48	0.00	0.00	
64.00		79.79	674.10	0.00	0.00	
66.00		79.60	668.69	0.00	0.00	
68.00	(0) 11 1	79.39	663.27	0.00	0.00	
70.00	(2) attachments	130.88	849.70	0.00	0.00	
72.00		78.90	652.00	0.00	0.00	
74.00		78.63	646.52	0.00	0.00	
76.00		78.34	641.04	0.00	0.00	
78.00		78.03	635.53	0.00	0.00	
80.00		77.71	630.02	0.00	0.00	
81.00		38.68	313.05	0.00	0.00	
82.00		38.59	274.92	0.00	0.00	
84.00		77.01	546.01	0.00	0.00	
85.00		38.32	271.33	0.00	0.00	
86.00		38.73	454.99	0.00	0.00	

CT01497-S-SBA Structure:

Plymouth 2 CT

Code:

TIA-222-H

C Exposure:

7/13/2023

Site Name: Crest Height: 0.00 195.00 (ft) Height: D - Stiff Soil Site Class: 0.000 (ft) Base Elev: Tower Engineering Solutions Page: 35 Struct Class: Topography: 1 1.1 Gh: 0.00 903.28 0.00 77.27 88.00 0.00 894.65 0.00 76.88 90.00 0.00 0.00 38.24 444.21 91.00 0.00 0.00 266.29 38.14 92.00 0.00 0.00 76.05 528.70 94.00 0.00 0.00 75.62 523.86 96.00 0.00 0.00 519.00 75.17 98.00 514.13 0.00 0.00 74.71 100.00 0.00 74.24 509.26 0.00 102.00 0.00 504.37 0.00 73.76 104.00 0.00 0.00 499.47 73.27 106.00 0.00 0.00 494.57 72.77 108.00 0.00 0.00 72.25 489.66 110.00 0.00 0.00 484.74 71.73 112.00 0.00 0.00 479.81 71.20 114.00 0.00 474.87 0.00 70.65 116.00 0.00 0.00 70.10 469.93 118.00 0.00 0.00 464.98 69.54 120.00 0.00 0.00 460.02 68.97 122.00 0.00 0.00 455.05 68.39 124.00 0.00 0.00 225.81 33.95 125.00 0.00 0.00 195.59 33.80 126.00 387.73 0.00 0.00 67.21 128.00 0.00 0.00 66.60 383.50 130.00 0.00 609.35 0.00 66.87 132.00 0.00 0.00 602.06 66.26 134.00 0.00 0.00 298.45 32.87 135.00 0.00 0.00 32.71 187.35 136.00 0.00 0.00 65.00 371.22 138.00 366.97 0.00 0.00 64.36 140.00 0.00 0.00 362.71 63.71 142.00 0.00 0.00 358.45 63.06 144.00 0.00 0.00 354.18 62.39 146.00 0.00 349.90 0.00 61.73 148.00 0.00 0.00 61.05 345.62 150.00 0.00 0.00 60.37 341.34 152.00 0.00 0.00 337.05 59.68 154.00 0.00 0.00 332.76 58.98 156.00 0.00 0.00 328.46 58.28 158.00 0.00 0.00 324.15 57.57 160.00 0.00 0.00 319.84 56.86 162.00 0.00 315.53 0.00 56.14 164.00 0.00 0.00 952.31 5427.57 (20) attachments 165.00 0.00 0.00 146.42 27.60 166.00 0.00 0.00 289.28 54.68 168.00 0.00 0.00 53.95 284.95 170.00 0.00 0.00 280.62 53.20 172.00 0.00 0.00 276.28 52.46 174.00 0.00 6331.31 0.00 1143.52 175.00 (28) attachments 0.00 0.00 121.84 25.74 176.00 0.00 240.10 0.00 50.94 178.00 0.00 0.00 235.75 50.18 180.00 0.00 250.34 0.00 49.17 182.00 0.00 0.00 49.28 250.42 184.00 0.00 0.00 250.50 49.40 186.00 0.00 0.00 250.59 49.52 188.00 0.00 0.00 250.67 49.63 190.00

Structure: CT01497-S-SBA

Code:

TIA-222-H

Site Name: Plymouth 2 CT

Exposure:

7/13/2023

Height:

195.00 (ft)

Crest Height: 0.00

Base Elev: 0.000 (ft)

Site Class:

D - Stiff Soil

С

((田))

Gh: 1.1

Topography: 1

Struct Class: II

Page: 36

192.00 49.75 250.75 0.00 0.00 194.00 49.86 250.83 0.00 0.00 195.00 (25) attachments 1047.31 4744.61 0.00 583.99 Totals: 9,867.01 71,107.57 0.00 583.99

Structure: CT01497-S-SBA
Site Name: Plymouth 2 CT

Height: 195.00 (ft)

Base Elev: 0.000 (ft)

Gh: 1.1

Topography: 1

Code: TIA-222-H

Exposure: C
Crest Height: 0.00

Site Class: D - Stiff Soil

Struct Class: ||

7/13/2023

Page: 37

((H)))
IES

Iterations

30

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20 Wind Load Factor 1.00

Seg Elev	Pu FY (-)	Vu FX (-)	Tu MY (-)	Mu MZ	Mu MX	Resultant Moment	phi Pn	phi Vn	phi Tn (ft-kips)	phi Mn	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
(ft)	(kips)	(kips)	(ft-kips)	T. C. C. C.		(ft-kips)	(kips)	(kips) 1339.45	7126.38	(ft-kips) 6119.66	0.00	0.000	0.000	0.221
0.00	-71.11	-9.88	0.00	-1260.2	0.00	1260.24	4628.91	1329.62	7022.11	6053.16	0.00	-0.018	0.000	0.220
2.00	-70.31	-9.82	0.00	-1240.4	0.00	1240.49	4612.68 4596.18	1319.78	6918.62	5986.64	0.02	-0.036	0.000	0.219
4.00	-69.51	-9.77	0.00	-1220.8	0.00	1220.84	4579.43	1309.95	6815.89	5920.10	0.03	-0.054	0.000	0.218
6.00	-68.71	-9.72	0.00	-1201.2	0.00	1201.29	4579.43 4562.40	1309.93	6713.93	5853.55	0.06	-0.072	0.000	0.217
8.00	-67.91	-9.67	0.00	-1181.8	0.00	1181.85	4545.12	1290.28	6612.74	5787.00	0.10	-0.091	0.000	0.216
10.00	-67.11	-9.62	0.00	-1162.5	0.00	1162.51	4527.57	1280.44	6512.31	5720.46	0.14	-0.109	0.000	0.215
12.00	-66.32	-9.57	0.00	-1143.2	0.00	1143.27 1124.14	4509.77	1270.61	6412.66	5653.92	0.19	-0.128	0.000	0.213
14.00	-65.53	-9.52	0.00	-1124.1	0.00	1105.11	4491.69	1260.77	6313.77	5587.41	0.25	-0.147	0.000	0.212
16.00	-64.74	-9.46	0.00	-1105.1	0.00	1086.18	4473.36	1250.94	6215.65	5520.93	0.31	-0.166	0.000	0.211
18.00	-63.96	-9.41	0.00	-1086.1	0.00	1067.36	4454.76	1241.10	6118.30	5454.49	0.38	-0.185	0.000	0.210
20.00	-63.18	-9.36	0.00	-1067.3	0.00 0.00	1048.65	4435.90	1231.27	6021.72	5388.08	0.47	-0.204	0.000	0.209
22.00	-62.41	-9.30	0.00	-1048.6	0.00	1030.05	4416.78	1221.43	5925.90	5321.73	0.56	-0.223	0.000	0.208
24.00	-61.64	-9.24	0.00	-1030.0	0.00	1011.57	4397.40	1211.60	5830.86	5255.44	0.65	-0.242	0.000	0.206
26.00	-60.88	-9.18		-1011.5 -993.20	0.00	993.20	4377.75	1201.76	5736.58	5189.22	0.76	-0.262	0.000	0.205
28.00	-60.12	-9.12		-993.20 -974.95	0.00	974.95	4357.84	1191.93	5643.07	5123.07	0.87	-0.281	0.000	0.204
30.00	-59.36	-9.06		-974.93 -956.83	0.00	956.83	4337.67	1182.09	5550.33	5057.01	1.00	-0.301	0.000	0.203
32.00	-58.61	-9.00		-938.82	0.00	938.82	4317.23	1172.26	5458.36	4991.03	1.13	-0.321	0.000	0.202
34.00	-57.87	-8.94		-920.94	0.00	920.94	4296.53	1162.42	5367.16	4925.16	1.26	-0.340	0.000	0.200
36.00	-57.13	-8.88	0.00	-903.19	0.00	903.19	4275.57	1152.59	5276.73	4859.38	1.41	-0.361	0.000	0.199
38.00	-56.39	-8.81		-885.56	0.00	885.56	4254.35	1142.76	5187.06	4793.73	1.57	-0.381	0.000	0.198
40.00	-55.66 -55.30	-8.75 -8.71		-876.82	0.00	876.82	4243.64	1137.84	5142.51	4760.94	1.65	-0.391	0.000	0.197
41.00	-55.30 -54.67	-8.68		-868.11	0.00	868.11	4232.86	1132.92	5098.16	4728.19	1.73	-0.401	0.000	0.197
42.00	-53.41	-8.61		-850.74	0.00	850.74	4211.11	1123.09	5010.03	4662.78	1.90	-0.421	0.000	0.195
44.00	-52.17	-8.54		-833.51	0.00	833.51	4189.10	1113.25	4922.67	4597.51	2.08	-0.442	0.000	0.194
46.00 48.00	-50.93	-8.47		-816.43	0.00	816.43	4202.19	1119.08	4974.38	4636.19	2.27	-0.463	0.000	0.188
50.00	-50.93	-8.40		-799.49	0.00	799.49	4180.07	1109.25	4887.33	4570.98	2.47	-0.483	0.000	0.187
52.00	-49.51	-8.33		-782.69		782.69	4157.69	1099.41	4801.05	4505.91	2.68	-0.503	0.000	0.186
54.00	-48.81	-8.26		-766.02		766.02	4135.04	1089.58	4715.54	4441.00	2.89	-0.523	0.000	0.184
56.00	-48.11	-8.19		-749.50		749.50	4112.14	1079.74	4630.79	4376.25	3.12		0.000	0.183 0.182
58.00	-47.42	-8.12		-733.11		733.11	4088.97	1069.91	4546.82	4311.67	3.35		0.000	0.182
60.00	-46.73	-8.05		-716.86		716.86	4065.54	1060.07		4247.27	3.59		0.000	0.160
62.00	-46.05	-7.98		-700.76	_	700.76	4041.84	1050.24		4183.06	3.84		0.000	0.179
64.00	-45.37	-7.91		-684.79	0.00	684.79	4017.89	1040.40		4119.03	4.10		0.000	0.176
66.00	-44.70	-7.84		-668.97	0.00	668.97	3993.67	1030.57		4055.21	4.36		0.000	0.175
68.00	-44.04	-7.77		-653.29	0.00	653.29	3969.18	1020.73		3991.60	4.64		0.000	0.173
70.00	-43.19	-7.65		-637.75	0.00	637.75	3944.44	1010.90	4059.10	3928.21	4.92		0.000	0.173
72.00	-42.53	-7.57		-622.46	0.00	622.46	3919.43	1001.06	3980.51	3865.04	5.22		0.000	0.172
74.00	-41.88	-7.50		-607.31	0.00	607.31	3894.16	991.23	3902.68	3802.10	5.52		0.000	0.169
76.00	-41.24	-7.43		-592.31	0.00	592.31	3868.63	981.39			5.83		0.000	0.168
78.00	-40.61	-7.36		-577.44	0.00	577.44	3842.83	971.56			6.15			0.166
80.00	-39.97	-7.29			0.00	562.72	3816.78		3673.81				0.000	0.165
81.00	-39.66				0.00	555.44	3803.65	956.81				_	0.000	0.103
81.00	-39.66					555.44	2964.89		3038.55		6.64		0.000	0.212
82.00	-39.38				0.00	548.19	2956.04	794.33			6.81		0.000	0.209
84.00	-38.84		_	-533. 7 5	0.00	533.75	2938.13		2945.70			_	0.000	0.208
85.00	-38.56			-526.60	0.00	526.60	2929.08		2915.07				0.000	0.206
86.00			0.00	-519.49	0.00	519.49	2919.97	777.94	2884.60	∠067.40	7.52	-0.000	0.000	5,200
							innorina Sol	lutions III	C All rights	reserved				

Structure: CT01497-S-SBA

Site Name: Plymouth 2 CT

195.00 (ft)

Base Elev: 0.000 (ft)

Height:

Code: TIA-222-H

Exposure: С Crest Height: 0.00

Site Class: D - Stiff Soil

	_101.	0.000	('')				Site Class	. 0	- Sun Soi	li .				
Gh:		1.1		Тор	ography:	1	Struct Cla	ss: II			Pa	ge: 38	Tower Enginee	ring Solutions
88.00	-37.20	-7.01	0.00	-505.32	0.00	505.32	2901.54	769.74	2824.14	2642,11	7.89	-0.894	0.000	0.204
90.00	-36.31	-6.93	0.00	-491.31	0.00	491.31	2882.85	761.55	2764.32	2596.94	8.27	-0.920	0.000	0.204 0.202
91.00	-35.86	-6.89	0.00	-484.38	0.00	484.38	2898.33	768.33	2813.78	2634.30	8.46	-0.933	0.000	0.202
92.00	-35.59	-6.86	0.00	-477.49	0.00	477.49	2889.00	764.23	2783.84	2611.72	8.66	-0.947	0.000	0.195
94.00	-35.06	-6.79	0.00	-463.77	0.00	463.77	2870.13	756.03	2724.45	2566.64	9.06	-0.972	0.000	0.193
96.00	-34.54	-6.72	0.00	-450.18	0.00	450.18	2851.00	747.84	2665.70	2521.69	9.48	-0.997	0.000	0.193
98.00	-34.02	-6.65	0.00	-436.74	0.00	436.74	2831.61	739.64	2607.60	2476.90	9.90	-1.023	0.000	0.188
100.00	-33.50	-6.58	0.00	-423.43	0.00	423.43	2811.95	731.45	2550.13	2432.25	10.33	-1.048	0.000	0.186
102.00	-32.99	-6.52	0.00	-410.26	0.00	410.26	2792.03	723.25	2493.30	2387.76	10.78	-1.073	0.000	0.184
104.00	-32.48	-6.45	0.00	-397.23	0.00	397.23	2771.85	715.06	2437.12	2343.44	11.23	-1.099	0.000	0.181
106.00	-31.98	-6.38	0.00	-384.34	0.00	384.34	2751.41	706.86	2381.57	2299.29	11.70	-1.125	0.000	0.179
108.00	-31.49	-6.31	0.00	-371.58	0.00	371.58	2730.70	698.66	2326.66	2255.33	12.17	-1.150	0.000	0.176
110.00	-31.00	-6.24	0.00	-358.96	0.00	358.96	2709.73	690.47	2272.40	2211.55	12.66	-1.176	0.000	0.174
112.00	-30.51	-6.17	0.00	-346.48	0.00	346.48	2688.50	682.27	2218.77	2167.98	13.16	-1.202	0.000	0.171
114.00	-30.03	-6.11	0.00	-334.13	0.00	334.13	2667.01	674.08	2165.79	2124.61	13.67	-1.227	0.000	0.169
116.00	-29.55	-6.04	0.00	-321.92	0.00	321.92	2645.25	665.88	2113.44	2081.45	14.19	-1.253	0.000	0.166
118.00	-29.08	-5.97	0.00	-309.85	0.00	309.85	2623.23	657.69	2061.74	2038.51	14.72	-1.279	0.000	0.163
120.00	-28.62	-5.90	0.00	-297.91	0.00	297.91	2600.95	649.49	2010.67	1995.80	15.26	-1.304	0.000	0.160
122.00	-28.16	-5.84	0.00	-286.10	0.00	286.10	2578.41	641.29	1960.25	1953.33	15.81	-1.330	0.000	0.157
124.00	-27.70	-5.77	0.00	-274.43	0.00	274.43	2555.60	633.10	1910.47	1911.10	16.37	-1.355	0.000	0.155
125.00	-27.48	-5.73	0.00	-268.66	0.00	268.66	2544.10	629.00	1885.82	1890.08	16.66	-1.368	0.000	0.153
125.00	-27.48	-5.73	0.00	-268.66	0.00	268.66	1882.48	504.07	1513.88	1403.39	16.66	-1.368	0.000	0.206
126.00	-27.28	-5.71	0.00	-262.93	0.00	262.93	1875.26	500.79	1494.25	1388.85	16.95	-1.381	0.000	0.204
128.00	-26.89	-5.64	0.00	-251.52	0.00	251.52	1860.60	494.24	1455.38	1359.83	17.53	-1.412	0.000	0.200
130.00	-26.50	-5.58	0.00	-240.23	0.00	240.23	1845.69	487.68	1417.02	1330.91	18.13	-1.443	0.000	0.195
132.00	-25.89	-5.51	0.00	-229.07	0.00	229.07	1830.51	481.12	1379.17	1302.09	18.74	-1.474	0.000	0.190
134.00	-25.29	-5.44	0.00	-218.04	0.00	218.04	1815.07	474.57	1341.84	1273.39	19.37	-1.505	0.000	0.185
135.00 136.00	-24.99	-5.41	0.00	-212.60	0.00	212.60	1823.78	478.25	1362.76	1289.51	19.68	-1.520	0.000	0.179
138.00	-24.80 -24.43	-5.38 -5.32	0.00	-207.19	0.00	207.19	1816.04	474.97	1344.14	1275.17	20.00	-1.536	0.000	0.176
140.00	-24.43	-5.32 -5.25	0.00	-196.44	0.00	196.44	1800.35	468.42	1307.29	1246.57	20.65	-1.565	0.000	0.171
142.00	-24.00	-5.25 -5.19	0.00	-185.80	0.00	185.80	1784.40	461.86	1270.94	1218.11	21.32	-1.593	0.000	0.166
144.00	-23.34	-5.19 -5.13	0.00	-175.29	0.00	175.29	1768.19	455.30	1235.12	1189.78	21.99	-1.621	0.000	0.161
146.00	-22.99	-5.07	0.00	-164.91 -154.65	0.00	164.91	1751.71	448.75	1199.80	1161.59	22.67	-1.649	0.000	0.155
148.00	-22.64	-5.01	0.00	-144.52	0.00	154.65	1734.98	442.19	1165.00	1133.55	23.37	-1.676	0.000	0.150
150.00	-22.29	-4.95	0.00	-134.50	0.00 0.00	144.52	1717.98	435.63	1130.70	1105.67	24.08	-1.703	0.000	0.144
152.00	-21.95	-4.88	0.00	-124.61	0.00	134.50	1700.71	429.08	1096.92	1077.96	24.80	-1.728	0.000	0.138
154.00	-21.61	-4.82	0.00	-114.85	0.00	124.61	1683.19	422.52	1063.66	1050.42	25.53	-1.754	0.000	0.132
156.00	-21.28	-4.76	0.00	-105.20	0.00	114.85 105.20	1665.40	415.96	1030.90	1023.06	26.27	-1.778	0.000	0.125
158.00	-20.95	-4.70	0.00	-95.68	0.00	95.68	1647.35 1629.04	409.41	998.66	995.89	27.02	-1.801	0.000	0.119
160.00	-20.63	-4.64	0.00	-86.27	0.00	86.27	1610.46	402.85 396.29	966.93 935.71	968.91	27.78	-1.824	0.000	0.112
162.00	-20.31	-4.58	0.00	-76.99	0.00	76.99	1591.62	389.74	905.01	942.14	28.55	-1.845	0.000	0.105
164.00	-19.99	-4.52	0.00	-67.83	0.00	67.83	1572.52	383.18		915.58	29.32	-1.865	0.000	0.097
165.00	-14.60	-3.39	0.00	-63.31	0.00	63.31	1562.88	379.90	874.81 859.91	889.24 876.15	30.11	-1.884	0.000	0.089
166.00	-14.45	-3.36	0.00	-59.92	0.00	59.92	1553.16	376.62	845.13	863.13	30.50 30.90	-1.893	0.000	0.082
168.00	-14.17	-3.30	0.00	-53.20	0.00	53.20	1533.53	370.07	815.96	837.25	31.70	-1.901 -1.918	0.000	0.079
170.00	-13.88	-3.24	0.00	-46.60	0.00	46.60	1513.65	363.51	787.30	811.61	32.51	-1.933	0.000	0.073
172.00	-13.60	-3.18	0.00	-40.11	0.00	40.11	1493.49	356.96	759.16	786.22	33.32		0.000	0.067
174.00	-13.33	-3.12	0.00	-33.75	0.00	33.75	1473.08	350.40	731.53	761.10	34.14	-1.947	0.000	0.060
175.00	-7.04	-1.76	0.00	-30.63	0.00	30.63	1462.77	347.12	717.90	748.63	34.55	-1.959 -1.965	0.000 0.000	0.053
176.00	-6.92	-1.73	0.00	-28.87	0.00	28.87	1452.40	343.84	704.41	736.23	34.96	-1.905	0.000	0.046
178.00	-6.68	-1.68	0.00	-25.40	0.00	25.40	1427.84	337.29	677.80	709.84	35.79	-1.980	0.000	0.044
180.00	-6.45	-1.62	0.00	-22.05	0.00	22.05	1400.09	330.73	651.70	682.38	36.62	-1.990	0.000	0.040 0.037
180.00	-6.45	-1.62	0.00	-22.05	0.00	22.05	678.42	203.53	25205.7	396.30	36.62	-1.990	0.000	0.037
182.00	-6.20	-1.56	0.00	-18.81	0.00	18.81	678.42	203.53	25205.7	396.30	37.46	-1.990	0.000	0.065
184.00	-5.95	-1.50	0.00	-15.69	0.00	15.69	678.42	203.53	25205.7	396.30	38.29	-2.005	0.000	0.057
186.00	-5.70	-1.45	0.00	-12.68	0.00	12.68	678.42		25205.7	396,30	39.14	-2.011	0.000	0.048
							-				-3.17		0.000	0.040

Structure: CT01497-S-SBA

Site Name: Plymouth 2 CT

Height:

195.00 (ft)

Base Elev: 0.000 (ft)

Code:

TIA-222-H

C

Exposure: Crest Height: 0.00

Site Class:

D - Stiff Soil

Gh:		1.1		Торо	graphy:	1	S	Struct Clas	ss: II			Pag	ge: 39		
							9.78	678,42	203.53	25205.7	396.30	39.98	-2.015	0.000	0.033
188.00	-5.45	-1.39	0.00	-9.78	0.00				203.53	25205.7	396.30	40.82	-2.018	0.000	0.025
190.00	-5.20	-1.33	0.00	-7.00	0.00		7.00	678.42			396.30	41.67	-2.021	0.000	0.018
192.00	-4.95	-1.27	0.00	-4.34	0.00		4.34	678.42	203.53	_			-2.022	0.000	0.012
194.00	-4.70	-1.21	0.00	-1.80	0.00		1.80	678.42	203.53		396.30	42.52			0.002
		-1.05	0.00	-0.58	0.00		0.58	678.42	203.53	25205.7	396.30	42.94	-2.022	0.000	0.002
195.00	0.00	-1.05	0.00	0.00	0.00										

Structure: CT01497-S-SBA

1.1

Code:

TIA-222-H

C

Site Name: Plymouth 2 CT

Exposure:

7/13/2023

Height:

Gh:

195.00 (ft)

Crest Height: 0.00

((图))

Base Elev: 0.000 (ft)

Topography: 1

Site Class: D - Stiff Soil Struct Class: II

Page: 40

Load Case: 1.2D + 1.0Ev + 1.0Eh

Gust Response Factor

Sds 0.20 **Iterations** 27 Ss 0.18

Dead Load Factor

1.20 Seismic Load Factor

1.00 Sd1 0.09

S1 0.05

SA

	Wind Load Factor	0.00 Struct	ure Fr	equency (f1)	0.29	SA	0.03	Seismic Importance Factor	1	.00
Тор				V	/ertical	Latera			_	.00
Elev	_		Wz	Hz	Ev	Fs	•			
(ft)	Description		(lb)	(lb)	(lb)	(lb)		F	R: 1	.50
0.00			0.00	0.00	0.00	0.0	0		-	_
2.00			569.35	1.00	22.23	0.0				
4.00			565.53	3.00	22.08	0.00	0			
6.00			561.72	5.00	21.93	0.0	1			
8.00			557.91	7.00	21.78	0.0				
10.00			554.09	9.00	21.63	0.02	2			
12.00			550.28	11.00	21.48	0.03	3			
14.00		;	546.46	13.00	21.33	0.04				
16.00			542.65	15.00	21.19	0.08	5			
18.00			538.84	17.00	21.04	0.07	7			
20.00			35.02	19.00	20.89	0.08				
22.00			31.21	21.00	20.74	0.10)			
24.00			527.40	23.00	20.59	0.11				
26.00		30 S	523.58	25.00	20.44	0.13	3			
28.00		5	19.77	27.00	20.29	0.15				
30.00		5	15.95	29.00	20.14	0.17				
32.00		5	12.14	31.00	19.99	0.20				
34.00		5	608.33	33.00	19.85	0.22	2			
36.00		5	04.51	35.00	19.70	0.24	ļ			
38.00		5	00.70	37.00	19.55	0.27				
40.00		4	96.89	39.00	19.40	0.29				
41.00	Bot - Section 2	2	47.01	40.50	9.64	0.08				
42.00		4	69.24	41.50	18.32	0.30)			
44.00		9	32.75	43,00	36.41	1.25				
46.00		9	25.12	45.00	36.12	1.35				
48.00	Top - Section 1	9	17.50	47.00	35.82	1.45				
50.00		4	83.89	49.00	18.89	0.44				
52.00		4	80.08	51.00	18.74	0.47				
54.00		4	76.26	53.00	18.59	0.50				
56.00		4	72.45	55.00	18.44	0.53				
58.00		4	68.64	57.00	18.30	0.56				
60.00		4	64.82	59.00	18.15	0.59				
62.00		4	61.01	61.00	18.00	0.62				
64.00		4	57.20	63.00	17.85	0.65				
66.00		4	53.38	65.00	17.70	0.68				
68.00		4	49.57	67.00	17.55	0.71				
70.00	Appurtenance(s)	5	69.75	69.00	22.24	1.20				
72.00		4	41.56	71.00	17.24	0.77				
74.00		4	37.74	73.00	17.09	0.80				
76.00		4	33.93	75.00	16.94	0.82				
78.00		4	30.12	77.00	16.79	0.85				
80.00		4:	26.30	79.00	16.64	0.88				
81.00	Top - Section 2	2	11.72	80.50	8.27	0.23				
82.00		18	30.14	81.50	7.03	0.17				
84.00		3:	57.89	83.00	13.97	0.69				
85.00	Bot - Section 4	1	77.75	84.50	6.94	0.18				

Structure: CT01497-S-SBA

Code:

TIA-222-H

7/13/2023

Site Name: Plymouth 2 CT

Exposure:

С

		105 00 (#)		Crest	Height:	0.00		IE
Height		195.00 (ft)			Class:	D - Stiff Soil		
Base E	Elev:	0.000 (ft) 1.1	Topography: 1		t Class:		Page: 41	Tower Enginee
Gh:		1.1		85.50	12.89	0.62		
86.00			330.30 655.84	87.00	25.60	2.54		
88.00			649.48	89.00	25.36	2.60		
90.00			322.36	90.50	12.58	0.66		
	Top - S	ection 3	174.30	91.50	6.80	0.20		
92.00			346.22	93.00	13.52	0.81		
94.00			343.04	95.00	13.39	0.83		
96.00			339.86	97.00	13.27	0.85		
98.00			336.69	99.00	13.14	0.87		
100.00			333.51	101.00	13.02	0.88		
102.00			330.33	103.00	12.90	0.90		
104.00			327.15	105.00	12.77	0.92		
106.00			323.97	107.00	12.65	0.94		
108.00 110.00			320.80	109.00	12.52	0.95		
112.00			317.62	111.00	12.40	0.97		
114.00			314.44	113.00	12.28	0.98		
116.00			311.26	115.00	12.15	1.00		
118.00			308.08	117.00	12.03	1.01		
120.00			304.91	119.00	11.90	1.03		
120.00			301.73	121.00	11.78	1.04		
124.00			298.55	123.00	11.66	1.05		
	Ton - S	Section 4	148.08	124.50	5.78	0.26		
126.00	ТОР-С	JCGGGT T	123.14	125.50	4.81	0.19		
128.00			244.38	127.00	9.54	0.75		
	Bot - S	ection 6	241.84	129.00	9.44	0.76		
132.00	DOI 0	COLION C	429.84	131.00	16.78	2.47		
134.00			424.75	133.00	16.58	2.49		
	Τοο - 5	Section 5	210.47	134.50	8.22	0.62		
136.00			118.14	135.50	4.61	0.20		
138.00			234.37	137.00	9.15	0.80		
140.00			231.83	139.00	9.05	0.81		
142.00			229.29	141.00	8.95	0.81		
144.00			226.74	143.00	8.85	0.82		
146.00			224.20	145.00	8.75	0.82		
148.00			221.66	147.00	8.65	0.83		
150.00			219.12	149.00	8.55	0.83		
152.00			216.57	151.00	8.45	0.83 0.84		
154.00			214.03	153.00	8.36 8.26	0.84		
156.00			211.49	155.00	8.16	0.84		
158.00			208.95	157.00 159.00	8.06	0.84		
160.00			206.40	161.00	7.96	0.84		
162.00			203.86		7.86			
164.00			201.32	164.50	107.54	159.90		
165.00	Appurt	tenance(s)	2754.5 90.26		3.52			
166.00			90.20 178.62	167.00	6.97			
168.00			176.02	169.00	6.87			
170.00			173.53		6.77			
172.00			170.99		6.68			
174.00			3424.0		133.67			
175.00	Appur	tenance(s)	70.15		2.74			
176.00			138.40		5.40			
178.00	_	0 11 0	135.86		5.30			
180.00	lop - S	Section 6	148.84		5.81			
182.00			148.84		5.81			
184.00			148.84		5.81	0.59		
186.00			148.84		5.81	0.60		
188.00			Convright © 2023 by To		ina Solution	s. LLC. All rights r	eserved.	

Structure: CT01497-S-SBA

Code:

TIA-222-H

689.1

С

7/13/2023

Site Name: Plymouth 2 CT

Exposure:

Height:

195.00 (ft)

Crest Height: 0.00

1,780.9

Base Elev: 0.000 (ft) Gh:

Site Class: D - Stiff Soil

1.1 Topography: 1 190.00 148.84 192.00

Struct Class: ||

Page: 42

189.00 5.81 0.62 148.84 191.00 5.81 0.63 194.00 148.84 193.00 5.81 0.64 195.00 Appurtenance(s) 2493.4 194.50 97.34 183.16 Totals: 45,616.8

Total Wind:

30,365.1

CT01497-S-SBA Structure:

Site Name: Plymouth 2 CT

195.00 (ft) Height:

Base Elev: 0.000 (ft)

Gh: 1.1

TIA-222-H Code:

С Exposure:

Crest Height: 0.00

D - Stiff Soil Site Class:

0.29

Struct Class: ||

7/13/2023

Page: 43

((曜))

Ss

S1

Iterations

Load Case: 1.2D + 1.0Ev + 1.0Eh

Dead Load Factor

Wind Load Factor

Gust Response Factor 1.10

1.20 Seismic Load Factor

0.00 Structure Frequency (f1)

Topography: 1

Sds 0.20

0.09 Sd1 1.00 SA

0.03 Seismic Importance Factor

1.00

27

0.18

0.05

Seg Elev	Pu FY (-)	Vu FX (-)	Tu MY (-)	Mu MZ	Mu MX	Resultant Moment	phi Pn	phi Vn	phi Tn	phi Mn	Total Deflect	Rotation Sway	Rotation Twist (deg)	Stress Ratio
(ft)	(kips)	(kips)	(ft-kips)	(ft-kips)	(ft-kips)	(ft-kips)	(kips)	(kips)	(ft-kips)	(ft-kips)	(in)	(deg) 0.00	0.00	0.033
0.00	-55.62	-0.69	0.00	-125.41	0.00	125.41	4628.91	1339.45	7126.38	6119.66		0.00	0.00	0.032
2.00	-54.93	-0.69	0.00	-124.03	0.00	124.03	4612.68	1329.62	7022.11	6053.16 5986.64		0.00	0.00	0.032
4.00	-54.24	-0.69	0.00	-122.65	0.00	122.65	4596.18	1319.78	6918.62 6815.89	5980.04		0.00	-0.01	0.032
6.00	-53.55	-0.69	0.00	-121.27	0.00	121.27	4579.43	1309.95	6713.93	5853.55		0.00	-0.01	0.032
8.00	-52.87	-0.69	0.00	-119.89	0.00	119.89	4562.40	1300.11 1290.28	6612.74	5787.00		0.01	-0.01	0.032
10.00	-52.19	-0.70	0.00	-118.50	0.00	118.50	4545.12	1280.44	6512.74	5720.46		0.01	-0.01	0.032
12.00	-51.52	-0.70	0.00	-117.11	0.00	117,11	4527.57 4509.77	1270.61	6412.66	5653.92		0.02	-0.01	0.032
14.00	-50.86	-0.70	0.00	-115.71	0.00	115.71	4491.69	1260.77	6313.77	5587.41		0.02	-0.01	0.032
16.00	-50.19	-0.70	0.00	-114.32	0.00	114.32	4491.09	1250.77	6215.65	5520.93		0.03	-0.02	0.032
18.00	-49.54	-0.70	0.00	-112.91	0.00	112.91	4473.36	1241.10	6118.30	5454.49		0.04	-0.02	0.031
20.00	-48.88	-0.70	0.00	-111.51	0.00	111.51	4434.70	1231.27	6021.72	5388.08		0.05	-0.02	0.031
22.00	-48.24	-0.70	0.00	-110.10	0.00	110.10	4435.90	1221.43	5925.90	5321.73		0.06	-0.02	0.031
24.00	-47.59	-0.71	0.00	-108.70	0.00	108.70 107.28	4397.40	1211.60	5830.86	5255.44		0.07	-0.02	0.031
26.00	-46.96	-0.71	0.00	-107.28	0.00	107.26	4397.75	1201.76	5736.58	5189.22		0.08	-0.03	0.031
28.00	-46.32	-0.71	0.00	-105.87	0.00	104.45	4357.84	1191.93	5643.07	5123.07		0.09	-0.03	0.031
30.00	-45.69	-0.71	0.00	-104.45	0.00	103.03	4337.67	1182.09	5550.33	5057.01		0.10	-0.03	0.031
32.00	-45.07	-0.71	0.00	-103.03	0.00	103.03	4317.23	1172.26	5458.36	4991.03		0.12	-0.03	0.031
34.00	-44.45	-0.71	0.00	-101.61	0.00	100.19	4296.53	1162.42		4925.16		0.13	-0.04	0.031
36.00	-43.83	-0.71	0.00	-100.19	0.00 0.00	98.76	4275.57	1152.59	5276.73	4859.38		0.14	-0.04	0.030
38.00	-43.22	-0.71	0.00	-98.76	0.00	97.34	4254.35	1142.76	5187.06	4793.73		0.16	-0.04	0.030
40.00	-42.62	-0.71	0.00	-97.34	0.00	96.62	4243.64	1137.84		4760.94		0.17	-0.04	0.030
41.00	-42.32	-0.72		-96.62 -95.91	0.00	95.91	4232.86	1132.92		4728.19		0.18	-0.04	0.030
42.00	-41.74	-0.72		-95.91 -94.47	0.00	94.47	4211.11	1123.09	5010.03	4662.78		0.20	-0.04	0.030
44.00	-40.60	-0.72		-94.47 -93.04	0.00	93.04	4189.10	1113.25	4922.67	4597.51		0.22	-0.05	0.030
46.00	-39.46	-0.71	0.00	-93.0 4 -91.62	0.00	91.62	4202.19	1119.08		4636.19		0.24	-0.05	0.029
48.00	-38.33	-0.71	0.00	-90.19	0.00	90.19	4180.07	1109.25	4887.33	4570.98		0.26	-0.05	0.029
50.00	-37.74	-0.71		-88.76	0.00	88.76	4157.69	1099.41	4801.05	4505.91		0.28	-0.05	0.029
52.00	-37.16	-0.71		-87.33	0.00	87.33	4135.04	1089.58	4715.54	4441.00		0.30	-0.06	0.029
54.00	-36.58	-0.72 -0.72		-85.90	0.00	85.90	4112.14	1079.74	4630.79	4376.25		0.33	-0.06	0.028
56.00	-36.01			-84.47	0.00	84.47	4088.97	1069.91	4546.82	4311.67		0.35	-0.06	0.028
58.00	-35.43	-0.72 -0.72		-83.04	0.00	83.04	4065.54	1060.07	4463.61	4247.27		0.38	-0.06	0.028
60.00	-34.87	-0.72		-81.61	0.00	81.61	4041.84	1050.24	4381.17	4183.06		0.40	-0.07	0.028
62.00	-34.31 -33.75	-0.72		-80.18	0.00	80.18	4017.89	1040.40	4299.50	4119.03		0.43	-0.07	0.028
64.00	-33.20	-0.72		-78.74		78.74	3993.67	1030.57	4218.60	4055.21		0.46	-0.07	0.028
66.00	-33.20	-0.72		-77.31	0.00	77.31	3969.18	1020.73	4138.47	3991.60		0.49	-0.07	0.028
68.00 70.00	-32.05	-0.72		-75.88	0.00	75.88	3944.44	1010.90	4059.10	3928.21		0.52	-0.07	0.027
	-31.42	-0.72		-74.45		74.45	3919.43	1001.06	3980.51	3865.04		0.55	-0.08	0.027
72.00 74.00	-30.89	-0.72		-73.02	_	73.02	3894.16	991.23	3902.68	3802.10		0.59	-0.08	0.027
76.00	-30.36	-0.72		-71.59		71.59	3868.63	981.39				0.62	-0.08	0.027
	-29.84	-0.72		-70.16	0.00	70.16	3842.83	971.56	3749.33	3676.95		0.65	-0.09	0.027
78.00 80.00	-29.32	-0.72		-68.73	_	68.73	3816.78	961.72	3673.81			0.69	-0.09	0.027
81.00	-29.06	-0.71		-68.01	0.00	68.01	3803.65	956.81		3583.75		0.71	-0.09	0.027
81.00	-29.06	-0.71			0.00	68.01	2964.89	798.43				0.71	-0.09	0.034
82.00	-28.85			_		67.30	2956.04		3007.44			0.73	-0.09	0.034
84.00	-28.41	-0.71		_		65.87	2938.13		2945.70			0.77	-0.09	0.034
85.00	-28.20	-0.72		-65.15	0.00	65.15	2929.08		2915.0 7			0.79	-0.10	0.034
50.00	_0.20			Cop	yright © 20	23 by Tower Eng	ineering Sol	utions, LL0	C. All rights	reserved.				

Structure: CT01497-S-SBA

Site Name: Plymouth 2 CT 195.00 (ft)

Base Flev: 0.000 (ft)

Height:

Code: TIA-222-H

Exposure: С Crest Height: 0.00



Base	Elev:	0.000	(ft)					Site Class	: D-	Stiff Soi	i			
Gh:		1.1		Тор	ography:	1		Struct Clas	ss: II			Page: 44	Tower Enginee	ring Solutions
86.00	-27.79	-0.72	0.00	-64.44	0.00		64.44	2919.97	777.94	2884.60	2687.40	0.81	-0.10	0.033
88.00	-26.99	-0.71	0.00	-63.01	0.00		63.01	2901.54	769.74		2642.11	0.85	-0.10	0.033
90.00	-26.20	-0.71	0.00	-61.58	0.00		61.58	2882.85	761.55	2764.32	2596.94	0.89	-0.10	0.033
91.00	-25.80	-0.71	0.00	-60.87	0.00		60.87	2898.33	768.33	2813.78	2634.30	0.91	-0.11	0.032
92.00	-25.59	-0.71	0.00	-60.16	0.00		60.16	2889.00	764.23	2783.84	2611.72	0.93	-0.11	0.032
94.00	-25.17	-0.71	0.00	-58.74	0.00		58.74	2870.13	756.03	2724.45	2566.64	0.98	-0.11	0.032
96.00	-24.76	-0.71	0.00	-57.33	0.00		57.33	2851.00	747.84	2665.70	2521.69	1.03	-0.11	0.031
98.00	-24.35	-0.71	0.00	-55.91	0.00		55.91	2831.61	739.64	2607.60	2476.90	1.07	-0.12	0.031
100.00	-23.94	-0.71	0.00	-54.49	0.00		54.49	2811.95	731.45	2550.13	2432.25	1.12	-0.12	0.031
102.00	-23.54	-0.71	0.00	-53.07	0.00	;	53.07	2792.03	723.25	2493.30	2387.76	1.17	-0.12	0.031
104.00	-23.14	-0.71	0.00	-51.66	0.00		51.66	2771.85	715.06	2437.12	2343.44	1.23	-0.13	0.030
106.00	-22.74	-0.71	0.00	-50.24	0.00	;	50.24	2751.41	706.86	2381.57	2299.29	1.28	-0.13	0.030
108.00	-22.35	-0.71	0.00	-48.82	0.00	4	48.82	2730.70	698.66	2326.66	2255.33	1.34	-0.13	0.030
110.00	-21.97	-0.71	0.00	-47.41	0.00		47.41	2709.73	690.47	2272.40	2211.55	1.39	-0.14	0.030
112.00	-21.58	-0.71	0.00	-46.00	0.00	4	46.00	2688.50	682.27	2218.77	2167.98	1.45	-0.14	0.029
114.00	-21.20	-0.71	0.00	-44.59	0.00	4	44.59	2667.01	674.08	2165.79	2124.61	1.51	-0.14	0.029
116.00	-20.83	-0.70	0.00	-43.18	0.00	4	43.18	2645.25	665.88	2113.44	2081.45	1.57	-0.15	0.029
118.00	-20.46	-0.70	0.00	-41.77	0.00	4	11.77	2623.23	657.69	2061.74	2038.51	1.63	-0.15	0.028
120.00	-20.09	-0.70	0.00	-40.36	0.00	4	10.36	2600.95	649.49	2010.67	1995.80	1.70	-0.15	0.028
122.00	-19.72	-0.70	0.00	-38.95	0.00	3	38.95	2578.41	641.29	1960.25	1953.33	1.76	-0.16	0.028
124.00	-19.36	-0.70	0.00	-37.55	0.00	3	37.55	2555.60	633.10	1910.47	1911.10	1.83	-0.16	0.027
125.00	-19.19	-0.70	0.00	-36.85	0.00	3	36.85	2544.10	629.00	1885.82	1890.08	1.86	-0.16	0.027
125.00	-19.19	-0.70	0.00	-36.85	0.00	3	36.85	1882.48	504.07	1513.88	1403.39	1.86	-0.16	0.036
126.00	-19.04	-0.70	0.00	-36.15	0.00	3	36.15	1875.26	500.79	1494.25	1388.85	1.90	-0.16	0.036
128.00	-18.75	-0.70	0.00	-34.74	0.00	3	34.74	1860.60	494.24	1455.38	1359.83	1.96	-0.17	0.036
130.00	-18.46	-0.70	0.00	-33.34	0.00	3	33.34	1845.69	487.68	1417.02	1330.91	2.04	-0.17	0.035
132.00	-17.93	-0.70	0.00	-31.94	0.00	3	31.94	1830.51	481.12	1379.17	1302.09	2.11	-0.18	0.034
134.00	-17.42	-0.70	0.00	-30.54	0.00		30.54	1815.07	474.57	1341.84	1273.39	2.18	-0.18	0.034
135.00	-17.16	-0.69	0.00	-29.85	0.00	2	29.85	1823.78	478.25	1362.76	1289.51	2.22	-0.18	0.033
136.00	-17.02	-0.69	0.00	-29.15	0.00		29.15	1816.04	474.97	1344.14	1275.17	2.26	-0.19	0.032
138.00	-16.74	-0.69	0.00	-27.76	0.00		27.76	1800.35	468.42	1307.29	1246.57	2.34	-0.19	0.032
140.00 142.00	-16.46	-0.69	0.00	-26.38	0.00		26.38	1784.40	461.86	1270.94	1218.11	2.42	-0.19	0.031
144.00	-16.19 -15.92	-0.69 -0.69	0.00	-24.99	0.00		24.99	1768.19	455.30	1235.12	1189.78	2.50	-0.20	0.030
146.00	-15.65	-0.69	0.00	-23.60	0.00		23.60	1751.71	448.75	1199.80	1161.59	2.59	-0.20	0.029
148.00	-15.39	-0.69	0.00	-22.22 -20.83	0.00		2.22	1734.98	442.19	1165.00	1133.55	2.67	-0.21	0.029
150.00	-15.13	-0.69	0.00	-20.63 -19.45	0.00		20.83	1717.98	435.63	1130.70	1105.67	2.76	-0.21	0.028
152.00	-14.87	-0.69	0.00	-19.45	0.00		9.45	1700.71	429.08	1096.92	1077.96	2.85	-0.21	0.027
154.00	-14.61	-0.69	0.00	-16.69	0.00		8.07	1683.19	422.52	1063.66	1050.42	2.94	-0.22	0.026
156.00	-14.36	-0.69	0.00	-15.31	0.00		6.69 5.31	1665.40 1647.35	415.96	1030.90	1023.06	3.03	-0.22	0.025
158.00	-14.11	-0.69	0.00	-13.94	0.00		3.94	1629.04	409.41 402.85	998.66 966.93	995.89	3.12	-0.22	0.024
160.00	-13.87	-0.69	0.00	-12.56	0.00		2.56	1610.46	396.29	935.71	968.91	3.22	-0.23	0.023
162.00	-13.63	-0.68	0.00	-11.19	0.00		1.19	1591.62	389.74	905.01	942.14 915.58	3.31	-0.23	0.022
164.00	-13,39	-0.68	0.00	-9.82	0.00		9.82	1572.52	383.18	874.81	889.24	3.41	-0.23	0.021
165.00	-9.98	-0.51	0.00	-9.14	0.00		9.14	1562.88	379.90	859.91	876.15	3.51 3.56	-0.24	0.020
166.00	-9.87	-0.51	0.00	-8.63	0.00		8.63	1553.16	376.62	845.13	863.13	3.61	-0.24 -0.24	0.017
168.00	-9.66	-0.51	0.00	-7.61	0.00		7.61	1533.53	370.07	815.96	837.25	3.71	-0.24 -0.24	0.016 0.015
170.00	-9.44	-0.51	0.00	-6.60	0.00		6.60	1513.65	363.51	787.30	811.61	3.81	-0.2 4 -0.24	0.013
172.00	-9.24	-0.51	0.00	-5.58	0.00		5.58	1493.49	356.96	759.16	786.22	3.91	-0.24 -0.24	
174.00	-9.03	-0.50	0.00	-4.57	0.00		4.57	1473.08	350.40	731.53	761.10	4.01	-0.24 -0.25	0.013 0.012
175.00	-4.79	-0.21	0.00	-4.07	0.00		4.07	1462.77	347.12	717.90	748.63	4.06	-0.25 -0.25	0.012
176.00	-4.71	-0.21	0.00	-3.86	0.00		3.86	1452.40	343.84	704.41	736.23	4.12	-0.25 -0.25	
178.00	-4.54	-0.21	0.00	-3.44	0.00		3.44	1427.84	337.29	677.80	709.84	4.12	-0.25 -0.25	0.008 800.0
180.00	-4.37	-0.21	0.00	-3.03	0.00		3.03	1400.09	330.73	651.70	682.38	4.32	-0.25 -0.25	0.008
180.00	-4.37	-0.21	0.00	-3.03	0.00		3.03	678.42	203.53	25205.7	396.30	4.32	-0.25 -0.25	0.008
182.00	-4.19	-0.20	0.00	-2.61	0.00		2.61	678.42	203.53	25205.7	396.30	4.43	-0.25	0.014
184.00	-4.00	-0.20	0.00	-2.21	0.00		2.21	678.42		25205.7	396.30	4.53	-0.25	0.013
				Convric	ht @ 2022 h			inonsina Coluti		All delete			3.23	0.011

Structure: CT01497-S-SBA

Site Name: Plymouth 2 CT

195.00 (ft) Height:

Base Elev: 0.000 (ft)

Code:

TIA-222-H

С

Exposure: Crest Height: 0.00

Site Class:

D - Stiff Soil

Dase	LICY.	4.4	,	T	b.//	1		Struct Clas	e'			Page: 45	Tower Engineer	ing Solutions
Gh:		1.1		Торс	graphy:								-0.25	0.010
186.00	-3.82	-0.20	0.00	-1.80	0.00		1.80	678.42	203.53	25205.7	396.30	4.64		
		-0.20	0.00	-1.39	0.00		1.39	678.42	203.53	25205.7	396.30	4.75	-0.25	0.009
188.00	-3.64						0.99	678.42	203.53	25205.7	396.30	4.85	-0.25	0.008
190.00	-3.45	-0.20	0.00	-0.99	0.00				203.53	25205.7	396.30	4.96	-0.25	0.006
192.00	-3.27	-0.20	0.00	-0.59	0.00		0.59	678.42					-0.25	0.005
194.00	-3.09	-0.20	0.00	-0.20	0.00		0.20	678.42	203.53	25205.7	396.30	5.07		
		-0.18	0.00	0.00	0.00		0.00	678.42	203.53	25205.7	396.30	5.12	-0.25	0.000
195.00	0.00	-0.10	Q.00	0.00	0.50									

Code:

Structure: CT01497-S-SBA

195.00 (ft)

Site Name: Plymouth 2 CT

Exposure: С

Crest Height: 0.00

Site Class: D - Stiff Soil

TIA-222-H

Base Elev: 0.000 (ft) Gh: 1.1

Height:

Topography: 1 Struct Class: || Page: 46



Load Case: 0.9D + 1.0Ev +	1.0Eh					Y	Iterations	27
Gust Response Factor	1.10			Sds	0.20	X	Ss	0.18
Dead Load Factor	0.90	Seismic Load Factor	1.00	Sd1	0.09	3	S 1	0.05
Wind Load Factor	0.00	Structure Frequency (f1)	0.29	SA	0.03	Seismic Importa	nce Factor	1.00

Тор				Vertical	Lateral	
Elev	Description	Wz	Hz	Ev	Fs	
(ft)	Description	(lb)	(lb)	(lb)	(lb)	R: 1.50
0.00		0.00	0.00	0.00	0.00	
2.00		556.39	1.00	21.72	0.00	
4.00		552.57	3.00	21.57	0.00	
6.00		548.76	5.00	21.42	0.01	
8.00		544.95	7.00	21.27	0.01	
10.00		541.13	9.00	21.13	0.02	
12.00		537.32	11.00	20.98	0.03	
14.00		533.50	13.00	20.83	0.04	
16.00		529.69	15.00	20.68	0.05	
18.00		525.88	17.00	20.53	0.06	
20.00		522.06	19.00	20.38	0.08	
22.00		518.25	21.00	20.23	0.09	
24.00		514.44	23.00	20.08	0.11	
26.00		510.62	25.00	19.93	0.13	
28.00		506.81	27.00	19.79	0.15	
30.00		502.99	29.00	19.64	0.17	
32.00		499.18	31.00	19.49	0.19	
34.00 36.00		495.37	33.00	19.34	0.21	
		491.55	35.00	19.19	0.23	
38.00 40.00		487.74	37.00	19.04	0.26	
	Pot Costion 2	483.93	39.00	18.89	0.28	
41.00 42.00	Bot - Section 2	240.53	40.50	9.39	0.07	
44.00		462.76	41.50	18.07	0.29	
46.00		919.79	43.00	35.91	1.23	
48.00	Top - Section 1	912.16	45.00	35.61	1.32	
50.00	rop - Section (904.54	47.00	35.31	1.42	
52.00		470.93	49.00	18.39	0.42	
54.00		467.12	51.00	18.24	0.45	
56.00		463.30	53.00	18.09	0.47	
58.00		459.49	55.00	17.94	0.50	
60.00		455.68 451.86	57.00	17.79	0.53	
62.00		448.05	59.00	17.64	0.56	
64.00		444.24	61.00	17.49	0.59	
66.00		444.24	63.00	17.34	0.62	
68.00		436.61	65.00 67.00	17.19	0.64	
70.00	Appurtenance(s)	556.79	69.00	17.05 21.74	0.67	
72.00	, , , , , , , , , , , , , , , , , , , ,	428.69	71.00	16.74	1.16	
74.00		424.88	73.00		0.73	
76.00		424.06	75.00 75.00	16.59 16.44	0.76	
78.00		417.25	75.00	16.44	0.78	
80.00		413.44	79.00	16.29	0.81	
81.00	Top - Section 2	205.29	80.50	8.01	0.84 0.21	
82.00	F	173.71	81.50	6.78	0.21 0.16	
84.00		345.03	83.00	13.47	0.16	
85.00	Bot - Section 4	171.32	84.50	6.69	0.16	
		111.02	U-1.00	0.03	0.70	

CT01497-S-SBA Structure:

Code:

TIA-222-H

7/13/2023

Site Name: Plymouth 2 CT

Exposure:

C

Crest Height: 0.00

Height: 195.00 (ft) 0.000 (ft)

e: 47

Heigh	t: 195.00 (ft)		Crest neight.		
Base	Elev: 0.000 (ft)		Site Class:	D - Stiff Soil	
Gh:	1.1	Topography: 1	Struct Class:	II	Page
		323.87	85.50 12.64	0.60	
86.00		642.97	87.00 25.10	2.46	
88.00		636.62	89.00 24.85	2.52	
90.00	Ton Section 3	315.92	90.50 12.33	0.64	
91.00	Top - Section 3	167.87	91.50 6.55	0.19	
92.00		333.36	93.00 13.01	0.76	
94.00 96.00		330.18	95.00 12.89	0.77	
98.00		327.00	97.00 12.77	0.79	
100.00		323.82	99.00 12.64	0.81	
102.00		320.64	101.00 12.52		
104.00		317.47	103.00 12.39		
106.00		314.29	105.00 12.27	0.86	
108.00		311.11	107.00 12.15		
110.00		307.93	109.00 12.02		
112.00		304.75	111.00 11.90		
114.00		301.58	113.00 11.77		
116.00		298.40	115.00 11.65		
118.00		295.22	117.00 11.53		
120.00		292.04	119.00 11.40		
122.00		288.86	121.00 11.28		
124.00		285.68	123.00 11.15		
125.00	Top - Section 4	141.65	124.50 5.53		
126.00		116.71	125.50 4.56		
128.00		231.52	127.00 9.04		
130.00	Bot - Section 6	228.98	129.00 8.94		
132.00		416.98	131.00 16.28		
134.00		411.89	133.00 16.08		
135.00	Top - Section 5	204.04	134.50 7.97		
136.00	'	111.71	135.50 4.36		
138.00		221.51	137.00 8.65		
140.00		218.96	139.00 8.55		
142.00		216.42	141.00 8.45		
144.00		213.88	143.00 8.35		
146.00		211.34	145.00 8.25		
148.00		208.79	147.00 8.15		
150.00		206.25	149.00 8.05		
152.00		203.71	151.00 7.95		
154.00		201.17	153.00 7.85		
156.00		198.62	155.00 7.75		
158.00		196.08	157.00 7.66		
160.00		193.54	159.00 7.56		
162.00		191.00	161.00 7.46 163.00 7.36		
164.00		188.45			
165.00	Appurtenance(s)	2748.1	164.50 107.29 165.50 3.36		
166.00		86.03	167.00 6.64		
168.00		170.16	169.00 6.54		
170.00		167.61	171.00 6.44		
172.00		165.07	173.00 6.35		
174.00		162.53	174.50 133.51		
175.00	Appurtenance(s)	3419.8 69.36	175.50 135.51		
176.00			177.00 5.34		
178.00	_	136.82	179.00 5.24		
180.00	Top - Section 6	134.27	181.00 5.75		
182.00		147.25 147.25	183.00 5.75		
184.00		147.25 147.25	185.00 5.75		
186.00		147.25	187.00 5.75		
188.00		147.20			erved.
		Converget (c) 2023 by 1010	er ennineering adiudd	10. LLU. All HYING 100	., ,

Structure: CT01497-S-SBA **Code**: TIA-222-H 7/13/2023

Site Name:Plymouth 2 CTExposure:CHeight:195.00 (ft)Crest Height:0.00

Base Elev: 0.000 (ft) Site Class: D - Stiff Soil

Gh: 1.1 Topography: 1 Struct Class: II Page: 48

18 Tower Engineering Solutions

100.00						
190.00			147.25	189.00	5.75	0.61
192.00			147.25	191.00	5.75	0.62
194.00			147.25	193.00	5.75	0.63
195.00	Appurtenance(s)		2492.6	194.50	97.31	184.71
		Totals:	44,494.0		1,737.0	689.1

Total Wind: 30,365.1

CT01497-S-SBA Structure:

Code:

TIA-222-H

Sds

С

Site Name: Plymouth 2 CT

Exposure:

7/13/2023

Height:

Gh:

195.00 (ft)

Crest Height: 0.00

Base Elev: 0.000 (ft)

Topography: 1

D - Stiff Soil Site Class: Struct Class: II

1.00

0.29

Page: 49

Load Case: 0.9D + 1.0Ev + 1.0Eh

1.10

Iterations 27 0.18 Ss

Gust Response Factor Dead Load Factor

0.90 Seismic Load Factor

0.09 Sd1

0.05 **S1**

Wind Load Factor

0.00 Structure Frequency (f1)

0.03 Seismic Importance Factor SA

0.20

1.00

	AATU	u Load					resultant phi phi			phi	Total	Rotation	Rotation	=
Seg	Pu	Vu	Tu	Mu	Mu	Resultant	phi Pn	pni Vn	phi Tn	Mn	Deflect	Sway	Twist	Stress
Elev	FY (-)	FX (-)	MY (-)	MZ	MX (ft-kips)	Moment (ft-kips)	(kips)	(kips)	(ft-kips)	(ft-kips)	(in)	(deg)	(deg)	Ratio
(ft)	(kips)	(kips)	(ft-kips)	(ft-kips) -123.78	0.00	123.78	4628.91	1339.45	7126.38	6119.66		0.00	0.00	0.029
0.00	-42.12	-0.69	0.00		0.00	122.41	4612.68	1329.62	7022.11	6053.16		0.00	0.00	0.029
2.00	-41.59	-0.69	0.00	-122.41 -121.03	0.00	121.03	4596.18	1319.78	6918.62	5986.64		0.00	0.00	0.029
4.00	-41.07	-0.69	0.00	-121.03	0.00	119.65	4579.43	1309.95	6815.89	5920.10		0.00	-0.01	0.029
6.00	-40.55	-0.69	0.00	-118.27	0.00	118.27	4562.40	1300.11	6713.93	5853.55		0.01	-0.01	0.029
8.00	-40.03	-0.69	0.00	-116.27	0.00	116.89	4545.12	1290.28	6612.74	5787.00		0.01	-0.01	0.029
10.00	-39.52	-0.69	0.00	-115.50	0.00	115.50	4527.57	1280.44	6512.31	5720.46		0.01	-0.01	0.029
12.00	-39.01	-0.69		-114.11	0.00	114.11	4509.77	1270.61	6412.66	5653.92		0.02	-0.01	0.029
14.00	-38.51	-0.70		-112.72	0.00	112.72	4491.69	1260.77	6313.77	5587.41		0.02	-0.01	0.029
16.00	-38.01	-0.70		-112.72	0.00	111.32	4473.36	1250.94	6215.65	5520.93		0.03	-0.02	0.029
18.00	-37.51	-0.70		-109.93	0.00	109.93	4454.76	1241.10	6118.30	5454.49		0.04	-0.02	0.028
20.00	-37.02	-0.70		-109.93	0.00	108.53	4435.90	1231.27	6021.72	5388.08		0.05	-0.02	0.028
22.00	-36.53	-0.70		-108.53	0.00	107.13	4416.78	1221.43	5925.90	5321.73		0.06	-0.02	0.028
24.00	-36.04	-0.70		-107.13	0.00	105.73	4397.40	1211.60	5830.86	5255.44		0.07	-0.02	0.028
26.00	-35.55	-0.70		-105.73	0.00	104.33	4377.75	1201.76	5736.58	5189.22		0.08	-0.03	0.028
28.00	-35.08	-0.70		-104.33	0.00	102.92	4357.84	1191.93	5643.07	5123.07		0.09	-0.03	0.028
30.00	-34.60	-0.70		-102.92	0.00	101.51	4337.67	1182.09	5550.33	5057.01		0.10	-0.03	0.028
32.00	-34.13	-0.70		-101.51	0.00	100.10	4317.23	1172.26	5458.36	4991.03		0.11	-0.03	0.028
34.00	-33.66	-0.71			0.00	98.69	4296.53	1162.42	5367.16	4925.16		0.13	-0.03	0.028
36.00	-33.19	-0.71		-98.69 -97.28	0.00	97.28	4275.57	1152.59	5276.73	4859.38		0.14	-0.04	0.028
38.00	-32.73	-0.71		-97.20 -95.87	0.00	95.87	4254.35	1142.76	5187.06	4793.73		0.16	-0.04	0.028
40.00	-32.27	-0.71		-95.07 -95.16	0.00	95.16	4243.64	1137.84	5142.51	4760.94		0.17	-0.04	0.028
41.00	-32.04	-0.71		-95.16 -94.45	0.00	94.45	4232.86	1132.92	5098.16	4728.19		0.18	-0.04	0.027
42.00	-31.61	-0.71		-94.45 -93.04	0.00	93.04	4211.11	1123.09	5010.03	4662.78		0.19	-0.04	0.027
44.00	-30.74	-0.71		-93.0 4 -91.62	0.00	91.62	4189.10	1113.25	4922.67	4597.51		0.21	-0.05	0.027
46.00	-29.88	-0.71		-90.21	0.00	90.21	4202.19	1119.08	4974.38	4636.19		0.23	-0.05	0.026
48.00	-29.03	-0.71		-88.80	0.00	88.80	4180.07	1109.25	4887.33	4570.98		0.25	-0.05	0.026
50.00	-28.58	-0.71		-87.39	0.00	87.39	4157.69	1099.41	4801.05	4505.91		0.27	-0.05	0.026
52.00	-28.14	-0.71		-85.98	0.00	85.98	4135.04	1089.58	4715.54	4441.00		0.30	-0.06	0.026
54.00	-27.70	-0.71		-85.96 -84.57	0.00	84.57	4112.14	1079.74	4630.79	4376.25		0.32	-0.06	0.026
56.00	-27.26	-0.71		-84.5 <i>1</i> -83.15	0.00	83.15	4088.97	1069.91	4546.82	4311.67		0.35	-0.06	0.026
58.00	-26.83	-0.71			0.00	81.74	4065.54	1060.07	4463.61	4247.27		0.37	-0.06	0.026
60.00	-26.40	-0.71		-81.74 -80.33	0.00	80.33	4041.84	1050.24	4381.17	4183.06		0.40	-0.06	0.026
62.00	-25.98	-0.71			0.00	78.91	4017.89	1040.40	4299.50	4119.03		0.42	-0.07	0.026
64.00	-25.56	-0.71		-78.91 -77.50		77.50	3993.67	1030.57	4218.60	4055.21		0.45	-0.07	0.025
66.00	-25.14	-0.71			0.00	76.09	3969.18	1020.73	4138.47	3991.60		0.48	-0.07	0.025
68.00	-24.73	-0.71				74.68	3944.44	1010.90	4059.10	3928.21		0.51	-0.07	0.025
70.00	-24.20	-0.71				73.27	3919.43	1001.06	3980.51	3865.04		0.54	-0.08	0.025
72.00	-23.79	-0.71				71.86	3894.16	991.23	3902.68	3802.10		0.58	-0.08	0.025
74.00	-23.39	-0.70				70.45	3868.63	981.39	3825.62	3739.40		0.61	-0.08	0.025
76.00	-22.99	-0.70				69.04	3842.83	971.56	3749.33	3676.95		0.65	-0.08	0.025
78.00	-22.59					67.63	3816.78	961.72		3614.75		0.68	-0.09	0.025
80.00	-22.20	-0.70				66.92	3803.65	956.81	3636.33	3583.75		0.70	-0.09	0.024
81.00	-22.01	-0.70				66.92	2964.89	798.43	3038.55	2801.11		0.70	-0.09	0.031
81.00	-22.01	-0.70				66.22	2956.04	794.33		2778.31		0.72	-0.09	0.031
82.00	-21.84					64.81	2938.13	786.13				0.76	-0.09	0.031
84.00	-21.51	-0.70				64.11	2929.08	782.04		2710.08		0.78	-0.09	0.031
85.00	-21.35	-0.70	0.00	-64.11	0.00		innaring Sa							

Copyright © 2023 by Tower Engineering Solutions, LLC. All rights reserved.

Structure: CT01497-S-SBA

Site Name: Plymouth 2 CT Height:

195.00 (ft)

Base Elev: 0.000 (ft)

Code: TIA-222-H

Exposure: С Crest Height: 0.00

Site Class:

D - Stiff Soil

Gh:		1.1	` ,	Тор	ography:	1	Struct Cla	ss: II	Otili Ooi	•	Page: 50	Tower Enginee	ering Solutions
86.00	-21.05	-0.70	0.00	-63.40	0.00	63.40	2919.97	777.94	2884.60	2687.40	0.79	-0.10	0.031
88.00	-20.44	-0.70	0.00	-62.00	0.00	62.00	2901.54	769.74	2824.14	2642.11	0.84	-0.10	0.031
90.00	-19.84	-0.70	0.00	-60.59	0.00	60.59	2882.85	761.55	2764.32	2596.94	0.88	-0.10	0.031
91.00	-19.54	-0.70	0.00	-59.90	0.00	59.90	2898.33	768.33	2813.78	2634.30	0.90	-0.10	0.030
92.00	-19.38	-0.70	0.00	-59.20	0.00	59.20	2889.00	764.23	2783.84	2611.72	0.92	-0.11	0.029
94.00	-19.06	-0.70	0.00	-57.80	0.00	57.80	2870.13	756.03	2724.45	2566.64	0.97	-0.11	0.029
96.00	-18.75	-0.70	0.00	-56.40	0.00	56.40	2851.00	747.84	2665.70	2521.69	1.01	-0.11	0.029
98.00	-18.44	-0.70	0.00	- 55.01	0.00	55.01	2831.61	739.64	2607.60	2476.90	1.06	-0.11	0.029
100.00	-18.13	-0.70	0.00	-5 3.61	0.00	53.61	2811.95	731.45	2550.13	2432.25	1.11	-0.12	0.028
102.00	-17.82	-0.70	0.00	-52.22	0.00	52.22	2792.03	723.25	2493.30	2387.76	1.16	-0.12	0.028
104.00	-17.52	-0.70	0.00	-50.83	0.00	50.83	2771.85	715.06	2437.12	2343.44	1.21	-0.12	0.028
106.00	-17.22	-0.70	0.00	-49.43	0.00	49.43	2751.41	706.86	2381.57	2299.29	1.26	-0.13	0.028
108.00	-16.93	-0.70	0.00	-48.04	0.00	48.04	2730.70	698.66	2326.66	2255.33	1.32	-0.13	0.028
110.00 112.00	-16.63	-0.69	0.00	-46.65	0.00	46.65	2709.73	690.47	2272.40	2211.55	1.37	-0.13	0.027
114.00	-16.34 -16.06	-0.69	0.00	-45.26	0.00	45.26	2688.50	682.27	2218.77	2167.98	1.43	-0.14	0.027
116.00	-15.77	-0.69 -0.69	0.00	-43.88	0.00	43.88	2667.01	674.08	2165.79	2124.61	1.49	-0.14	0.027
118.00	-15.49	-0.69	0.00 0.00	-42.49	0.00	42.49	2645.25	665.88	2113.44	2081.45	1.55	-0.14	0.026
120.00	-15.49 -15.21	-0.69	0.00	-41.10	0.00	41.10	2623.23	657.69	2061.74	2038.51	1.61	-0.15	0.026
122.00	-14.94	-0.69	0.00	-39.72 -38.34	0.00	39.72	2600.95	649.49	2010.67	1995.80	1.67	-0.15	0.026
124.00	-14.67	-0.69	0.00	-36.96	0.00 0.00	38.34	2578.41	641.29	1960.25	1953.33	1.73	-0.15	0.025
125.00	-14.53	-0.69	0.00	-36.27	0.00	36.96	2555.60	633.10	1910.47	1911.10	1.80	-0.16	0.025
125.00	-14.53	-0.69	0.00	-36.27	0.00	36.27 36.27	2544.10	629.00	1885.82	1890.08	1.83	-0.16	0.025
126.00	-14.42	-0.69	0.00	-35.58	0.00	35.58	1882.48 18 7 5.26	504.07	1513.88	1403.39	1.83	-0.16	0.034
128.00	-14.20	-0.69	0.00	-34.20	0.00	34.20		500.79	1494.25	1388.85	1.87	-0.16	0.033
130.00	-13.98	-0.69	0.00	-32.82	0.00	32.82	1860.60 1845.69	494.24	1455.38	1359.83	1.94	-0.17	0.033
132.00	-13.58	-0.69	0.00	-31.44	0.00	31.44	1830.51	487.68 481.12	1417.02 1379.17	1330.91	2.01	-0.17	0.032
134.00	-13.19	-0.68	0.00	-30.07	0.00	30.07	1815.07	474.57	1341.84	1302.09 1273.39	2.08	-0.17	0.032
135.00	-13.00	-0.68	0.00	-29.39	0.00	29.39	1823.78	478.25	1362.76	1273.39	2.15 2.19	-0.18	0.031
136.00	-12.89	-0.68	0.00	-28.70	0.00	28.70	1816.04	474.97	1344.14	1209.51	2.19	-0.18	0.030
138.00	-12.68	-0.68	0.00	-27.34	0.00	27.34	1800.35	468.42	1307.29	1246.57	2.30	-0.18 -0.19	0.030
140.00	-12.47	-0.68	0.00	-25.97	0.00	25.97	1784.40	461.86	1270.94	1218.11	2.38	-0.19	0.029 0.028
142.00	-12.26	-0.68	0.00	-24.61	0.00	24.61	1768.19	455.30	1235.12	1189.78	2.46	-0.19	0.028
144.00	-12.06	-0.68	0.00	-23.24	0.00	23.24	1751.71	448.75	1199.80	1161.59	2.55	-0.20	0.023
146.00	-11.86	-0.68	0.00	-21.88	0.00	21.88	1734.98	442.19	1165.00	1133.55	2.63	-0.20	0.026
148.00	-11.66	-0.68	0.00	-20.52	0.00	20.52	1717.98	435.63	1130.70	1105.67	2.72	-0.21	0.025
150.00	-11.46	-0.68	0.00	-19.16	0.00	19.16	1700.71	429.08	1096.92	1077.96	2.80	-0.21	0.025
152.00	-11.26	-0.68	0.00	-17.80	0.00	17.80	1683.19	422.52	1063.66	1050.42	2.89	-0.21	0.024
154.00	-11.07	-0.68	0.00	-16.44	0.00	16.44	1665.40	415.96	1030.90	1023.06	2.98	-0.22	0.023
156.00	-10.88	-0.68	0.00	-15.09	0.00	15.09	1647.35	409.41	998.66	995.89	3.07	-0.22	0.022
158.00	-10.69	-0.68	0.00	-13.74	0.00	13.74	1629.04	402.85	966.93	968.91	3.17	-0.22	0.021
160.00	-10.51	-0.68	0.00	-12.38	0.00	12.38	1610.46	396.29	935.71	942.14	3.26	-0.23	0.020
162.00	-10.32	-0.67	0.00	-11.03	0.00	11.03	1591.62	389.74	905.01	915.58	3.36	-0.23	0.019
164.00	-10.14	-0.67	0.00	-9.69	0.00	9.69	1572.52	383.18	874.81	889.24	3.45	-0.23	0.017
165.00	-7.56	-0.50	0.00	-9.01	0.00	9.01	1562.88	379.90	859.91	876.15	3.50	-0.23	0.015
166.00	-7.48 7.22	-0.50	0.00	-8.51	0.00	8.51	1553.16	376.62	845.13	863.13	3.55	-0.23	0.015
168.00 170.00	-7.32 7.16	-0.50	0.00	-7.51	0.00	7.51	1533.53	370.07	815.96	837.25	3.65	-0.24	0.014
170.00	-7.16 7.00	-0.50	0.00	-6.50	0.00	6.50	1513.65	363.51	787.30	811.61	3.75	-0.24	0.013
174.00	-7.00 -6.84	-0.50 -0.50	0.00	-5.50	0.00	5.50	1493.49	356.96	759.16	786.22	3.85	-0.24	0.012
175.00	-0.64 -3.63	-0.20	0.00 0.00	-4.50 4.01	0.00	4.50	1473.08	350.40	731.53	761.10	3.95	-0.24	0.011
176.00	-3.57	-0.20	0.00	-4.01 3.80	0.00	4.01	1462.77	347.12	717.90	748.63	4.00	-0.24	800.0
178.00	-3.44	-0.20	0.00	-3.80 -3.39	0.00	3.80	1452.40	343.84	704.41	736.23	4.05	-0.24	800.0
180.00	-3.31	-0.20	0.00	-3.39 -2.99	0.00	3.39	1427.84	337.29	677.80	709.84	4.16	-0.25	0.007
180.00	-3.31	-0.20	0.00	-2.99 -2.99	0.00 0.00	2.99	1400.09	330.73	651.70	682.38	4.26	-0.25	0.007
182.00	-3:17	-0.20	0.00	-2.58	0.00	2.99 2.58	678.42 678.42	203.53	25205.7	396.30	4.26	-0.25	0.012
184.00	-3.03	-0.20	0.00	-2.18	0.00	2.56	678.42 678.42	203.53	25205.7	396.30	4.36	-0.25	0.011
·						2.10	0/0.42	203.33	25205.7	396.30	4.47	-0.25	0.010

Code:

CT01497-S-SBA Structure:

Site Name: Plymouth 2 CT 195.00 (ft)

Base Elev: 0.000 (ft)

Height:

Exposure: Crest Height: 0.00

> D - Stiff Soil Site Class:

C

TIA-222-H

2000		- '	,									DE4	Tower Engineer	ing solutions
Gh:		1.1		Topo	ography:	1		Struct Clas	ss: II			Page: 51		
	_			4.70	0.00		1.78	678.42	203.53	25205.7	396.30	4.57	-0.25	0.009
186.00	-2.90	-0.20	0.00	-1.78	0.00					25205.7	396.30	4.67	-0.25	0.008
188.00	-2.76	-0.20	0.00	-1.38	0.00		1.38	678.42	203.53				-0.25	0.006
	-2.62	-0.20	0.00	-0.98	0.00		0.98	678.42	203.53	25205.7	396.30	4.78		
190.00			•	-0.59	0.00		0.59	678.42	203.53	25205.7	396.30	4.88	-0.25	0.005
192.00	-2.48	-0.20	0.00				_	678.42	203.53	25205.7	396.30	4.99	-0.25	0.004
194.00	-2.34	-0.19	0.00	-0.19	0.00		0.19						-0.25	0.000
195.00	0.00	-0.18	0.00	0.00	0.00		0.00	678.42	203.53	25205.7	396.30	5.04	-0.23	0.000

Structure: CT01497-S-SBA

Site Name: Plymouth 2 CT Height: 195.00 (ft)

Base Elev: 0.000 (ft)

Gh: 1.1 Code:

TIA-222-H

Exposure: Crest Height: 0.00

Site Class:

D - Stiff Soil

Struct Class: ||

7/13/2023

(((MI)))

Page: 52

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00 **Wind Load Factor** 1.00

Topography: 1



Iterations 29

Elev (ft) Descri	otion	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (Ib)	Tot Dead Load (lb)
0.00		1.00	0.85	6.464	7.11	297.48	0.630	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	6.464	7.11	295.31	0.630	0.000		10.876	6.85	48.7	0.0	517.5
4.00		1.00	0.85	6.464	7.11	293.13	0.630	0.000		10.796	6.80	48.4	0.0	513.7
6.00		1.00	0.85	6.464	7.11	290.96	0.630	0.000		10.717	6.75	48.0	0.0	509.9
8.00		1.00	0.85	6.464	7.11	288.79	0.630	0.000		10.637	6.70	47.6	0.0	506.1
10.00		1.00	0.85	6.464	7.11	286.62		0.000		10.557	6.65	47.3	0.0	502.3
12.00		1.00	0.85	6.464	7.11	284.45	0.630	0.000		10.478	6.60	46.9	0.0	498.4
14.00		1.00	0.85	6.464	7.11	282.28	0.630	0.000		10.398	6.55	46.6	0.0	494.6
16.00		1.00	0.86	6.544	7.20	281.83	0.630	0.000		10.318	6.50	46.8	0.0	490.8
18.00		1.00	88.0	6.708	7.38	283.13	0.630	0.000		10.239	6.45	47.6	0.0	487.0
20.00		1.00	0.90	6.859	7.54	284.05	0.630	0.000		10.159	6.40	48.3	0.0	483.2
22.00		1.00	0.92	6.998	7.70	284.66	0.630	0.000		10.079	6.35	48.9	0.0	479.4
24.00		1.00	0.94	7.127	7.84	285.00	0.630	0.000	2.00	9.999	6.30	49.4	0.0	475.6
26.00		1.00	0.95	7.248	7.97	285.11	0.630	0.000	2.00	9.920	6.25	49.8	0.0	471.7
28.00		1.00	0.97	7.362	8.10	285.02	0.630	0.000	2.00	9.840	6.20	50.2	0.0	467.9
30.00		1.00	0.98	7.470	8.22	284.77	0.630	0.000	2.00	9.760	6.15	50.5	0.0	464.1
32.00		1.00	1.00	7.572	8.33	284.36	0.630	0.000	2.00	9.681	6.10	50.8	0.0	460.3
34.00		1.00	1.01	7.669	8.44	283.81	0.630	0.000	2.00	9.601	6.05	51.0	0.0	456.5
36.00		1.00	1.02	7.762	8.54	283.15	0.630	0.000	2.00	9.521	6.00	51.2	0.0	452.7
38.00		1.00	1.03	7.851	8.64	282.37	0.630	0.000	2.00	9.442	5.95	51.4	0.0	448.9
40.00		1.00	1.04	7.936	8.73	281.49	0.630	0.000	2.00	9.362	5.90	51.5	0.0	445.0
41.00 Bot - Section	2	1.00	1.05	7.978	8.78	281.02	0.630	0.000	1.00	4.651	2.93	25.7	0.0	221.1
42.00		1.00	1.05	8.018	8.82	280.52	0.630	0.000	1.00	4.695	2.96	26.1	0.0	443.3
44.00		1.00	1.06	8.097	8.91	279.47	0.630	0.000	2.00	9.330	5.88	52.4	0.0	880.9
46.00		1.00	1.07	8.173	8.99	278.34	0.630	0.000	2.00	9.250	5.83	52.4	0.0	873.3
48.00 Top - Section	1 .	1.00	1.08	8.247	9.07	277.14	0.630	0.000	2.00	9.170	5.78	52.4	0.0	865.7
50.00	•	1.00	1.09	8.318	9.15	279.79	0.630	0.000	2.00	9.091	5.73	52.4	0.0	432.1
52.00		1.00	1.10	8.387	9.23	278.47	0.630	0.000	2.00	9.011	5.68	52.4	0.0	428.2
54.00	•	1.00	1.11	8.454	9.30	277.10	0.630	0.000	2.00	8.931	5.63	52.3	0.0	424.4
56.00	•	1.00	1.12	8.519	9.37	275.67	0.630	0.000	2.00	8.851	5.58	52.3	0.0	420.6
58.00	•	1.00	1.13	8.582	9.44	274.19	0.630	0.000	2.00	8.772	5.53	52.2	0.0	416.8
60.00	•	1.00	1.14	8.643	9.51	272.66	0.630	0.000	2.00	8.692	5.48	52.1	0.0	413.0
62.00		1.00	1.14	8.703	9.57	271.08	0.630	0.000	2.00	8.612	5.43	51.9	0.0	409.2
64.00	•	1.00	1.15	8.762	9.64	269.46	0.630	0.000	2.00	8.533	5.38	51.8	0.0	405.4
66.00	•	1.00	1.16	8.819	9.70	267.80	0.630	0.000	2.00	8.453	5.33	51.7	0.0	401.5
68.00		1.00	1.17	8.874	9.76	266.10	0.630	0.000	2.00	8.373	5.28	51.5	0.0	397.7
70.00 Appurtenance	(s) 1	1.00	1.17	8.929	9.82	264.36	0.630	0.000	2.00	8.294	5.23	51.3	0.0	393.9
72.00	1	1.00	1.18	8.982	9.88	262.58	0.630	0.000	2.00	8.214	5.17	51.1	0.0	390.1
74.00	1	1.00	1.19	9.034	9.94	260.77	0.630	0.000	2.00	8.134	5.12	50.9	0.0	386.3
76.00	1	1.00	1.19	9.085	9.99	258.93	0.630	0.000	2.00	8.055	5.07	50.7	0.0	382.5
78.00		1.00	1.20	9.134	10.05	257.06	0.630	0.000	2.00	7.975	5.02	50.5	0.0	378.7
80.00		1.00	1.21	9.183	10.10	255.16		0.000	2.00	7.895	4.97	50.2	0.0	374.8
81.00 Top - Section		1.00	1.21	9.207	10.13	254.20	0.630	0.000	1.00	3.918	2.47	25.0	0.0	186.0
82.00		1.00	1.21	9.231	10.15	253.23	0.630	0.000	1.00	3.898	2.46	24.9	0.0	154.4
84.00		1.00		9.278	10.21	251.27	0.630	0.000	2.00	7.736	4.87	49.7	0.0	306.4
85.00 Bot - Section 4		1.00		9.301	10.23	250.28	0.630	0.000	1.00	3.838	2.42	24.7	0.0	152.0
86.00	1	1.00	1.23	9.324	10.26	249.28	0.630	0.000	1.00		2.44	25.0	0.0	304.6

Copyright © 2023 by Tower Engineering Solutions, LLC. All rights reserved.

Structure: CT01497-S-SBA

Code: Site Name: Plymouth 2 CT

С Exposure: Crest Height: 0.00

TIA-222-H

195.00 (ft) Height: Site Class: D - Stiff Soil

Base Elev: 0.000 (ft)



Gh: 1.1	/	Topography	: 1	Stri	uct Cla	ıss: II				Page: 53	Tower Er	ngineering Solutions
	1.00	1.23 9.369	10.31	247.27	0.630	0.000	2.00	7.682	4.84	49.9	0.0	604.4
88.00	1.00	1.24 9.414	10.36	245.24	0.630	0.000	2.00	7.603	4.79	49.6	0.0	598.0
90.00 91.00 Top - Section 3	1.00	1.24 9.436	10.38	244.21	0.630	0.000	1.00	3.771	2.38	24.7	0.0	296.6
92.00 92.00	1.00	1.24 9.457	10.40	246.67	0.630	0.000	1.00	3.752	2.36	24.6	0.0	148.6
94.00	1.00	1.25 9.500	10.45	244.59	0.630	0.000	2.00	7.443	4.69	49.0	0.0	294.8
96.00	1.00	1.25 9.542	10.50	242.50	0.630	0.000	2.00	7.364	4.64	48.7	0.0	291.6
98.00	1.00	1,26 9.584	10.54	240.38	0.630	0.000	2.00	7.284	4.59	48.4	0.0	288.4 285.2
100.00	1.00	1.27 9.625	10.59	238.24	0.630	0.000	2.00	7.204	4.54	48.1	0.0	282.1
102.00	1.00	1.27 9.665	10.63	236.08	0.630	0.000	2.00	7.125	4.49	47.7	0.0 0.0	278.9
104.00	1.00	1.28 9.705	10.68	233.91	0.630	0.000	2.00	7.045	4.44	47.4 47.0	0.0	275.7
106.00	1.00	1.28 9.744	10.72	231.71	0.630	0.000	2.00	6.965	4.39	46.7	0.0	272.5
108.00	1.00	1.29 9.782	10.76	229.49	0.630	0.000	2.00	6.886	4.34	46.3	0.0	269.3
110.00	1.00	1.29 9.820	10.80	227.26	0.630	0.000	2.00	6.806 6.726	4.29 4.24	45.9	0.0	266.2
112.00	1.00	1.30 9.857	10.84	225.01	0.630	0.000	2.00 2.00	6.646	4.19	45.6	0.0	263.0
114.00	1.00	1.30 9.894	10.88	222.74	0.630 0.630	0.000	2.00	6.567	4.14	45.2	0.0	259.8
116.00	1.00	1.31 9.930	10.92	220.46		0.000	2.00	6.487	4.09	44.8	0.0	256.6
118.00	1.00	1.31 9.966	10.96	218.16	0.630 0.630	0.000	2.00	6.407	4.04	44.4	0.0	253.4
120.00	1.00	1.32 10.001	11.00	215.85	0.630	0.000 0.000	2.00	6.328	3.99	44.0	0.0	250.3
122.00	1.00	1.32 10.036	11.04	213.52 211.17	0.630	0.000	2.00	6.248	3.94	43.6	0.0	247.1
124.00	1.00	1.32 10.071	11.08		0.630	0.000	1.00	3.094	1.95	21.6	0.0	122.4
125.00 Top - Section 4	1.00	1.33 10.088	11.10	209.99 208.81	0.630	0.000	1.00	3.074	1.94	21.5	0.0	97.4
126.00	1.00	1.33 10.105	11.12	206.44	0.630	0.000	2.00	6.089	3.84	42.8	0.0	192.9
128.00	1.00	1.33 10.138	11.15	204.05	0.630	0.000	2.00	6.009	3.79	42.4	0.0	190.4
130.00 Bot - Section 6	1.00	1.34 10.171	11.19 11.22	204.05	0.630	0.000	2.00	6.014	3.79	42.5	0.0	378.4
132.00	1.00	1.34 10.204 1.35 10.237	11.22	199.24	0.630	0.000	2.00	5.934	3.74	42.1	0.0	373.3
134.00	1.00	1.35 10.257	11.28	198.03	0.630	0.000	1.00	2.937	1.85	20.9	0.0	184.7
135.00 Top - Section 5	1.00	1.35 10.269	11.30	199.72	0.630	0.000	1.00	2.917	1.84	20.8	0.0	92.4
136.00	1.00 1.00	1.35 10.209	11.33	197.29	0.630	0.000	2.00	5.775	3.64	41.2	0.0	182.9
138.00	1.00	1.36 10.331	11.36	194.84	0.630	0.000	2.00	5.695	3.59	40.8	0.0	180.4
140.00	1.00	1.36 10.362	11.40	192.38	0.630	0.000	2.00	5.616	3.54	40.3	0.0	177.8
142.00	1.00	1.37 10.393	11.43	189.91	0.630	0.000	2.00	5.536	3.49	39.9	0.0	175.3
144.00	1.00	1.37 10.423	11.47	187.43	0.630	0.000	2.00	5.456	3.44	39.4	0.0	172.7
146.00	1.00	1.37 10.453	11.50	184.94	0.630	0.000	2.00	5.376	3.39	38.9	0.0	170.2
148.00	1.00	1.38 10.483	11.53	182.43	0.630	0.000	2.00	5.297	3.34	38.5	0.0	167.7
150.00 152.00	1.00	1.38 10.512	11.56	179.92	0.630	0.000	2.00	5.217	3.29	38.0	0.0	165.1
154.00	1.00	1.39 10.541	11.59	177.39	0.630	0.000	2.00	5.137	3.24	37.5	0.0	162.6
156.00	1.00	1.39 10.569	11.63	174.86	0.630	0.000	2.00	5.058	3.19	37.0	0.0	160.0
158.00	1.00	1.39 10.598	11.66	172.31	0.630	0.000	2.00	4.978	3.14	36.6	0.0	157.5
160.00	1.00	1.40 10.626	11.69	169.76	0.630	0.000	2.00	4.898	3.09	36.1	0.0	154.9
162.00	1.00	1.40 10.654	11.72	167.19	0.630	0.000	2.00	4.819	3.04	35.6	0.0	152.4
164.00	1.00	1.40 10.681	11.75	164.62	0.630	0.000	2.00	4.739	2.99	35.1	0.0	149.9 74.0
165.00 Appurtenance(s)	1.00	1.41 10.695		163.33	0.630	0.000	1.00		1.47	17.3	0.0	73.3
166.00	1.00	1.41 10.709	11.78	162.03	0.630	0.000	1.00	2.320	1.46	17.2	0.0	144.8
168.00	1.00	1.41 10.736	11.81	159.44	0.630	0.000	2.00	4.580	2.89	34.1	0.0	142.2
170.00	1.00	1.42 10.762		156.83	0.630	0.000	2.00	4.500	2.83	33.6	0.0 0.0	139.7
172.00	1.00	1.42 10.789		154.22	0.630	0.000	2.00	4.420	2.78	33.0	0.0	137.1
174.00	1.00	1.42 10.815		151.60	0.630	0.000	2.00	4.341	2.73	32.5	0.0	67.6
175.00 Appurtenance(s)	1.00	1.42 10.828		150.29	0.630	0.000	1.00	2.140	1.35	16.1	0.0	67.0
176.00	1.00	1.43 10.841	11.93	148.97	0.630	0.000	1.00	2.120	1.34 2.63	15.9 31.5	0.0	132.1
178.00	1.00	1.43 10.867		146.33	U.03U	0.000	2.00	4.181 4.102	2.58	31.0	0.0	129.5
180.00 Top - Section 6	1.00	1.43 10.893		143.69	0.030	0.000	2.00	4.000	1.80	21.6	0.0	142.5
182.00	1.00	1.44 10.918		141.67		0.000	2.00 2.00	4.000	1.80	21.7	0.0	142.5
184.00	1.00	1.44 10.943		141.83		0.000 0.000	2.00	4.000	1.80	21.7	0.0	142.5
186.00	1.00	1.44 10.968		141.99	0.450	0.000	2.00	4.000	1.80	21.8	0.0	142.5
188.00	1.00	1.45 10.993		142.15 142.31	0.450 0.450	0.000	2.00	4.000	1.80	21.8	0.0	142.5
190.00	1.00	1.45 11.017								=		
		Convright © 20	23 by To	ver Engine	ering Sc	olutions, LL	.C. All right	s reserve	ea.			

Structure: CT01497-S-SBA

Site Name: Plymouth 2 CT

Height: 195.00 (ft)

Base Elev: 0.000 (ft)

Code:

TIA-222-H

D - Stiff Soil

Exposure: С

Crest Height: 0.00

Site Class:

7/13/2023

(((HI))

ower	Engi	necri	ng	So

Gh:	1.1		Topography	: 1	Str	uct Cl	ass: II				Page: 54	Tower E	ingineering Solutio
192.00		1.00	1.45 11.042	12.15	142.47	0.450	0.000	2.00	4.000	1.80	21.9	0.0	142.5
194.00		1.00	1.46 11.066	12.17	142.62	0.450	0.000	2.00	4.000	1.80	21.9	0.0	142.5
195.00 Appu	ırtenance(s)	1.00	1.46 11.078	12.19	142.70	0.450	0.000	1.00	2.000	0.90	11.0	0.0	71.3
							Totals:	195.00			4.271.1	Ş. -	32.588.3

Discrete Appurtenance Forces

CT01497-S-SBA Structure:

Site Name: Plymouth 2 CT

195.00 (ft) Height: Base Elev: 0.000 (ft)

Gh:

Code:

TIA-222-H

С Exposure:

Crest Height: 0.00 D - Stiff Soil Site Class:

Struct Class: ||

7/13/2023

Page: 55

Load Case: 1.0D + 1.0W 60 mph Wind

1.00 **Dead Load Factor** 1.00 Wind Load Factor

Topography: 1



Iterations

29

					gzGh	Orient Factor		Total CaAa	Dead Load	Horiz Ecc	Vert Ecc	Wind FX	Mom Y	Mom Z
No.	Elev (ft)	Description	Qty	qz (psf)	(psf)	x Ka	Ka	(sf)	(lb)	(ft)	(ft)	(lb)	(lb-ft)	(lb-ft)
-		800 MHz RRH	3	11.090	12,199	0.60	0.90	4.50	159.00	0.000	1.000	54.95	0.00	54.95
1		APXVSPP18-C-A20	3	11.090	12.199	0.75	0.90	17.97	171.00	0.000	1.000	219.25	0.00	219.25
2		APXVTM14-C-I20	3	11.090	12.199	0.69	0.90	13.18	168.60	0.000	1.000	160.79	0.00	160.79
3		1900MHz RRH (65MHz)	3	11.090	12.199	0.60	0.90	5.01	180.00	0.000	1.000	61.13	0.00	61.13
4		T-Arms w/ Working	3	11.078	12,186	0.56	0.75	27.00	1500.00	0.000	0.000	329.01	0.00	0.00
5		TD-RRH8x20-25	3	11.090	12.199	0.60	0.90	7.33	210.00	0.000	1.000	89.37	0.00	89.37
6		ALU 800MHz External	3	11.090		0.60	0.90	1.41	26.40	0.000	1.000	17.21	0.00	17.21
/		ACU-A20-N	4	11.090	12,199	0.60	0.90	0.34	4.00	0.000	1.000	4.12	0.00	4.12
8		(3) T-Arm Kit	1	10.828	11.911	0.56	0.75	9.00	500.00	0.000	0.000	107.20	0.00	0.00
9 10		FE15501P77/75	6	10.828	11.911	0.54	0.80	2.28	105.00	0.000	0.000	27.20	0.00	0.00
11		4449 B71 + B85	3	10.828	11.911	0.54	0.80	3.17	225.00	0.000	0.000	37.73	0.00	0.00
12		KRY 112 489/2	3	10.828	11.911	0.54	0.80	1.05	46.20	0.000	0.000	12.45	0.00	0.00
13		KRY 112 144/1	3	10.828	11.911	0.54	0.80	0.66	33.00	0.000	0.000	7.85	0.00	0.00
14		APXVAALL24_43-U-NA20	3	10.828	11.911	0.56	0.80	34.00	368.40	0.000	0.000	405.02	0.00	0.00
15		4460 B25 + B66	3	10.828	11.911	0.54	0.80	4.58	312.00	0.000	0.000	54.59	0.00	0.00
16	,	AIR6419 B41	3	10.828	11.911	0.61	0.80	6.93	249.90	0.000	0.000	82.56	0.00	0.00
17		T-Arms w/ Working	3	10.828	11.911	0.56	0.75	27.00	1500.00	0.000	0.000	321.60	0.00	0.00
18		MT6407-77A	3	10.695	11.764	0.56	0.80	7.88	238.20	0.000	0.000	92.69	0.00	0.00
19		Low Profile Platform	1	10.695	11.764	1.00	1.00	22.00	1500.00	0.000	0.000	258.82	0.00	0.00
20		BSF0020F3V1-1	2	10.695	11.764	0.64	0.80	1.52	35.20	0.000	0.000	17.92	0.00	0.00 0.00
21		MX06FRO660-03	6	10.695	11.764	0.70	0.80	41.69	360.00	0.000	0.000	490.47	0.00	0.00
22		Samsung B5/B13	3	10.695	11.764	0.54	0.80	3.02	210.90	0.000	0.000	35.56	0.00	0.00
23		Samsung B2/B66A	3	10.695	11.764	0.54	0.80	3.02	253.20	0.000	0.000	35.56	0.00	0.00
24		Raycap	1	10.695	11.764	0.80	0.80	3.03	32.00	0.000	0.000	35.67	0.00	0.00
25		91900314	1	10.695	11.764	1.00	1.00	0.00	25.35	0.000	0.000	0.00	0.00	0.00
26		Side Arm (L. Heavy)	1	8.929	9.821	1.00	1.00	3.50	120.00	0.000	0.000	34.38	0.00	0.00
27		407577689 Gps	1	8.929	9.821	0.50	1.00	0.46	4.00	0.000	0.000	4.47	0.00	0.00
	. 0.00	The state of the s					Totals	:	8,537.35			2,997.57		

Structure: CT01497-S-SBA

Site Name: Plymouth 2 CT

Height: 195.00 (ft)

Base Elev: 0.000 (ft)

Gh:

86.00

25.01

326.01

1.1

Code: TIA-222-H

D - Stiff Soil

Exposure: C

Crest Height: 0.00

Site Class:

Struct Class:

7/13/2023

((H))) Tower Engineering Solutions

29

Iterations

Page: 56

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor

1.00

Topography:

Wind Load Factor

1.00

Lateral Axial Torsion Moment Elev FX (-) FY (-) ΜZ (ft) Description (lb) (lb) (lb-ft) (lb-ft) 0.00 0.00 0.00 0.00 0.00 2.00 48.72 560.71 0.00 0.00 4.00 48.36 556.89 0.00 0.00 6.00 48.01 553.08 0.00 0.00 8.00 47.65 549.27 0.00 0.00 10.00 47.29 545.45 0.00 0.00 12.00 46.94 541.64 0.00 0.00 14.00 46.58 537.82 0.00 0.00 16.00 46.79 534.01 0.00 0.00 18.00 47.60 530.20 0.00 0.00 20.00 48.29 526.38 0.00 0.00 22.00 48.88 522.57 0.00 0.00 24.00 49.39 518.76 0.00 0.00 26.00 49.83 514.94 0.00 0.00 28.00 50.20 511.13 0.00 0.00 30.00 50.53 507.31 0.00 0.00 32.00 50.80 503.50 0.00 0.00 34.00 51.03 499.69 0.00 0.00 36.00 51.22 495.87 0.00 0.00 38.00 51.37 492.06 0.00 0.00 40.00 51.49 488.25 0.00 0.00 41.00 25.71 242.69 0.00 0.00 42.00 26.09 464.92 0.00 0.00 44.00 52.35 924.11 0.00 0.00 46.00 52.39 916.48 0.00 0.00 48.00 52.41 908.86 0.00 0.00 50.00 52.40 475.25 0.00 0.00 52.00 52.37 471.44 0.00 0.00 54.00 52.32 467.62 0.00 0.00 56.00 52.26 463.81 0.00 0.00 58.00 52.17 460.00 0.00 0.00 60.00 52.07 456.18 0.00 0.00 62.00 51.95 452.37 0.00 0.00 64.00 51.81 448.56 0.00 0.00 66.00 51.66 444.74 0.00 0.00 68.00 51.50 440.93 0.00 0.00 70.00 (2) attachments 90.16 561.11 0.00 0.00 72.00 51.13 432.98 0.00 0.00 74.00 50.92 429.17 0.00 0.00 76.00 50.71 425.35 0.00 0.00 78.00 50.48 421.54 0.00 0.00 80.00 50.25 417.73 0.00 0.00 81.00 25.00 207.43 0.00 0.00 82.00 24.93 175.85 0.00 0.00 84.00 49.74 349.32 0.00 0.00 85.00 24 74 173.47 0.00 0.00

0.00

0.00

Total Applied Force Summary

CT01497-S-SBA Structure:

Site Name: Plymouth 2 CT 195.00 (ft) Height:

Code:

TIA-222-H

Exposure: С

Crest Height: 0.00

7/13/2023

Deer Flee	0.000 (ft)			Site Class:	D - Stiff Soil		
	v: 0.000 (ft)	Tone	graphy: 1	Struct Clas		Page: 57	Tower Engin
Gh:	1.1	Торс					
88.00		49.88	647.26		0.00 0.00		
90.00		49.60	640.90		0.00		
91.00		24.66	318.07		0.00		
92.00		24.59	170.01		0.00		
94.00		49.00	337.64		0.00		
96.00		48.70	334.47		0.00		
98.00		48.38	331.29		0.00		
100.00		48.05	328.11 324.93		0.00		
102.00		47.72	321.75		0.00		
104.00		47.38 47.03	318.58		0.00		
106.00		46.68	315.40		0.00		
108.00		46.32	312.22		0.00		
110.00		45.95	309.04		0.00		
112.00		45.57	305.86		0.00		
114.00		45.19	302.69		0.00		
116.00		44.80	299.51		0.00		
118.00		44.41	296.33		0.00		
120.00		44.01	293.15		0.00		
122.00 124.00		43.61	289.97	0.00	0.00		
125.00		21.63	143.79	0.00	0.00		
126.00		21.53	118.86	0.00	0.00		
128.00		42.78	235.81	0.00	0.00		
130.00		42.36	233.26	0.00	0.00		
132.00		42.53	421.26	0.00	0.00		
134.00		42.10	416.18	0.00	0.00		
135.00		20.87	206.18	0.00	0.00		
136.00		20.76	113.85	0.00	0.00		
138.00		41.22	225.79	0.00	0.00		
140.00		40.78	223.25	0.00	0.00		
142.00		40.33	220.71	0.00	0.00		
144.00		39.87	218.17	0.00	0.00		
146.00		39.41	215.62	0.00	0.00 0.00		
148.00		38.95	213.08	0.00 0.00	0.00		
150.00		38.48	210.54	0.00	0.00		
152.00		38.00	208.00	0.00	0.00		
154.00		37.53	205.45	0.00	0.00		
156.00		37.05	202.91 200.37	0.00	0.00		
158.00		36.56	197.83	0.00	0.00		
160.00		36.07 35.58	195.28	0.00	0.00		
162.00			192.74	0.00	0.00		
164.00	(00) - H h	35.08 984.04	2750.27	0.00	0.00		
	(20) attachments	17.21	87.44	0.00	0.00		
166.00		34.07	172.98	0.00	0.00		
168.00		33.56	170.43	0.00	0.00		
170.00		33.05	167.89	0.00	0.00		
172.00		32.53	165.35	0.00	0.00		
174.00	(28) attachments	1072.26	3421.22	0.00	0.00		
175.00 176.00	(20) attachments	15.93	69.63	0.00	0.00		
178.00		31.49	137.34	0.00	0.00		
180.00		30.96	134.80	0.00	0.00		
182.00		21.62	147.78	0.00	0.00		
184.00		21.67	147.78	0.00	0.00		
186.00		21.72	147.78	0.00	0.00		
188.00		21.77	147.78	0.00	0.00		
190.00		21.81	147.78	0.00	0.00		
		Соруг	ight © 2023 by Tow	er Engineering Solu	tions, LLC. All rights rese	rved.	

Total Applied Force Summary

Structure: CT01497-S-SBA Code: TIA-222-H

Site Name: Plymouth 2 CT Exposure: С Height: 195.00 (ft) Crest Height: 0.00

Base Elev: 0.000 (ft) Site Class: D - Stiff Soil

1.1 Topography: 1 Struct Class: II 192.00 21.86 147.78 0.00 0.00 194.00 21.91 147.78 0.00 0.00

946.79

Gh:

195.00

(25) attachments

2492.89 0.00 606.82 Totals: 7,268.69 44,868.28 0.00 606.82



7/13/2023

Page: 58

Calculated Forces

Structure: CT01497-S-SBA

Site Name: Plymouth 2 CT

Height: 195.00 (ft) **Base Elev:** 0.000 (ft)

Gh: 1.1

Code: TIA-222-H

Exposure: C
Crest Height: 0.00

Site Class: D - Stiff Soil

Struct Class: ||

7/13/2023

IES

29

Page: 59 Tower

Iterations

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00 Wind Load Factor 1.00

Topography: 1

											T.4-1	Datation	Detetion	
Seg	Pu	Vu	Tu	Mu	Mu	Resultant	phi	phi	phi T-	phi Mn	Total Deflect	Rotation Sway	Twist	Stress
Elev	FY (-)	FX (-)	MY (-)	MZ	MX	Moment	Pn (kine)	Vn (kips)	Tn (ft-kips)	(ft-kips)	(in)	(deg)	(deg)	Ratio
(ft)	(kips)			(ft-kips)	(ft-kips)	(ft-kips)	(kips) 4628.91	1339.45	7126.38	6119.66	0.00	0.000	0.000	0.165
0.00	-44.87	-7.27	0.00	-949.82	0.00	949.82	4612.68	1329.62	7022.11	6053.16	0.00	-0.014	0.000	0.164
2.00	-44.30	-7.23	0.00	-935.28	0.00	935.28	4596.18	1319.78	6918.62	5986.64	0.01	-0.027	0.000	0.163
4.00	-43.75	-7.19	0.00	-920.82	0.00	920.82	4579.43	1309.95	6815.89	5920.10	0.03	-0.041	0.000	0.163
6.00	-43.19	-7.16	0.00	-906.43	0.00	906.43	4579.43 4562.40	1309.93	6713.93	5853.55	0.05	-0.055	0.000	0.162
8.00	-42.64	-7.12	0.00	-892.12	0.00	892.12		1290.28	6612.74	5787.00	0.07	-0.069	0.000	0.161
10.00	-42.09	-7.08	0.00	-877.88	0.00	877.88	4545.12 4527.57	1280.44	6512.31	5720.46	0.10	-0.083	0.000	0.160
12.00	-41.55	-7.04	0.00	-863.72	0.00	863.72	4527.57	1270.61	6412.66	5653.92	0.14	-0.097	0.000	0.159
14.00	-41.01	-7.01	0.00	-849.63	0.00	849.63	4491.69	1260.77	6313.77	5587.41	0.19	-0.111	0.000	0.159
16.00	-40.48	-6.97	0.00	-835.62	0.00	835.62		1250.77	6215.65	5520.93	0.23	-0.125	0.000	0.158
18.00	-39.94	-6.93	0.00	-821.68	0.00	821.68	4473.36	1230.54	6118.30	5454.49	0.29	-0.139	0.000	0.157
20.00	-39.42	-6.89	0.00	-807.82	0.00	807.82	4454.76	1231.27	6021.72	5388.08	0.35	-0.154	0.000	0.156
22.00	-38.89	-6.85	0.00	-794.04	0.00	794.04	4435.90		5925.90	5321.73	0.42	-0.168	0.000	0.155
24.00	-38.37	-6.81	0.00	-780.34	0.00	780.34	4416.78	1221.43	5830.86	5255.44	0.42	-0.183	0.000	0.155
26.00	-37.85	-6.77	0.00	-766.72	0.00	766.72	4397.40	1211.60		5189.22	0.57	-0.198	0.000	0.154
28.00	-37.34	-6.72	0.00	-753.19	0.00	753.19	4377.75	1201.76	5736.58	5109.22	0.66	-0.130	0.000	0.153
30.00	-36.83	-6.68	0.00	-739.74	0.00	739.74	4357.84	1191.93	5643.07		0.75	-0.217	0.000	0.152
32.00	-36.33	-6.64	0.00	-726.37	0.00	726.37	4337.67	1182.09	5550.33	5057.01	0.75	-0.243	0.000	0.151
34.00	-35.83	-6.60	0.00	-713.10	0.00	713.10	4317.23	1172.26	5458.36	4991.03	0.96	-0.258	0.000	0.150
36.00	-35.33	-6.55	0.00	-699.91	0.00	699.91	4296.53	1162.42	5367.16	4925.16	1.07	-0.273	0.000	0.150
38.00	-34.84	-6.51	0.00	-686.80	0.00	686.80	4275.57	1152.59	5276.73	4859.38		-0.273	0.000	0.149
40.00	-34.35	-6.46	0.00	-673.79	0.00	673.79	4254.35	1142.76	5187.06	4793.73	1.18	-0.296	0.000	0.148
41.00	-34.10	-6.44	0.00	-667.33	0.00	667.33	4243.64	1137.84	5142.51	4760.94	1.25	-0.304	0.000	0.148
42.00	-33.64	-6.42	0.00	-660.89	0.00	660.89	4232.86	1132.92	5098.16	4728.19	1.31	-0.304	0.000	0.147
44.00	-32.71	-6.37	0.00	-648.06	0.00	648.06	4211.11	1123.09	5010.03	4662.78	1.44		0.000	0.146
46.00	-31.79	-6.32	0.00	-635.33	0.00	635.33	4189.10	1113.25	4922.67	4597.51	1.58	-0.335	0.000	0.142
48.00	-30.88	-6.27	0.00	-622.69	0.00	622.69	4202.19	1119.08	4974.38	4636.19	1.72	-0.351	0.000	0.142
50.00	-30.41	-6.22	0.00	-610.15	0.00	610.15	4180.07	1109.25	4887.33	4570.98	1.87	-0.366	0.000	0.140
52.00	-29.93	-6.17		-597.71	0.00	597.71	4157.69	1099.41	4801.05	4505.91	2.03	-0.382		0.140
54.00	-29.46	-6.13		-585.36	0.00	585.36	4135.04	1089.58	4715.54	4441.00	2.19	-0.397	0.000	0.138
56.00	-29.00	-6.08	0.00	-573.11	0.00	573.11	4112.14	1079.74	4630.79	4376.25	2.36	-0.412	0.000	0.137
58.00	-28.54	-6.03		-560.95	0.00	560.95	4088.97	1069.91	4546.82	4311.67	2.54	-0.428	0.000	0.137
60.00	-28.08	-5.98		-548.88	0.00	548.88	4065.54	1060.07	4463.61	4247.27	2.72	-0.444	0.000	0.135
62.00	-27.63	-5.94		-536.92	0.00	536.92	4041.84	1050.24	4381.17	4183.06	2.91	-0.459	0.000	0.133
64.00	-27.18	-5.89		-525.05	0.00	525.05	4017.89	1040.40	4299.50	4119.03	3.10	-0.475	0.000	0.134
66.00	-26.73	-5.84		-513.27	0.00	513.27	3993.67	1030.57	4218.60	4055.21	3.31	-0.491	0.000	
68.00	-26.29	-5.79	-	-501.59	0.00	501.59	3969.18	1020.73	4138.47	3991.60	3.52	-0.507	0.000	0.132
70.00	-25.73	-5.70		-490.01	0.00	490.01	3944.44	1010.90	4059.10	3928.21	_. 3.73	-0.523	0.000	0.131
72.00	-25.29	-5.66		-478.60	0.00	478.60	3919.43	1001.06	3980.51	3865.04	3.95	-0.539	0.000	0.130
74.00	-24.86	-5.61		-467.29	0.00	467.29	3894.16	991.23	3902.68	3802.10	4.18	-0.556	0.000	0.129
76.00	-24.44	-5.56		-456.07	0.00	456.07	3868.63	981.39	3825.62	3739.40	4.42		0.000	0.128
		-5.51		-444.95		444.95	3842.83	971.56	3749.33	3676.95	4.66		0.000	0.127
78.00	-24.01					433.93	3816.78	961.72		3614.75	4.91	-0.605	0.000	0.126
80.00	-23.60	-5.46		-428.46		428.46	3803.65	956.81	3636.33	3583.75	5.04		0.000	0.126
81.00	-23.39	-5.44				428.46	2964.89	798.43	3038.55	2801.11	5.04	-0.613	0.000	0.161
81.00	-23.39	-5.44				423.03	2956.04	794.33	3007.44	2778.31	5.17	-0.622	0.000	0.160
82.00	-23.21	-5.42	_			412.19	2938.13	786.13		2732.80	5.44	-0.642	0.000	0.159
84.00	-22.86	-5.37				406.82	2929.08	782.04	2915.07	2710.08	5.57	-0.652	0.000	0.158
85.00	-22.69	-5.35				401.47	2919.97	777.94	2884.60	2687.40	5.71	-0.662	0.000	0.157
86.00	-22.36	-5.33	0.00	-401.47	0.00	401.71								

Calculated Forces

Structure: CT01497-S-SBA

Code:

TIA-222-H

7/13/2023

Site Name: Plymouth 2 CT

Exposure:

С

Height:

195.00 (ft)

Crest Height: 0.00

Base Elev: 0.000 (ft)

Site Class: D - Stiff Soil

	Elev.	0.000	(11)				Site Class	: D-	Stiff Soi	l				
Gh:		1.1		Тор	ography:	1	Struct Cla	ss: II			Pa	ge: 60	Tower Enginee	ring Solutions
88.00	-21.71	-5.28	0.00	-390.82	0.00	390.82	2901.54	769.74	2824.14	2642.11	5.99	-0.682	0.000	0.155
90.00	-21.07	-5.22	0.00	-380,27	0.00	380.27	2882.85	761.55	2764.32	2596.94	6.28	-0.702	0.000	0.154
91.00	-20.75	-5.20	0.00	-375.05	0.00	375.05	2898.33	768.33	2813.78	2634.30	6.43	-0.712	0.000	0.150
92.00	-20.58	-5.18	0.00	-369.85	0.00	369.85	2889.00	764.23	2783.84	2611.72	6.58	-0.723	0.000	0.149
94.00	-20.24	-5.13	0.00	-359.50	0.00	359.50	2870.13	756.03	2724.45	2566.64	6.89	-0.742	0.000	0.147
96.00	-19.91	-5.08	0.00	-349.23	0.00	349.23	2851.00	747.84	2665.70	2521.69	7.20	-0.762	0.000	0.146
98.00	-19.57	-5.04	0.00	-339.06	0.00	339.06	2831.61	739.64	2607.60	2476.90	7.52	-0.782	0.000	0.144
100.00	-19.24	-4.99	0.00	-328.99	0.00	328.99	2811.95	731.45	2550.13	2432.25	7.86	-0.801	0.000	0.142
102.00	-18.92	-4.95	0.00	-319.00	0.00	319.00	2792.03	723.25	2493.30	2387.76	8.20	-0.821	0.000	0.140
104.00	-18.60	-4.90	0.00	-309.11	0.00	309.11	2771.85	715.06	2437.12	2343,44	8.54	-0.841	0.000	0.139
106.00	-18.28	-4.86	0.00	-299.31	0.00	299.31	2751.41	706.86	2381.57	2299.29	8.90	-0.861	0.000	0.137
108.00	-17.96	-4.81	0.00	-289.59	0.00	289.59	2730.70	698.66	2326.66	2255.33	9.27	-0.881	0.000	0.135
110.00	-17.65	-4.77	0.00	-279.97	0.00	279.97	2709.73	690.47	2272.40	2211.55	9.64	-0.901	0.000	0.133
112.00	-17.34	-4.72	0.00	-270.44	0.00	270.44	2688.50	682.27	2218.77	2167.98	10.02	-0.921	0.000	0.131
114.00	-17.03	-4.68	0.00	-261.00	0.00	261.00	2667.01	674.08	2165.79	2124.61	10.41	-0.941	0.000	0.129
116.00	-16.73	-4.63	0.00	-251.65	0.00	251.65	2645.25	665.88	2113.44	2081.45	10.81	-0.961	0.000	0.127
118.00	-16.43	-4.59	0.00	-242.38	0.00	242.38	2623.23	657.69	2061.74	2038.51	11.22	-0.981	0.000	0.125
120.00	-16.13	-4.54	0.00	-233.21	0.00	233.21	2600.95	649.49	2010.67	1995.80	11.63	-1.001	0.000	0.123
122.00	-15.84	-4.50	0.00	-224.12	0.00	224.12	2578.41	641.29	1960.25	1953.33	12.06	-1.021	0.000	0.121
124.00	-15.54	-4.46	0.00	-215.12	0.00	215.12	2555.60	633.10	1910.47	1911.10	12.49	-1.041	0.000	0.119
125.00	-15.40	-4.43	0.00	-210.66	0.00	210.66	2544.10	629.00	1885.82	1890.08	12.71	-1.051	0.000	0.118
125.00	-15.40	-4.43	0.00	-210.66	0.00	210.66	1882.48	504.07	1513.88	1403.39	12.71	-1.051	0.000	0.158
126.00	-15.28	-4.42	0.00	-206.23	0.00	206.23	1875.26	500.79	1494.25	1388.85	12.93	-1.061	0.000	0.157
128.00	-15.04	-4.37	0.00	-197.40	0.00	197.40	1860.60	494.24	1455.38	1359.83	13.38	-1.086	0.000	0.153
130.00	-14.81	-4.33	0.00	-188.65	0.00	188.65	1845.69	487.68	1417.02	1330.91	13.84	-1.110	0.000	0.150
132.00	-14.39	-4.29	0.00	-179.98	0.00	179.98	1830.51	481.12	1379.17	1302.09	14.31	-1.135	0.000	0.146
134.00	-13.97	-4.24	0.00	-171.40	0.00	171.40	1815.07	474.57	1341.84	1273.39	14.79	-1.159	0.000	0.142
135.00	-13.76	-4.22	0.00	-167.16	0.00	167.16	1823.78	478.25	1362.76	1289.51	15.03	-1.171	0.000	0.137
136.00	-13.65	-4.20	0.00	-162.94	0.00	162.94	1816.04	474.97	1344.14	1275.17	15.28	-1.183	0.000	0.135
138.00	-13.42	-4 .16	0.00	-154.53	0.00	154.53	1800.35	468.42	1307.29	1246.57	15.78	-1.206	0.000	0.131
140.00	-13.20	-4.12	0.00	-146.21	0.00	146.21	1784.40	461.86	1270.94	1218.11	16.29	-1.228	0.000	0.128
142.00	-12.98	-4.08	0.00	-137.96	0.00	137.96	1768.19	455.30	1235.12	1189.78	16.81	-1.250	0.000	0.123
144.00	-12.76	-4.04	0.00	-129.80	0.00	129.80	1751.71	448.75	1199.80	1161.59	17.34	-1.272	0.000	0.119
146.00	-12.54	-4.00	0.00	-121.72	0.00	121.72	1734.98	442.19	1165.00	1133.55	17.88	-1.293	0.000	0.115
148.00	-12.33	-3.96	0.00	-113.71	0.00	113.71	1717.98	435.63	1130.70	1105.67	18.42	-1.314	0.000	0.110
150.00	-12.12	-3.92	0.00	-105.79	0.00	105.79	1700.71	429.08	1096.92	1077.96	18.98	-1.334	0.000	0.105
152.00	-11.91	-3.89	0.00	-97.94	0.00	97.94	1683.19	422.52	1063.66	1050.42	19.54	-1.354	0.000	0.100
154.00	-11.70	-3.85	0.00	-90.17	0.00	90.17	1665.40	415.96	1030.90	1023.06	20.11	-1.373	0.000	0.095
156.00	-11.50	-3.81	0.00	-82.48	0.00	82.48	1647.35	409.41	998.66	995.89	20.69	-1.392	0.000	0.090
158.00	-11.30	-3.77	0.00	-74.86	0.00	74.86	1629.04	402.85	966.93	968.91	21.28	-1.409	0.000	0.084
160.00	-11.10	-3.73	0.00	-67.32	0.00	67.32	1610.46	396.29	935.71	942.14	21.87	-1.426	0.000	0.078
162.00	-10.91	-3.70	0.00	-59.86	0.00	59.86	1591.62	389.74	905.01	915.58	22.47	-1.442	0.000	0.072
164.00	-10.71	-3.66	0.00	-52.47	0.00	52.47	1572.52	383.18	874.81	889.24	23.08	-1.456	0.000	0.066
165.00	-7.99	-2.60	0.00	-48.81	0.00	48.81	1562.88	379.90	859.91	876.15	23.39	-1.463	0.000	0.061
166.00	-7.90	-2.59	0.00	-46.20	0.00	46.20	1553.16	376.62	845.13	863.13	23.69	-1.470	0.000	0.059
168.00	-7.73	-2.55	0.00	-41.03	0.00	41.03	1533.53	370.07	815.96	837.25	24.31	-1.482	0.000	0.054
170.00	-7.56	-2.51	0.00	-35.93	0.00	35.93	1513.65	363.51	787.30	811.61	24.94	-1.494	0.000	0.049
172.00	-7.39	-2.48	0.00	-30.91	0.00	30.91	1493.49	356.96	759.16	786.22	25.56	-1.505	0.000	0.044
174.00	-7.23	-2.44	0.00	-25.95	0.00	25.95	1473.08	350.40	731.53	761.10	26.20	-1.514	0.000	0.039
175.00	-3.84	-1.28	0.00	-23.51	0.00	23.51	1462.77	347.12	717.90	748.63	26.51	-1.519	0.000	0.034
176.00	-3.77	-1.26	0.00	-22.23	0.00	22.23	1452.40	343.84	704.41	736.23	26.83	-1.523	0.000	0.033
178.00	-3.63	-1.23	0.00	-19.71	0.00	19.71	1427.84	337.29	677.80	709.84	27.47	-1.531	0.000	0.030
180.00	-3.50	-1.19	0.00	-17.26	0.00	17.26	1400.09	330.73	651.70	682.38	28.11	-1.538	0.000	0.028
180.00	-3.50	-1.19	0.00	-17.26	0.00	17.26	678.42	203.53	25205.7	396.30	28.11	-1.538	0.000	0.049
182.00	-3.35	-1.17	0.00	-14.87	0.00	14.87	678.42	203.53	25205.7	396.30	28.76	-1.545	0.000	0.042
184.00	-3.20	-1.14	0.00	-12.54	0.00	12.54	678.42		25205.7	396.30	29.41	-1.550	0.000	0.036
186.00	-3.05	-1.12	0.00	-10.25	0.00	10.25	678.42	203.53	25205.7	396.30	30.06	-1.554	0.000	0.030

Calculated Forces

CT01497-S-SBA Structure:

Site Name: Plymouth 2 CT 195.00 (ft) Height:

Base Elev: 0.000 (ft)

TIA-222-H Code:

C Exposure: Crest Height: 0.00

D - Stiff Soil Site Class:

7/13/2023

base	Elev.	0.000 (,				truct Clas	e II			Pad	ge: 61	Tower Engineeri	ing Solutions
Gh:		1.1		Горо	ography: 1					200.00			0.000	0.025
188.00	-2.91	-1.09	0.00	-8.02	0.00	8.02	678.42	203.53 203.53	25205.7 25205.7	396.30 396.30	30.71 31.36	-1.558 -1.561	0.000	0.023
190.00	-2.76	-1.07	0.00	-5.83	0.00 0.00	5.83 3.70	678.42 678.42	203.53	25205.7	396.30	32.02	-1.563	0.000	0.013
192.00 194.00	-2.61 -2.47	-1.04 -1.01	0.00 0.00	-3.70 -1.62	0.00	1.62	678.42	203.53	25205.7	396.30	32.67	-1.564	0.000	800.0
195.00	0.00	-0.95	0.00	-0.61	0.00	0.61	678.42	203.53	25205.7	396.30	33.00	-1.564	0.000	0.002

Final Analysis Summary

Structure: CT01497-S-SBA

Site Name: Plymouth 2 CT Height: 195.00 (ft)

Base Elev: 0.000 (ft)

0. . . .

Gh: 1.1

Code:

Topography: 1

TIA-222-H

Exposure: C **Crest Height:** 0.00

Site Class:

Class: D - Stiff Soil

Struct Class: II

7/13/2023

Page: 62

TOWER Engineering Solution

Reactions

Load Case	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)
1.2D + 1.0W 116 mph Wind	30.4	0.00	53.83	0.00	0.00	3998.90
0.9D + 1.0W 116 mph Wind	30.4	0.00	40.37	0.00	0.00	3946.01
1.2D + 1.0Di + 1.0Wi 50 mph Wind	9.9	0.00	71.11	0.00	0.00	1260.24
1.2D + 1.0Ev + 1.0Eh	0.7	0.00	55.62	0.00	0.00	125.41
0.9D + 1.0Ev + 1.0Eh	0.7	0.00	42.12	0.00	0.00	123.78
1.0D + 1.0W 60 mph Wind	7.3	0.00	44.87	0.00	0.00	949 82

Max Stresses

Load Case	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)		phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Elev (ft)	Stress Ratio
1.2D + 1.0W 116 mph Wind	-53.83	-30.39	0.00	-3998.9	0.00	-3998.9	4628.91	1339.4	7126.38	6119.66	0.00	0.666
0.9D + 1.0W 116 mph Wind	-40.37	-30.38	0.00	-3946.0	0.00	-3946.0	4628.91	1339.4		6119.66	0.00	0.654
1.2D + 1.0Di + 1.0Wi 50 mph Wind	-71.11	-9.88	0.00	-1260.2	0.00	-1260.2	4628.91	1339.4	7126.38	6119.66	0.00	0.221
1.2D + 1.0Ev + 1.0Eh	-19.19	-0.70	0.00	-36.85	0.00	-36.85	2544.10	629.00	1885.82	1890.08	125.00	0.036
0.9D + 1.0Ev + 1.0Eh	-14.53	-0.69	0.00	-36.27	0.00	-36.27	2544.10	629.00	1885.82	1890.08	125.00	0.034
1.0D + 1.0W 60 mph Wind	-44.87	-7.27	0.00	-949.82	0.00	-949.82	4628.91	1339.4	7126.38	6119.66	0.00	0.165



Calculated Maxium Net Soil Pressure under the base (psf):

Factor of Safety Against Overturning (O. R. Moment/Design Moment):

Allowable Foundation Overturning Resistance (kips-ft.):

35507	1 10 1 10 11 11 11 11 11	- Decign	Date
Mono	pole Mat Foundation	on Design	7/12/2023
Customer Name:	SBA Communcations Corp	TIA Standard:	EIA-222-G
Site Name:		Structure Height (Ft.):	195
Site Number:	CT01497-A-SBA	Engineer Name:	J. Tibbetts
Engr. Number:	127609	Engineer Login ID:	

Foundation Info Obtained from:		Mapping Operation				V			
Struc <u>ture Type:</u>		Monopole					_	一个	
Analysis or Design?		Analysis			1.5'			14	
		The second secon			•	0 0 0 0	11.	- V	_ '
Base Reactions (Factored):		4	20.4		1111		56	#	8
Axial Load (Kips):	53.8	Shear Force (Kips):	30.4		99'		1		4.5'
Uplift Force (Kips):	0.0	Moment (Kips-ft):	3998.9		99		•		3
Foundation Geometries:					_		56	1	8
		Mods required -Yes/No ?:	No		ĭ	56 # 8	56	#	8
Anchor Bolt Circle (ft.):	58.00	Depth of Base BG (ft.):	3.00					>	
Thickness of Pad (ft):	4.50					35'		4	
ength of Pad (ft.):	35	Width of Pad (ft.):	35						
Final Length of pad (ft)	35.0	Final width of pad (ft):	35.0			Bolt Circle 58 ft.			
Material Properties and Reabr Info	E				w	July 2012			
Concrete Strength (psi):	3000	Steel Elastic Modulus:	29000	ksi	35.0	•			
Pad Rebar Yield (Ksi):	60	Tie Spacing (in):	12.0			1000			
Pad Steel Rebar Size (#):	8							1	
Concrete Cover (in.):	3	Unit Weight of Concrete:	150.0	pcf					
Rebar at the bottom of the concrete	pad:								
Qty. of Rebar in Pad (L):	56	Qty. of Rebar in Pad (W):	56		_	35.0		->	
Rebar at the top of the concrete pa	d:							107	
Qty. of Rebar in Pad (L):	56	Qty. of Rebar in Pad (W):	56						
Soil Design Parameters:									
	99.0	Unit Weight of Water:	62.4	pcf	Angle from T	op of Pad:	30		
Water Table B.G.S. (ft): Ultimate Bearing Pressure (psf):	30000	Ultimate Skin Friction:	0	Psf	Angle from E	ottm of Pad:	25		
Consider Friction for O.T.M. (Y/N):	No	Consider Friction for bearing	ng (Y/N):	No	_	Bottm of Pad:	25		
Consider soil hor. resist, for OTM.:	No	Reduction factor on the m	aximum s	oil bea	ring pressure:	1.00			
Foundation Analysis and Design:	Uplift Str	rength Reduction Factor:	0.75	Com	pression Streng	th Reduction Factor:	0.75		
Total Dry Soil Volume (cu. Ft.):			0.00		Dry Soil Weigh		0.00		
Total Buoyant Soil Volume (cu.	Ft.):		0.00		Buoyant Soil V		0.00		
Total Effective Soil Weight (Kips			0.00			ncrete Block at Top (K):	0.00 826.88		
Total Dry Concrete Volume (cu.	Ft.):				Dry Concrete		0.00		
Total Buoyant Concrete Volume	(cu. Ft.):		0.00			rete Weight (Kips):	880.69		
Total Effective Concrete Weight	: (Kips):		826.88	ıota	Vertical Load	או טמשב (אוףש).	333.03	Load/ Capacity	
Check Soil Capacities:						to the start of	33500	Ratio 0.07	ОК
Calculated Maxium Net Soil Pressur	e under tl	ne base (psf):	1561	<		actored Soil Bearing (psf):	22500 4137	0.07	OK

3.38

13965.0 >

OK!

4137

Design Factored Momont (kips-ft):

0.30 OK!

TES Engr. Number:	127609		Page 2/2	Date:	7/12/2023		
Check the capacities of Reinforceing Concrete:							
Strength reduction factor (Flexure and axial tension):	0.90	Stren	gth reduction factor (S	hear):	0.75		
Strength reduction factor (Axial compresion):	0.65		Load Factor on Concre		1.00		
Concrete Pad:							
One-Way Design Shear Capacity (L-Direction, Kips):	1742.6	>	One-Way Factored S	hear (L-D. Kips):	0.0	0.00	OK!
One-Way Design Shear Capacity (W-Direction, Kips):	1742.6	>	One-Way Factored S	hear (W-D., Kips)	0.0	0.00	OK!
One-Way Design Shear Capacity (Corner-Corner. Kips):	448.2	>	One-Way Factored S	hear (C-C, Kips):	31.6	0.07	OK!
Lower Steel Pad Reinforcement Ratio (L-Direct.):	0.0021	OK!	Lower Steel Pad Rein	f. Ratio (W-Direc	0.0021		
Lower Steel Pad Moment Capacity (L-Direction. Kips-ft):	9806.8	>	Moment at Bottom (L-Direct. K-Ft):	0.0	0.00	OKI
Lower Steel Pad Moment Capacity (W-Direction. Kips-ft):	9806.8	>	Moment at Bottom (W-Direct. K-Ft):	0.0	0.00	OK!
Lower Steel Pad Moment Capacity (Corner-Corner,K-ft):	16136.1	>	Moment at Bottom (C-C Dir. K-Ft):	0.0	0.00	OK!
Upper Steel Pad Reinforcement Ratio (L-Direct.):	0.0021	OK!	Upper Steel Reinf. Ra	tio (W-Direct.):	0.0021		
Upper Steel Pad Moment Capacity (L-Direction. Kips-ft):	9806.8	>	Moment at the top (L-Dir Kips-Ft):	113.2	0.01	OK!
Upper Steel Pad Moment Capacity (W-Direction. Kips-ft):	9806.8	>	Moment at the top (W-Dir Kips-Ft):	113.2	0.01	OK!
Upper Steel Pad Moment Capacity (Corner-Corner. K-ft):	16136.1	>	Moment at the top (C-C Direc. K-Ft):	-6.1	0.00	OK!





Colliers Engineering & Design CT, PC 1055 Washington Boulevard Stamford, CT 06901 203.324.0800 peter.albano@collierseng.com

Antenna Mount Analysis Report and PMI Requirements

Mount ReAnalysis

SMART Tool Project #: 10206276 Colliers Engineering & Design CT, PC Project #: 23777041 (Rev. 1)

August 1, 2023

Site Information

Site ID:

5000245391-VZW / PLYMOUTH NW CT

Site Name:

PLYMOUTH NW CT

Carrier Name:

Verizon Wireless 297 North Adams Street

Address:

Plymouth, Connecticut 06782

Litchfield County

Latitude:

41.693319°

Longitude:

-73.053711°

Structure Information

Tower Type:

170-Ft Self Support

Mount Type:

14.00-Ft Platform

FUZE ID # 17123735

Analysis Results

Platform: 74.5% Pass*

*Antennas and equipment to be installed in compliance with PMI Requirements of this mount analysis.

***Contractor PMI Requirements:

Included at the end of this MA report
Available & Submitted via portal at https://pmi.vzwsmart.com

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

Report Prepared By: Frank Centone

Executive Summary:

The objective of this report is to determine the capacity of the antenna support mount at the subject facility for the final wireless telecommunications configuration, per the applicable codes and standards. Any modification listed under Sources of Information was assumed completed and was included in this analysis.

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

Sources of Information:

Document Type	Remarks
Radio Frequency Data Sheet (RFDS)	Verizon RFDS, Site ID: 324688, dated December 15, 2020
Mount Mapping Report	Level-Up Towers, Site ID: 467291, dated February 21, 2021
Previous Mount Modification Report	Maser Consulting Connecticut, Project #: 21777098A, dated May 5, 2021
Filter Add Scope	Provided by Verizon Wireless

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H
----------------------	----------------

2022 Connecticut State Building Code (CSBC), Effective October 1, 2022

Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), Vult:	115 mph
------------------	--	---------

Ice Wind Speed (3-sec. Gust):	50 m ph
Design Ice Thickness:	1.00 i n
Risk Category:	11
Exposure Category:	В
Topographic Category:	1
Topographic Feature Considered:	N/A
Topographic Method:	N/A
Ground Elevation Factor, K _e :	0.971

Seismic Parameters: S _s : 0	.178	q
--	------	---

S₁: 0.054 g

Maintenance Parameters: Wind Speed (3-sec. Gust): 30 mph

Maintenance Load, Lv: 250 lbs. Maintenance Load, Lm: 500 lbs.

Analysis Software: RISA-3D (V17)

Final Loading Configuration:

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

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
(14)		6	JMA Wireless	MX06FRO660-03	
		3	Samsung	MT6407-77A	
	DEC.	Antel	LPA-80080/6CF	Retained	
165.00		RFS	DB-C1-12C-24AB-0Z	Retained	
103.00	105.00	3	Samsung	B2/B66A RRH-BR049	
		3	Samsung	B5/B13 RRH-BR04C	
		2	Kaelus	BSF0020F3V1-1	Added

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

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

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

Standard Conditions:

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

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

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

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

- 5. The mount was checked up to, and including, the bolts that fasten it to the mount collar/attachment and threaded rod connections in collar members if applicable. Local deformation and interaction between the mount collar/attachment and the supporting tower structure are outside the scope of this analysis.
- 6. All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. Colliers Engineering & Design is not responsible for the conclusion, opinions, and recommendations made by others based on the information supplied.
- 7. Structural Steel Grades have been assumed as follows, if applicable, unless otherwise noted in this analysis:

o Channel, Solid Round, Angle, Plate

ASTM A36 (Gr. 36)

HSS (Rectangular)

ASTM 500 (Gr. B-46)

o Pipe

ASTM A53 (Gr. B-35)

o Threaded Rod

F1554 (Gr. 36)

o Bolts

ASTM A325

Discrepancies between in-field conditions and the assumptions listed above may render this analysis invalid unless explicitly approved by Colliers Engineering & Design.

Analysis Results:

Component	Utilization %	Pass/Fail
Face Horizontal	16.7 %	Pass
Standoff Horizontal	34.8 %	Pass
Platform Crossmember	18.1 %	Pass
Mount Pipe	28.7 %	Pass
Mount Pipe 2.5	20.0 %	Pass
Corner Plate	18.5 %	Pass
Grating Support	16.5 %	Pass
Cross Arm Plate	36.0 %	Pass
Support Rail	15.9 %	Pass
Support Rail Corner	11.6 %	Pass
Mount Connection	74.5 %	Pass

Structure Rating - (Controlling Hillipotion of all Company)	74 50/
Structure Rating - (Controlling Utilization of all Components)	74.5%

Mount Steel (EPA)a per ANSI/TIA-222-H Section 2.6.11.2:

Ice	Mount Pipe	s Excluded	Mount Pipes Included				
Thickness (In)	Front (EPA)a (Sq. Ft.)					Side (EPA)a (Sq. Ft.)	
0	25.4	25.4	43.4	43.4			
0.5	32.9	32.9	58.1	58.1			
1	40.0	40.0	72.4	72.4			

Notes:

- (EPA)a values listed above may be used in the absence of more precise information
- (EPA)a values in the table above include 3 sector(s).
- Ka factors included in (EPA)a calculations

August 1, 2023 Site ID: 5000245391-VZW / PLYMOUTH NW CT

BASELINE mount weight per SBA agreement: 2269.63 lbs

Increase in mount weight due to Verizon loading change per SBA agreement: No Change

The weights listed above include 3 sector(s).

Requirements:

The existing mount is **SUFFICIENT** for the final loading configuration shown in attachment 2 and do not require modifications. Additional requirements are noted below.

Contractor to verify that all equipment and modifications per previous mount analysis and modification drawings report by Maser Consulting Connecticut, Project #: 21777098A, dated May 5, 2021 has been installed.

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

Attachments:

- 1. Contractor Required Post Installation Inspection (PMI) Report Deliverables
- 2. Antenna Placement Diagrams
- 3. Mount Photos
- 4. Mount Mapping Report (for reference only)
- 5. Analysis Calculations

Mount Desktop - Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Passing Mount Analysis

Passing Mount Analysis requires a PMI due to a modification in loading.

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

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

MDG #: 5000245391

SMART Project #: 10206276

Fuze Project ID: 17123735

<u>Purpose</u> – to provide SMART Tool structural vendor the proper documentation in order to complete the required Mount Desktop review of the Post Modification Inspection Report.

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

Base Requirements:

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

Photo Requirements:

- Photos taken at ground level
 - o Photo of Gate Signs showing the tower owner, site name, and number.
 - Overall tower structure after installation.
 - Photos of the mount after installation; if the mounts are at different rad elevations, pictures must be provided for all elevations that equipment was installed.
- Photos taken at Mount Elevation
 - Photos showing the safety climb wire rope above and below the mount prior to installation.
 - Photos showing the climbing facility and safety climb if present.

- Photos showing each individual sector after installation. Each entire sector shall be in one photo to show the interconnection of members.
 - These photos shall also certify that the placement and geometry of the equipment on the mount is as depicted in the antenna placement diagram in this form.
- Photos that show the model number of each antenna and piece of equipment installed per sector.

Antenna & equipment placement and Geometry Confirmation:

•	The contractor shall certify that the antenna & equipment placement and geometry is in accordance with the sketch and table as included in the mount analysis and noted below.
	\Box The contractor certifies that the photos support and the equipment on the mount is as depicted on the sketch and table included in this form and with the mount analysis provided.
	OR
	\Box The contractor notes that the equipment on the mount is not in accordance with the sketch and has noted the differences below and provided photo documentation of any alterations.
Specia	al Instructions / Validation as required from the MA or any other information the contractor
deem	s necessary to share that was identified:
<mark>Issue:</mark>	L. L. L'Election deswings report
Contr	actor to verify that all equipment and modifications per previous mount analysis and modification drawings report
by Ma	actor to verify that an equipment #: 21777098A, dated May 5, 2021 has been installed.
Respo	onse:
Specia	al Instruction Confirmation:
	\square The contractor has read and acknowledges the above special instructions.
	tre to the second secon
	\square All hardware listed in the Special Instructions above (if applicable) has been properly installed, and the existing hardware was inspected.
	☐ The material utilized was as specified in the SMART Tool engineering vendor Special Instructions above (if applicable) and included in the material certification folder is a packing list or invoice for these materials.

Comments:
Contractor certifies that the climbing facility / safety climb was not damaged prior to starting work
☐ Yes ☐ No
Contractor certifies no new damage created during the current installation:
☐ Yes ☐ No
Contractor to certify the condition of the safety climb and verify no damage when leaving the site:
☐ Safety Climb in Good Condition ☐ Safety Climb Damaged
Certifying Individual:
Company:
Employee Name:
Contact Phone: Email:
Date:

Structure: 5000245391-VZW - PLYMOUTH NW CT

Sector:

Mount Elev:

Structure Type: Self Support

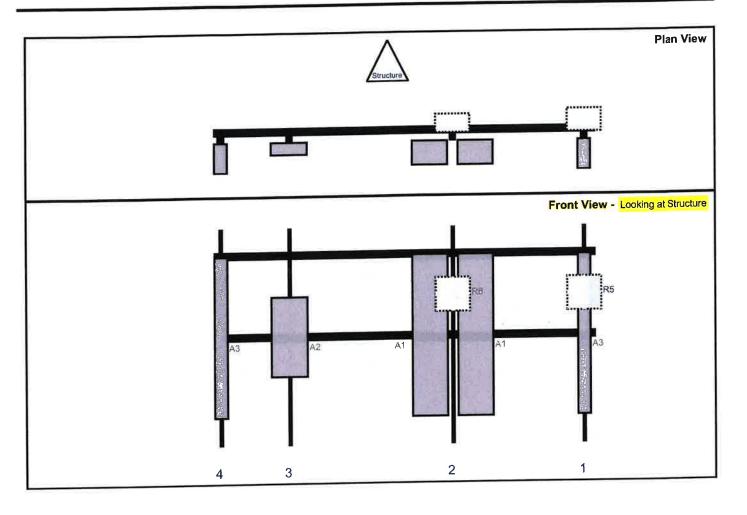
165.00

10206276

7/10/2023







Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A3	LPA-80080/6CF	70.9	5.5	163	1	а	Front	48	0	Retained	02/21/2021
R5	B2/B66A RRH-BR049	15	15	163	1	а	Behind	30	0	Retained	
A1	MX06FRO660-03	71.3	15.4	105	2	а	Front	48	10	Retained	
A1	MX06FRO660-03	71.3	15.4	105	2	b	Front	48	-10	Retained	
R6	B5/B13 RRH-BR04C	15	15	105	2	а	Behind	30	0	Retained	
A2	MT6407-77A	35.1	16.1	33	3	а	Front	48	0	Retained	
A3	LPA-80080/6CF	70.9	5.5	3	4	а	Front	48	0	Retained	02/21/2021
M101	DB-C1-12C-24AB-0Z	29.5	16.5		Memb	er				Retained	

Structure: 5000245391-VZW - PLYMOUTH NW CT

Sector: **B** 7/10/2023

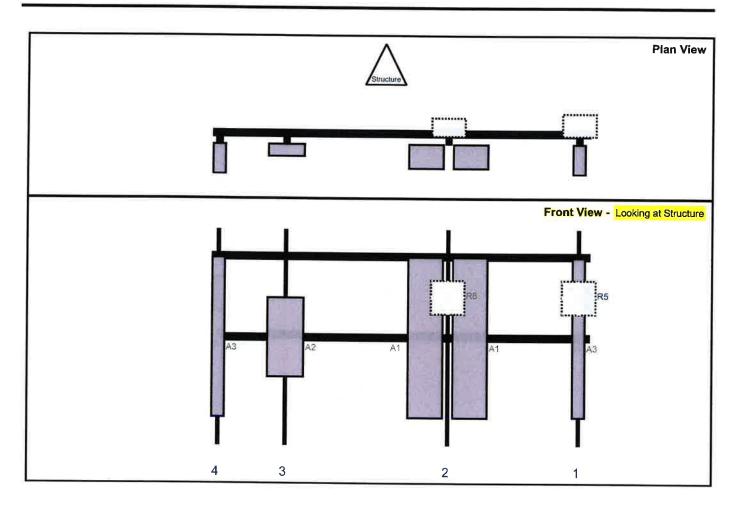
Structure Type: Self Support

10206276

Colliers Engineering & Design

Mount Elev: 165.00

Page: 2



		Height	Width	H Dist	Pipe	Pipe	Ant	C. Ant	Ant		
Ref#	Model	(in)	(in)	Fm L.	#	Pos V	Pos	Fm T	H Off	Status	Validation
A3	LPA-80080/6CF	70.9	5.5	163	1	а	Front	48	0	Retained	02/21/2021
R5	B2/B66A RRH-BR049	15	15	163	1	а	Behind	30	0	Retained	
A1	MX06FRO660-03	71.3	15.4	105	2	а	Front	48	10	Retained	THE SET
A1	MX06FRO660-03	71.3	15.4	105	2	b	Front	48	-10	Retained	THE P
R6	B5/B13 RRH-BR04C	15	15	105	2	а	Behind	30	0	Retained	
A2	MT6407-77A	35.1	16.1	33	3	а	Front	48	0	Retained	
А3	LPA-80080/6CF	70.9	5.5	3	4	a	Front	48	0	Retained	02/21/2021

Sector:

Mount Elev:

- C

Structure Type: Self Support

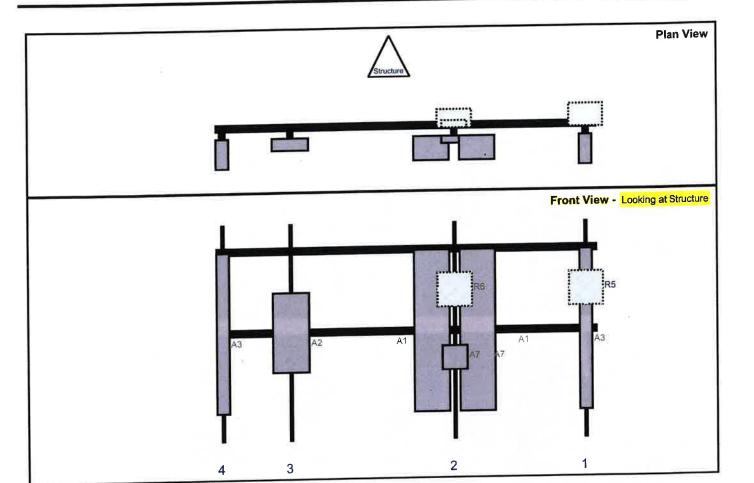
165.00

10206276

7/10/2023

Colliers Engineering & Design

Page: 3



Ref#	Model	9	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A3	LPA-80080/6CF		70.9	5.5	163	1	а	Front	48	0	Retained	02/21/2021
R5	B2/B66A RRH-BR049		15	15	163	1	а	Behind	30	0	Retained	
A1	MX06FRO660-03		71.3	15.4	105	2	а	Front	48	10	Retained	
A1	MX06FRO660-03		71.3	15.4	105	2	b	Front	48	-10	Retained	5
R6	B5/B13 RRH-BR04C		15	15	105	2	а	Behind	30	0	Retained	
A7	BSF0020F3V1-1		10.6	10.9	105	2	а	Behind	60	0	Added	
A7	BSF0020F3V1-1	THE VE	10.6	10.9	105	2	b	Front	60	0	Added	
A2	MT6407-77A		35.1	16.1	33	3	а	Front	48	0	Retained	
A2	LPA-80080/6CF		70.9	5.5	3	4	а	Front	48	0	Retained	02/21/2021





V3.0 Updated on 8-31-2020



	Antenna Mount Mapping	Form (PATENT PENDING)		FCC# 1215891
	ISBA	Mapping Date:		/2021
Tower Owner: Site Name:	Plymouth NW CT	Tower Type:	Mor	opole
Site Number or ID:	467291	Tower Height (FL): Mount Elevation (FL):		61
Mapping Contractor:	Level-Up Towers	Mount Elevation (PL).	production, transmission,	publication,

Inapping Contractor: Level-Up 16Wers | Mount Elevation (FL): 101

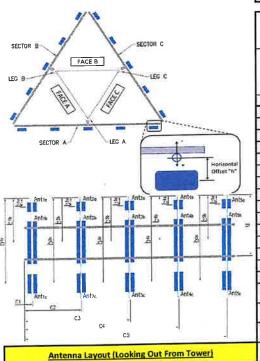
This antenna mapping form is the property of TES and under PATENT PENDING. The formation contained herein is considered confidential in nature and is to be used only for the specific customer it was intended for. Reproduction, transmission, publication modification or disclosure by any method is prohibited except by express written permission of TES. All means and methods are the responsibility of the contractor and the work shall be compliant with ANSI/ASSE A 10.48, OSHA, FCC, FAA and other safety requirements that may apply. TES is not warrantying the usability of the safety climb as it must be assessed prior to each use in compliance with OSHA requirements.



Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	eometries [Unit = Inches] Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."
A1	2.38"x0.17", 96" Long	48.00	5.00	C1	2.38"x0.17", 96" Long	48.00	5,00
A2	2.38"x0.17", 96" Long	48.00	63.00	C2	2.38"x0.16", 96" Long	48.00	63.00
A3	2.38"x0.17", 96" Long	48.00	135.00	C3	2.38"x0.16", 96" Long	48.00	135.00
A4	2.38°x0.17°, 96" Long	48.00	170.00	C4	2.38"x0.17", 96" Long	48.00	170.00
A5	2.38 AU.17 , 30 CONS	10.00	1	C5			
A6				C6			
B1	2.38"x0.17", 95" Long	48.00	5.00	D1			
82	2.38"x0.17", 96" Long	48.00	63.00	D2			
B3	2.38"x0.17", 96" Long	48.00	135.00	D3			
B4	2.38"x0.17", 96" Long	48.00	170.00	D4			
B5	2.50			D5			
				D6		- 1	
86	Distance from	top of botto	m support r	on (dim d). Unit is inches. See 'Mount Elev ReP' est tip of ant./eqpt. of Carrier above. (est tip of ant./eqpt. of Carrier below. (N/AII > 10 IC.)	

Please enter additional information or comments below.

Tower Face Width at Mount Elev. (ft.): | Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.): 24



	Enter antenna	model.	If not labe	led, enter '	'Unknown'		Mountin [Units are incl	g Locations nes and de		Photos o antennas
Ants. Items	Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Antenna Center- line (Ft.)	Vertical Distances"b _{1a} , b _{2a} , b _{3a} , b _{1b} " (Inches)	Horiz. Offset "h" (Use "-" f Ant is behind)	Photo Numbers	
					Sector A					
Antia	Amphenol LPA 80080	6.00	12.00	72.00	(1) 1-5/8	161.083	47.00	15.00	0.00	97
Antıb										
Ant _{1c}										
Ant _{2a}	Amphenol BXA-70063	11.30	6.00	71.00	(2) 1-5/8	160.917	49.00	9.00	0.00	99
Ant _{2b}										
Ant _{2c}									2.00	103
Ant _{3a}	Amphenol BXA-17108	6.10	4.10	48.50	(2) 1-5/8	162	36.00	7.50	0.00	103
Ant _{3b}								_		_
Ant _{3c}								45.00	0.00	106
Ant _{da}	Amphenol LPA 80080	6.00	12.00	72.00	(1) 1-5/8	161.083	47.00	15.00	0.00	100
Ant ₄₆										
Ant _{4c}					-					
Ant _{Sa}					-	-				-
Antsb										
Antsc				_		_				
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

Mou	nt Azlmuth	(Degre	e)	Tower Lea Av	imush (Doggoo)	7					Sector	ń				
	for Each Se		-1		imuth (Degree) :h Sector	Antıa	Amphenol LPA 8008	6.00	12.00	72.00	Sector 1	161.083	47.00	15.00	120.00	108
Sector A:	0.00	_	Leg A:		Deg	Ant _{1b}	Paripricitor El A adopt	0.00	12.00	72.00	(1) 1-5/6	101.083	47.00	13,00	120.00	108
Sector B:	120.00		Leg 8:		Deg	Antic		-	-	-	_			+	-	-
Sector C:	240.00		Leg C:		Deg	Arit _{2a}	Amphenol BXA-7006	11.30	6.00	71.00	/2\1_5/9	160.917	49.00	9.00	120.00	110
Sector D:		_	Leg D:		Deg	Ant _{2b}	Paripricio BAA-7000	11.50	0.00	71.00	12/1-3/6	100.517	49.00	9.00	120.00	110
	-			ility information	Inck	Ant _{2c}		-		-	-	-		_		
Location:	180.00	Deg	oning rac	Sector B		_	A I I 4740			-				_	_	
LOCATION.	Corros	_		Good condition.		Ant _{3a}	Amphenol BXA-1710	6.10	4.10	48.50	(2) 1-5/8	162	36.00	7.50	120.00	118
Climbing			e.	The state of the s	and the second	Ant ₃₆										
Facility		cess:	-	Climbing path was u	inobstructed.	Ant _{3r}								_		
	Con	dition:		Good condition.		Ant _{4a}	Amphenol LPA 80080	6.00	12.00	72.00	(1) 1-5/8	161.083	47.00	15.00	120.00	120
	3 3	TIT		e		Ant _{4b}										
î	ήГ	1811	ШП	ľП		Ant _{4c}										
- 1		13441	131			Ant _{Sa}										
4		1	(11			Ant _{5b}										
2	7 7		11	7 7 7 10 100 100	1	Ant _{5c}										
		40.1	11			Ant on										
J	ПП	Ш	UIL	1	PRETANCE FROM TOP OF MAN PLATFORM VEHICLE TO CAMPAN AREA (N/A II > 10 FT)	Standoff Ant on			-			-		-		
7		Till.	Til		(0/4 1/ 3 12 7/ 1	Standoff										
-		4	111	<u> </u>	+	Ant on								1		
and the state of	ਾ		1		HISTORICE FROM THE OF MAIN PLATFORM WOMER TO HEMET II OF ANY /COME OF PARTICLE NELD ON/A IT > 10 FT)	Tower										
	1 .	HIII	11.	A ST OF ST PROPERTY.				=								
Ī	T M	1111	1111	П		Tower	L									LVIE
- 1			111	[A]		Ant _{1a}	Amphenol LPA 80080	6.00	17.00	77.00	Sector C		42.00	1		
ď		- 25	=				Ampriendi LPA 80080	6.00	12.00	72.00	(1) 1-5/8	161.083	47.00	15.00	240.00	122
Ĺ	ہا لہا		111	ليا ل		Ant _{1b}					-			-		
			LLI.				A I Investor	44.00						_		
	1 [1	n.			Ant ₂₃	Amphenol BXA-7006	11.30	6.00	71.00	(2) 1-5/8	160.917	49.00	9.00	240.00	123
ŧ	-	15	7	<u></u>		Ant _{2b}										
			Y			Ant _{2c}										
į.,		F	=,5	7.275.00		Ant _{3a}	Amphenol BXA-17108	6.10	4.10	48.50	(2) 1-5/8	162	36.00	7.50	240.00	124
			/		Ī	Ant _{3b}										
	4 12		/_		MERCAL PROPERTY AND AND ADDRESS OF THE PERCAL PROPERTY ADDRESS O	Ant _{3c}										
		1			DISTANCE FINE TOP OF BUTTLE COMPOST BALL TO LONDER ABOVE. (N/A F > 10 FT)	Ant _{4a}	Amphenol LPA 80080	6.00	12.00	72.00	(1) 1-5/8	161.083	47.00	15.00	240.00	125
=			₹ 5		(6/A F > 13 FI)	ruscan										
	The State of the S	L	⊒ ∄		1	Ant _{4c}										
l _e	1/4	1	7	T.	CATAMIE FRANCISCO DE SANCIA	Ant _{5a}										
UNIC 10704 EWI	i)	1	_		SPECT HE TO MAKE TO AND AND THE AND THE COURSE OF COURSE OF THE COURSE O	Ant _{5b}										
.3	. 3		\n.	N. T. Charles		Antsc										
[1]			TI.			Ant on										
	- tur		= 1 197	-		Standoff Ant on		-						-		
Į.	491	II.	4			Standoff										
4	Ļ		ᆜ	Ļ		Ant on										
						Tower										
						Ant on										
						Tower		-1			Sector P					
						Antla		- 1			Sector D			F	-	
						Ant _{1b}						-				
						Ant _{1c}						-				
						Ant _{2a}						\rightarrow				
												_		-		
						Ant _{2b}								-		
						Ant _{2c}					_					
						Ant _{3a}										
						Ant _{3b}										
						Ant _{3c}										
						Ant										
						Antab										
						Ant _{4c}										
						Ant _{5a}										
						Ant _{5b}										
						Ant _{Sc}				Û						
						Ant on										
						Standoff										
						Ant on Standoff										
						Ant on						-+		1 -		
						Tower										
						Ant on										

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

1	
2	
3	
4	
5	
6	
7	
8	

Mapping Notes

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

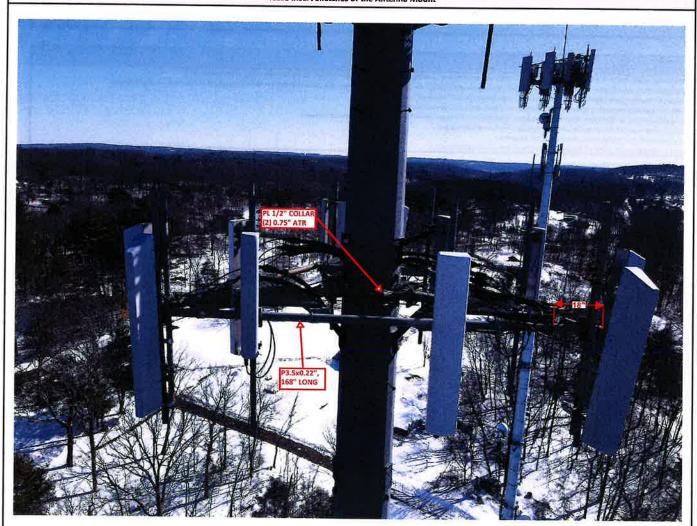
Standard Conditions

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

	Antenna Mount Mapoing I	Form (PATENT PENDING)	FCC #
Tower Owner:	ISBA		1215891
Site Name:	Plymouth NW CT	Mapping Date:	2/21/2021
Site Number or ID:		Tower Type:	Monopole
AND DESCRIPTION OF THE PARTY OF	467291	Tower Height (Ft.):	
Mapping Contractor:	Level-Up Towers	Mount Elevation (Ft.):	161

This antenna mapping form is the property of TES and under PATENT PENDING. The formation contained herein is considered confidential in nature and is to be used only for the specific customer it was intended for. Reproduction, transmission, publication, modification or disclosure by any method is prohibited except by express written permission of TES. All means and methods are the responsibility of the contractor and the work shall be compliant with ANSI/ASSE A 10.48, OSHA, FCC, FAA and other safety requirements that may apply. TES is not warrantying the usability of the safety climb as it must be assessed prior to each use in compliance with OSHA requirements.

Please Insert Sketches of the Antenna Mount



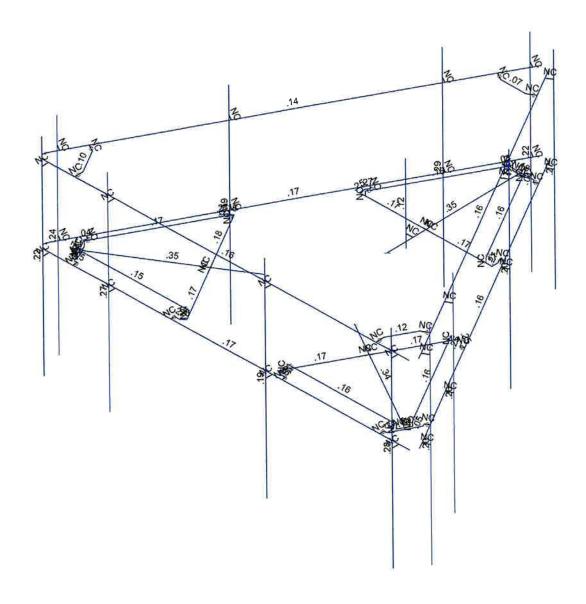


Envelope Only Solution

Colliers Engineering & Des		SK - 1
CL	5000245391-VZW_MT_LO_H	July 5, 2023 at 5:39 PM
Project No. 10206276		5000245391-VZW_MT_LO_H.r3d







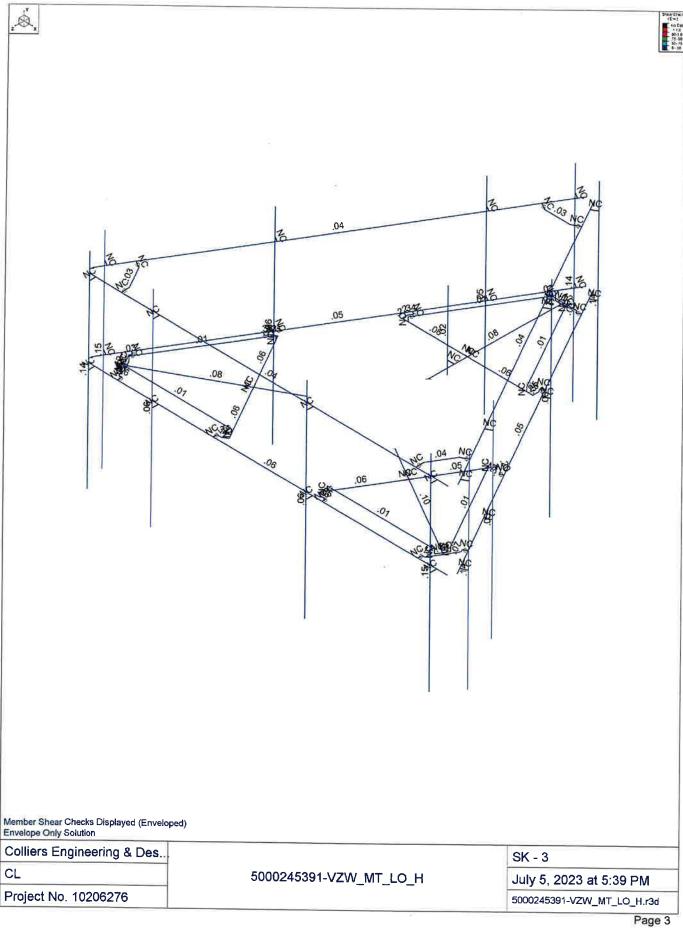
Member Code Checks Displayed (Enveloped) Envelope Only Solution

	Colliers Engineering & Des
	CL
-	Project No. 10206276

5000245391-VZW_MT_LO_H

SK - 2 July 5, 2023 at 5:39 PM 5000245391-VZW_MT_LO_H.r3d

Page 2





: Colliers Engineering & Design : CL : Project No. 10206276 : 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed A	rea(Me	Surface(P
1	Antenna D	None					114	-		_
2	Antenna Di	None					114	_		+
3	Antenna Wo (0 Deg)	None					114	+	_	
4	Antenna Wo (30 Deg)	None					114	_		
5	Antenna Wo (60 Deg)	None					114	+		
6	Antenna Wo (90 Deg)	None					114	-		+
7	Antenna Wo (120 Deg)	None					114	+		+
8	Antenna Wo (150 Deg)	None					114	_		1
9	Antenna Wo (180 Deg)	None					114			1
10	Antenna Wo (210 Deg)	None					114			-
11	Antenna Wo (240 Deg)	None					114			+
12	Antenna Wo (270 Deg)	None					114			
13	Antenna Wo (300 Deg)	None					114	+		-
14	Antenna Wo (330 Deg)	None					114			+
15	Antenna Wi (0 Deg)	None					114	+		+
16	Antenna Wi (30 Deg)	None					114			
17	Antenna Wi (60 Deg)	None					114	-		-
18	Antenna Wi (90 Deg)	None					114			
19	Antenna Wi (120 Deg)	None					114			-
20	Antenna Wi (150 Deg)	None					114			-
21	Antenna Wi (180 Deg)	None					114			+
22	Antenna Wi (210 Deg)	None					114			_
23	Antenna Wi (240 Deg)	None					114			
24	Antenna Wi (270 Deg)	None					114			
25	Antenna Wi (300 Deg)	None					114			
26	Antenna Wi (330 Deg)	None					114			
27	Antenna Wm (0 Deg)	None					114			
28	Antenna Wm (30 Deg)	None					114			
29	Antenna Wm (60 Deg)	None					114			
-	Antenna Wm (90 Deg)	None					114			
30	Antenna Wm (120 Deg)	None					114			
	Antenna Wm (150 Deg)	None		18			114			
32	Antenna Wm (180 Deg)	None					114			
33	Antenna Wm (210 Deg)	None					114			
34	Antenna Wm (240 Deg)	None					114			
35	Antenna Wm (270 Deg)	None					114			
36	Antenna Wm (300 Deg)	None					114			
37	Antenna Wm (330 Deg)	None					114			
38		None		-1					3	
39	Structure D	None						58	3	
40	Structure Di	None						116		
41	Structure Wo (0 Deg)				P-TE			116		
42	Structure Wo (30 Deg)	None	_					116		
43	Structure Wo (60 Deg)	None						116		
44	Structure Wo (90 Deg)	None			1			116		
45	Structure Wo (120 D	None	-					116		
46	Structure Wo (150 D	None	-					116		
47	Structure Wo (180 D	None		-				116		
48	Structure Wo (210 D	None						116		
49	Structure Wo (240 D	None_		-				116		
50	Structure Wo (270 D	None		+	+			116		
51	Structure Wo (300 D	None						116		
52	Structure Wo (330 D	None None		-		-		116		



: Colliers Engineering & Design : CL : Project No. 10206276 : 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me	. Surface/P
54	Structure Wi (30 Deg)	None						116	- Lunidoc(i
_55	Structure Wi (60 Deg)	None						116	
56	Structure Wi (90 Deg)	None						116	†
57	Structure Wi (120 De	None						116	
58	Structure Wi (150 De	None						116	
59	Structure Wi (180 De	None						116	
60	Structure Wi (210 De	None						116	
61	Structure Wi (240 De	None						116	
62	Structure Wi (270 De	None						116	
63	Structure Wi (300 De	None						116	
64	Structure Wi (330 De	None						116	
65	Structure Wm (0 Deg)	None						116	
66	Structure Wm (30 De	None						116	
67	Structure Wm (60 De	None						116	
68	Structure Wm (90 De	None						116	
69	Structure Wm (120 D	None						116	
70	Structure Wm (150 D	None						116	
71	Structure Wm (180 D	None						116	
72	Structure Wm (210 D	None						116	
73	Structure Wm (240 D	None						116	
74	Structure Wm (270 D	None						116	
75	Structure Wm (300 D	None						116	
76	Structure Wm (330 D	None						116	
77	Lm1	None					1	110	
78	Lm2	None					1		
79	Lv1	None					1		
80	Lv2	None					1		
81	Antenna Ev	None					114		
82	Antenna Eh (0 Deg)	None					76		
83	Antenna Eh (90 Deg)	None					76		
84	Structure Ev	ELY					, ,	3	
85	Structure Eh (0 Deg)	ELZ			03			3	
86	Structure Eh (90 Deg)	ELX	.03					3	1000000
87	BLC 39 Transient Are	None						30	
	BLC 40 Transient Are	None						30	
89	BLC 84 Transient Are	None						30	
90	BLC 85 Transient Are	None			12-1			30	
91	BLC 86 Transient Are	None						30	

Load Combinations

	Description	S	PDelta	S	В	Fa	В	Fa	В	Fa.	В	Fa	В	Fa	В	Fa	B	Fa	B	Fa	В	Fa	В	Fa
_1	1.2D+1.0Wo (0 Deg)	Yes	Y		1	1.2	39	1.2	3	1	41	1		1			Τ		T	, u	J	T	J	1 0
2	1.2D+1.0Wo (30 Deg)	Yes	Υ		1	1.2				1	42	1												
3		Yes	1.00		1			1.2		1	43	1	1	1					1					_
4	1.2D+1.0Wo (90 Deg)			100	1	1.2	39	1.2	6	1	44	-							1					
5	1.2D+1.0Wo (120 Deg)				1		_	1.2	_	1	45													
6	1.2D+1.0Wo (150 Deg)				1	1.2	39	1.2	8	1	46													
7	1.2D+1.0Wo (180 Deg)					1.2				1	47	1		1	1		1							
8	1.2D+1.0Wo (210 Deg)				1	1.2	39	1.2	10	1	48	1	100				†			SHITE.				
9	1.2D+1.0Wo (240 Deg)	Yes	Y		1			1.2			49	_			1			1						
10	1.2D+1.0Wo (270 Deg)				1	1.2					50											2		
11	1.2D+1.0Wo (300 Deg)				1		_	1.2	_	_	51	_												
12	1.2D+1.0Wo (330 Deg)				1	1.2					52	1				-			1					
13	1.2D + 1.0Di + 1.0Wi (0				1	1.2				1	40	1	15	1	53	1		_	-			-	-	
14	1.2D + 1.0Di + 1.0Wi (3	Yes	Υ		1	1.2				1	40	1	16	1	54	1	2							



Colliers Engineering & Design
CL
Project No. 10206276
5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

Jac	d Combinations (Co	Hillia	Uu,	_	_		_					_		387	9=				_		D 5		-	=-
	Description S	. PDelta	S I	В	Fa	В.	F	a	B	Fa	. B	Fa	. B	Fa	B	Fa	B I	Fa	B	Fa	B F	-a t	31	а
5	1.2D + 1.0Di + 1.0Wi (6Ye	s Y		1	1.2	39	9 1	.2	2	_1_	40		117	1	99						\rightarrow	-	\neg	_
6	1.2D + 1.0Di + 1.0Wi (9Ye	s Y		1	1.2	3	9 1	.2	2	1	40				56								-+	
7	1.2D + 1.0Di + 1.0Wi (1Ye	s Y		1	1.2					1	40	112	19		57		-				-	-	-	
Q	1.2D + 1.0Di + 1.0Wi (1Ye	s Y		1	1.2	39	9 1	.2	2	1	40	1	20	1	58		_			-	-	-	-	-
0	1.2D + 1.0Di + 1.0Wi (1Ye	s Y		1	1.2					1	40	1	21	1	59	1				_	_	-	-	-
9	1.2D + 1.0Di + 1.0Wi (2Ye	s Y		1	1.2					1	40	1	22	1	60	1						-	-	_
U	1.2D + 1.0Di + 1.0Wi (2Ye	s Y			1.2					1	40	1	23	1	61	1							_	
1	1.2D + 1.0DI + 1.0WI (210	s Y		1	1.2					1	40		24	1	62	1								
2	1.2D + 1.0Di + 1.0Wi (2Ye	5 I	-		1.2					1	40		25		63									
3_	1.2D + 1.0Di + 1.0Wi (3Ye	s Y	-	1	1.2					1	40	0.2	26	1	64									
4	1.2D + 1.0Di + 1.0Wi (3Ye	s Y	+++	1	1.2	3	0 1	2.	77	_		1			0.									
5	1.2D + 1.5Lm1 + 1.0W Ye	s Y		1	1.2	3	9 1	.2	77	4.5	27	-	66	1111111	1			-						
	1.2D + 1.5Lm1 + 1.0W Ye			1	1.2	3	9 1	1.2	11	1.5	28	1	_		-	-								
7	1.2D + 1.5Lm1 + 1.0W Ye	s Y		1	1.2	3	9 1	.2	11	1.5	29	1	67		-	-	-							
8	1.2D + 1.5Lm1 + 1.0W Ye	s Y		1	1.2	3	9 1	.2	77	1.5	30		68		-		-					-	\neg	-
a	1.2D + 1.5Lm1 + 1.0W Ye	s Y		1	1.2	3	9 1	1.2	77	1.5	31	_1	69	11.7				et et et	-		-	-+		
'n	1.2D + 1.5Lm1 + 1.0W Ye	s Y		1	1.2	3	9 1	1.2	77	1.5	32	1	70	- 0	-		-	_		_	-	-		-
_	1.2D + 1.5Lm1 + 1.0W Ye	s Y		1	1.2	3	9 1	1.2	77	1.5	33	1	71	1					_				-	
_	1.2D + 1.5Lm1 + 1.0W Ye				12	3	9 1	1.2	77	1.5	34	1	72	1								_		
_	1.2D + 1.5Lm1 + 1.0W Ye	s Y		1	112	3	9	1.2	77	1.5	35	1	73	1									_	-
-	LOD . A FL 4 L 4 OWN MG	s Y	1	1	1 2	3	9	1.2	77	1.5	36	1	74	1										
4	1.2D + 1.5LIII T 1.0VV TE	s Y		1	1 2	2	9 '	12	77	1 5	37	1	75	1 22										
35	1.2D + 1.5Lm1 + 1.0W Ye	S 1	-		1 0	3	0	12	77	1 5	38	1	76											
36	1.2D + 1.5Lm1 + 1.0W Ye	s Y		1							27		65											
7_	1.2D + 1.5Lm2 + 1.0W Ye	s Y	-										66											
38	1.2D + 1.5Lm2 + 1.0W Ye	s Y		-	1.2	3	9	1.2	78	1.5	28	1			1			_						Г
39	1.2D + 1.5Lm2 + 1.0W Ye	s Y		1	1.2	2 3	9	1.2	78	1.5	29	1	67	1	\vdash	-								Г
เก	1.2D + 1.5Lm2 + 1.0W Ye	s Y		1	1.2	2 3	9	1.2	78	1.5	30	1	68		-		-	-	-	_			-1	Г
11	1.2D + 1.5Lm2 + 1.0W Ye	s Y		1	1.2	2 3	9	<u>1.2</u>	78	1.5	31	1	69	-	-				-					
12	1.2D + 1.5Lm2 + 1.0W Ye	s Y	Control	1	1.2	2 3	9	1.2	78	1.5	32	1	70	-	+						-		-	-
12	1.2D + 1.5Lm2 + 1.0W Ye	s Y		1	1.2	2 3	9	1.2	78	1.5	33	1	71	1	_				_		-			-
	1.2D + 1.5Lm2 + 1.0W Ye	s Y		1	11.2	3	9	1.2	78	1.5	5 34	1	72	1								_	_	-
14	1.2D + 1.5Lm2 + 1.0W Ye	s Y		1	110	3	9	12	78	1.5	35	1	73	1										1
	1.2D + 1.5Lill2 + 1.0W.	, V		1	11	2 3	Q ·	1 2	78	1 5	36	1	74	1										1.
	1.2D + 1.5Lm2 + 1.0W Ye			1.4	1.0	2 3	0	1.2	78	1 5	37	1		7	T									
17_	1.2D + 1.5Lm2 + 1.0W Ye	s Y	_	1	1.0	2 3	0	1.2	78	1 6	38	1		-										
18	1.2D + 1.5Lm2 + 1.0W Ye			1								1	-	† ·										
19	1.2D + 1.5Lv1 Ye		_	1						1.5		+		1	1									
50	1.2D + 1.5Lv2 Ye			1						1.5)	+	+	+	+				-					
51	1.4D Ye			1	1.4	4 3	9	1.4	-	-	-	-	00	1	02	-	EI 7	1	E		\vdash			T
52	1.2D + 1.0Ev + 1.0Eh (0Ye	s Y		1	1.2	2 3	39	1.2	81	1	E	1	82	000	00								_	t
53	1.2D + 1.0Ev + 1.0Eh (3.)Ye	es Y		1						1				.00	83	.5	E14	.000	-	.5	\vdash			H
54	1.2D + 1.0Ev + 1.0Eh (6Ye	s Y		1					81			_		_	83	.866	E	.5		.000			-	+
55	1.2D + 1.0Ev + 1.0Eh (9.)Ye	s Y		1	11.2	2 3	39	1.2	81	1	E	1	82		83	1	EL4	_	E					+
-	1.2D + 1.0Ev + 1.0Eh (1.)Ye	s Y		1	1.3	2 3	39	1.2	81	1	E.,	. 1	82	5	83	.866	ELZ	5	E	.866				+
56	1.2D + 1.0Ev + 1.0Eh (1. Ye	s Y		1	11:	2 3	39	1.2	81	1	E.,	. 1	182	86	683	1.5	ELZ	,80t	JE	.5	-			+
2/	1.2D + 1.0Ev + 1.0Eh (1. Ye	s Y		1	1	2 3	39	1.2	81	1	E	. 1	82	-1	83		ELZ	-1	E		6 9			+
<u> 8c</u>	1.2D + 1.0EV + 1.0Eh (1.11	es Y		1					81		E	. 1	82	86	683	5	ELZ	866	3E	5				-
	1.2D + 1.0Ev + 1.0Eh (2. Ye	1 V	-	1	4.4	2 3	20	1 2	81	1		. 1	82	5	83	866	ELZ	5	E	866	3			1
60	1.2D + 1.0Ev + 1.0Eh (2. Ye	es Y	+	-	4 4	2 0	20	1.2	21	1	E		82		83	-1	ELZ		E	-1				
61	1.2D + 1.0Ev + 1.0Eh (2. Y	s Y	-	1	100		00	1.2	01	1	Ē	_	82	5	83	866	ELZ	.5	E	866	3			
62	1.2D + 1.0Ev + 1.0Eh (3Y)	es Y	-	11	1.	2 3	שמ	1.2	01	1		. 1	02	88	6 83	5	ELZ	.866	E	5				Γ
63	1.2D + 1.0Ev + 1.0Eh (3Y)	es Y	-	1	1.3	2 3	19	1.2	0	1			02	1.00	o 0 0		FI 7	1	F	1.0				Ī
64	0.9D - 1.0Ev + 1.0Eh (0Ye	es Y		1	9.	3	39	.9	81	-1	E.,		82	000	83	E								t
65	0.9D - 1.0Ev + 1.0Eh (3Y	es Y		1	.9) 3	39	.9	81	-1	E.,		82	.86	0 03	.5	===	.000	1	000				t
66	0.9D - 1.0Ev + 1.0Eh (6Y	es Y		1	9.9	3	39	.9	81	-1	E	- 1	82	.5	83	.866	ELZ	.5	E	000		-	-	t
	10F 10FL (0 W			1	0	1 3	20	a	21	111-1	I IE.,		1 82	2	183	1	ELZ		E	1 1		-		+
67	0.9D - 1.0Ev + 1.0Eh (3Y	es Y		1	C	1 2	20	a	81	1 -1	E		82	5	83	.866	ELZ	5	E	.866				+
<u>68</u>	TOTAL A OFFI AN MANAGEMENT			1	C	13	39	.9	81		E.,		82	186	683	.5	ELZ	00	<u> </u>	C.			-	1
69	TO THE MARKET AND A MARKET AND		-	1	C)	20	Q	181	-1	E.		1 82	-1	183		J=LZ	-1.	E					1
70	U.9D - 1.0EV + 1.0EH (1)	1	- 1	1		-			-		-		1 00	00	000	5	EL 7	000	2 =	5				1



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

Load Combinations (Continued)

		Description	S	PDelta	S B	. Fa	. B	Fa.	В	Fa	В	Fa	B	Fa	B	Fa	B	Fa	B	Fa	R	Fa	D.	Ea
72	0.9D -	1.0Ev + 1.0Eh (2	Yes	Y	1	.9	39	.9	81	-1	Ē	-1	82	- 5	83	866	ELZ	- 5	Ē	866	D	I a	D	Fa
The second second		1.0Ev + 1.0Eh (2	1		1					-1					_	-1	_	_	E	-1				
74	0.9D -	1.0Ev + 1.0Eh (3	Yes	Υ	1														F	866	100	-		-
75	0.9D -	1.0Ev + 1.0Eh (3	Yes	Υ	1	.9	39	.9	81	-1	E	-1	82	.866	83	- 5	ELZ	.866	E	5				

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap
1	N1	7	0	4.206357	Ò	
2	N2	-7	0	4.206357	0	
3	N3	0	0	-2	0	
4	N5	-2.541667	0	-3.5	0	
5	N6	2.315104	0.166667	-3.5	0	
6	N7	-2.315104	0.166667	-3.5	0	
7	N8	6.583333	0	4.206357	0	
8	N9	6.583333	0	4.456357	0	
9	N10	-6.75	0	4.206357	0	
10	N11	-6.75	0	4.456357	Ō	
11	N12	1.75	0	4.206357	0	
12	N13	1.75	0	4.456357	Ö	
13	N14	-4.25	0	4.206357	Ō	
14	N15	-4.25	0	4.456357	0	
15	N16	-4.25	-4	4.456357	0	
16	N17	-4.25	4	4.456357	0	N
17	N18	-6.75	-4	4.456357	0	
18	N19	-6.75	4	4.456357	0	
19	N20	1.75	-4	4.456357	0	
20	N21	1.75	4	4.456357	Ö	
21	N22	6.583333	-4	4.456357	0	
22	N23	6.583333	4	4.456357	0	+
23	N24	0.000333	0	-3.5		
24	N27	0	0	-7.1875	0	
25	CP	0	0		0	
26	N29	2.315104	0	0	0	
27	N30	-2.315104		-3.5	0	
28	N101	2.541667	0	-3.5	0	
29	N102	-0.166667	0	-3.5	0	
30	N103A	0.166667	0	-3.5	0	
31	N104A		0	-3.5	0	
32	N104A	-2.541667	0	-3.71875	0	
33	N131	2.541667	0	-3.71875	0	
34	N135	2.458333	0	-3.863088	0	
35		0.571615	0	-7.090523	0	
	N144	-2.458333	0	-3.863088	0	
36	N148	-0.571615	0	-7.090523	0	
37	N86A	2.584629	0	-3.936004	0	
38	N86B	-2.584629	0	-3.936004	0	
39	N86C	-0.515625	0	-7.1875	0	
40	N87A	0.515625	0	-7.1875	0	
41	N86D	0.715429	0	-7.173554	0	
42	N86E	-0.715429	0	-7.173554	0	
43	N88A	0	0	-7.104167	0	
44	N87C	0.234238	0.166667	-7.104167	0	
45	N86G	0.234238	- 0	-7.104167	0	
46	N87B	-0.234238	0.166667	-7.104167	0	
47	N88C	-0.234238	0	-7.104167	Ö	
48	N52	-1.732051	0	1.	0	



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

Joint Coordinates and Temperatures (Continued)

	Label	emperatures (Co	Y [ft]	Z [ft]	Temp [F]	Detach From Diap
40	N53	-1.760256	0	3.951148	0	
49 50	N54	-4.188641	0.166667	-0.254939	0	
	N55	-1.873537	0.166667	3.754939	0	
51	N56	-3.031089	0	1.75	0	
52		-6.224558	0	3.59375	0	
53	N57 N59	-4.188641	0	-0.254939	0	
54		-1.873537	0	3.754939	0	
55	N60	-4.301922	0	-0.451148	0	
56	N61	-2.947756	0	1.894338	0	
57	N62		0	1.605662	0	
58	N63	-3.114422	0	4.060523	0	
59	N64	-1.949699	0	-0.341773	0	
60	N65	-4.491365	0	-0.197435	0	
61	N66	-4.574699		3.050229	0	
62	N67	-6.426381	0	4.060523	0	
63	N68	-2.116365	0		0	
64	N69	-5.854766	0	4.040294	0	
65	N70	-4.700994	0	-0.270352		3
66	N71	-2.116365	0	4.206357	0	
67	N72	-5.966745	00	4.040294	0	
68	N73	-6.48237	0	3.147206	0	
69	N74	-6.570195	0	2.967198	0	
70	N75	-5.854766	0	4.206357	0	
	N76	-6.152389	0	3.552083	0	
71	N77	-6.269508	0.166667	3.349228	0	0.
72		-6.269508	0	3.349228	0	
73	N78	-6.03527	0.166667	3.754939	0	
74	N79	-6.03527	0.100001	3.754939	0	
75	N80	1.732051	0	1.	0	
76	N81		0	-0.451148	Ō	
77	N82	4.301922	0.166667	3.754939	0	
78	N83	1.873537		-0.254939	0	
79	N84	4.188641	0.166667	1.75	Ö	
80	N85	3.031089	0	3.59375	0	
81	N86	6.224558	0		0	
82	N88	1.873537	0	3.754939	0	
83	N89	4.188641	0	-0.254939		
84	N90	1.760256	0	3.951148	0	
85	N91	3.114422	0	1.605662	0	
86	N92	2.947756	0	1.894338	0	
87	N93	4.491365	0	-0.341773	0	
	N94	1.949699	0	4.060523	0	
88	N95	2.116365	0	4.060523	0	
89		5.854766	0	4.040294	0	In the second
90	N96	4.574699	Ö	-0.197435	0	
91	N97	6.426381	ő	3.050229	0	
92	N98		0	4.206357	0	
93	N99	2.116365	1 0	-0.270352	0	
94	N100	4.700994		3.147206	Ö	
95	N101A	6.48237	0	4.040294	0	
96	N102A	5.966745	0		0	
97	N103	5.854766	0	4.206357	0	
98	N104	6.570195	0	2.967198	0	
99	N105A	6.152389	0	3.552083		
100	N106	6.03527	0.166667	3.754939	0	
101	N107	6.03527	0	3.754939	.0	
102	N108	6.269508	0.166667	3.349228	0	
102	N109	6.269508	0	3.349228	0	
	N108A	0.142812	0	-8.165356	0	
104	N109A	7.142812	0	3.959	0	



: Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap
106	N110	0.351145	0	-7.804512	0	Detach From Diap
107	N111	0.567651	0	-7.929512	0	
108	N112	7.017812	0	3.742493	0	
109	N113	7.234318	0	3.617493	0	
110	N114	2.767812	0	-3.618723	0	
111	N115	2.984318	0	-3.743723	0	
112	N116	5.767812	0	1.57743	0	
113	N117	5.984318	0	1.45243	0	
114	N118	5.984318	-4	1.45243	0	
115	N119	5.984318	4	1.45243	0	
116	N120	7.234318	-4	3.617493	0	
117	N121	7.234318	4	3.617493	Ö	
118	N122	2.984318	-4	-3.743723	0	
119	N123	2.984318	4	-3.743723	Ö	
120	N124	0.567651	-4	-7.929512	0	
121	N125	0.567651	4	-7.929512	0	
122	N129	2.984318	2.75	-3.743723	0	
123	N131A	-7.142812	0	3.959	0	
124	N132	-0.142812	0	-8.165356	0	
125	N133	-6.934478	0			
126	N134	-7.150985	0	3.598156	0	
127	N135A	-0.267812		3.473156	0	
128	N136	-0.484318	0	-7.94885	0	
129	N137		0	-8.07385	0	
130	N138	-4.517812	0	-0.587634	00	
131	N139	-4.734318	0	-0.712634	0	
132	N140	-1.517812	0	-5.783786	0	
133	N141	-1.734318	0	-5.908786	0	
		-1.734318	-4	-5.908786	0	
134	N142	-1.734318	4	-5.908786	0	
135	N143A	-0.484318	-4	-8.07385	0	
136	N144A	-0.484318	4	-8.07385	0	
137	N145	-4.734318	-4	-0.712634	0	
138	N146	-4.734318	4	-0.712634	0	
139	N147	-7.150985	-4	3.473156	0	
140	N148A	-7.150985	4	3.473156	0	
141	N152	-4.734318	2.75	-0.712634	0	
142	N152A	0	0	-3	0	
143	N153A	-0.266667	0	-3	.0	
144	N154	-0.266667	5	-3	0	
145	N155	-0.266667	2.5	-3	0	
146	N159	7	3	4.206357	0	
147	N160	-7	3	4.206357	0	
148	N161	6.583333	3	4.206357	0	
149	N162	6.583333	3	4.456357	0	
150	N163	-6.75	3	4.206357	Ö	
151	N164	-6.75	3	4.456357	0	
152	N165	1.75	3	4.206357	Ö	
153	N166	1.75	3	4.456357	0	
154	N167	-4.25	3	4.206357	0	
155	N168	-4.25	3	4.456357	0	
156	N169	-2.116365	3	4.206357	0	
157	N170	2.116365	3	4.206357	0	
158	N171	0.142812	3	-8.165356	0	
159	N172	7.142812	3	3.959		
160	N173	0.351145	3	-7.804512	0	
161	N174	0.567651	3			
162	N175	7.017812	3	-7.929512 3.742493	0	
	71170	1.017012	3	3.742493	0	



Company Designer Job Number

Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap
100	N176	7.234318	3	3.617493	0	
163	N177	2.767812	3	-3.618723	0	
164		2.984318	3	-3.743723	0	
165	N178	5.767812	3	1.57743	0	
166	N179	5.984318	3	1,45243	0	
167	N180	-7.142812	3	3.959	0	
168	N181	-0.142812	3	-8.165356	0	
169	N182	-6.934478	3	3.598156	0	
170	N183	-7.150985	3	3.473156	0	
171	N184	-0.267812	3	-7.94885	0	
172	N185	-0.484318	3	-8.07385	0	
173	N186	And the second s	3	-0.587634	0	
174	N187	-4,517812	3	-0.712634	0	
175	N188	-4.734318	3	-5.783786	0	
176	N189	-1.517812	3	-5.908786	0	
177	N190	-1.734318	3	4.206357	0	
178	N191	-5.75	3	4.206357	0	
179	N192	5.75		3.893857	0	
180	N193	5.75	3	3.893857	0	
181	N195	-5.75		2.876468	0	
182	N196	6.517812	3		0	
183	N197	0.767812	3	-7.082824	0	
184	N198	0.497179	3	-6.926574	0	
185	N199	6.247179	3	3.032718		
186	N201	-0.767812	3	-7.082824	0	
187	N202	-6.517812	3	2.876468	0	
188	N203	-6.247179	3	3.032718	0	
189	N204	-0.497179	3	-6.926574	0	
190	N206	0	0	-5.25	0	
191	N209	-4.546633	0	2.625	0	
192	N212	4.546633	0	2.625	0	

Hot Rolled Steel Section Sets

	Trabal	Shape	Type	Design List	Material	Design	A [in2]	lyy [in4]		J [in4]
_	Label	PIPE 3.0	Beam	Pipe	A53 Gr.B	Typical	2.07	2.85	2.85	5.69
1_	Face Horizontal	HSS4X4X4	Beam	SquareTube	A500 Gr.B Rect	Typical	3.37	7.8	7.8	12.8
2_	Standoff Horizontal	PL1/2x6	Beam	BAR	A36 Gr.36	Typical	3	.063	9	.237
3	Corner Plate		Beam	SquareTube	A500 Gr.B Rect		3.37	7.8	7.8	12.8
4	Platform Crossmember	HSS4X4X4	11/13/14 / - North 1	Single Angle	A36 Gr.36	Typical	.722	.271	.271	.009
5_	Grating Support	L2x2x3	Beam	Single Angle	A36 Gr.36	Typical	1.44	1.23	1.23	.031
6	Support Rail Corner	L3X3X4	Beam	Single Angle	A36 Gr.36	Typical	2.18	4.09	1.9	.027
7	Mod Kickers	LL3x3x3x3	Beam		A53 Gr.B	Typical	1.02	.627	.627	1.25
8	Mount Pipe	PIPE 2.0	Column	Pipe	A53 Gr.B	Typical	1.61	1.45	1.45	2.89
9	Support Rail	PIPE 2.5	Column	Pipe			2.25	.026	6.75	.101
10	Cross Arm Plate	PL3/8x6	Column	RECT	A36 Gr.36	Typical	1.61	1.45	1.45	2.89
11	Mount Pipe 2.5	PIPE 2.5	Column	Pipe	A53 Gr.B	Typical	1.01	1.40	1.70	2.00

Hot Rolled Steel Properties

0.	Kulled Steel I		G [ksi]	Nu	Therm (/1	Density[k/ft^3]	Yield[ksi]	Ry	Fu[ksi]	Rt
	Label	E [ksi]		3	.65	.49	50	1.1	65	1.1
1	A992	29000	11154	.5_			36	1.5	58	1.2
2	A36 Gr.36	29000	11154	.3	.65	.49		1.0		1.1
2	A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	65	1.1
3_			11154	3	.65	.527	42	1.4	58	1.3
4_	A500 Gr.B RND			.0		.527	46	14	58	1.3
5	A500 Gr.B Rect	29000	11154	.3	.65			16		1.2
6	A53 Gr.B	29000	11154	.3	.65	.49	35	1.6	60	
7	A1085	29000	11154	.3	.65	.49	50	1.4	65	1.3



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

Hot Rolled Steel Properties (Continued)

	Label	E [ksi]	G [ksi]	Nu	Therm (/1	Density[k/ft^3]	Yield[ksi]	Rv	Fulksil	P+
8	Q235	29000	11154	.3	.65	.49	35	1.5	58	12

Member Primary Data

1	Label	1 Joint	J Joint	K Joint	Rotate(deg	Section/Shape	Туре	Design List	Material	Design Rules
1	M1	N2	N1			Face Horizontal		Pipe	A53 Gr.B	Typical
2	M4	N3	N27		ļ	Standoff Horiz	Beam	SquareTube		Typical
3	M10	N101	N103A		-	Platform Cross.	Beam	SquareTube		Typical
4	M19	N8	N9		-	RIGID	None	None	RIGID	Typical
5	M20	N10	N11		ļ	RIGID	None	None	RIGID	Typical
6	M21	N12	N13			RIGID	None	None	RIGID	Typical
7	M22	N14	N15			RIGID	None	None	RIGID	Typical
8	MP3A	N17	N16			Mount Pipe	Column		A53 Gr.B	Typical
9	MP4A	N19	N18			Mount Pipe	Column		A53 Gr.B	Typical
10	MP2A	N21	N20			Mount Pipe 2.5	Column	Pipe	A53 Gr.B	Typical
11	MP1A	N23	N22			Mount Pipe	Column		A53 Gr.B	Typical
12	M43	N102	N5			Platform Cross	Beam	SquareTube		Typical
13	M46	N86C	N87A			Corner Plate	Beam	BAR	A36 Gr.36	Typical
14	M35A	N7	N30			RIGID	None	None	RIGID	Typical
15	M36A	N6	N29			RIGID	None	None	RIGID	Typical
16	M51B	N87C	N6			Grating Support	Beam	Single Angle	A36 Gr.36	Typical
17	M52B	N7	N87B			Grating Support	Beam	Single Angle	A36 Gr.36	Typical
18	M52	N87B	N88C			RIGID	None	None	RIGID	Typical
19	M58	N102	N24			RIGID	None	None	RIGID	Typical
20	M59	N24	N103A			RIGID	None	None	RIGID	Typical
21	M76	N101	N105			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
22	M77	N105	N131			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
23	M79	N131	N86A			RIGID	None	None	RIGID	Typical
24	M80	N87A	N135			Corner Plate	Beam	BAR	A36 Gr.36	Typical
25	M83	N135	N86D			RIGID	None	None	RIGID	Typical
26	<u> M84</u>	N5	N104A			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
27	M85	N104A	N144			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
28	M88	N144	N86B			RIGID	None	None	RIGID	Typical
29	M91	N86C	N148			Corner Plate	Beam	BAR	A36 Gr.36	Typical
30	M92	N148	N86E			RIGID	None	None	RIGID	Typical
31	M50	N88C	N88A			RIGID	None	None	RIGID	Typical
32	M51	A88N	N86G			RIGID	None	None	RIGID	Typical
33	M51A	N87C	N86G			RIGID	None	None	RIGID	Typical
34	M34	N52	N57			Standoff Horiz	Beam	SquareTube		Typical
35	M35	N61	N63			Platform Cross	Beam	SquareTube		Typical
36	M36	N62	N53			Platform Cross	Beam	SquareTube		Typical
37	M37	N72	N73			Corner Plate	Beam	BAR	A36 Gr.36	Typical
38	M38	N55	N60		240	RIGID	None	None	RIGID	Typical
39	M39	N54	N59		240	RIGID	None	None	RIGID	Typical
40	M40	N77	N54			Grating Support	Beam	Single Angle	A36 Gr.36	Typical
41	M41	N55	N79			Grating Support	Beam	Single Angle		Typical
42	M42	N79	N80		240	RIGID	None	None	RIGID	
43	M43A	N62	N56		240	DIOID				Typical
44	M44	N56	N63		100000	RIGID	None	None None	RIGID RIGID	Typical
45	M45	N61	N65			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
46	M46A	N65	N66	11		Cross Arm Plate	Column		A36 Gr.36	Typical
47	M47	N66	N70			RIGID	None	RECT	RIGID	Typical
48	M48	N73	N67			Corner Plate	Beam	None	A36 Gr.36	Typical
49	M49	N67	N74			RIGID		BAR		Typical
50	M50A	N53	N64			Cross Arm Plate	None	None RECT	RIGID A36 Gr.36	Typical Typical
	11100/1	1400	IVUT				CADILLITATI	KEL.I	MAD CILLID	IVDICAL



: Colliers Engineering & Design : CL

: CL : Project No. 10206276 : 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

Member Primary Data (Continued)

	Label	1 Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
52	M52A	N68	N71			RIGID	None	None	RIGID	Typical
53	M53	N72	N69			Corner Plate	Beam	BAR	A36 Gr.36	Typical
54	M54	N69	N75			RIGID	None	None	RIGID	Typical
55	M55	N80	N76			RIGID	None	None	RIGID	Typical
		N76	N78			RIGID	None	None	RIGID	Typical
56	M56	N77	N78		240	RIGID	None	None	RIGID	Typical
57	M57		N86			Standoff Horiz	Beam	SquareTube	A500 Gr.B.,	Typical
58	M58A	N81	N92			Platform Cross	Beam	SquareTube	A500 Gr.B	Typical
59	M59A	N90				Platform Cross		SquareTube	A500 Gr.B	Typical
60	M60	N91	N82		1	Corner Plate		BAR	A36 Gr.36	Typical
61	M61	N101A	N102A		120	RIGID	None	None	RIGID	Typical
62	M62	N84	N89	100110	120	RIGID	None	None	RIGID	Typical
63	M63	N83	N88		120	Grating Support		Single Angle	A36 Gr.36	Typical
64	M64	N106	N83			Grating Support		Single Angle	A36 Gr.36	Typical
65	M65	N84	N108		400		None	None	RIGID	Typical
66	M66	N108	N109		120	RIGID		None	RIGID	Typical
67	M67	N91	N85		-	RIGID	None		RIGID	Typical
68	M68	N85	N92			RIGID	None	None	A36 Gr.36	Typical
69	M69	N90	N94			Cross Arm Plate		RECT	A36 Gr.36	Typical
70	M70	N94	N95			Cross Arm Plate		RECT		Typical
71	M71	N95	N99			RIGID	None	None	RIGID	
72	M72	N102A	N96			Corner Plate		BAR	A36 Gr 36	Typical
73	M73	N96	N103			RIGID	None	None	RIGID	Typical
	M74	N82	N93			Cross Arm Plate		RECT	A36 Gr.36	Typical
74		N93	N97		_	Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
75	M75	N97	N100			RIGID	None	None	RIGID	Typical
76	M76A	N101A	N98			Corner Plate	Beam	BAR	A36 Gr.36	Typical
77	M77A		N104			RIGID	None	None	RIGID	Typical
78	M78	N98				RIGID	None	None	RIGID	Typical
79	M79A	N109	N105A		-	RIGID	None	None	RIGID	Typical
80	M80A	N105A	N107		120	RIGID	None	None	RIGID	Typical
81	M81	N106	N107	-	120	Face Horizontal		Pipe	A53 Gr.B	Typical
82	M82	N108A	N109A		_	RIGID	None	None	RIGID	Typical
83	M83A	N110	N111					None	RIGID	Typical
84	M84A	N112	N113			RIGID	None	None	RIGID	Typical
85	M85A	N114_	N115			RIGID	None		RIGID	Typical
86	M86	N116	N117			RIGID	None	None	A53 Gr.B	
87	MP3C	N119	N118		240	Mount Pipe				
88	MP4C	N121	N120		240	Mount Pipe	Column	Pipe	A53 Gr.B	
89	MP2C	N123	N122		240	Mount Pipe 2.5			A53 Gr.B	
90	MP1C	N125	N124		240	Mount Pipe		Pipe	A53 Gr.B	
		N131A	N132			Face Horizontal	Beam	Pipe	A53 Gr.B	Typical
91	M91A	N133	N134			RIGID	None	None	RIGID	Typical
92	M92A		N136		1	RIGID	None	None	RIGID	Typical
93	M93	N135A	N138			RIGID	None	None	RIGID	Typical
94	M94	N137				RIGID	None	None	RIGID	Typical
95	M95	N139	N140	-	120	Mount Pipe		100000000000000000000000000000000000000	A53 Gr.B	Typical
96	MP3B	N142	N141	-	120	Mount Pipe	-	The state of the s	A53 Gr.B	
97	MP4B	N144A	N143A	-		Mount Pipe 2.5			A53 Gr.B	
98	MP2B	N146	N145		120	Mount Pipe			A53 Gr.B	
99	MP1B	N148A	N147		120			None	RIGID	Typical
100	M100	N152A	N153A			RIGID	None		A53 Gr.E	
101	M101	N155	N154			Mount Pipe	Column		A53 Gr.E	
102	M102	N160	N159			Support Rail		Pipe		Typical
103	M103	N161	N162			RIGID	None	None	RIGID	
104	M104	N163	N164	N ASSESSMENT		RIGID	None	None	RIGID	Typical
	M105	N165	N166			RIGID	None	None	RIGID	Typical
105	M105	N167	N168			RIGID	None	None	RIGID	Typical
	IVI IUO	IVIOI						Pipe	A53 Gr.E	Typical
106	M107	N171	N172			Support Rail	Column	1 100	RIGID	Typical



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
109	M109	N175	N176			RIGID	None	None	RIGID	Typical
110	M110	N177	N178			RIGID	None	None	RIGID	Typical
111	M111	N179	N180			RIGID	None	None	RIGID	Typical
112	M112	N181	N182			Support Rail	Column		A53 Gr.B	
113	M113	N183	N184			RIGID	None	None	RIGID	Typical
114	M114	N185	N186			RIGID	None	None	RIGID	Typical
115	M115	N187	N188			RIGID	None	None	RIGID	Typical
116	M116	N189	N190			RIGID	None	None	RIGID	Typical
117	M117	N192	N193			RIGID	None	None	RIGID	Typical
118	M118	N191	N195			RIGID	None	None	RIGID	Typical
119	M119	N197	N198			RIGID	None	None	RIGID	Typical
120	M120	N196	N199			RIGID	None	None	RIGID	Typical
121	M121	N202	N203			RIGID	None	None	RIGID	Typical
122	M122	N201	N204			RIGID	None	None	RIGID	Typical
123	M123	N195	N203		90	Support Rail C	Beam	Single Angle	A36 Gr.36	Typical
124	M124	N199	N193			Support Rail C	Beam	Single Angle	A36 Gr.36	Typical
125	M125	N204	N198			Support Rail C	Beam	Single Angle	A36 Gr.36	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physica	I Defl RatAnalysis	Inactive	Seismic
1	M1						Yes	Default	- Control of Control o	None
2	M4						Yes			None
_ 3	M10						Yes	Default		None
4	M19						Yes	** NA **		None
5	M20						Yes	** NA **		None
6	M21						Yes	** NA **		None
7	M22						Yes	** NA **		None
8	MP3A						Yes	** NA **		None
9	MP4A						Yes	** NA **		None
10	MP2A						Yes	** NA **		None
11	MP1A						Yes	** NA **		None
12	M43	1/1/2					Yes	Default		None
13	M46						Yes	Default		None
14	M35A						Yes	** NA **		None
15	M36A						Yes	** NA **		None
16	M51B	00000X	00000X				Yes	Default		None
17	M52B	00000X	00000X				Yes	Default		None
18	M52					1	Yes	** NA **		None
19	M58						Yes	** NA **		None
20	M59						Yes	** NA **		None
21	M76						Yes	** NA **		None
22	M77						Yes	** NA **		None
23	M79		BenPIN				Yes	** NA **		None
24	M80						Yes	+-19/2		None
25	M83		BenPIN				Yes	** NA **		None
26	M84						Yes	** NA **		None
27	M85						Yes	** NA **		None
28	M88		BenPIN				Yes	** NA **		None
29	M91						Yes	14/7		None
30	M92		BenPIN				Yes	** NA **		None
31	M50						Yes	** NA **		
32	M51						Yes	** NA **		None
33	M51A						Yes	** NA **		None
34	M34						Yes	11/7		None
35	M35						Yes	Default		None None



: Colliers Engineering & Design : CL : Project No. 10206276 : 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

Member Advanced Data (Continued)

	Label	1 Release	J Release	I Offset[in]	J Offset[in]	1/C Only		Defl Rat. Analysis	Inactive	Seismic
36	M36						Yes	Default		None
37	M37						Yes	Default ** NA **		None
38	M38						Yes	** NA **		None
39	M39						Yes			None
10	M40	00000X	00000X				Yes	Default		None
11	M41		00000X				Yes	Default		None
12	M42						Yes	** NA **	_	None
43	M43A						Yes	** NA ** ** NA **		None
44	M44						Yes	** NA **		None
45	M45						Yes	** NA ** ** NA **		None
46	M46A			5183			Yes	** NA **		None
47	M47		BenPIN				Yes	** NA **		None
48	M48						Yes	** *! A **		None
49	M49		BenPIN				Yes	** NA **		None
50	M50A						Yes	** NA ** ** NA **		None
51	M51C						Yes	** NA **		None
52	M52A		BenPIN				Yes	** NA **		None
53	M53						Yes	** NIA **		None
54	M54		BenPIN				Yes	** NA **		Non
55	M55						Yes	** NA **		None
56	M56						Yes	** NA **		Non
57	M57						Yes	** NA **	-	Non
58	M58A						Yes			Non
59	M59A						Yes	Default		Non
60	M60	1					Yes	Default		
61	M61						Yes	Default		Non
62	M62						Yes	** NA **		Non
	M63						Yes	** NA **		Non
63 64	M64	OOOOOX	00000X				Yes	Default		Non
65	M65	OOOOOX	00000X				Yes	Default		Non
	M66	CCCCCX	300007				Yes	** NA **		Non
66	M67						Yes	** NA **		Non
67	M68	+					Yes	** NA **		Non
68							Yes	** NA **		Non
69	M69						Yes	** NA **		Non
<u>70</u>	M70	-	BenPIN				Yes	** NA **	ļ	Non
71	M71	1	DOM MY			SE250	Yes			Non
72	M72		BenPIN				Yes	** NA **		Non
73	M73	-	Dem III				Yes	** NA **		Non
74	M74						Yes	** NA **		Non
75	M75		BenPIN				Yes	** NA **		Non
76	M76A		Delli III				Yes			Non
77	M77A		BenPIN				Yes	** NA **		Non
78_	M78	-	Delli IIV				Yes	** NA **		Non
79	M79A	-					Yes	** NA **	2	Non
80_	M80A	+	-		1		Yes	** NA **		Non
81	M81		-		777		Yes	Default		Non
82	M82		1		1		Yes	** NA **		Non
83	M83A						Yes	** NA **		Non
84	M84A	WANTED TO	+				Yes	** NA **		Nor
85	M85A		-				Yes	** NA **		Nor
86	M86						Yes	** NA **		Nor
87	MP3C		-		-		Yes	** NA **		Nor
88	MP4C				+	+	Yes	** NA **		Nor
89	MP2C				-		Yes	** NA **		Nor
90	MP1C			-			Yes	Default		Nor
91	M91A				-		Yes	** NA **		Nor
92	M92A						100			Page 14



: Colliers Engineering & Design

: CL

ob Number : Project No. 10206276 fodel Name : 5000245391-VZW_MT_LO_H July 5, 2023 5:39 PM Checked By: DX

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physica	I Defl RatAnalysis	Inactive	Seismic
93	M93						Yes	** NA **		None
94	M94						Yes	** NA **		None
95	M95						Yes	** NA **		None
96	MP3B						Yes	** NA **		None
97	MP4B						Yes	** NA **		None
98	MP2B						Yes	** NA **		None
99	MP1B						Yes	** NA **		
100	M100						Yes	** NA **		None
101	M101						Yes	** NA **		None
102	M102						Yes	** NA **		None
103	M103						Yes	** NA **		None
104	M104						Yes	** NA **		None
105	M105						Yes	** NA **		None
106	M106						Yes	** NA **		None
107	M107						Yes	** NA **		None
108	M108						Yes	** NA **		None
109	M109						Yes	** NA **		None
110	M110						Yes	** NA **		None
111	M111						Yes	** NA **		None
112	M112		-			77.7.7.7.	Yes	** NA **		None
113	M113						Yes	** NA **		None
114	M114									None
115	M115						Yes	** NA **		None
116	M116						Yes	** NA **		None
117	M117	00000X					Yes	** NA **		None
118	M118	00000X					Yes	** NA **		None
119	M119	00000X					Yes	** NA **		None
120	M120	00000X					Yes	** NA **		None
121	M121	00000X					Yes	** NA **		None
122	M122	00000X					Yes	** NA **		None
123	M123	COCCOX					Yes	** NA **		None
124	M124	t					Yes			None
125	M125						Yes			None
120	IVITZU						Yes			None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	Y	-23	2
2	MP2A	Mv	021	2
3	MP2A	Mz	.019	2
4	MP2A	Y	-23	6
5	MP2A	My	021	6
6	MP2A	Mz	.019	6
7	MP2B	Y	-23	2
8	MP2B	My	006	2
9	MP2B	Mz	028	2
10	MP2B	Y	-23	6
11	MP2B	My	006	6
12	MP2B	Mz	028	6
13	MP2C	Y	-23	$\frac{1}{2}$
14	MP2C	Mv	.028	2
15	MP2C	Mz	.004	2
16	MP2C	Y	-23	6
17	MP2C	My	.028	6
18	MP2C	Mz	.004	6
19	MP2A	Y	-23	2



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

M	ember Label	: Antenna D) (Cont	Magnitude[lb.k-ft]	Location[ft,%]
20	MP2A	My	021	2
21	MP2A	Mz	019	6
22	MP2A	Y	-23	6
23	MP2A	My	021	6
24	MP2A	Mz	019	2
25	MP2B	Y	-23	2
26	MP2B	My	.027	2
27	MP2B	Mz	009	6
28	MP2B	Y	-23	6
29	MP2B	My	.027	6
30	MP2B	Mz	009	2
31	MP2C	Y	-23	2
32	MP2C	My	001	2
33	MP2C	Mz	.028	
34	MP2C	Y	-23	6
35	MP2C	My	001	
36	MP2C	Mz	.028	6
37	MP3A	Y	-43.55	3
38	MP3A	My	022	3
39	MP3A	Mz	0	3
40	MP3A	Y	-43.55	5
41	MP3A	My	022	5
42	MP3A	Mz	0	5
43	MP3B	Y	-43.55	3
	MP3B	My	.011	3
45	MP3B	Mz	019	3
	MP3B	Y	-43.55	5
46	MP3B	My	.011	5
47	MP3B	Mz	019	5
48	MP3C	Y	-43.55	3
49	MP3C	My	.014	3
50	MP3C	Mz	.017	3
51	MP3C	Y	-43.55	5
52	MP3C	My	.014	5
53		Mz	.017	5
54	MP3C	Y	-10.5	2
55	MP1A	My	013	2
56	MP1A	Mz	0	2
57	MP1A	Y	-10.5	6
58	MP1A	My	013	6
59	MP1A	Mz	0	6
60	MP1A	Y	-10.5	2
61	MP1B	My	.007	2
62	MP1B	Mz	011	2
63	MP1B	Y	-10.5	6
64	MP1B	My	.007	6
65	MP1B	Mz	011	6
66	MP1B	Y	-10.5	2
67	MP1C		.007	2
68	MP1C	My	.011	2
69	MP1C	Mz	-10.5	6
70	MP1C	Y	.007	6
71	MP1C	My	.011	6
72	MP1C	Mz	-10.5	2
73	MP4A	Y	013	2
74	MP4A	My	013	2
75	MP4A	Mz	-10.5	6
76	MP4A	Y	-10.5	



Colliers Engineering & Design

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
77	MP4A	My	013	6
78	MP4A	Mz	0	6
79	MP4B	Y	-10.5	2
80	MP4B	My	.007	2
81	MP4B	Mz	011	2
82	MP4B	Y	-10.5	6
83	MP4B	Mv	.007	6
84	MP4B	Mz	011	6
85	MP4C	Y	-10.5	2
86	MP4C	Mv	.007	2
87	MP4C	Mz	.011	2
88	MP4C	Y	-10.5	6
89	MP4C	Mv	.007	6
90	MP4C	Mz	.011	6
91	M101	Y	-32	1
92	M101	My	-32	
93	M101	Mz	0	1
94	MP1A	Y	-84.4	
95	MP1A	My	.042	2.5
96	MP1A	Mz	0	2.5
97	MP1B	Y	-84.4	2.5
98	MP1B	My	-,021	2.5
99	MP1B	Mz	.037	2.5
100	MP1C	Y	-84.4	2.5
101	MP1C	My	027	2.5
102	MP1C	Mz		2.5
103	MP2A	Y	032	2.5
104	MP2A	My	-70.3	2.5
105	MP2A	Mz	.035	2.5
106	MP2B	Y	0	2.5
107	MP2B	My	-70.3	2.5
108	MP2B	Mz	018	2.5
109	MP2C	Y	.03	2.5
110	MP2C		-70.3	2.5
111	MP2C	My	023	2.5
112	MP2B	Mz Y	027	2.5
113	MP2B		-17.6	5
114		My	002	5
114	MP2B	Mz	.004	5

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	Y	-84.062	2
2	MP2A	My	077	2
3	MP2A	Mz	.07	2
4	MP2A	Y	-84.062	6
5	MP2A	My	077	6
6	MP2A	Mz	.07	6
7	MP2B	Y	-84.062	2
8	MP2B	My	022	2
9	MP2B	Mz	102	2
10	MP2B	Y	-84.062	6
11	MP2B	My	022	6
12	MP2B	Mz	102	6
13	MP2C	Y	-84.062	2
14	MP2C	Mv	.103	2
15	MP2C	Mz	.014	2



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	: Antenna Di) (Cont	Magnitude[lb,k-ft]	Location[ft,%]
16	MP2C	Y	-84.062	6 6
7	MP2C	My	.103	6
8	MP2C	Mz	.014	2
9	MP2A	Y	-84.062	2
20	MP2A	My	077	2
1	MP2A	Mz	07	6
2	MP2A	Y	-84.062	6
23	MP2A	My	077	6
24	MP2A	Mz	07	2
25	MP2B	Υ	-84.062	2
26	MP2B	My	.099	2
7	MP2B	Mz	032	6
28	MP2B	Y	-84.062	6
29	MP2B	My	.099	6
30	MP2B	Mz	032	2
31	MP2C	Y	-84.062	2
32	MP2C	My	004	2
33	MP2C	Mz	.104	6
34	MP2C	Y	-84.062	6
35	MP2C	My	004	6
36	MP2C	Mz	.104	3
37	MP3A	Y	-36.324	3
38	MP3A	My	018	3
39	MP3A	Mz	0	5
40	MP3A	Y	-36.324	5
41	MP3A	My	018	5
42	MP3A	Mz	0	
43	MP3B	Y	-36.324	3 3
44	MP3B	My	.009	3
45	MP3B	Mz	016	5
46	MP3B	Y	-36.324	5
47	MP3B	My	.009	5
48	MP3B	Mz	016	3
49	MP3C	Y	-36.324	3
50	MP3C	My	.012	3
51	MP3C	Mz	.014	5
52	MP3C	Y	-36.324	5
53	MP3C	My	.012	5
54	MP3C	Mz	.014	2
55	MP1A	Y	-59.636	2
56	MP1A	My	075	2
57	MP1A	Mz	0	6
58	MP1A	Y	-59.636	6
59	MP1A	My	075	6
60	MP1A	Mz	0	2
61	MP1B	Y	-59.636	2
62	MP1B	My	.037	2
63	MP1B	Mz	065	6
64	MP1B	Y	-59.636	6
65	MP1B	My	.037	6
66	MP1B	Mz	065	
67	MP1C	Y	-59.636	2
68	MP1C	My	.037	2
69	MP1C	Mz	.065	2
70	MP1C	Y	-59.636	6
71	MP1C	My	.037	6
72	MP1C	Mz	.065	6



Colliers Engineering & Design CL

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
73	MP4A	Y	-59.636	2
74	MP4A	My	075	2
75	MP4A	Mz	0	2
76	MP4A	Y	-59.636	6
77	MP4A	My	075	6
78	MP4A	Mz	0	6
79	MP4B	Y	-59.636	2
80	MP4B	My	.037	2
81	MP4B	Mz	065	2
82	MP4B	Y	-59.636	6
83	MP4B	My	.037	6
84	MP4B	Mz	065	6
85	MP4C	Y	-59.636	2
86	MP4C	My	.037	2
87	MP4C	Mz	.065	2
88	MP4C	Y	-59.636	6
89	MP4C	My	.037	6
90	MP4C	Mz	.065	6
91	M101	Y	-89.636	1
92	M101	My	0	1
93	M101	Mz	0	
94	MP1A	Y	-45.809	2.5
95	MP1A	Mv	.023	2.5
96	MP1A	Mz	0	2.5
97	MP1B	Y	-45.809	2.5
98	MP1B	My	011	2.5
99	MP1B	Mz	.02	2.5
100	MP1C	Y	-45.809	2.5
101	MP1C	Mv	015	2.5
102	MP1C	Mz	018	2.5
103	MP2A	Y	-41.202	2.5
104	MP2A	Mv	.021	2.5
105	MP2A	Mz	0	
106	MP2B	Y	-41.202	2.5
107	MP2B	My	01	2.5
108	MP2B	Mz	.018	2.5
109	MP2C	Y	-41.202	2.5
110	MP2C	My	-41.202	2.5
111	MP2C	Mz	013	2.5
112	MP2B	Y	-17.724	2.5
113	MP2B	My		5
114	MP2B	Mz	002 .004	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	2
2	MP2A	Z	-82.561	2
3	MP2A	Mx	069	2
4	MP2A	X	0	6
5	MP2A	Z	-82.561	6
6	MP2A	Mx	069	6
7	MP2B	X	0	2
8	MP2B	7	-66.983	2
9	MP2B	Mx	.081	2
10	MP2B	X	0	
11	MP2B	Z	-66.983	6



Colliers Engineering & Design

: CL : Project No. 10206276 : 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	lember Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
12	MP2B	Mx	.081	6
13	MP2C	X	0	2
14	MP2C	Z	-70.372	2
15	MP2C	Mx	012	2
16	MP2C	X	0	6
17	MP2C	Z	-70.372	6
	MP2C	Mx	012	6
18	MP2A	X	0	2
19	MP2A	Ž	-82.561	2
20		Mx	.069	2
21	MP2A	X	0	6
22	MP2A	Z	-82.561	6
23	MP2A	Mx	.069	6
24	MP2A	X	0	2
25	MP2B		-66.983	2
26	MP2B	Z	.025	2
27	MP2B	Mx	0	6
28	MP2B	X	-66.983	6
29	MP2B	Z	.025	6
30	MP2B	Mx		2
31	MP2C	X	0	2
32	MP2C	Z	-70.372	
33	MP2C	Mx	087	2
34	MP2C	X	0	6
35	MP2C	Z	-70.372	6
36	MP2C	Mx	087	6
	MP3A	X	0	3
37	MP3A	Z	-82.037	3
38	MP3A	Mx	0	3
39		X	0	5
40	MP3A	Z	-82.037	5
41	MP3A	Mx	0	5
42	MP3A		0	3
43	MP3B	X	-44.597	3
44	MP3B	Z	.019	3
45	MP3B	Mx	0	5
46	MP3B	X	-44.597	5
47	MP3B	Z		5
48	MP3B	Mx	.019	3
49	MP3C	X	0	3
50	MP3C	Z	-52.743	3
51	MP3C	Mx	-,02	
52	MP3C	X	0	5
53	MP3C	Z	-52.743	5
54	MP3C	Mx	02	5
55	MP1A	X	0	2
	MP1A	Z	-75.579	2
56	MP1A	Mx	0	2
57		X	0	6
58	MP1A	Z	-75.579	6
59	MP1A	Mx	0	6
60	MP1A	X	<u>ŏ</u>	2
61	MP1B	Z	-131.849	2
62	MP1B		.143	2
63	MP1B	Mx	0	6
64	MP1B	X		6
65	MP1B	Z	-131.849	6
66	MP1B	Mx	.143	2
67	MP1C	X	0	2
68	MP1C	Z	-131.849	



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

69	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
70	MP1C MP1C	Mx	143	2
71		X	0	6
72	MP1C MP1C	Z	-131.849	6
73		Mx	143	6
74	MP4A	X	0	2
	MP4A	Z	-75.579	2
75	MP4A	Mx	0	2
76	MP4A	X	0	6
77	MP4A	Z	-75.579	6
78	MP4A	Mx	0	6
79	MP4B	X	0	2
80	MP4B	Z	-131.849	2
81	MP4B	Mx	.143	2
82	MP4B	X	0	6
83	MP4B	Z	-131.849	6
84	MP4B	Mx	.143	6
85	MP4C	X	0	2
86	MP4C	Z	-131.849	2
87	MP4C	Mx	143	2
88	MP4C	X	0	6
89	MP4C	Z	-131.849	6
90	MP4C	Mx	143	6
91	M101	X	0	1 1
92	M101	Z	-109.145	
93	M101	Mx	0	1
94	MP1A	X	0	2.5
95	MP1A	Ž	-54.11	2.5
96	MP1A	Mx	0	2.5
97	MP1B	X	0	2.5
98	MP1B	Z	-40.757	2.5
99	MP1B	Mx	018	2.5
100	MP1C	X	-:018	2.5
101	MP1C	Z Z	-43.662	2.5
102	MP1C	Mx	.017	2.5
03	MP2A	X	0	2.5
104	MP2A	Z	-54.11	2.5
105	MP2A	Mx	-54.11	2.5
06	MP2B	X	0	2.5 2.5
07	MP2B	Z	-35.782	
108	MP2B	Mx	-30./82	2.5
09	MP2C	X	015 0	2.5
10	MP2C	Z		2.5
111	MP2C		-39.77	2.5
112	MP2B	Mx	.015	2.5
13	MP2B	X	0	5
114	MP2B	Z	-16.002	5
114	IVITZD	Mx	- 003	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	38.684	2
2	MP2A	Z	-67.003	2
3	MP2A	Mx	091	2
4	MP2A	X	38.684	6
5	MP2A	Ž	-67.003	6
6	MP2A	Mx	091	6
7	MP2B	X	30.895	2



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	: Antenna Wo (30 L	Magnitude[lb,k-ft]	Location[ft,%]
8	MP2B	Z	-53.512	2 2
9	MP2B	Mx	.057	
10	MP2B	X	30.895	6
1	MP2B	Z	-53.512	
2	MP2B	Mx	.057	6
3	MP2C	X	40.066	2
4	MP2C	Z	-69.396	2
5	MP2C	Mx	.038	2
6	MP2C	X	40.066	6
	MP2C	Z	-69.396	6
7	MP2C	Mx	.038	6
8	MP2A	X	38.684	2
9		Z	-67.003	2
20	MP2A	Mx	.02	2
21	MP2A	X	38.684	6
22	MP2A	<u>^</u> <u>- </u>	-67.003	6
23	MP2A	Mx	.02	6
24	MP2A		30.895	2
25	MP2B	X	-53.512	2
26	MP2B		.057	2
7	MP2B	Mx	30.895	6
28	MP2B	X	-53.512	6
29	MP2B	Z	.057	6
30	MP2B	Mx		2
31	MP2C	X	40,066	2
32	MP2C	Z	-69.396	2
33	MP2C	Mx	088	6
34	MP2C	X	40.066	
35	MP2C	Z	-69.396	6
36	MP2C	Mx	088	6
37	MP3A	X	34.779	3
38	MP3A	Z	-60.239	3
39	MP3A	Mx	017	3
40	MP3A	X	34.779	5
41	MP3A	Z	-60.239	5
	MP3A	Mx	017	5
12	MP3B	X	16.059	3
43	MP3B	Z	-27.815	3
14	MP3B	Mx	.016	3
45		X	16.059	5
46	MP3B	Ž	-27.815	5
47	MP3B	Mx	.016	5
48	MP3B	X	38.099	3
49	MP3C	Z	-65.989	3
50	MP3C		013	3
51	MP3C	Mx	38.099	5
52	MP3C	X	-65.989	5
53	MP3C	Z	013	5
54	MP3C	Mx	47.168	2
55	MP1A	X	-81.697	2
56	MP1A	Z	059	2
57	MP1A	Mx		6
58	MP1A	X	47.168	6
59	MP1A	Z	-81.697	
60	MP1A	Mx	059	6
61	MP1B	X	75.303	2
62	MP1B	Z	-130.429	2
63	MP1B	Mx	.188	2
64	MP1B	X	75.303	6



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

GE	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
65 66	MP1B	Z	-130.429	6
67	MP1B	Mx	.188	6
68	MP1C	X	47.168	2
69	MP1C	Z	-81.697	2
70	MP1C	Mx	059	2
	MP1C	X	47.168	6
71	MP1C	Z	-81.697	6
72	MP1C	Mx	059	6
73	MP4A	X	47.168	2
74	MP4A	Z	-81.697	2
75	MP4A	Mx	059	2
76	MP4A	X	47.168	6
77	MP4A	Z	-81.697	6
78	MP4A	Mx	059	6
79	MP4B	X	75.303	2
80	MP4B	Z	-130.429	2
81	MP4B	Mx	.188	2
82	MP4B	X	75.303	6
83	MP4B	Z	-130.429	6
84	MP4B	Mx	.188	6
85	MP4C	X	47.168	2
86	MP4C	Z	-81.697	2
87	MP4C	Mx	059	2
88	MP4C	X	47.168	6
89	MP4C	Z	-81.697	6
90	MP4C	Mx	059	6
91	M101	X	56.031	1
92	M101	Z	-97.049	1
93	M101	Mx	0	
94	MP1A	X	24.829	2.5
95	MP1A	Z	-43.006	2.5
96	MP1A	Mx	.012	2.5
97	MP1B	X	18.153	2.5
98	MP1B	Z	-31.442	2.5
99	MP1B	Mx	018	2.5
100	MP1C	X	26.014	2.5
01	MP1C	Z	-45.057	2.5
02	MP1C	Mx	.009	2.5
.03	MP2A	X	24	2.5
04	MP2A	Z	-41.57	2.5
05	MP2A	Mx	.012	2.5
06	MP2B	X	14.837	2.5
07	MP2B	Z	-25.698	2.5
80	MP2B	Mx	015	2.5
09	MP2C	X	25.626	2.5
10	MP2C	Z	-44.385	2.5
11	MP2C	Mx	.009	2.5
12	MP2B	X	5.082	5
13	MP2B	Z	-8.803	5
14	MP2B	Mx	003	5

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

	Member Label	Direction	Magnitude(lb k-ft)	Location[ft %]
1	MP2A	X	58.009	2
2	MP2A	Z	-33.491	2
3	MP2A	Mx	- 081	2



Company Designer Job Number

Colliers Engineering & Design

Project No. 10206276 5000245391-VZW_MT_LO_H Model Name

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
4	MP2A	X	58.009 -33.491	6
5	MP2A	Z	081	6
6	MP2A	Mx	58.009	2
7	MP2B	X	-33.491	2
8	MP2B	Z	.025	2
9	MP2B	Mx	58.009	6
10	MP2B	X	-33.491	6
11	MP2B	Z	.025	6
12	MP2B	Mx	70.958	2
13	MP2C	X	-40.967	2
14	MP2C		-40.967 .08	2
15	MP2C	Mx	70.958	6
16	MP2C	X	-40.967	6
17	MP2C	Z	.08	6
18	MP2C	Mx		2
19	MP2A	X	58.009	2
20	MP2A	Z	-33.491 025	2
21	MP2A	Mx		6
22	MP2A	X	58.009	6
23	MP2A	Z	-33.491	6
24	MP2A	Mx	025	2
25	MP2B	X	58.009	2
26	MP2B	Z	-33.491	2
27	MP2B	Mx	.081	6
28	MP2B	X	58.009	6
29	MP2B	Z	-33.491	6
30	MP2B	Mx	.081	2
31	MP2C	X	70.958	2
32	MP2C	Z	-40.967	2
33	MP2C	Mx	054	6
34	MP2C	X	70.958	6
35	MP2C	Z	-40.967	6
36	MP2C	Mx	054	3
37	MP3A	X	38.623	3
38	MP3A	Z	-22.299	3
39	MP3A	Mx	019	5
40	MP3A	X	38.623	5
41	MP3A	Z	-22.299	5
42	MP3A	Mx	019	3
43	MP3B	X	38.623	3
44	MP3B	Z	-22.299	3
45	MP3B	Mx	.019	
46	MP3B	X	38.623	5
47	MP3B	Z	-22.299	5
48	MP3B	Mx	.019	3
49	MP3C	X	69.743	3
50	MP3C	Z	-40.266	3
51	MP3C	Mx	.007	3
52	MP3C	X	69.743	5
53	MP3C	Z	-40.266	5
54	MP3C	Mx	.007	3
55	MP1A	X	114.185	2
56	MP1A	Z	-65.925	2
57	MP1A	Mx	143	2
58	MP1A	X	114.185	6
59	MP1A	Z	-65.925	6
60	MP1A	Mx	143	6



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
61	MP1B	X	114.185	2
62	MP1B	Z	-65.925	2
63	MP1B	Mx	.143	2
64	MP1B	X	114.185	6
65	MP1B	Z	-65.925	6
66	MP1B	Mx	.143	6
67	MP1C	X	65.453	2
68	MP1C	Z	-37.79	2
69	MP1C	Mx	-1e-6	2
70	MP1C	X	65.453	6
71	MP1C	Z	-37.79	6
72	MP1C	Mx	-1e-6	6
73	MP4A	X	114.185	2
74	MP4A	Z	-65.925	2
75	MP4A	Mx	143	2
76	MP4A	X	114.185	6
77	MP4A	Z	-65.925	6
78	MP4A	Mx	143	6
79	MP4B	X	114.185	2
80	MP4B	Z	-65.925	2
81	MP4B	Mx	.143	2
82	MP4B	X	114.185	6
83	MP4B	Z	-65.925	6
84	MP4B	Mx	.143	6
85	MP4C	X	65.453	2
86	MP4C	Z	-37.79	2
87	MP4C	Mx	-1e-6	2
88	MP4C	X	65.453	6
89	MP4C	Z	-37.79	6
90	MP4C	Mx	-1e-6	6
91	M101	X	110.721	1
92	M101	Ž	-63.925	
93	M101	Mx	0	1
94	MP1A	X	35.297	
95	MP1A	Z	-20.378	2.5
96	MP1A	Mx	.018	2.5
97	MP1B	X	35.297	2.5
98	MP1B	Z	-20.378	2.5
99	MP1B	Mx		2.5
100	MP1C	X	018	2.5
101	MP1C	Z	46.396	2,5
02	MP1C		-26.786	2.5
103	MP2A	Mx	005	2.5
104	MP2A	X	30.988	2.5
05	MP2A	Z	-17.891	2.5
06	MP2B	Mx	.015	2.5
07		X	30.988	2.5
08	MP2B	Z	-17.891	2.5
	MP2B	Mx	015	2.5
09	MP2C	X	46.222	2.5
10	MP2C		-26.686	2.5
11	MP2C	Mx	005	2.5
12	MP2B	X Z	13.858	5
13	MP2B		-8.001	5
114	MP2B	Mx	003	5

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

Mombor Lobol	Direction	The control of the co	
	Lucotton	Magnitudellh k #1	Location[ft 9/1
		500000000000000000000000000000000000000	



: Colliers Engineering & Design : CL : Project No. 10206276 : 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	ember Label	: Antenna Wo (90 L	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	61.79	2
	MP2A	X	0	2
3	MP2A	Mx	057	2
	MP2A	X	61.79	6
	MP2A	Z	0	6
3	MP2A	Mx	057	6
7	MP2B	X	77.368	2
3	MP2B	Z	0	2
9	MP2B	Mx	02	2
0	MP2B	X	77.368	6
1	MP2B	Z		6
2	MP2B	Mx	02	6
3	MP2C	X	73.979	2
4	MP2C	Z	0	2
5	MP2C	Mx	.091	2
6	MP2C	X	73.979	6
7	MP2C	Z	0	6
8	MP2C	Mx	.091	6
9	MP2A	X	61,79	2
0	MP2A	Z	0	2
1	MP2A	Mx	057	2
2	MP2A	X	61.79	6
3	MP2A	Z	0	6
	MP2A	Mx	057	6
24	MP2B	X	77.368	2
25	MP2B	Z	0	2
26	MP2B	Mx	.091	2
7	MP2B	X	77.368	6
28	MP2B	Ž	0	6
9	MP2B	Mx	.091	6
30	MP2C	X	73.979	2
31	MP2C	Ž	0	2
32	MP2C	Mx	004	2
33	MP2C	X	73.979	6
34	MP2C	Z	0	6
35	MP2C	Mx	004	6
36	MP3A	X	32.118	3
37	MP3A	Ž	0	3
38		Mx	016	3
39	MP3A MP3A	X	32.118	5
10		Z	0	5
11	MP3A	Mx	016	5
12	MP3A MP3P	X	69.557	3
13	MP3B	Z	0	3
14	MP3B	Mx	.017	3
15	MP3B	X	69.557	5
16	MP3B	Z	0	5
17	MP3B	Mx	.017	5
18	MP3B	X	61.412	3
19	MP3C	ż	0	3
50	MP3C	Mx	.02	3
51	MP3C		61.412	5
52	MP3C	X	0	5
53	MP3C	Mx	.02	5
54	MP3C		150.606	2
55	MP1A	X	0	2
56	MP1A		188	2
57	MP1A	Mx	.100	Page 2



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP1A	X	150.606	6
59	MP1A	Z	0	6
60	MP1A	Mx	188	6
61	MP1B	X	94.336	2
62	MP1B	Z	0	2
63	MP1B	Mx	.059	2
64	MP1B	X	94.336	6
65	MP1B	Z	0	6
66	MP1B	Mx	.059	6
67	MP1C	X	94.336	2
68	MP1C	Z	0	2
69	MP1C	Mx	.059	2
70	MP1C	X	94.336	6
71	MP1C	Z	0	6
72	MP1C	Mx	.059	6
73	MP4A	X	150.606	2
74	MP4A	Z	0	2
75	MP4A	Mx	188	2
76	MP4A	X	150.606	6
77	MP4A	Z	0	6
78	MP4A	Mx	188	6
79	MP4B	X	94.336	2
80	MP4B	Z	0	2
81	MP4B	Mx	.059	2
82	MP4B	X	94.336	6
83	MP4B	Z	0	6
84	MP4B	Mx	.059	6
85	MP4C	X	94.336	2
86	MP4C	Ž	0	2
87	MP4C	Mx	.059	2
88	MP4C	X	94.336	6
89	MP4C	Z	0	6
90	MP4C	Mx	.059	6
91	M101	X	140.72	1
92	M101	Ž	0	1
93	M101	Mx	0	1
94	MP1A	X	36.306	
95	MP1A	Z	0	2.5
96	MP1A	Mx	.018	2.5
97	MP1B	X		2.5
98	MP1B	Ž	49.659	2.5
99	MP1B	Mx		2.5
100	MP1C		012	2.5
101	MP1C	X	46.754	2.5
102	MP1C		0	2.5
103	MP2A	Mx	015	2.5
104	MP2A	X	29.673	2.5
105	MP2A MP2A		0	2.5
106	MP2B	Mx	.015	2.5
107	MP2B	X	48.001	2.5
108	MP2B	Z	0	2.5
109		Mx	012	2.5
	MP2C	X	44.013	2.5
110	MP2C	Z	0	2.5
111	MP2C	Mx	014	2.5
112	MP2B	X	27.676	5
113	MP2B	Z	0	5
114	MP2B	Mx	003	5



: Colliers Engineering & Design : CL

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	: Antenna Wo (120	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	58.009	2 2
2	MP2A	Z	33.491	2
3	MP2A	Mx	025	6
4	MP2A	X	58.009	6
5	MP2A	Z	33.491	6
6	MP2A	Mx	025	2
7	MP2B	X	71.5	2
8	MP2B	Z	41.281	2
9	MP2B	Mx	069	
10	MP2B	X	71.5	6
11	MP2B	Z	41.281	6
12	MP2B	Mx	069	
13	MP2C	X	55.616	2
14	MP2C	Z	32.11	2
15	MP2C	Mx	.074	2
16	MP2C	X	55.616	6
17	MP2C	Z	32.11	6
18	MP2C	Mx	.074	6
19	MP2A	X	58.009	2
20	MP2A	Z	33.491	2
21	MP2A	Mx	081	2
22	MP2A	X	58.009	6
23	MP2A	Z	33.491	6
	MP2A	Mx	081	6
24	MP2B	X	71.5	2
25	MP2B	Z	41.281	2
26	MP2B	Mx	.069	2
27		X	71.5	6
28	MP2B	Z	41.281	6
29	MP2B	Mx	.069	6
30	MP2B	X	55.616	2
31	MP2C	Ž	32.11	2
32	MP2C	Mx	.037	2
33	MP2C	X	55.616	6
34	MP2C	Z	32.11	6
35	MP2C	Mx	.037	6
36	MP2C	X	38.623	3
37	MP3A	Ž	22.299	3
38	MP3A		019	3
39	MP3A	Mx	38.623	5
40	MP3A	X	22.299	5
41	MP3A		019	5
42	MP3A	Mx	71.047	3
43	MP3B	X	41.019	3
44	MP3B		0	3
45	MP3B	Mx Mx	71.047	5
46	MP3B	X	41.019	5
47	MP3B	Z	0	5
48	MP3B	Mx	32.872	3
49	MP3C	X	18.979	3
50	MP3C	Z		3
51	MP3C	Mx	.018	5
52	MP3C	X	32.872	5
53	MP3C	Z	18.979	5
54	MP3C	Mx	.018	2
55	MP1A	X	114.185	2
56	MP1A	Z	65.925	2
57	MP1A	Mx	143	



Colliers Engineering & Design

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

58	Member Label	Direction	Magnitude[ib,k-ft]	Location[ft,%]
59	MP1A MP1A	X	114.185	6
60	MP1A MP1A	Z	65.925	6
61	MP1B	Mx	143	6
62	MP1B	X	65.453	2
63	MP1B	Mx	37.79	2
64	MP1B	X	-1e-6	2
65	MP1B	Z	65.453	6
66	MP1B	Mx	37.79	6
67	MP1C	X	<u>-1e-6</u> 114.185	6
68	MP1C	Ž	65.925	2
69	MP1C	Mx	.143	2
70	MP1C	X	114.185	2
71	MP1C	Z	65.925	6
72	MP1C	Mx	.143	
73	MP4A	X	114.185	6 2
74	MP4A	Z	65.925	2
75	MP4A	Mx	143	2
76	MP4A	X	114.185	6
77	MP4A	Z	65.925	6
78	MP4A	Mx	143	6
79	MP4B	X	65.453	2
80	MP4B	Z	37.79	2
81	MP4B	Mx	-1e-6	2
82	MP4B	X	65,453	6
83	MP4B	Z	37.79	6
84	MP4B	Mx	-1e-6	6
85	MP4C	X	114.185	2
86	MP4C	Z	65.925	2
87	MP4C	Mx	.143	2
88	MP4C	X	114.185	6
89	MP4C	Z	65.925	6
90	MP4C	Mx	.143	6
91	M101	X	119.34	1
92	M101	Z	68.901	1
93	M101	Mx	0	1
94	MP1A	X	35.297	2.5
95	MP1A	Z	20.378	2.5
96	MP1A	Mx	.018	2.5
97	MP1B	X	46.86	2.5
98	MP1B	Z	27.055	2.5
100	MP1B	Mx	0	2.5
101	MP1C	X	33.245	2.5
102	MP1C		19.194	2.5
103	MP1C	Mx	018	2.5
104	MP2A	X	30.988	2.5
105	MP2A	Z	17.891	2.5
106	MP2A MP2B	Mx	.015	2.5
107	MP2B	X	46.86	2.5
108	MP2B	Z	27.055	2.5
109	MP2C	Mx	0	2.5
110	MP2C	X	28.173	2.5
111	MP2C MP2C		16.266	2.5
112	MP2B	Mx	015	2.5
113	MP2B	X	29.023	5
114	MP2B	Mx	16.757	5
defeat.	IIII ZU	IVIX	0	5



RISA-3D Version 17.0.4

Company Designer Job Number Model Name

: Colliers Engineering & Design : CL : Project No. 10206276 : 5000245391.

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	: Antenna Wo (150	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	38.684	2 2
2	MP2A	Z	67.003	2
3	MP2A	Mx	.02	6
4	MP2A	X	38.684	6
5	MP2A	Z	67.003	6
6	MP2A	Mx	.02	
7	MP2B	X	38.684	2
8	MP2B	Z	67.003	2
	MP2B	Mx	091	2
9	MP2B	X	38.684	6
10	MP2B	Ž	67.003	6
11	MP2B	Mx	091	6
12		X	31.208	2
13	MP2C	Z	54.054	2
14	MP2C	Mx	.047	2
15	MP2C	X	31.208	6
16	MP2C	Z	54.054	6
17	MP2C		,047	6
18	MP2C	Mx	38.684	2
19	MP2A	X	67.003	2
20	MP2A	Z	091	2
21	MP2A	Mx		6
22	MP2A	X	38.684	6
23	MP2A	Z	67.003	6
24	MP2A	Mx	091	2
25	MP2B	X	38.684	2
26	MP2B	Z	67.003	2
27	MP2B	Mx	.02	2
	MP2B	X	38.684	6
28	MP2B	Z	67.003	6
29	MP2B	Mx	.02	6
30	MP2C	X	31.208	2
31		Z	54.054	2
32	MP2C	Mx	.065	2
33	MP2C	X	31.208	6
34	MP2C	Z	54.054	6
35	MP2C		.065	6
36	MP2C	Mx V	34.779	3
37	MP3A	X	60.239	3
38	MP3A	Z	017	3
39	MP3A	Mx	34.779	5
40	MP3A	X		5
41	MP3A	Z	60.239	5
42	MP3A	Mx	017	3
43	MP3B	X	34.779	3
44	MP3B	Z	60.239	
45	MP3B	Mx	017	3
46	MP3B	X	34.779	5
47	MP3B	Z	60.239	5
	MP3B	Mx	017	5
48		X	16.811	3
49	MP3C	Z	29.118	3
50	MP3C	Mx	.017	3
51	MP3C	X	16.811	5
52	MP3C	Z	29.118	5
53	MP3C		.017	5
54	MP3C	Mx	47.168	2
55	MP1A	X	81.697	2
56	MP1A	Z		2
57	MP1A	Mx	059	.r3d] Page 3



Colliers Engineering & Design CL

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

50	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP1A	X	47.168	6
59	MP1A	Z	81.697	6
60	MP1A	Mx	059	6
61	MP1B	X	47.168	2
62	MP1B	Z	81.697	2
63	MP1B	Mx	059	2
64	MP1B	X	47.168	6
65	MP1B	Z	81.697	6
66	MP1B	Mx	059	6
37	MP1C	X	75.303	2
68	MP1C	Z	130.429	2
69	MP1C	Mx	.188	2
70	MP1C	X	75.303	6
7.1	MP1C	Z	130.429	6
72	MP1C	Mx	.188	6
73	MP4A	X	47.168	2
74	MP4A	Z	81.697	2
75	MP4A	Mx	059	2
76	MP4A	X	47.168	6
77	MP4A	Z	81.697	6
78	MP4A	Mx	059	6
79	MP4B	X	47.168	2
80	MP4B	Z	81.697	2
81	MP4B	Mx	059	2
32	MP4B	X	47.168	6
33	MP4B	Z	81.697	6
34	MP4B	Mx	059	6
35	MP4C	X	75.303	2
36	MP4C	Z	130.429	2
37	MP4C	Mx	.188	2
38	MP4C	X	75.303	6
39	MP4C	Z	130.429	
90	MP4C	Mx	.188	6
91	M101	X	61.008	6
92	M101	Z	105.668	
93	M101	Mx	0	1
94	MP1A	X	24.829	
95	MP1A	Z	43.006	2.5
96	MP1A	Mx	.012	2.5
97	MP1B	X	24.829	2.5
8	MP1B	Ž	43.006	2.5
99	MP1B	Mx		2.5
00	MP1C		.012	2,5
01	MP1C	Z	18.421	2.5
02	MP1C	Mx	31.907	2.5
03	MP2A	V	018	2.5
04	MP2A	X	24	2.5
05	MP2A	Mx	41.57	2.5
26	MP2B	IVIX	.012	2.5
07	MP2B	X Z	24	2.5
08	MP2B		41.57	2.5
09		Mx	.012	2.5
10	MP2C	X	15.205	2.5
11	MP2C	Z	26.336	2.5
12	MP2C	Mx	015	2.5
	MP2B	X	13.838	5
13	MP2B	Z	23.968	5
14	MP2B	Mx	.003	5



RISA-3D Version 17.0.4

Company Designer Job Number Model Name

: Colliers Engineering & Design : CL

: CL : Project No. 10206276 : 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

N	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0 82.561	2
2	MP2A	Z		2
3	MP2A	Mx	.069	6
4	MP2A	X	0 82.561	6
5	MP2A	Z		6
6	MP2A	Mx	.069	2
7	MP2B	X	0	2
8	MP2B	Z	66.983	2
9	MP2B	Mx	081	6
10	MP2B	X	0	6
11	MP2B	Z	66.983	6
12	MP2B	Mx	081	2
13	MP2C	X	0	2
14	MP2C	Z	70.372	2
15	MP2C	Mx	.012	6
16	MP2C	X	0	6
17	MP2C	Z	70.372	6
18	MP2C	Mx	.012	2
9	MP2A	X	0	2
20	MP2A	Z	82.561	2
21	MP2A	Mx	069	6
22	MP2A	X	0	
23	MP2A	Z	82.561	6
24	MP2A	Mx	069	6 2
25	MP2B	X	0	
26	MP2B	Z	66.983	2
27	MP2B	Mx	025	2
28	MP2B	X	0	6
29	MP2B	Z	66.983	6
30	MP2B	Mx	025	6
31	MP2C	X	0	2
32	MP2C	Z	70.372	2
33	MP2C	Mx	.087	2
34	MP2C	X	0	6
35	MP2C	Z	70.372	6
36	MP2C	Mx	.087	6
37	MP3A	X	0	3
38	MP3A	Z	82.037	3
39	MP3A	Mx	0	3
40	MP3A	X	0	5
41	MP3A	Z	82.037	5
42	MP3A	Mx	0	5
43	MP3B	X	0	3
	MP3B	Z	44.597	3
44	MP3B	Mx	019	3
45	MP3B	X	0	5
46	MP3B	Z	44.597	5
47	MP3B	Mx	019	5
48	MP3C	X	0	3
49	MP3C	Z	52.743	3
50		Mx	.02	3
51	MP3C	X	0	5
52	MP3C	Z	52.743	5
53	MP3C	Mx	.02	5
54	MP3C	X	0	2
55	MP1A	Ž	75.579	2
56	MP1A	Mx	0	2
57	MP1A		a\5000245391-VZW_MT_LO_H	.r3dl Page 3



Company Designer Job Number

Colliers Engineering & Design CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

1	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP1A	X	0	6
59	MP1A	Z	75.579	6
60	MP1A	Mx	0	6
61	MP1B	X	0	2
62	MP1B	Z	131.849	2
63	MP1B	Mx	143	2
64	MP1B	X	0	6
65	MP1B	Z	131.849	6
66	MP1B	Mx	143	6
67	MP1C	X	0	2
68	MP1C	Z	131.849	2
69	MP1C	Mx	.143	2
70	MP1C	X	0	6
71	MP1C	Z	131.849	6
72	MP1C	Mx	.143	6
73	MP4A	X	0	2
74	MP4A	Z	75.579	2
75	MP4A	Mx	0	2
76	MP4A	X	0	6
77	MP4A	Z	75.579	6
78	MP4A	Mx	0	6
79	MP4B	X	0	2
80	MP4B	Z	131.849	2
81	MP4B	Mx	143	2
82	MP4B	X	0	6
83	MP4B	Z	131.849	6
84	MP4B	Mx	143	6
85	MP4C	X	0	2
86	MP4C	Z	131.849	2
87	MP4C	Mx	.143	2
88	MP4C	X	0	6
89	MP4C	Z	131.849	6
90	MP4C	Mx	.143	6
91	M101	X	0	1
92	M101	Z	109.145	1
93	M101	Mx	0	1
94	MP1A	X	0	2.5
95	MP1A	Z	54.11	2.5
96	MP1A	Mx	0	2.5
97	MP1B	X	0	2.5
98	MP1B	Z	40.757	2.5
99	MP1B	Mx	.018	2.5
00	MP1C	X	0	2.5
01	MP1C	Z	43.662	2.5
02	MP1C	Mx	017	2.5
103	MP2A	X	0	2.5
04	MP2A	Z	54.11	2.5
05	MP2A	Mx	0	2.5
06	MP2B	X	0	2.5
07	MP2B	Z	35.782	2.5
08	MP2B	Mx	.015	2.5
09	MP2C	X	0	2.5
10	MP2C	Ž	39.77	2.5
11	MP2C	Mx	015	2.5
12	MP2B	X	0	5
13	MP2B	Z	16.002	5
14	MP2B	Mx	.003	5



Company Designer Job Number Model Name

: Colliers Engineering & Design : CL : Project No. 10206276 : 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

M	ember Label	0 : Antenna Wo (210 Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-38.684	2
	MP2A		67.003	2
	MP2A	Mx	.091	2 6
	MP2A	X	-38.684	
5	MP2A	Z	67.003	6
6	MP2A	Mx	.091	6
7	MP2B	X	-30.895	2
8	MP2B	Z	53.512	2
9	MP2B	Mx	057	2
0	MP2B	X	-30.895	6
1	MP2B	Z	53.512	6
2	MP2B	Mx	057	6
3	MP2C	X	-40.066	2
14	MP2C	Z	69.396	2
5	MP2C	Mx	038	2
6	MP2C	X	-40.066	6
17	MP2C	Z	69.396	6
8	MP2C	Mx	038	6
19	MP2A	X	-38.684	2
20	MP2A	Z	67.003	2
21	MP2A	Mx	02	2
22	MP2A	X	-38.684	6
23	MP2A	Z	67.003	6
24	MP2A	Mx	02	6
25	MP2B	X	-30.895	2
26	MP2B	Z	53.512	2
27	MP2B	Mx	057	2
28	MP2B	X	-30.895	6
29	MP2B	Z	53.512	6
	MP2B	Mx	057	6
30	MP2C	X	-40.066	2
32	MP2C	Z	69.396	2
33	MP2C	Mx	.088	2
34	MP2C	X	-40.066	6
	MP2C	Z	69.396	6
35	MP2C	Mx	.088	6
36	MP3A	X	-34.779	3
37	MP3A	Z	60.239	3
38	MP3A	Mx	.017	3
39	MP3A	X	-34.779	5
40	MP3A	Z	60.239	5
41	MP3A	Mx	.017	5
42	MP3B	X	-16.059	3
43	MP3B	Ž	27.815	3
44	MP3B MP3B	Mx	016	3
45		X	-16.059	5
46	MP3B	Z	27.815	5
47	MP3B	Mx	016	5
48	MP3B	X	-38.099	3
49	MP3C	Ž	65.989	3
50	MP3C	Mx	.013	3
51	MP3C	X	-38.099	5
52	MP3C	Ž	65.989	5
53	MP3C	Mx	.013	5 .
54	MP3C	X	-47.168	2
55	MP1A	Z	81.697	2
56	MP1A	Mx	.059	2
57	MP1A	IVIX	a\5000245391-VZW_MT_LO_H	.r3dl Page



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP1A	X	-47.168	6
59	MP1A		81.697	6
60	MP1A	Mx	.059	6
61	MP1B	X	-75.303	2
62	MP1B	Z	130.429	2
63	MP1B	Mx	188	2
64	MP1B	X	-75.303	6
65 66	MP1B	Z	130.429	6
	MP1B	Mx	188	6
67 68	MP1C MP1C	X	-47.168	2
69	MP1C	Z	81.697	2
70	MP1C	Mx	.059	2
71	MP1C	X	-47.168	6
72	MP1C MP1C	Z	81.697	6
73	MP4A	Mx	.059	6
74	MP4A	X	-47.168	2
75	MP4A		81.697	2
76	MP4A	Mx X	.059	2
77	MP4A	Z	-47.168	6
78	MP4A	Mx	81.697	6
79	MP4B	X	.059	6
80	MP4B	Z	-75.303 430.430	2
81	MP4B	Mx	130.429 188	2
82	MP4B	X	-75.303	2
83	MP4B	Z	130.429	6
84	MP4B	Mx	188	6
85	MP4C	X	-47.168	6
86	MP4C	Z	81.697	2 2
87	MP4C	Mx	.059	2
88	MP4C	X	-47.168	6
89	MP4C	Z	81.697	6
90	MP4C	Mx	.059	6
91	M101	X	-56.031	1
92	M101	Ž	97.049	1
93	M101	Mx	0	
94	MP1A	X	-24.829	2.5
95	MP1A	Z	43.006	2.5
96	MP1A	Mx	012	2.5
97	MP1B	X	-18.153	2.5
98	MP1B	Z	31.442	2.5
99	MP1B	Mx	.018	2.5
100	MP1C	X	-26.014	2.5
101	MP1C	Z	45.057	2.5
102	MP1C	Mx	009	2.5
103	MP2A	X	-24	2.5
104	MP2A	Z	41.57	2.5
105	MP2A	Mx	012	2.5
106	MP2B	X	-14.837	2.5
107	MP2B	Z	25.698	2.5
108	MP2B	Mx	.015	2.5
109	MP2C	X	-25.626	2.5
110	MP2C	Z	44.385	2.5
111	MP2C	Mx	009	2.5
112	MP2B	X	-5.082	5
113	MP2B	Z	8.803	5
114	MP2B	Mx	.003	5



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-58,009	2
2	MP2A	Z	33.491	2
3	MP2A	Mx	.081	6
4	MP2A	X	-58.009	6
5	MP2A	Z	33.491	6
6	MP2A	Mx	.081	2
7	MP2B	X	-58.009	2
8	MP2B	Z	33.491	2
9	MP2B	Mx	025	6
10	MP2B	X	-58.009	
11	MP2B	Z	33.491	6
12	MP2B	Mx	025	6
13	MP2C	X	-70.958	2
14	MP2C	Z	40.967	2
15	MP2C	Mx	-,08	2
16	MP2C	X	-70.958	6
17	MP2C	Z	40.967	6
18	MP2C	Mx	08	6
19	MP2A	X	-58.009	2
20	MP2A	Z	33.491	2
	MP2A	Mx	.025	2
21	MP2A	X	-58.009	6
22	MP2A	Ž	33.491	6
23	MP2A	Mx	.025	6
24		X	-58.009	2
25	MP2B	Z	33.491	2
26	MP2B	Mx	081	2
27	MP2B	X	-58.009	6
28	MP2B	- X	33.491	6
29	MP2B	Mx	081	6
30	MP2B	X	-70.958	2
31	MP2C	Ž	40.967	2
32	MP2C		.054	2
33	MP2C	Mx	-70.958	6
34	MP2C	X	40.967	6
35	MP2C	Z	.054	6
36	MP2C	Mx	-38.623	3
37	MP3A	X	22.299	3
38	MP3A	Z	.019	3
39	MP3A	Mx		5
40	MP3A	X	-38.623	5
41	MP3A	Z	22.299	5
42	MP3A	Mx	.019	3
43	MP3B	X	-38.623	3
44	MP3B	Z	22.299	3
45	MP3B	Mx	019	3
46	MP3B	X	-38.623	5
47	MP3B	Z	22.299	5
48	MP3B	Mx	019	5
49	MP3C	X	-69.743	3
50	MP3C	Z	40.266	3
	MP3C	Mx	007	3
51	MP3C	X	-69.743	5
52	MP3C	Ž	40.266	5
53		Mx	007	5
54	MP3C	X	-114.185	2
55	MP1A	Ž	65.925	2
56	MP1A	Mx	.143	2
57	MP1A	.\\\\\\Rev 0\Ris		r3d] Page



Colliers Engineering & Design

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP1A	X	-114.185	6
59	MP1A		65.925	6
60	MP1A	Mx	.143	6
61	MP1B	X	-114,185	2
62	MP1B	Z	65.925	2
63	MP1B	Mx	143	2
64	MP1B	X	-114.185	6
65	MP1B	Z	65.925	6
66	MP1B	Mx	143	6
67	MP1C	X	-65.453	2
68	MP1C	Z	37.79	2
69	MP1C	Mx	1e-6	2
70	MP1C	X	-65,453	6
71	MP1C	Z	37.79	6
72	MP1C	Mx	1e-6	6
73	MP4A	X	-114.185	2
74	MP4A	Z	65.925	2
75	MP4A	Mx	.143	2
76	MP4A	X	-114.185	6
77	MP4A	Z	65.925	6
78	MP4A	Mx	.143	6
79	MP4B	X	-114.185	2
80	MP4B	Z	65.925	2
81	MP4B	Mx	143	2
82	MP4B	X	-114.185	6
83	MP4B	Z	65.925	6
84	MP4B	Mx	143	6
85	MP4C	X	-65.453	2
86	MP4C	Z	37.79	2
87	MP4C	Mx	1e-6	2
88	MP4C	X	-65.453	6
89	MP4C	Z	37.79	6
90	MP4C	Mx	1e-6	6
91	M101	X	-110.721	1
92	M101	Z	63.925	1
93	M101	Mx	0	1
94	MP1A	X	-35.297	2.5
95	MP1A	Z	20.378	2.5
96	MP1A	Mx	018	2.5
97	MP1B	X	-35.297	2.5
98	MP1B	Z	20.378	2.5
99	MP1B	Mx	.018	2.5
100	MP1C	X	-46.396	2.5
101	MP1C	Z	26.786	2.5
102	MP1C	Mx	.005	2.5
103	MP2A	X	-30.988	2.5
104	MP2A	Z	17.891	
105	MP2A	Mx	015	2.5
106	MP2B	X	-30.988	2.5
107	MP2B	Z		2.5
108	MP2B	Mx	17.891	2.5
109	MP2C	X	.015 -46.222	2.5
110	MP2C	Z		2.5
111	MP2C	Mx	26,686	2.5
112	MP2B	X	.005	2.5
113	MP2B	Z	-13.858	5
114	MP2B	Mx	8.001	5
	IVII ZU	IVIA	.003	5



: Colliers Engineering & Design : CL

: CL : Project No. 10206276 : 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Point Loads (BLC 1) Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-61.79	2
2	MP2A	Z	0	2
3	MP2A	Mx	.057	2
4	MP2A	X	-61.79	6
5	MP2A	Z	0	6
6	MP2A	Mx	.057	6
7	MP2B	X	-77.368	2
8	MP2B	Z	0	2
9	MP2B	Mx	.02	2
10	MP2B	X	-77.368	6
11	MP2B	Z	0	6
2	MP2B	Mx	.02	6
13	MP2C	X	-73.979	2
14	MP2C	Z	0	2
15	MP2C	Mx	091	2
16	MP2C	X	-73.979	6
17	MP2C	Z	0	6
8	MP2C	Mx	091	6
19	MP2A	X	-61.79	2
20	MP2A	Z	0	2
21	MP2A	Mx	.057	2
22	MP2A	X	-61.79	6
23	MP2A	Z	0	6
24	MP2A	Mx	.057	6
25	MP2B	X	-77.368	2
26	MP2B	Z	0	2
27	MP2B	Mx	091	2
28	MP2B	X	-77.368	6
29	MP2B	Z	0	6
30	MP2B	Mx	091	6
31	MP2C	X	-73.979	2
32	MP2C	Z	0	2
33	MP2C	Mx	.004	2
34	MP2C	X	-73,979	6
35	MP2C	Z	0	6
36	MP2C	Mx	.004	6
37	MP3A	X	-32.118	3
38	MP3A	Z	0	3
39	MP3A	Mx	.016	3
40	MP3A	X	-32.118	5
41	MP3A	Z	0	5
42	MP3A	Mx	.016	5
43	MP3B	X	-69.557	3 3
44	MP3B	Z	0	
45	MP3B	Mx	017	3
46	MP3B	X	-69.557	5
47	MP3B	Z	0	5
48	MP3B	Mx	017	5
49	MP3C	X	-61.412	3
50	MP3C	Z	0	3
51	MP3C	Mx	-,02	3
52	MP3C	X	-61.412	5
53	MP3C	Z		5
54	MP3C	Mx	02	5
55	MP1A	X	-150.606	2
56	MP1A	Z	0	2
JU	MP1A	Mx	.188	2



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

F0	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP1A	X	-150,606	6
59	MP1A	Z	0	6
60	MP1A	Mx	.188	6
61	MP1B	X	-94.336	2
62	MP1B	Z	0	2
63	MP1B	Mx	059	2
64	MP1B	X	-94.336	6
65	MP1B	Z	0	6
66	MP1B	Mx	059	6
67	MP1C	X	-94.336	2
68	MP1C	Z	0	2
69	MP1C	Mx	059	2
70	MP1C	X	-94.336	6
71	MP1C	Z	0	6
72	MP1C	Mx	059	6
73	MP4A		-150.606	2
74	MP4A	X	0	2
75	MP4A	Mx	.188	2
76	MP4A	X	-150.606	6
77	MP4A	Z	-130.808	
78	MP4A	Mx	.188	6
79	MP4B	X	-94.336	0
80	MP4B	Z		2
81	MP4B	Mx	<u>0</u> 059	2
82	MP4B			2
83	MP4B	X	-94.336	6
84	MP4B		0	6
85		Mx	059	6
86	MP4C	<u> </u>	-94.336	2
	MP4C	Z	0	2
87	MP4C	Mx	059	2
88	MP4C	X	-94.336	6
89	MP4C	Z	0	6
90	MP4C	Mx	059	6
91	M101	X	-140.72	1
92	M101	Z	0	1
93	M101	Mx	0	
94	MP1A	X	-36.306	2.5
95	MP1A	Z	0	2.5
96	MP1A	Mx	018	2.5
97	MP1B	X	-49.659	2.5
98	MP1B	Z	0	2.5
99	MP1B	Mx	.012	2.5
100	MP1C	X	-46.754	2.5
101	MP1C	Z	0	2.5
102	MP1C	Mx	.015	2.5
103	MP2A	X	-29.673	2.5
104	MP2A	Z	0	2.5
105	MP2A	Mx	015	
106	MP2B	X	-48.001	2.5
107	MP2B	Z	-48.001 0	2.5
108	MP2B			2.5
109	MP2C	Mx	.012	2.5
110	MP2C	X	-44.013	2.5
111	MP2C		0	2.5
112	MP2B	Mx	.014	2.5
113		X	-27.676	5
114	MP2B	Z	0	5
114	MP2B	Mx	.003	5



: Colliers Engineering & Design : CL

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-58.009	2 2
2	MP2A		-33.491	
3	MP2A	Mx	.025	6
4	MP2A	X	-58.009	6
5	MP2A	Z	-33.491	
6	MP2A	Mx	.025	6
7	MP2B	X	-71.5	2
8	MP2B	Z	-41.281	2
9	MP2B	Mx	.069	2
10	MP2B	X	-71.5	6
11	MP2B	Z	-41.281	.6
12	MP2B	Mx	.069	6
13	MP2C	X	-55,616	2
14	MP2C	Z	-32.11	2
15	MP2C	Mx	074	2
16	MP2C	X	-55.616	6
17	MP2C	Z	-32.11	6
	MP2C	Mx	074	6
18	MP2A	X	-58.009	22
19	MP2A	Z	-33.491	2
20	MP2A	Mx	.081	2
21	MP2A MP2A	X	-58.009	6
22	MP2A	Z	-33.491	6
23		Mx	.081	6
24	MP2A	X	-71.5	2
25	MP2B	Z	-41,281	2
26	MP2B	Mx	069	2
27	MP2B	X	-71.5	6
28	MP2B	Z	-41.281	6
29	MP2B	Mx	069	6
30	MP2B	X	-55.616	2
31	MP2C	Z	-32.11	2
32	MP2C		037	2
33	MP2C	Mx	-55.616	6
34	MP2C	X	-32.11	6
35	MP2C	Z	037	6
36	MP2C	Mx	-38.623	3
37	MP3A	<u>X</u>	-22.299	3
38	MP3A	Z		3
39	MP3A	Mx	.019 -38.623	5
40	MP3A	X		5
41	MP3A	Z	-22.299	5
42	MP3A	Mx	.019	3
43	MP3B	X	-71.047	3
44	MP3B	Z	-41.019	3
45	MP3B	Mx	0	5
46	MP3B	X	-71.047	
47	MP3B	Z	-41.019	5
48	MP3B	Mx	0	5
49	MP3C	X	-32.872	3
50	MP3C	Z	-18.979	3
51	MP3C	Mx	018	3
52	MP3C	X	-32.872	5
53	MP3C_	Z	-18.979	5
	MP3C	Mx	018	5
54 55	MP1A	X	-114.185	2
56	MP1A	Z	-65.925	2
57	MP1A	Mx	.143	2



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP1A	X	-114.185	6
59	MP1A	Z	-65.925	6
60	MP1A	Mx	,143	6
61	MP1B	X	-65.453	2
62	MP1B	Z	-37.79	2
63	MP1B	Mx	1e-6	2
64	MP1B	X	-65.453	6
65	MP1B	Z	-37.79	6
66	MP1B	Mx	1e-6	6
67	MP1C	X	-114.185	2
38	MP1C	Z	-65.925	2
39	MP1C	Mx	143	2
70	MP1C	X	-114.185	6
71	MP1C	Z	-65.925	6
72	MP1C	Mx	143	6
73	MP4A	X	-114.185	2
74	MP4A	Z	-65.925	2
75	MP4A	Mx	.143	2
'6	MP4A	X	-114.185	6
77	MP4A	Ž	-65.925	6
78	MP4A	Mx	.143	6
79	MP4B	X	-65.453	2
30	MP4B	Z	-37.79	2
31	MP4B	Mx	1e-6	2
32	MP4B	X	-65.453	6
33	MP4B	Z	-37.79	6
4	MP4B	Mx	1e-6	6
35	MP4C	X	-114.185	2
36	MP4C	Z	-65.925	
37	MP4C	Mx	143	2
38	MP4C	X	-114.185	2
39	MP4C	Z	-65.925	6
90	MP4C	Mx		6
91	M101	X	143	6
2	M101	Ž	-119.34	11
93	M101		-68.901	1
94	MP1A	Mx	0	1
95	MP1A	Z	-35.297	2.5
96	MP1A		-20.378	2.5
7	MP1B	Mx	018	2.5
98	MP1B	X	-46.86	2.5
9	MP1B	Z	-27.055	2.5
00	MP1C	Mx	0	2.5
01		X	-33.245	2.5
02	MP1C		-19.194	2.5
	MP1C	Mx	.018	2.5
03	MP2A	X	-30.988	2.5
04	MP2A		-17.891	2.5
05	MP2A	Mx	015	2.5
06	MP2B	X	-46.86	2.5
07	MP2B	Z	-27.055	2.5
80	MP2B	Mx	0	2.5
09	MP2C	X	-28.173	2.5
10	MP2C	Z	-16.266	2.5
11	MP2C	Mx	.015	2.5
12	MP2B	X	-29.023	5
13	MP2B	Z	-16.757	5
14	MP2B	Mx	0	5



RISA-3D Version 17.0.4

Company Designer Job Number Model Name

Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

	Member Label	4 : Antenna Wo (33) Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-38.684	2
2	MP2A	Z	-67.003	2
3	MP2A	Mx	02	6
4	MP2A	X	-38.684	
5	MP2A	Z	-67.003	6
6	MP2A	Mx	02	6
7	MP2B	X	-38.684	2
8	MP2B	Z	-67.003	2
9	MP2B	Mx	.091	2
10	MP2B	X	-38.684	6
11	MP2B	Z	-67.003	6
12	MP2B	Mx	.091	6
13	MP2C	X	-31.208	2
14	MP2C	Z	-54.054	2
15	MP2C	Mx	047	2
16	MP2C	X	-31.208	6
17	MP2C	Z	-54.054	6
18	MP2C	Mx	047	6
19	MP2A	X	-38.684	2 2
20	MP2A	Z	-67.003	2
21	MP2A	Mx	.091	2
22	MP2A	X	-38.684	6
23	MP2A	Z	-67.003	
24	MP2A	Mx	.091	6 2
25	MP2B	X	-38.684	2
26	MP2B	Z	-67.003	
27	MP2B	Mx	02	2
28	MP2B	X	-38.684	6
29	MP2B	Z	-67.003	6
30	MP2B	Mx	02	6 2
31	MP2C	X	-31,208	
32	MP2C	Z	-54.054	2
33	MP2C	Mx	065	2
34	MP2C	X	-31.208	6
35	MP2C	Z	-54.054	6
36	MP2C	Mx	065	6
37	MP3A	X	-34.779	3
38	MP3A	Z	-60.239	
39	MP3A	Mx	.017	3
40	MP3A	X	-34.779	5
41	MP3A	Z	-60.239	5
42	MP3A	Mx	.017	3
43	MP3B	X	-34.779	3
44	MP3B	Z	-60.239	3
45	MP3B	Mx	.017	3 5
46	MP3B	X	-34.779	5
47	MP3B	Z	-60.239	5
48	MP3B	Mx	.017	5
49	MP3C	X	-16.811	3
50	MP3C	Z	-29.118	3
51	MP3C	Mx	017	3
52	MP3C	X	-16.811	5
53	MP3C	Z	-29.118	5
54	MP3C	Mx	017	5
55	MP1A	X	-47.168	2
56	MP1A	Z	-81.697	2
57	MP1A	Mx	.059	2



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

EQ.	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58 59	MP1A	X	-47.168	6
60	MP1A MP1A	Z	-81.697	6
61	MP1B	Mx	.059	6
62		X	-47.168	2
63	MP1B MP1B	Z	-81.697	2
64	MP1B MP1B	Mx	.059	2
65	MP1B MP1B	X	-47.168	6
66	MP1B	Z	-81.697	6
67	MP1C	Mx	.059	6
68	MP1C	X	-75.303	2
69	MP1C	Z	-130.429	2
70	MP1C	Mx	188	2
71	MP1C MP1C	X	-75.303	6
72	MP1C	Z	-130.429	6
73	MP4A	Mx	188	6
74	MP4A	X	-47.168	2
75		Z	-81.697	2
76	MP4A MP4A	Mx	.059	2
77		X	-47.168	6
78	MP4A	Z	-81.697	6
79	MP4A MP4B	Mx	.059	6
80	MP4B	X	-47.168	2
	MP4B	Z	-81.697	2
81 82	MP4B	Mx	.059	2
83	MP4B	X	-47.168	6
	MP4B	Z	-81.697	6
84	MP4B	Mx	.059	6
85	MP4C	X	-75.303	2
86	MP4C	Z	-130.429	2
87	MP4C	Mx	188	2
88	MP4C	X	-75.303	6
89	MP4C	Z	-130.429	6
90	MP4C	Mx	188	6
91	M101	X	-61.008	11
92	M101	Z	-105.668	1
93	M101	Mx	0	1
94	MP1A	X	-24.829	2.5
95	MP1A	Z	-43.006	2.5
96	MP1A	Mx	012	2.5
97	MP1B	X	-24.829	2.5
98	MP1B	Z	-43.006	2.5
99	MP1B	Mx	012	2.5
00	MP1C	X	-18.421	2.5
01	MP1C	Z	-31.907	2.5
02	MP1C	Mx	.018	2.5
03	MP2A	X	-24	2.5
04	MP2A	Z	-41.57	2.5
05	MP2A	Mx	012	2.5
06	MP2B	X	-24	2.5
07	MP2B	Z	-41.57	2.5
80	MP2B	Mx	012	2.5
09	MP2C	X	-15.205	2.5
10	MP2C	Z	-26.336	2.5
11	MP2C	Mx	.015	2.5
12	MP2B	X	-13.838	5
13	MP2B	Z	-23.968	5
14	MP2B	Mx	003	5



Colliers Engineering & Design CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	nt Loads (BLC 1 Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
1	MP2A	X	0	2
2	MP2A		-32.665	2
3	MP2A	Mx	027	2 6
4	MP2A	X	0	
5	MP2A	Z	-32.665	6
6	MP2A	Mx	027	2
7	MP2B	X	0	
8	MP2B	Z	-26.706	2
9	MP2B	Mx	.032	2 6
10	MP2B	X	0	6
11	MP2B	Z	-26.706	
12	MP2B	Mx	.032	6 2
13	MP2C	X	0	2
14	MP2C	Z	-28.002	
15	MP2C	Mx	005	2
16	MP2C	X	0	6
17	MP2C	Z	-28.002	6
18	MP2C	Mx	005	6 2
19	MP2A	X	0	2
20	MP2A	Z	-32.665	2
21	MP2A	Mx	.027	6
22	MP2A	X	0	6
23	MP2A	Z	-32.665	6
24	MP2A	Mx	.027	2
25	MP2B	X	0	2
26	MP2B	Z	-26.706	2
27	MP2B	Mx	.01	6
28	MP2B	X	0	6
29	MP2B	Z	-26.706	6
30	MP2B	Mx	.01	2
31	MP2C	X	0	
32	MP2C	Z	-28.002	2 2
33	MP2C	Mx	035	6
34	MP2C	X	0	6
35	MP2C	Z	-28.002	6
36	MP2C	Mx	035	3
37	MP3A	X	0	3
38	MP3A	Z	-16.124	3
39	MP3A	Mx	0	5
40	MP3A	X	0	5
41	MP3A		-16.124	5
42	MP3A	Mx	0	3
43	MP3B	X	0	3
44	MP3B	Z	-9.19	3
45	MP3B	Mx	.004	5
46	MP3B	X	0	5
47	MP3B	Z	-9.19	5
48	MP3B	Mx	.004	3
49	MP3C	Χ	0	3
50	MP3C	Z	-10.698	3
51	MP3C	Mx	004	5
52	MP3C	X	0	5 E
53	MP3C	Z	-10.698	5
54	MP3C	Mx	004	
55	MP1A	X	0	2
56	MP1A	Z	-15.443	2
57	MP1A	Mx		2



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP1A	X	0	6
59	MP1A	Z	-15.443	6
60	MP1A	Mx	0	6
31	MP1B	X	0	2
62	MP1B	Z	-25 .439	2
53	MP1B	Mx	.028	2
54	MP1B	X	0	6
35	MP1B	Z	-25.439	6
36	MP1B	Mx	.028	6
57	MP1C	X	0	2
88	MP1C	Z	-25.439	2
39	MP1C	Mx	028	2
70	MP1C	X	0	6
71	MP1C	Z	-25.439	6
72	MP1C	Mx	028	6
73	MP4A	X	0	2
74	MP4A	Z	-15.443	2
75	MP4A	Mx	0	2
76	MP4A	X	Ö	6
77	MP4A	Z	-15.443	6
78	MP4A	Mx	0	6
79	MP4B	X	0	2
80	MP4B	Z	-25.439	2
81	MP4B	Mx	.028	2
32	MP4B	X	0	6
33	MP4B	Z	-25.439	6
34	MP4B	Mx	.028	6
35	MP4C	X		6
86	MP4C	Z	0	2
87	MP4C	Mx	-25.439	2
88	MP4C	X	028	2
39	MP4C		0	6
90	MP4C	Z	-25.439	6
91	M101	Mx	028	6
92		X	0	11
93	M101	Z	-22.033	1
	M101	Mx		
94	MP1A	X	0	2.5
95	MP1A	Z	-13.603	2.5
96	MP1A	Mx	0	2.5
7	MP1B	X	0	2.5
88	MP1B	Z	-10.502	2.5
99	MP1B	Mx	005	2.5
00	MP1C	Z	0	2.5
01	MP1C		-11.177	2.5
02	MP1C	Mx	.004	2.5
03	MP2A	X	0	2.5
04	MP2A		-13.603	2.5
05	MP2A	Mx	0	2.5
06	MP2B	X	0	2.5
07	MP2B	Z	-9.324	2.5
08	MP2B	Mx	004	2.5
09	MP2C	X	0	2.5
10	MP2C	Z	-10.255	2.5
11	MP2C	Mx	.004	2.5
12	MP2B	X	0	5
13	MP2B	Z	-3.995	5
14	MP2B	Mx	000865	5



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

Ciliber	Point Loads (BLC 1	Direction	Magnitude[lb,k-ft]	Location[ft,%]
4 1	Member Label MP2A	X	15.339	2
1	MP2A	Z	-26.568	2
2 3	MP2A	Mx	036	2
4	MP2A	X	15.339	6
5	MP2A	Z	-26.568	6
6	MP2A	Mx	036	6
7	MP2B	X	12.36	2
8	MP2B	Z	-21.408	2
9	MP2B	Mx	.023	6
10	MP2B	X	12.36	6
11	MP2B	Z	-21.408	6
12	MP2B	Mx	.023	2
13	MP2C	X	15.868	2
14	MP2C	Z	-27.484	2
15	MP2C	Mx	.015	6
16	MP2C	X	15.868 -27.484	6
17	MP2C	Z		6
18	MP2C	Mx	.015 15.339	2
19	MP2A	X	-26.568	2
20	MP2A	Z	.008	2
21	MP2A	Mx	15.339	6
22	MP2A	X	-26.568	6
23	MP2A	Z	.008	6
24	MP2A	Mx	12.36	2
25	MP2B	X	-21.408	2
26	MP2B	Z	.023	2
27	MP2B	Mx	12.36	6
28	MP2B	X	-21.408	6
29	MP2B	Z	.023	6
30	MP2B	Mx	15.868	2
31	MP2C	X	-27.484	2
32	MP2C	Mx	035	2
33	MP2C	X	15.868	6
34	MP2C	Z	-27.484	6
35	MP2C	Mx	035	6
36	MP2C	X	6.906	3
37	MP3A	Z	-11.962	3
38	MP3A	Mx	003	3
39	MP3A	X	6.906	5
40	MP3A MP3A	Z	-11.962	5
41	MP3A	Mx	003	5
42		X	3.439	3
43	MP3B MP3B	Ž	-5.957	3
44	MP3B	Mx	.003	3
45	MP3B	X	3.439	5
46	MP3B MP3B	Z	-5.957	5
47	MP3B	Mx	.003	5
48	MP3C	X	7.521	3
49	MP3C	Z	-13.027	3
50	MP3C	Mx	003	3
51	MP3C	X	7.521	5
52	MP3C	Z	-13.027	5
53	MP3C	Mx	003	5
54	MP1A	X	9.387	2
55	MP1A	Z	-16.259	2
56 57	MP1A MP1A	Mx	012	2



Colliers Engineering & Design

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

==	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP1A	X	9.387	6
59	MP1A	Z	-16.259	6
60 61	MP1A	Mx	012	6
62	MP1B	X	14.385	2
63	MP1B	Z	-24.916	2
64	MP1B	Mx	.036	2
65	MP1B MP1B	X	14.385	6
66	MP1B	Z	-24.916	6
67	MP1C	Mx	.036	6
68	MP1C MP1C	X	9.387	2
69	MP1C		-16.259	2
70	MP1C	Mx	012	2
71	MP1C	X	9.387	6
72	MP1C	Mx Mx	-16.259	6
73	MP4A		012	6
74	MP4A	Z	9.387	2
75	MP4A	Mx	-16.259	2
76	MP4A	X	012 9.387	2
77	MP4A	Z		6
78	MP4A	Mx	-16.259 012	6
79	MP4B	X	14.385	6
80	MP4B	Z	-24.916	2
81	MP4B	Mx	.036	2
82	MP4B	X	14.385	2
83	MP4B	Z	-24.916	6
84	MP4B	Mx	.036	6
85	MP4C	X	9.387	2
86	MP4C	Ž	-16.259	2
87	MP4C	Mx	012	2
88	MP4C	X	9.387	6
89	MP4C	Z	-16.259	6
90	MP4C	Mx	012	6
91	M101	X	11.28	1
92	M101	Z	-19.538	
93	M101	Mx	0	1
94	MP1A	X	6.285	2.5
95	MP1A	Z	-10.885	2.5
96	MP1A	Mx	.003	2.5
97	MP1B	X	4.734	2.5
98	MP1B	Z	-8.2	2.5
99	MP1B	Mx	005	2.5
00	MP1C	X	6.56	2.5
01	MP1C		-11.362	2.5
02	MP1C	Mx	.002	2.5
03	MP2A	X	6.088	2.5
04	MP2A		-10.545	2.5
05	MP2A	Mx	.003	2.5
06	MP2B	X Z	3.949	2.5
07	MP2B		-6.84	2.5
08	MP2B	Mx	004	2.5
09	MP2C	X	6.468	2.5
10	MP2C	Z	-11.202	2.5
11	MP2C	Mx	.002	2.5
12	MP2B	X	1.415	5
13	MP2B	Z	-2.452	5
14	MP2B	Mx	000708	5



: Colliers Engineering & Design : CL : Project No. 10206276 : 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	nber Label	7 : Antenna Wi (60 L	Magnitude[lb,k-ft]	Location[ft,%]
	MP2A	X	23.128	2
	MP2A		-13.353	2
	ИР2А	Mx	032	2
4 1	иР2А	X	23.128	6
	MP2A	Z	-13.353	6
	MP2A	Mx	032	2
	MP2B	X	23.128	2
	MP2B	Z	-13.353	
	MP2B	Mx	.01	6
	MP2B	X	23.128	
	MP2B	Z	-13.353	6
	MP2B	Mx	.01	2
	MP2C	X	28.081	2
	MP2C	Z	-16.213	
	MP2C	Mx	.032	2
	MP2C	X	28.081	6
	MP2C	Z	-16.213	
	MP2C	Mx	.032	6
	MP2A	X	23.128	2 2
	MP2A	Z	-13.353	2
	MP2A	Mx	01	6
	MP2A	X	23.128	6
	MP2A	Z	-13.353	
	MP2A	Mx	01	6
	MP2B	X	23.128	2
	MP2B	Z	-13.353	2
	MP2B	Mx	.032	2
	MP2B	X	23.128	6
	MP2B	Z	-13.353	6
	MP2B	Mx	.032	6
31	MP2C	X	28.081	2
	MP2C	Z	-16.213	2
	MP2C	Mx	021	6
	MP2C	X	28.081	
	MP2C	Z	-16.213	6
	MP2C	Mx	021	6
	мР3А	X	7.959	3 3
	MP3A	Z	-4.595	3
	MP3A	Mx	004	
	MP3A	X	7.959	5
41	MP3A	Z	-4.595	5
	MP3A	Mx	004	3
	MP3B	X	7.959	3
	мР3В	Z	-4.595	3
	MP3B	Mx	.004	5
	MP3B	X	7.959	
	MP3B	Z	-4.595	5
	MP3B	Mx	.004	5
	MP3C	X	13.722	3
	MP3C	Z	-7.923	3
	MP3C	Mx	.001	3 5
	MP3C	X	13.722	5
	MP3C	Z	-7.923	5
	MP3C	Mx	.001	5
	MP1A	X	22.03	2
56	MP1A	Z	-12.719	2
	MP1A	Mx	028	2



: Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP1A	X	22.03	6
59	MP1A	Z	-12.719	6
60 61	MP1A	Mx	028	6
62	MP1B	X	22.03	2
63	MP1B MP1B	Z	-12.719	2
64	MP1B	Mx	.028	2
65	MP1B	X	22.03	6
66	MP1B	Z	-12.719	6
67	MP1C	Mx	.028	6
68	MP1C	X	13.374	2
69	MP1C	Mx	-7.721	2
70	MP1C	X	1e-6	2
71	MP1C	Z	13.374	6
72	MP1C	Mx	-7.721 1e-6	6
73	MP4A	X	22.03	6
74	MP4A	Z	-12.719	2
75	MP4A	Mx	028	2
76	MP4A	X	22.03	2 6
77	MP4A	Z	-12.719	6
78	MP4A	Mx	028	6
79	MP4B	X	22.03	2
80	MP4B	Ž	-12.719	2
81	MP4B	Mx	.028	2
82	MP4B	X	22.03	6
83	MP4B	Z	-12.719	6
84	MP4B	Mx	.028	6
85	MP4C	X	13.374	2
86	MP4C	Z	-7.721	2
87	MP4C	Mx	1e-6	2
88	MP4C	X	13.374	6
89	MP4C	Z	-7.721	
90	MP4C	Mx	1e-6	6
91	M101	X	22.012	1
92	M101	Z	-12.709	
93	M101	Mx	0	1
94	MP1A	X	9.095	2.5
95	MP1A	Z	-5.251	2.5
96	MP1A	Mx	.005	2.5
97	MP1B	X	9.095	2.5
98	MP1B	Z	-5.251	2.5
99	MP1B	Mx	005	2.5
100	MP1C	X	11.672	2.5
101 102	MP1C	Z	-6.739	2.5
102	MP1C	Mx	001	2.5
103	MP2A	X	8.075	2.5
105	MP2A	Z	-4.662	2.5
106	MP2A	Mx	.004	2.5
107	MP2B MP2B	X	8.075	2.5
108	MP2B	Z	-4.662	2.5
109	MP2C	Mx	004	2.5
110	MP2C	X	11.631	2.5
111	MP2C MP2C		-6.715	2.5
112	MP2B	Mx X	001	2.5
113	MP2B	Z	3.459	5
114	MP2B	Mx	-1.997	5
	IVII ZU	IVIA	000865	5



: Colliers Engineering & Design

: CL : Project No. 10206276 : 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	8 : Antenna Wi (90 L	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	24.719	2
2	MP2A		0	2
3	MP2A	Mx	023	6
4	MP2A	X	24.719	
5	MP2A	Z	0	6
6	MP2A	Mx	023	6
7	MP2B	X	30.679	2
8	MP2B	Z	0	2
9	MP2B	Mx	008	2
10	MP2B	X	30.679	6
11	MP2B	Z	0	6
12	MP2B	Mx	-,008	6
13	MP2C	X	29.382	2
14	MP2C	Z	0	2
15	MP2C	Mx	.036	2
16	MP2C	X	29.382	6
17	MP2C	Z	0	6
18	MP2C	Mx	.036	6
19	MP2A	X	24,719	2
20	MP2A	Ž	0	2
21	MP2A	Mx	023	2
22	MP2A	X	24.719	6
23	MP2A	Z	0	6
	MP2A	Mx	023	6
24	MP2B	X	30.679	2
25	MP2B	Z	0	2
26	MP2B	Mx	.036	2
27	MP2B	X	30.679	6
28	MP2B	Z	0	6
29		Mx	.036	6
30	MP2B	X	29.382	2
31	MP2C	Ž	0	2
32	MP2C	Mx	001	2
33	MP2C	X	29.382	6
34	MP2C	Z	0	6
35	MP2C	Mx	001	6
36	MP2C	X	6.879	3
37	MP3A	Ž	0	3
38	MP3A	Mx	003	3
39	MP3A	X	6.879	5
40	MP3A	Z	0	5
41	MP3A	Mx	003	5
42	MP3A	X	13.812	3
43	MP3B	Z	0	3
44	MP3B	Mx	.003	3
45	MP3B	X	13.812	5
46	MP3B	Z	0	5
47	MP3B		.003	5
48	MP3B	Mx	12.304	3
49	MP3C	X	0	3
50	MP3C		.004	3
51	MP3C	Mx	12.304	5
52	MP3C	X	0	5
53	MP3C	Z	.004	5
54	MP3C	Mx		2
55	MP1A	X	28.77	2
56	MP1A	Z	036	2
57	MP1A	Mx	030	



Colliers Engineering & Design

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

C 50 T	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP1A	X	28.77	6
59	MP1A	Z	. 0	6
60	MP1A	Mx	036	6
61	MP1B	X	18,775	2
62	MP1B	Z	0	2
63	MP1B	Mx	.012	2
64	MP1B	X	18.775	6
65	MP1B	Z	0	6
66	MP1B	Mx	.012	6
67	MP1C	X	18.775	2
68	MP1C	Z	0	2
69	MP1C	Mx	.012	2
70	MP1C	X	18.775	6
71	MP1C	Z	0	6
72	MP1C	Mx	.012	6
73	MP4A	X	28.77	6 2
74	MP4A	Z	0	2
75	MP4A	Mx	036	2
76	MP4A	X	28.77	6
77	MP4A	Z	0	6
78	MP4A	Mx	036	6
79	MP4B	X	18.775	2
80	MP4B	Z	0	2
81	MP4B	Mx	.012	2
82	MP4B	X	18.775	6
83	MP4B	Z	0	6
84	MP4B	Mx	.012	6
85	MP4C	X	18.775	2
86	MP4C	Z	0	2
87	MP4C	Mx	.012	2
88	MP4C	X	18.775	6
89	MP4C	Z	0	6
90	MP4C	Mx	.012	6
91	M101	X	27.747	1
92	M101	Z	0	1
93	M101	Mx	0	1
94	MP1A	X	9.469	2.5
95	MP1A	Z	0	2.5
96	MP1A	Mx	.005	2.5
97	MP1B	X	12.569	2.5
98	MP18	Z	0	2.5
99	MP1B	Mx	003	2.5
100	MP1C	X	11.895	
101	MP1C	Z	0	2.5 2.5
102	MP1C	Mx	004	2.5
103	MP2A	X	7.898	
104	MP2A	Z	0	2.5
105	MP2A	Mx	.004	2.5
106	MP2B	X	12.177	2.5
107	MP2B	Z	0	2.5
108	MP2B	Mx	003	2.5
109	MP2C	Y		2.5
110	MP2C	X	11.246 0	2.5
111	MP2C			2.5
112	MP2B	Mx	004	2.5
113	MP2B	X Z	6.322	5
114	MP2B		0	
	IVITZD	Mx	00079	5



: Colliers Engineering & Design : CL

: CL : Project No. 10206276 : 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

Mc	ember Label	9 : Antenna Wi (120 Direction	Magnitude[lb,k-ft]	Location[ft.%]
1	MP2A	X	23.128	2
2	MP2A	Z	13.353	2
3	MP2A	Mx	01	2
4	MP2A	X	23.128	6
5	MP2A	Z	13.353	6
6	MP2A	Mx	01	6
7	MP2B	X	28.289	2
8	MP2B	Z	16.333	2
9	MP2B	Mx	027	2
10	MP2B	X	28.289	6
11	MP2B	Z	16.333	6
12	MP2B	Mx	027	6
13	MP2C	X	22.213	2
14	MP2C	Z	12.824	2
15	MP2C	Mx	.029	2
16	MP2C	X	22.213	6
17	MP2C	Z	12.824	6
18	MP2C	Mx	.029	6
19	MP2A	X	23.128	2
20	MP2A	Z	13.353	2
21	MP2A	Mx	032	2
22	MP2A	X	23.128	6
23	MP2A	Z	13.353	6
	MP2A	Mx	032	6
24	MP2B	X	28.289	2
25	MP2B	Z	16.333	2
26	MP2B	Mx	.027	2
27	MP2B	X	28.289	6
28		Ž	16.333	6
29	MP2B MP2B	Mx	.027	6
30	MP2C	X	22,213	2
31		Ž	12.824	2
32	MP2C MP2C	Mx	.015	2
33		X	22.213	6
34	MP2C	Z	12.824	6
35	MP2C	Mx	.015	6
36	MP2C	X	7.959	3
37	MP3A	Z	4.595	3
38	MP3A	Mx	004	3
39	MP3A	X	7.959	5
40	MP3A	Z	4.595	5
41	MP3A	Mx	004	5
42	MP3A	X	13.964	3
43	MP3B	Z	8.062	3
44	MP3B	Mx	0	3
45	MP3B	X	13.964	5
46	MP3B	Z	8.062	5
47	MP3B	Mx	0	5
48	MP3B	X	6.894	3
49	MP3C	Ž	3.98	3
50	MP3C	Mx	.004	3
51	MP3C	X	6.894	5
52	MP3C	Z	3.98	5
53	MP3C		.004	5
54	MP3C	Mx	22.03	2
55	MP1A	X	12.719	2
56	MP1A		028	2
57	MP1A	Mx	.020	



Colliers Engineering & Design CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP1A		22.03	6
59	MP1A	X	12.719	6
60	MP1A	Mx	028	6
61	MP1B	X	13.374	2
62	MP1B	Z	7.721	2
63	MP1B	Mx	1e-6	2
64	MP1B	X	13.374	6
65	MP1B	Z	7.721	6
66	MP1B	Mx	1e-6	6
67	MP1C	X	22.03	2
68	MP1C	Z	12.719	2
69	MP1C	Mx	.028	2
70	MP1C	X	22.03	6
71	MP1C	Z	12.719	6
72	MP1C	Mx	.028	6
73	MP4A	X	22.03	2
74	MP4A	Z	12.719	2
75	MP4A	Mx	028	2
76	MP4A	X	22.03	6
77	MP4A	Z	12.719	6
78	MP4A	Mx	028	6
79	MP4B	X	13.374	2
80	MP4B	Z	7.721	2
81	MP4B	Mx	1e-6	2
82	MP4B	X	13.374	6
83	MP4B	Z	7.721	6
84	MP4B	Mx	1e-6	6
85	MP4C	X	22.03	2
86	MP4C	Ž	12.719	2
87	MP4C	Mx	.028	2
88	MP4C	X	22.03	6
89	MP4C	Z	12.719	6
90	MP4C	Mx	.028	6
91	M101	X	23.572	1
92	M101	Z	13.609	
93	M101	Mx	0	1
94	MP1A	X	9.095	2.5
95	MP1A	Z	5.251	2.5
96	MP1A	Mx	.005	2.5
97	MP1B	X	11.78	2.5
98	MP1B	Z	6.801	2.5
99	MP1B	Mx	0	2.5
100	MP1C	X	8.619	2.5
101	MP1C	Z	4.976	2.5
102	MP1C	Mx	005	2.5
103	MP2A	X	8.075	2.5
104	MP2A	Ž	4,662	2.5
05	MP2A	Mx	.004	
06	MP2B	X	11.78	2.5
07	MP2B	Z	6.801	2.5
08	MP2B	Mx	0	2.5
09	MP2C	X		2.5
10	MP2C	Z	7.418	2.5
111	MP2C	Mx	4.283	2.5
12	MP2B	X	004	2.5
13	MP2B	Z	6.483	5
114	MP2B	Mx	3.743	5



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	mber Label	0 : Antenna Wi (150 Direction	Magnitude[lb,k-ft]	Location[ft.%]
1	MP2A	X	15.339	2
2	MP2A	Z	26.568	2
3	MP2A	Mx	.008	2
1	MP2A	X	15.339	6
5	MP2A	Z	26.568	6
6	MP2A	Mx	.008	6
7	MP2B	X	15.339	2
3	MP2B	Z	26.568	2
9	MP2B	Mx	036	2
0	MP2B	X	15.339	6
1	MP2B	Z	26.568	6
2	MP2B	Mx	036	6
3	MP2C	X	12.479	2
4	MP2C	Z	21.615	2
5	MP2C	Mx	.019	2
6	MP2C	X	12.479	6
7	MP2C	Z	21.615	6
	MP2C	Mx	.019	6
9	MP2A	X	15.339	2
	MP2A	Z	26.568	2
0	MP2A	Mx	036	2
21	MP2A	X	15.339	6
22	MP2A	Ž	26.568	6
3	MP2A	Mx	036	6
4	MP2B	X	15.339	2
25		Z	26.568	2
6	MP2B	Mx	.008	2
27	MP2B	X	15.339	6
28	MP2B	Z	26.568	6
29	MP2B	Mx	.008	6
30	MP2B	X	12.479	2
81	MP2C	Z	21.615	2
32	MP2C	Mx	.026	2
33	MP2C	X	12.479	6
34	MP2C	Z	21.615	6
35	MP2C	Mx	.026	6
36	MP2C	X	6.906	3
37	MP3A	Ž	11.962	3
38	MP3A	Mx	003	3
39	MP3A	X	6.906	5
10	MP3A	Z	11.962	5
11	MP3A		003	5
12	MP3A	Mx	6.906	3
13	MP3B	X	11.962	3
14	MP3B	Mx	003	3
15	MP3B	X	6.906	5
16	MP3B	Z	11.962	5
17	MP3B		003	5
18	MP3B	Mx	3.579	3
19	MP3C	X	6.198	3
50	MP3C	Z	.004	3
51	MP3C	Mx	3.579	5
52	MP3C	X	6.198	5
53	MP3C	Z	.004	5
54	MP3C	Mx	9.387	2
55	MP1A	X	16.259	2
56	MP1A	Z	012	2
57	MP1A	Mx	U I Z	



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP1A	X	9.387	6
59	MP1A	Z	16.259	6
60	MP1A	Mx	012	6
62	MP1B	X	9.387	2
63	MP1B MP1B	Z	16.259	2
64	MP1B	Mx	012	2
65	MP1B	X	9.387	6
66	MP1B	Z	16.259	6
67	MP1C	Mx	012	6
68	MP1C	X	14.385	2
69	MP1C	Mx	24.916	2
70	MP1C	X	.036 14.385	2
71	MP1C	Z	24.916	6
72	MP1C	Mx	.036	6
73	MP4A	X	9.387	6
74	MP4A	Ž	16.259	2 2
75	MP4A	Mx	012	2
76	MP4A	X	9.387	6
77	MP4A	Z	16.259	6
78	MP4A	Mx	012	6
79	MP4B	X	9.387	2
80	MP4B	Ž	16.259	2
81	MP4B	Mx	012	2
82	MP4B	X	9.387	6
83	MP4B	Z	16.259	6
84	MP4B	Mx	012	6
85	MP4C	X	14.385	2
86	MP4C	Z	24.916	2
87	MP4C	Mx	.036	2
88	MP4C	X	14.385	6
89	MP4C	Z	24.916	6
90	MP4C	Mx	.036	6
91	M101	X	12.181	1
92	M101	Z	21.098	1
93	M101	Mx	0	1
94	MP1A	X	6.285	2.5
95	MP1A	Z	10.885	2.5
96	MP1A	Mx	.003	2.5
97	MP1B	X	6.285	2.5
98	MP1B	Z	10.885	2.5
99	MP1B	Mx	.003	2.5
100	MP1C	X	4.797	2.5
101	MP1C	Z	8.308	2.5
102	MP1C	Mx	005	2.5
103	MP2A	X	6.088	2.5
104 105	MP2A	Z	10.545	2.5
	MP2A	Mx	.003	2.5
106	MP2B	X	6.088	2.5
107 108	MP2B MP2B	Z	10.545	2.5
109		Mx	.003	2.5
110	MP2C MP2C	X	4.035	2.5
111		Z	6.989	2.5
112	MP2C MP2B	Mx	004	2.5
113	MP2B	X	3.161	5
114	MP2B	Z	5.475	5
1171	IVIEZD	Mx	.00079	5



Colliers Engineering & Design CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	32.665	2
2	MP2A	Z		2
3	MP2A	Mx	.027	6
4	MP2A	X	0	6
5	MP2A	Z	32.665	6
6	MP2A	Mx	.027	
7	MP2B	X	0	2
8	MP2B	Z	26.706	2
9	MP2B	Mx	-,032	2
0	MP2B	X	0	6
	MP2B	Z	26.706	6
1	MP2B	Mx	032	6
12	MP2C	X	0	2
13	MP2C MP2C	Ž	28.002	2
4		Mx	.005	2
15	MP2C	X	0	6
16	MP2C	Z	28.002	6
17	MP2C		.005	6
8	MP2C	Mx	0	2
19	MP2A	X	32.665	2
20	MP2A	Z	027	2
21	MP2A	Mx	0	6
22	MP2A	X	32.665	6
23	MP2A	Z		6
24	MP2A	Mx	027	2
25	MP2B	X	0	2
26	MP2B	Z	26.706	2
27	MP2B	Mx	01	2
28	MP2B	X	0	6
29	MP2B	Z	26.706	6
30	MP2B	Mx	01	6
31	MP2C	X	0	2
	MP2C	Z	28.002	2
32	MP2C	Mx	.035	2
33	MP2C	X	0	6
34	MP2C	Z	28.002	6
35		Mx	.035	6
36	MP2C	X	0	3
37	MP3A	Z	16.124	3
38	MP3A	Mx	0	3
39	MP3A		Ö	5
40	MP3A	X	16.124	5
41	MP3A	Z	0	5
42	MP3A	Mx	0	3
43	MP3B	X	9.19	3
44	MP3B	Z	004	3
45	MP3B	Mx		5
46	мР3В	X	0	5
47	MP3B	Z	9.19	5
48	MP3B	Mx	004	3
49	MP3C	X	0	3
50	MP3C	Z	10.698	3
51	MP3C	Mx	.004	3
52	MP3C	X	0	5
53	MP3C	Ž	10.698	5
	MP3C	Mx	.004	5
54	MP1A	X	0	2
55 56	MP1A MP1A	Ž	15.443	2
			0	2



Colliers Engineering & Design CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP1A	X	0	6
59	MP1A	Z	15.443	6
60	MP1A	Mx	0	6
61	MP1B	X	0	2
62	MP1B	Z	25.439	2
63	MP1B	Mx	028	2
64	MP1B	X	0	6
65	MP1B	Z	25.439	6
66	MP1B	Mx	028	6
67	MP1C	X	0	2
68	MP1C	Z	25.439	2
69	MP1C	Mx	.028	2
70	MP1C	X	0	6
71	MP1C	Z	25.439	6
72	MP1C	Mx	.028	6
73	MP4A	X	0	2
74	MP4A	Z	15.443	2
75	MP4A	Mx	0	2
76	MP4A	X	0	6
77	MP4A	Z	15.443	6
78	MP4A	Mx	0	6
79	MP4B	X	0	2
80	MP4B	Z	25.439	2
81	MP4B	Mx	028	2
82	MP4B	X	0	6
83	MP4B	Z	25,439	6
84	MP4B	Mx	028	6
85	MP4C	X	0	2
86	MP4C	Z	25.439	2
87	MP4C	Mx	.028	2
88	MP4C	X	0	6
89	MP4C	Z	25.439	6
90	MP4C	Mx	.028	6
91	M101	X	0	1
92	M101	Z	22.033	
93	M101	Mx	0	1
94	MP1A	X	0	2.5
95	MP1A	Z	13.603	2.5
96	MP1A	Mx	0	2.5
97	MP1B	X	0	2.5
98	MP1B	Z	10.502	2.5
99	MP1B	Mx	.005	2.5
00	MP1C	X	0	2.5
01	MP1C	Z	11.177	2.5
02	MP1C	Mx	004	2.5
03	MP2A	X	0	2.5
04	MP2A	Z	13.603	2.5
05	MP2A	Mx	0	2.5
06	MP2B	X	Ö	2.5
07	MP2B	Z	9.324	2.5
08	MP2B	Mx	.004	2.5
09	MP2C	X	0	2.5
10	MP2C	Ž	10.255	2.5
11	MP2C	Mx	004	2.5
12	MP2B	X	-:004	
13	MP2B	Z	3.995	5
14	MP2B	Mx	.000865	5



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-15.339	2
2	MP2A	Z	26.568	2
3	MP2A	Mx	.036	6
4	MP2A	X	-15.339	
5	MP2A	Z	26.568	6
6	MP2A	Mx	.036	6
7	MP2B	X	-12.36	2
8	MP2B	Z	21.408	2
9	MP2B	Mx	023	2
10	MP2B	X	-12.36	6
11	MP2B	Z	21.408	6
2	MP2B	Mx	023	6
	MP2C	X	-15.868	2
13		Ž	27.484	2
14	MP2C MP2C	Mx	015	2
15		X	-15.868	6
16	MP2C	Z	27.484	6
7	MP2C	Mx	015	6
18	MP2C		-15.339	2
19	MP2A	X	26.568	2
20	MP2A		008	2
21	MP2A	Mx	-15.339	6
22	MP2A	X	26.568	6
23	MP2A	Z	008	6
24	MP2A	Mx		2
25	MP2B	X	-12.36	2
26	MP2B	Z	21.408	2
27	MP2B	Mx	023	6
28	MP2B	X	-12.36	- 6
29	MP2B	Z	21.408	6
30	MP2B	Mx	023	6
31	MP2C	X	-15.868	2
32	MP2C	Z	27.484	2
33	MP2C	Mx	.035	2
	MP2C	X	-15.868	6
34	MP2C	Z	27.484	6
35	MP2C	Mx	.035	6
36		X	-6.906	3
37	MP3A	Z	11.962	3
38	MP3A	Mx	.003	3
39	MP3A	X	-6.906	5
40	MP3A	Ž	11.962	5
41	MP3A		.003	5
42	MP3A	Mx	-3.439	3
43	MP3B	X	5.957	3
44	MP3B	Z	003	3
45	MP3B	Mx		5
46	мР3В	X	-3.439	5
47	MP3B	Z	5.957	5
48	мР3В	Mx	003	
49	MP3C	Χ	-7.521	3
50	MP3C	Z	13.027	3
51	MP3C	Mx	.003	3
52	MP3C	X	-7.521	5
	MP3C	Z	13.027	5
53	MP3C	Mx	.003	5
54	MP1A	X	-9.387	2
55	MP1A	Z	16.259	2
56		Mx	.012	2
57	MP1A		sa\5000245391-VZW_MT_LO_H	r3dl Page



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

MP1A MP1A MP1A MP1B MP1B MP1B MP1B MP1B MP1B MP1C MP1C MP1C	X Z Mx X Z Mx X Z Mx Z Mx X Z Mx	-9.387 16.259 .012 -14.385 24.916 036 -14.385	Location[ft,%] 6 6 6 2 2 2
MP1A MP1B MP1B MP1B MP1B MP1B MP1B MP1C MP1C	Mx X Z Mx X Z Mx X Z	.012 -14.385 24.916 036 -14.385	6 6 2 2 2
MP1B MP1B MP1B MP1B MP1B MP1B MP1C MP1C	X Z Mx X Z Mx	-14.385 24.916 036 -14.385	2 2 2
MP1B MP1B MP1B MP1B MP1B MP1C MP1C	Z Mx X Z Mx	24.916 036 -14.385	2
MP1B MP1B MP1B MP1B MP1C MP1C	Mx X Z Mx	036 -14.385	2
MP1B MP1B MP1B MP1C MP1C	Z Mx	-14.385	2
MP1B MP1B MP1C MP1C	Z Mx		21
MP1B MP1C MP1C	Mx	04.040	6
MP1C MP1C		24.916	6
MP1C		036	6
	X	-9.387	2
MD1C	Z	16.259	2
	Mx	.012	2
MP1C	X	-9.387	6
MP1C	Z	16.259	6
MP1C	Mx	.012	6
MP4A	X	-9.387	2
MP4A	Z	16.259	2
MP4A	Mx	.012	2
MP4A	X	-9.387	6
MP4A	Z	16.259	6
MP4A	Mx	.012	6
MP4B	X	-14.385	2
MP4B	Z	24.916	2
MP4B	Mx	036	2
MP4B	X	-14.385	6
MP4B	Z	24.916	6
MP4B	Mx	036	6
MP4C	X	-9.387	2
MP4C	Z	16.259	2 2
MP4C	Mx	.012	2
MP4C	X	-9.387	6
MP4C	Z	16.259	6
MP4C	Mx	.012	6
M101	X	-11.28	1
M101	Z	19.538	1
M101	Mx	0	1
MP1A	X	-6.285	2.5
MP1A	Z	10.885	2.5
MP1A	Mx	003	2.5
MP1B	X	-4.734	2.5
MP1B	Z	8.2	2.5
MP1B	Mx	.005	2.5
MP1C		-6.56	2.5
MP1C	X Z	11.362	2.5
MP1C	Mx	002	2.5
MP2A	X	-6.088	2.5
MP2A	7		2.5
MP2A			2.5
MP2B	X		2.5
MP2B			2.5
MP2B		0.04	2.5
MP2C			2.5
	7		
			2.5
	Y		2.5
	7		5
MP2B		2.402	5 5
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	MP2A MP2A MP2B MP2B MP2B MP2C MP2C MP2C MP2B	MP2A Z MP2A Mx MP2B X MP2B Z MP2B Mx MP2C X MP2C Z MP2C Mx MP2B X MP2B X MP2B Z	MP2A Z 10.545 MP2A Mx 003 MP2B X -3.949 MP2B Z 6.84 MP2B Mx .004 MP2C X -6.468 MP2C Z 11.202 MP2C Mx 002 MP2B X -1.415



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	3 : Antenna Wi (240 Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-23.128	2
2	MP2A	Z	13.353	2
3	MP2A	Mx	.032	6
4	MP2A	X	-23.128	6
5	MP2A	Z	13.353	
6	MP2A	Mx	.032	6
7	MP2B	X	-23.128	2
8	MP2B	Z	13.353	2
9	MP2B	Mx	01	2
	MP2B	X	-23.128	6
10	MP2B	Ž	13.353	6
11		Mx	01	6
12	MP2B	X	-28.081	2
13	MP2C	Ž	16.213	2
14	MP2C	Mx	032	2
15	MP2C	X	-28.081	6
16	MP2C	Ž	16.213	6
17	MP2C		032	6
18	MP2C	Mx	-23.128	2
19	MP2A	X	13.353	2
20	MP2A	Z	.01	2
21	MP2A	Mx	-23.128	6
22	MP2A	X		6
23	MP2A	Z	13.353	6
24	MP2A	Mx	.01	2
25	MP2B	X	-23.128	
26	MP2B	Z	13.353	2
27	MP2B	Mx	032	2
28	MP2B	X	-23.128	6
29	MP2B	Z	13.353	6
	MP2B	Mx	032	6
30	MP2C	X	-28.081	2
31	MP2C	Z	16.213	2
32		Mx	.021	2
33	MP2C	X	-28.081	6
34	MP2C	Z	16.213	6
35	MP2C	Mx	.021	6
36	MP2C		-7.959	3
37	MP3A	X	4.595	3
38	MP3A		.004	3
39	MP3A	Mx	-7.959	5
40	MP3A	X	4.595	5
41	MP3A	Z	.004	5
42	MP3A	Mx		3
43	MP3B	X	-7.959	3
44	MP3B	Z	4.595	3
45	MP3B	Mx	004	5
46	MP3B	X	-7.959	
47	MP3B	Z	4.595	5
48	MP3B	Mx	004	5
49	MP3C	X	-13.722	3
	MP3C	Z	7.923	3
50	MP3C	Mx	001	3
51	MP3C	X	-13.722	5
52		Ž	7.923	5
53	MP3C	Mx	001	5
54	MP3C	X	-22.03	2
55	MP1A	Ž	12.719	2
56	MP1A		.028	2
57	MP1A	Mx	.020	



Colliers Engineering & Design CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

M	ember Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP1A	X	-22.03	6
59	MP1A	Z	12.719	6
60	MP1A	Mx	.028	6
61	MP1B	X	-22.03	2
62	MP1B	Z	12.719	2
63	MP1B	Mx	028	2
64	MP1B	X	-22.03	6
65	MP1B	Z	12.719	6
66	MP1B	Mx	028	6
67	MP1C	X	-13.374	2
68	MP1C	Z	7.721	2
69	MP1C	Mx	-1e-6	2
70	MP1C	X	-13.374	6
71	MP1C	Z	7.721	6
72	MP1C	Mx	-1e-6	6
73	MP4A	X	-22.03	2
74	MP4A	Z	12.719	2
75	MP4A	Mx	.028	2
76	MP4A	X	-22.03	6
77	MP4A	Z	12.719	6
78	MP4A	Mx	.028	6
79	MP4B	X	-22.03	2
80	MP4B	Z	12.719	2
81	MP4B	Mx	028	2
82	MP4B	X	-22.03	6
83	MP4B	Z	12.719	6
84	MP4B	Mx	028	6
85	MP4C	X	-13.374	
86	MP4C	Z	7.721	2 2
87	MP4C	Mx	-1e-6	2
88	MP4C	X	-13.374	6
89	MP4C	Z	7.721	6
90	MP4C	Mx	-1e-6	6
91	M101	X	-22.012	1
92	M101	Z	12.709	1
93	M101	Mx	0	1
94	MP1A	X	-9.095	2.5
95	MP1A	Z	5.251	2.5
96	MP1A	Mx	005	2.5
97	MP1B	X	-9.095	2.5
98	MP1B	Z	5.251	2.5
99	MP1B	Mx	.005	2.5
100	MP1C	X	-11.672	2.5
	MP1C	Z	6.739	2.5
102	MP1C	Mx	.001	2.5
103	MP2A	X	-8.075	2.5
04	MP2A	Z	4.662	2.5
05	MP2A	Mx	004	2.5
	MP2B	X	-8.075	2.5
	MP2B	Z	4.662	2.5
	MP2B	Mx	.004	2.5
09	MP2C	X	-11.631	2.5
	MP2C	Z	6.715	2.5
	MP2C	Mx	.001	2.5
12	MP2B	X	-3.459	5
13	MP2B	Z	1.997	5
	MP2B	Mx	.000865	5



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

	Point Loads (BLC 2	Direction	Magnitude[lb.k-ft]	Location[ft,%]
	Member Label MP2A	X	-24.719	2
	MP2A	Ž	0	2
2	MP2A	Mx	.023	2
3	MP2A	X	-24.719	6
1	MP2A	7	0	6
5	MP2A	Mx	.023	6
3	MP2B	X	-30.679	2
7	MP2B	Z	0	2
3	MP2B	Mx	.008	2
0	MP2B	X	-30.679	6
1	MP2B	Z	.0	6
2	MP2B	Mx	.008	6
3	MP2C	X	-29.382	2
4	MP2C	Z	0	2
5	MP2C	Mx	-,036	2
6	MP2C	X	-29.382	6
7	MP2C	Z	0	6
8	MP2C	Mx	036	6 2
9	MP2A	X	-24.719	2
20	MP2A	Z	0	2
21	MP2A	Mx	.023	6
22	MP2A	X	-24.719	6
23	MP2A	Z	0	6
24	MP2A	Mx	.023	2
25	MP2B	X	-30.679	2
26	MP2B	Z	0	2
27	MP2B	Mx	036	6
28	MP2B	X	-30.679	6
29	MP2B	Z	036	6
30	MP2B	Mx	-29.382	2
31	MP2C	X	0	2
32	MP2C	Z	.001	2
33	MP2C	Mx	-29.382	6
34	MP2C	X	0	6
35	MP2C	Z	.001	6
36	MP2C	Mx	-6.879	3
37	MP3A	X	0	3
38	MP3A		.003	3
39	MP3A	Mx X	-6.879	5
40	MP3A	Z	0	5
41	MP3A	Mx	.003	5
42	MP3A	X	-13.812	3
43	MP3B	Z	0	3
44	MP3B	Mx	003	3
45	MP3B	X	-13.812	5
46	MP3B	Z	0	5
47	MP3B	Mx	003	5
48	MP3B	X	-12.304	3
49	MP3C MP3C	Z	0	3
50	MP3C MP3C	Mx	004	3
51	MP3C	X	-12.304	5
52	MP3C	Z	0	5 5
53	MP3C MP3C	Mx	004	5
54	MP1A	X	-28.77	2
55	MP1A	Ž	0	2
56 57	MP1A	Mx	.036	2



Colliers Engineering & Design CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Magnitude[ib,k-ft]	Location[ft,%]
58	MP1A	X	-28.77	6
59	MP1A	Z	0	6
60	MP1A	Mx	.036	6
61	MP1B	X	-18.775	2
62	MP1B	Z	0	2
63	MP1B	Mx	012	2
64	MP1B	X	-18.775	6
65	MP1B	Z	0	6
66	MP1B	Mx	012	6
67	MP1C	X	-18.775	2
68	MP1C	Z	0	2
69	MP1C	Mx	012	2
70	MP1C	X	-18.775	6
71	MP1C	Z	0	6
72	MP1C	Mx	012	6
73	MP4A	X	-28.77	2
74	MP4A	Z	0	2
75	MP4A	Mx	.036	2
76	MP4A	X	-28.77	6
77	MP4A	Z	0	6
78	MP4A	Mx	.036	6
79	MP4B	X	-18.775	2
80	MP4B	Z	0	2
81	MP4B	Mx	012	2
82	MP4B	X	-18.775	6
83	MP4B	Z	0	6
84	MP4B	Mx	012	6
85	MP4C	X	-18.775	2
86	MP4C	Z	0	2
87	MP4C	Mx	012	2
88	MP4C	X	-18.775	6
89	MP4C	Z	0	6
90	MP4C	Mx	012	6
91	M101	X	-27.747	1
92	M101	Z	0	1
93	M101	Mx	0	1
94	MP1A	X	-9.469	2.5
95	MP1A	Z	0	2.5
96	MP1A	Mx	005	2.5
97	MP1B	X	-12.569	2.5
98	MP1B	Z	0	2.5
99	MP1B	Mx	.003	2.5
00	MP1C	X	-11.895	2.5
01	MP1C	Z	0	2.5
02	MP1C	Mx	.004	2.5
03	MP2A	X	-7.898	2.5
04	MP2A	Z	0	2.5
05	MP2A	Mx	004	2.5
06	MP2B	X	-12.177	2.5
07	MP2B	Z	0	2.5
80	MP2B	Mx	.003	2.5
09	MP2C	X	-11.246	2.5
10	MP2C	Z	0	2.5
11	MP2C	Mx	.004	2.5
12	MP2B	X	-6.322	5
13	MP2B	Z	0	5
14	MP2B	Mx	.00079	5



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	5 : Antenna Wi (300 Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-23.128	2
2	MP2A	Z	-13.353	2
3	MP2A	Mx	.01	2
4	MP2A	X	-23.128	6
5	MP2A	Z	-13.353	6
3	MP2A	Mx	.01	6
7	MP2B	X	-28.289	2
3	MP2B	Z	-16.333	2
9	MP2B	Mx	.027	2
0	MP2B	X	-28.289	6
	MP2B	Z	-16.333	6
1	MP2B	Mx	.027	6
2	MP2C	X	-22.213	2
3		Z	-12.824	2
4	MP2C	Mx	029	2
5	MP2C	X	-22.213	6
6	MP2C	Ž	-12.824	6
7	MP2C	Mx	029	6
8	MP2C	X	-23.128	2
9	MP2A		-13.353	2
.0	MP2A		.032	2
1	MP2A	Mx	-23.128	6
2	MP2A	X	-13.353	6
3	MP2A	Z	.032	6
4	MP2A	Mx		2
5	MP2B	X	-28.289	2
6	MP2B	Z	-16.333	2
7	MP2B	Mx	027	6
8	MP2B	X	-28.289	0
9	MP2B	Z	-16.333	6
30	MP2B	Mx	027	6
31	MP2C	X	-22.213	2
12	MP2C	Z	-12.824	2
33	MP2C	Mx	015	2
34	MP2C	X	-22.213	6
35	MP2C	Z	-12.824	6
	MP2C	Mx	015	6
36	MP3A	X	-7.959	3
37	MP3A	Z	-4.595	3
38		Mx	.004	3
39	MP3A	X	-7.959	5
10	MP3A	Z	-4.595	5
11	MP3A	Mx	.004	5
2	MP3A	IVIX	-13.964	3
13	MP3B	X	-8.062	3
4	MP3B		0	3
15	MP3B	Mx	-13.964	5
16	MP3B	X	-8.062	5
7	MP3B	Z	-6.062	5
18	MP3B	Mx		3
19	MP3C	X	-6.894	3
50	MP3C	Z	-3.98	3
51	MP3C	Mx	004	5
52	MP3C	X	-6.894	5
53	MP3C	Z	-3.98	5
54	MP3C	Mx	004	5
55	MP1A	X	-22.03	2
56	MP1A	Z	-12.719	2
57	MP1A	Mx	.028	2



Colliers Engineering & Design CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP1A	X	-22.03	6
59	MP1A	Z	-12.719	6
60	MP1A	Mx	.028	6
61	MP1B	X	-13.374	2
62	MP1B	Z	-7.721	2
63	MP1B	Mx	-1e-6	2
64	MP1B	X	-13.374	6
65	MP1B	Z	-7.721	6
66	MP1B	Mx	-1e-6	6
67	MP1C	X	-22.03	2
68	MP1C	Z	-12.719	2
69	MP1C	Mx	028	2
70	MP1C	X	-22.03	6
71	MP1C	Z	-12.719	6
72	MP1C	Mx	028	6
73	MP4A	X	-22.03	2
74	MP4A	Z	-12.719	2
75	MP4A	Mx	.028	2
76	MP4A	X	-22.03	6
77	MP4A	Z	-12.719	6
78	MP4A	Mx	.028	6
79	MP4B	X	-13.374	2
80	MP4B	Z	-7.721	2
81	MP4B	Mx	-1e-6	2
82	MP4B	X	-13.374	6
83	MP4B	Z	-7.721	6
84	MP4B	Mx	-1e-6	6
85	MP4C	X	-22.03	2
86	MP4C	Z	-12.719	2
87	MP4C	Mx	028	2
88	MP4C	X	-22.03	6
89	MP4C	Z	-12.719	6
90	MP4C	Mx	028	6
91	M101	X	-23.572	1
92	M101	Z	-13.609	1
93	M101	Mx	0	1
94	MP1A	X	-9.095	2.5
95	MP1A	Z	-5.251	2.5
96	MP1A	Mx	005	2.5
97	MP1B	X	-11.78	2.5
98	MP1B	Z	-6.801	2.5
99	MP1B	Mx	0	2.5
00	MP1C	X	-8.619	2.5
01	MP1C	Z	-4.976	2.5
02	MP1C	Mx	.005	2.5
03	MP2A	X	-8.075	2.5
04	MP2A	Z	-4.662	2.5
05	MP2A	Mx	004	2.5
06	MP2B	X	-11.78	2.5
07	MP2B	Z	-6.801	2.5
08	MP2B	Mx	0	2.5
09	MP2C	X	-7.418	2.5
10	MP2C	Z	-4.283	2.5
11	MP2C	Mx	.004	2.5
12	MP2B	X	-6.483	5
13	MP2B	Z	-3.743	5
14	MP2B	Mx	0	5



Colliers Engineering & Design CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-15.339	2
2	MP2A	Z	-26.568	2
3	MP2A	Mx	008	6
4	MP2A	X	-15.339	6
5	MP2A	Z	-26.568	6
6	MP2A	Mx	008	2
7	MP2B	X	-15.339	2
8	MP2B	Z	-26.568	2
9	MP2B	Mx	.036	6
10	MP2B	X	-15.339	6
11	MP2B	Z	-26.568	6
12	MP2B	Mx	.036	2
13	MP2C	X	-12.479	2
14	MP2C	Z	-21.615	2
15	MP2C	Mx	019	6
16	MP2C	X	-12.479	6
17	MP2C	Z	-21.615	6
18	MP2C	Mx	019	0
19	MP2A	X	-15.339	22
20	MP2A	Z	-26.568	2
21	MP2A	Mx	.036	2
22	MP2A	X	-15.339	6
23	MP2A	Z	-26.568	6
24	MP2A	Mx	.036	6
25	MP2B	X	-15.339	2
26	MP2B	Z	-26.568	2
27	MP2B	Mx	008	2
	MP2B	X	-15.339	6
28	MP2B	Z	-26.568	6
29	MP2B	Mx	008	6
30	MP2C	X	-12.479	2
31	MP2C	Z	-21.615	2
32	MP2C	Mx	026	2
33	MP2C	X	-12.479	6
34	MP2C	Ž	-21.615	6
35	MP2C	Mx	026	6
36		X	-6.906	3
37	MP3A	Ž	-11.962	3
38	MP3A MP3A	Mx	.003	3
39	MP3A	X	-6.906	5
40		Z	-11.962	5
41	MP3A MP3A	Mx	.003	5
42		X	-6.906	3
43	MP3B	Z	-11.962	3
44	MP3B	Mx	.003	3
45	MP3B	X	-6.906	5
46	MP3B	Ž	-11.962	5
47	MP3B	Mx	.003	5
48	MP3B	X	-3.579	3
49	MP3C		-6.198	3
50	MP3C	Mx	004	3
51	MP3C	X	-3.579	5
52	MP3C	Z	-6.198	5
53	MP3C		004	5
54	MP3C	Mx	-9.387	2
55	MP1A	X	-16.259	2
56	MP1A	Z	.012	2
57	MP1A	Mx	.014	



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

E0	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58 59	MP1A	X	-9.387	6
60	MP1A	Z	-16.259	6
61	MP1A	Mx	.012	6
62	MP1B	X	-9.387	2
63	MP1B	Z	-16.259	2
64	MP1B	Mx	.012	2
	MP1B	X	-9.387	6
65 66	MP1B	Z	-16.259	6
67	MP1B	Mx	.012	6
	MP1C	X	-14.385	2
68 69	MP1C	Z	-24.916	2
70	MP1C	Mx	036	2
	MP1C	X	-14.385	6
71	MP1C	Z	-24.916	6
72	MP1C	Mx	036	6
73	MP4A	X	-9.387	2
74	MP4A	Z	-16.259	2
75	MP4A	Mx	.012	2
76	MP4A	X	-9.387	6
77	MP4A	Z	-16.259	6
78	MP4A	Mx	.012	6
79	MP4B	X	-9.387	2
80	MP4B	Z	-16.259	2
81	MP4B	Mx	.012	2
82	MP4B	X	-9.387	6
83	MP4B	Z	-16.259	6
84	MP4B	Mx	.012	6
85	MP4C	X	-14.385	2
86	MP4C	Z	-24.916	2
87	MP4C	Mx	036	2
88	MP4C	X	-14.385	6
89	MP4C	Z	-24.916	6
90	MP4C	Mx	036	6
91	M101	X	-12.181	1
92	M101	Z	-21.098	1
93	M101	Mx	0	1
94	MP1A	X	-6.285	2.5
95	MP1A	Z	-10.885	2.5
96	MP1A	Mx	003	2.5
97	MP1B	X	-6.285	2.5
98	MP1B	Z	-10.885	2.5
99	MP1B	Mx	003	2.5
00	MP1C	X	-4.797	2.5
01	MP1C	Z	-8.308	2.5
02	MP1C	Mx	.005	2.5
03	MP2A	X	-6.088	2.5
04	MP2A	Z	-10.545	2.5
05	MP2A	Mx	003	2.5
06	MP2B	X	-6.088	2.5
07	MP2B	Z	-10.545	2.5
08	MP2B	Mx	003	2.5
09	MP2C		-4.035	2.5
10	MP2C	X	-6.989	2.5
11	MP2C	Mx	.004	2.5
12	MP2B	X	-3.161	5
13	MP2B	Z	-5.475	5
14	MP2B	Mx	00079	5



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	7 : Antenna Wm (0 L	Magnitude[lb,k-ft]	Location[ft.%]
1	MP2A	X	0	2 2
2	MP2A	Z	-5.16	2
3	MP2A	Mx	004	6
4	MP2A	X	0	6
5	MP2A	Z	-5.16	
6	MP2A	Mx	004	6
7	MP2B	X	0	2
8	MP2B	Z	-4.186	2
9	MP2B	Mx	.005	2
10	MP2B	X	0	6
11	MP2B	Z	-4.186	6
12	MP2B	Mx	.005	6
	MP2C	X	0	2
13	MP2C	Z	-4.398	2
14		Mx	000732	2
15	MP2C	X	0	6
16	MP2C	Z	-4.398	6
17	MP2C	Mx	000732	6
18	MP2C	X	0	2
19	MP2A		-5.16	2
20	MP2A	Z	.004	2
21	MP2A	Mx	0	6
22	MP2A	X	-5.16	6
23	MP2A	Z		6
24	MP2A	Mx	.004	2
25	MP2B	X		2
26	MP2B	Z	-4.186	2
27	MP2B	Mx	.002	
28	MP2B	X	0	6
29	MP2B	Z	-4.186	6
30	MP2B	Mx	.002	6
31	MP2C	X	0	2
32	MP2C	Z	-4.398	2
	MP2C	Mx	005	2
33	MP2C	X	0	6
34		Z	-4.398	6
35	MP2C	Mx	005	6
36	MP2C	X	0	3
37	MP3A	Ž	-5.127	3
38	MP3A	Mx	0	3
39	MP3A	X	0	5
40	MP3A	<u>^</u>	-5.127	5
41	MP3A	Z	0	5
42	MP3A	Mx	0	3
43	мР3В	X	-2.787	3
44	MP3B	Z		3
45	MP3B	Mx	.001	5
46	МРЗВ	X	0 707	5
47	MP3B	Z	-2.787	5
48	MP3B	Mx	.001	3
49	MP3C	X	0	3
50	MP3C	Z	-3.296	3
51	MP3C	Mx	001	3
52	MP3C	X	0	5
	MP3C	Z	-3.296	5
53	MP3C	Mx	001	5
54	MP1A	X	0	2
55	MD1A	Ž	-4.724	2
56	MP1A	Mx	0	2
57	MP1A	IVIA		r3d] Page 68



Colliers Engineering & Design CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

[no	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP1A	X	0	6
59	MP1A	Z	-4.724	6
60	MP1A	Mx	0	6
61	MP1B	X	0	2
62	MP1B	Z	-8.241	2
63 64	MP1B	Mx	.009	2
65	MP1B	X	0	6
66	MP1B MP1B	Z	-8.241	6
67	MP1C	Mx	.009	6
68	MP1C	X	0	2
69	MP1C	Z	-8.241	2
70	MP1C	Mx	009	2
71	MP1C	X	0	6
72	MP1C		-8.241	6
73	MP4A	Mx	009	6
74	MP4A	X	0	2
75	MP4A	Mx	-4.724	2
76	MP4A	X	0	2
77	MP4A	Z		6
78	MP4A	Mx	-4.724 0	6
79	MP4B	X	0	6
80	MP4B	Z	-8.241	2
81	MP4B	Mx	.009	2
82	MP4B	X	0	2
83	MP4B	Z	-8.241	6
84	MP4B	Mx	.009	6
85	MP4C	X	0	2
86	MP4C	Z	-8.241	2
87	MP4C	Mx	009	2
88	MP4C	X	0	6
89	MP4C	Z	-8.241	6
90	MP4C	Mx	009	6
91	M101	X	0	1
92	M101	Z	-6.822	
93	M101	Mx	0	1
94	MP1A	X	Ō	2.5
95	MP1A	Z	-3.382	2.5
96	MP1A	Mx	0	2.5
97	MP1B	X	0	2.5
98	MP1B	Z	-2.547	2.5
99	MP1B	Mx	001	2.5
100	MP1C	X	0	2.5
101	MP1C	Z	-2.729	2.5
102	MP1C	Mx	.001	2.5
103	MP2A	X	0	2.5
104	MP2A	Z	-3.382	2.5
105	MP2A	Mx	0	2.5
106	MP2B	X	0	2.5
107	MP2B	Z	-2.236	2.5
801	MP2B	Mx	000968	2.5
109	MP2C	X	0	2.5
110	MP2C	Z	-2.486	2.5
111	MP2C	Mx	.000952	2.5
112	MP2B	X	0	5
113	MP2B	Z	-1	5
114	MP2B	Mx	000217	5



: Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
	MP2A	X	2.418	2
	MP2A	Z	-4.188	2
3	MP2A	Mx	006	6
	MP2A	X	2.418	6
5	MP2A	Z	-4.188	6
6	MP2A	Mx	006	2
7	MP2B	X	1.931	2
8	MP2B	Z	-3.344	2
9	MP2B	Mx	.004 1.931	6
0	MP2B	X	-3.344	6
1	MP2B	Z	.004	6
2	MP2B	Mx	2.504	2
13	MP2C	X	-4.337	2
4	MP2C	Mx	.002	2
5	MP2C		2.504	6
16	MP2C	X	-4.337	6
7	MP2C	Mx	.002	6
18	MP2C	X	2.418	2
19	MP2A	Z	-4.188	2
20	MP2A	Mx	.001	2
21	MP2A MP2A	X	2,418	6
22	MP2A MP2A	Z	-4.188	6
23	MP2A	Mx	.001	6
24	MP2B	X	1.931	2
25	MP2B	Z	-3.344	2
26 27	MP2B	Mx	.004	2
28	MP2B	X	1.931	6
29	MP2B	Z	-3.344	6
30	MP2B	Mx	.004	6
31	MP2C	X	2.504	2
32	MP2C	Z	-4.337	2
33	MP2C	Mx	005	2
34	MP2C	X	2.504	6
35	MP2C	Z	-4.337	6
36	MP2C	Mx	005	6
37	МРЗА	X	2.174	3 3
38	MP3A	Z	-3.765	3
39	MP3A	Mx	001	5
40	MP3A	X	2.174	5
41	MP3A	Z	-3.765	5
42	мрза	Mx	001	3
43	MP3B	X	1.004	3
44	MP3B	Z	-1.738 -001	3
45	MP3B	Mx	.001 1.004	5
46	MP3B	X	-1.738	5
47	MP3B	Z	-1.738	5
48	MP3B	Mx	2.381	3
49	MP3C	<u>X</u>	-4.124	3
50	MP3C	Z	-000814	3
51	MP3C	Mx	2.381	5
52	MP3C	X	-4.124	5
53	MP3C	Z	-4.124	5
54	MP3C	Mx	2.948	2
55	MP1A	X	-5.106	2
56	MP1A	Z	004	2
57	MP1A	Mx	=:,004 :a\5000245391-VZW_MT_LO_H	



Colliers Engineering & Design CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

F0	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP1A	X	2.948	6
59	MP1A	Z	-5.106	6
60	MP1A	Mx	004	6
61	MP1B	X	4.706	2
62	MP1B	Z	-8.152	2
63	MP1B	Mx	.012	2
64	MP1B	X	4.706	6
65	MP1B	Z	-8.152	6
66	MP1B	Mx	.012	6
67	MP1C	X	2.948	2
68	MP1C	Z	-5.106	2
69	MP1C	Mx	004	2
70	MP1C	X	2.948	6
71	MP1C	Z	-5.106	6
72	MP1C	Mx	004	6
73	MP4A	X	2.948	2
74	MP4A	Z	-5.106	2
75	MP4A	Mx	004	2
76	MP4A	X	2.948	6
77	MP4A	Z	-5.106	6
78	MP4A	Mx	004	6
79	MP4B	X	4.706	2
80	MP4B	Z	-8.152	2
81	MP4B	Mx	.012	2
82	MP4B	X	4.706	6
83	MP4B	Z	-8.152	6
84	MP4B	Mx	.012	6
85	MP4C	X	2.948	2
86	MP4C	Z	-5.106	2
87	MP4C	Mx	004	2
88	MP4C	X	2.948	6
89	MP4C	Z	-5.106	6
90	MP4C	Mx	004	6
91	M101	X	3.502	1
92	M101	Z	-6.066	1
93	M101	Mx	0	1
94	MP1A	X	1.552	2.5
95	MP1A	Z	-2.688	2.5
96	MP1A	Mx	.000776	2.5
97	MP1B	X	1.135	2.5
98	MP1B	Z	-1.965	2.5
99	MP1B	Mx	001	2.5
00	MP1C	X	1.626	2.5
01	MP1C	Z	-2.816	2.5
02	MP1C	Mx	.000556	2.5
03	MP2A	X	1.5	2.5
04	MP2A	Z	-2.598	2.5
05	MP2A	Mx	.00075	2.5
06	MP2B	X	.927	2.5
07	MP2B	Z	-1.606	2.5
08	MP2B	Mx	000927	2.5
09	MP2C	X	1.602	2.5
10	MP2C	Ž	-2.774	2.5
11	MP2C	Mx	.000548	2.5
12	MP2B	X	.318	5
13	MP2B	Z	55	5
14	MP2B	Mx	000159	5



: Colliers Engineering & Design : CL : Project No. 10206276 : 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	mber Label	9 : Antenna Wm (60 Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	3.626	2
2	MP2A	Z	-2.093	2
3	MP2A	Mx	005	6
4	MP2A	X	3.626	6
5	MP2A	Z	-2.093	6
6	MP2A	Mx	005	
7	MP2B	X	3.626	2 2
8	MP2B	Z	-2.093	
9	MP2B	Mx	.002	2
10	MP2B	X	3.626	6
	MP2B	Z	-2.093	6
11	MP2B	Mx	.002	6
12	MP2C	X	4.435	2
13		Ž	-2.56	2
14	MP2C	Mx	.005	2
15	MP2C	X	4.435	6
16	MP2C	Z	-2.56	6
17	MP2C	Mx	.005	6
18	MP2C	X	3.626	2
19	MP2A		-2.093	2
20	MP2A	Z	002	2
21	MP2A	Mx	3.626	6
22	MP2A	X	-2.093	6
23	MP2A	Z		6
24	MP2A	Mx	002	2
25	MP2B	X	3.626	2
26	MP2B	Z	-2.093	2
27	MP2B	Mx	.005	6
28	MP2B	X	3.626	
29	MP2B	Z	-2.093	6
30	MP2B	Mx	.005	6
	MP2C	X	4.435	2
31	MP2C	Z	-2.56	2
32	MP2C	Mx	003	2
33	MP2C	X	4.435	6
34		Ž	-2.56	6
35	MP2C	Mx	003	6
36	MP2C	X	2.414	3
37	MP3A	Ž	-1.394	3
38	MP3A		001	3
39	MP3A	Mx X	2.414	5
40	MP3A		-1.394	5
41	MP3A	Z	001	5
42	MP3A	Mx	2.414	
43	MP3B	X	-1.394	3
44	MP3B	Z		3
45	MP3B	Mx	.001 2.414	5
46	MP3B	X		5
47	MP3B	Z	-1.394	5
48	MP3B	Mx	.001	3
49	MP3C	X	4.359	3
50	MP3C	Z	-2.517	3
	MP3C	Mx	.000437	3
51	MP3C	X	4.359	5
52	MP3C	Ž	-2.517	5
53		Mx	.000437	5
54	MP3C	X	7.137	2
55	MP1A	Ž	-4.12	2
56	MP1A	Mx	009	2
57	MP1A	IVIX		.r3d1 Page 72



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP1A	X	7.137	6
59	MP1A	Z	-4.12	6
60	MP1A	Mx	009	6
61	MP1B	X	7.137	2
63	MP1B	Z	-4.12	2
64	MP1B	Mx	.009	2
65	MP1B MP1B	X	7.137	6
66	MP1B	Z	-4.12	6
67	MP1C	Mx	.009	6
68	MP1C	X	4.091	2
69	MP1C	Mx	-2.362	2 2
70	MP1C	X	0 4.091	
71	MP1C	Z	-2.362	6
72	MP1C	Mx	-2.362	6
73	MP4A	X	7.137	6
74	MP4A	Z	-4.12	2 2
75	MP4A	Mx	009	2
76	MP4A	X	7.137	6
77	MP4A	Z	-4.12	6
78	MP4A	Mx	009	6
79	MP4B	X	7.137	2
80	MP4B	Z	-4.12	2
81	MP4B	Mx	.009	2
82	MP4B	X	7.137	6
83	MP4B	Z	-4.12	6
84	MP4B	Mx	.009	6
85	MP4C	X	4.091	2
86 87	MP4C	Z	-2.362	2
88	MP4C MP4C	Mx	0	2
89	MP4C	X	4.091	6
90	MP4C	Z	-2.362	6
91	M101	Mx	0	6
92	M101	X	6.92	1
93	M101	Mx	-3.995	1
94	MP1A	X	0 2.206	ļ
95	MP1A	Z	2.20b -1.274	2.5
96	MP1A	Mx	.001	2.5
97	MP1B	X	2.206	2.5 2.5
98	MP1B	Ž	-1.274	2.5
99	MP1B	Mx	001	2.5
100	MP1C	X	2.9	2.5
101	MP1C	Z	-1.674	2.5
102	MP1C	Mx	000291	2.5
103	MP2A	X	1.937	2.5
104	MP2A	Z	-1.118	2.5
105	MP2A	Mx	.000968	2.5
106	MP2B	X	1.937	2.5
107	MP2B	Z	-1.118	2.5
108	MP2B	Mx	000968	2.5
109	MP2C	X	2.889	2.5
110	MP2C	Z	-1.668	2.5
111	MP2C	Mx	00029	2.5
112 113	MP2B	X	.866	5
114	MP2B MP2B	Z	_{7.5}	5
117	IVIFZD	Mx	000217	5



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

Member	ds (BLC 30 : Antenna Wm (Magnitude[lb,k-ft]	Location[ft,%]
1 MP2	A X	3.862	2
2 MP2	A Z	0	2
3 MP2	A Mx	004	2
4 MP2	A X	3.862	6
5 MP2	A Z	0	6
6 MP2	A Mx	004	6
7 MP2		4.836	2
8 MP2		0	2
9 MP2		001	2
10 MP2	B X	4.836	6
11 MP2	B Z	0	6
12 MP2	B Mx	001	6
13 MP2		4.624	2
14 MP2		0	2
15 MP2		.006	2
16 MP2		4.624	6
17 MP2		0	6
18 MP2	C Mx	.006	6
19 MP2	A X	3,862	2
20 MP2		0	2
21 MP2	A Mx	004	2
22 MP2		3.862	6
23 MP2		0	6
24 MP2		004	6
25 MP2		4.836	2
		0	2
	1,200,00	.006	2
		4.836	6
		0	6
		.006	6
		4.624	2
		0	2
	9	000227	2
		4.624	6
		0	6
	9	000227	6 3
		2.007	
37 MP3 38 MP3		0	3
00		001	3
39 MP3		2.007	5
40 MP3		0	5
41 MP3	<i>**</i>	001	5
42 MP3		4.347	3
43 MP3		0	3
44 MP3	,,,	.001	3
45 MP3		4.347	5
46 MP3		0	5
47 MP3	,,,	.001	5
48 MP:		3.838	3
49 MP3		0	3
50 MP3	70	.001	3
51 MP3		3.838	5
52 MP3		0	5
53 MP3		.001	5
54 MP3		9.413	2
55 MP		9.413	2
56 MP		012	2
57 MP	1A Mx	012	r3dl Page 74



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

50	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP1A	X	9.413	6
59	MP1A	Z	0	6
60	MP1A	Mx	012	6
61	MP1B	X	5.896	2
62	MP1B	Z	0	2
63	MP1B	Mx	.004	2
64	MP1B	X	5.896	6
65	MP1B	Z	0	6
66	MP1B	Mx	.004	6
67	MP1C	X	5.896	2
68	MP1C	Z	0	2 2
69	MP1C	Mx	.004	2
70	MP1C	X	5.896	6
71	MP1C	Z	0	6
72	MP1C	Mx	.004	6
73	MP4A	X	9.413	2
74	MP4A	Z	0	2
75	MP4A	Mx	012	2
76	MP4A	X	9.413	6
77	MP4A	Z	0	6
78	MP4A	Mx	012	6
79	MP4B	X	5.896	2
80	MP4B	Z	0	2
81	MP4B	Mx	.004	2
82	MP4B	X	5.896	6
83	MP4B	Z	0	6
84	MP4B	Mx	.004	6
85	MP4C	X	5.896	2
86	MP4C	Z	0	2
87	MP4C	Mx	.004	2
88	MP4C	X	5.896	6
89	MP4C	Z	0	6
90	MP4C	Mx	.004	6
91	M101	X	8.795	1
92	M101	Z	0	1
93	M101	Mx	0	1
94	MP1A	X	2.269	2.5
95	MP1A	Z	0	2.5
96	MP1A	Mx	.001	2.5
97	MP1B	X	3.104	2.5
98	MP1B	Z	0	2.5
99	MP1B	Mx	000776	2.5
100	MP1C	X	2.922	2.5
101	MP1C	Z	0	2.5
102	MP1C	Mx	000939	2.5
103	MP2A	X	1.855	2.5
104	MP2A	Z	0	2.5
105	MP2A	Mx	.000927	2.5
106	MP2B	X	3	2.5
107	MP2B	Z	0	2.5
108	MP2B	Mx	00075	2.5
109	MP2C	X	2.751	2.5
110	MP2C	Ž	0	2.5
111	MP2C	Mx	000884	2.5
112	MP2B	X	1.73	5
113	MP2B	Z	0	5
114	MP2B	Mx	000216	5



: Colliers Engineering & Design : CL : Project No. 10206276 : 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	lember Label	1 : Antenna Wm (12	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	3.626	2 2
2	MP2A	Z	2.093	2
3	MP2A	Mx	002	6
4	MP2A	X	3.626	6
5	MP2A	Z	2.093	6
6	MP2A	Mx	002	2
7	MP2B	X	4.469	2
8	MP2B	Z	2.58	2
9	MP2B	Mx	004	6
10	MP2B	X	4.469	6
11	MP2B	Z	2.58	6
12	MP2B	Mx	004	2
13	MP2C	X	3.476	2
14	MP2C	Z	2.007	2
15	MP2C	Mx	.005	6
16	MP2C	X	3.476	6
17	MP2C	Z	2.007	6
18	MP2C	Mx	.005 3.626	2
19	MP2A	X	2.093	2
20	MP2A	Z		2
21	MP2A	Mx	005	6
22	MP2A	X	3.626	6
23	MP2A	Z	2.093	6
24	MP2A	Mx	005 4.469	2
25	MP2B	X		2
26	MP2B	Z	2.58	2
27	MP2B	Mx	.004	6
28	MP2B	X	4.469	6
29	MP2B	Z	2.58	6
30	MP2B	Mx	.004	2
31	MP2C	X	3.476	2
32	MP2C		2.007	2
33	MP2C	Mx		6
34	MP2C	X	3.476	6
35	MP2C	Z	2.007	6
36	MP2C	Mx	.002	3
37	MP3A	X	2.414	3
38	MP3A	Z	1.394	3
39	MP3A	Mx	001	5
40	MP3A	X	2.414	5
41	MP3A	Z	1.394	5
42	мР3А	Mx	001	
43	MP3B	X	4.44	3
44	MP3B	Z	2.564	3
45	MP3B	Mx	0	5
46	MP3B	X	4.44	5
47	MP3B	Z	2.564	5
48	MP3B	Mx	0	3
49	MP3C	X	2.054	3
50	MP3C	Z	1.186	3
51	MP3C	Mx	.001	5
52	MP3C	X	2.054	5
53	MP3C	Z	1.186	5
54	MP3C	Mx	.001	2
55	MP1A	X	7.137	2
56	MP1A	Z	4.12	2
57	MP1A	Mx	009	



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP1A	X	7.137	6
59	MP1A	Z	4.12	6
60	MP1A	Mx	009	6
61	MP1B	X	4.091	2
62	MP1B	Z	2.362	2
63	MP1B	Mx	0	2
64	MP1B	X	4.091	6
65	MP1B	Z	2.362	6
66	MP1B	Mx	0	6
67	MP1C	X	7.137	2
68	MP1C	Z	4.12	2
69	MP1C	Mx	.009	2
70	MP1C	X	7.137	6
71	MP1C	Z	4.12	6
72	MP1C	Mx	.009	6
73	MP4A	X	7.137	2
74	MP4A	Z	4.12	2
75	MP4A	Mx	009	2
76	MP4A	X	7.137	6
77	MP4A	Z	4.12	6
78	MP4A	Mx	009	6
79	MP4B	X	4.091	2
30	MP4B	Z	2.362	2
31	MP4B	Mx	0	2
32	MP4B	X	4.091	6
33	MP4B	Z	2.362	6
34	MP4B	Mx	0	6
35	MP4C	X	7,137	2
36	MP4C	Z	4.12	2
37	MP4C	Mx	.009	2
38	MP4C	X	7.137	6
39	MP4C	Z	4.12	6
90	MP4C	Mx	.009	6
91	M101	X	7.459	1
92	M101	Z	4.306	
3	M101	Mx	0	1
4	MP1A	X	2.206	2.5
95	MP1A	Z	1.274	2.5
96	MP1A	Mx	.001	2.5
7	MP1B	X	2.929	2.5
8	MP1B	Ž	1.691	2.5
9	MP1B	Mx	0	2.5
00	MP1C		2.078	2.5
01	MP1C	Z	1.2	2.5
02	MP1C	Mx	001	2.5
03	MP2A	X	1.937	2.5
)4	MP2A	Ž	1.118	2.5
05	MP2A	Mx	.000968	2.5
06	MP2B	X	2.929	2.5
07	MP2B	Z	1.691	
38	MP2B	Mx	0	2.5
09	MP2C	X	1.761	2.5
10	MP2C	Z	1.017	2.5
11	MP2C	Mx		2.5
12	MP2B	X	000956	2.5
13	MP2B	Z	1.814	5
14	MP2B	Mx	1.047	5



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

M	ember Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	2.418 4.188	2
2	MP2A	Z	.001	2
3	MP2A	Mx	2.418	6
4	MP2A	X	4.188	6
5	MP2A	Z	.001	6
6	MP2A	Mx	2.418	2
7	MP2B	X	4.188	2
8	MP2B	Z	006	2
9	MP2B	Mx	2.418	6
0	MP2B	X	4.188	6
1	MP2B	Z	006	6
12	MP2B	Mx	1.951	2
13	MP2C	X	3.378	2
14	MP2C		.003	2
5	MP2C	Mx.	1.951	6
16	MP2C	X	3.378	6
17	MP2C		.003	6
18	MP2C	Mx X	2.418	2
19	MP2A	X	4.188	2
20	MP2A		006	2
21	MP2A	Mx	2.418	6
22	MP2A	X	4.188	6
23	MP2A		006	6
24	MP2A	Mx	2.418	2
25	MP2B	X	4.188	2
26	MP2B		.001	2
27	MP2B	Mx	2.418	6
28	MP2B	X	4.188	6
29	MP2B	Z	.001	6
30	MP2B	Mx	1.951	2
31	MP2C	X	3.378	2
32	MP2C	Z	.004	2
33	MP2C	Mx	1.951	6
34	MP2C	X	3.378	6
35	MP2C	Z	.004	6
36	MP2C	Mx V	2.174	3
37	MP3A	X	3.765	3
38	MP3A	Z	001	3
39	MP3A	Mx	2.174	5
40	MP3A	X	3.765	5
41	MP3A	Z	001	5
42	MP3A	Mx	2.174	3
43	MP3B	X	3,765	3
44	MP3B		001	3
45	MP3B	Mx	2.174	5
46	<u>МРЗВ</u>	X	3.765	5
47	MP3B		001	5
48	MP3B	Mx	1.051	3
49	MP3C	X	1.82	3
50	MP3C	Z	.001	3
51	MP3C	Mx	1.051	5
52	MP3C	X	1.82	5
53	MP3C	Z	.001	5
54	MP3C	Mx	2.948	2
55	MP1A	X	5.106	2
56	MP1A	Z	004	2
57	MP1A	Mx	-,004	r3d) Page 78



Colliers Engineering & Design CL

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

50	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP1A	X	2.948	6
59	MP1A	Z	5.106	6
60	MP1A	Mx	004	6
61	MP1B	X	2.948	2
62	MP1B	Z	5.106	2
63	MP1B	Mx	004	2
64	MP1B	X	2.948	6
65	MP1B	Z	5.106	6
66	MP1B	Mx	004	6
67	MP1C	X	4.706	2
68	MP1C	Z	8.152	2
69	MP1C	Mx	.012	2
70	MP1C	X	4.706	6
71	MP1C	Z	8.152	6
72	MP1C	Mx	.012	6
73	MP4A	X	2.948	2
74	MP4A	Z	5.106	2
75	MP4A	Mx	004	2
76	MP4A	X	2.948	6
77	MP4A	Z	5.106	6
78	MP4A	Mx	004	6
79	MP4B	X	2.948	2
80	MP4B	Z	5.106	2
81	MP4B	Mx	004	2
82	MP4B	X	2.948	6
83	MP4B	Z	5.106	6
84	MP4B	Mx	004	6
85	MP4C	X	4.706	2
86	MP4C	Ž	8.152	2
87	MP4C	Mx	.012	
88	MP4C	X	4.706	2
89	MP4C	Z	8.152	6
90	MP4C	Mx	.012	6
91	M101	X	3.813	6
92	M101	Z	6.604	1
93	M101	Mx	0	1
94	MP1A	X	1.552	
95	MP1A	Z	2.688	2.5
96	MP1A	Mx		2.5
97	MP1B	X	.000776	2.5
98	MP1B	Z	1.552	2.5
99	MP1B	Mx	2.688	2.5
100	MP1C		.000776	2.5
101	MP1C	Z	1.151	2.5
102	MP1C		1.994	2.5
103	MP2A	Mx	001	2.5
04	MP2A MP2A	X	1.5	2.5
05	MP2A MP2A		2.598	2.5
06	MP2B	Mx	.00075	2.5
07		X	1.5	2.5
	MP2B	Z	2.598	2.5
80	MP2B	Mx	.00075	2.5
09	MP2C	X	.95	2.5
10	MP2C	Z	1.646	2.5
11	MP2C	Mx	000936	2.5
12	MP2B	X	.865	5
13	MP2B	Z	1.498	5
114	MP2B	Mx	.000216	5



RISA-3D Version 17.0.4

Company Designer Job Number Model Name

Colliers Engineering & Design

CL

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Point Loads (BLC 33	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	2 2
2	MP2A	Z	5.16	
3	MP2A	Mx	.004	2
4	MP2A	X	0	6
5	MP2A	Z	5.16	6
6	MP2A	Mx	.004	6
7	MP2B	X	0	2
8	MP2B	Z	4.186	2
9	MP2B	Mx	005	2
10	MP2B	X	0	6
11	MP2B	Z	4.186	6
12	MP2B	Mx	005	6
13	MP2C	X	0	2
14	MP2C	Z	4.398	2
15	MP2C	Mx	.000732	2
16	MP2C	X	0	6
17	MP2C	Z	4.398	6
18	MP2C	Mx	.000732	6
19	MP2A	X		2
20	MP2A	Z	5.16	2 2
21	MP2A	Mx	004	6
22	MP2A	X	0	
23	MP2A	Z	5.16	6
24	MP2A	Mx	004	6
25	MP2B	X	0	2
26	MP2B	Z	4.186	2
27	MP2B	Mx	002	2
28	MP2B	Χ	0	6
29	MP2B	Z	4.186	6
30	MP2B	Mx	-,002	6 2
31	MP2C	X	0	
32	MP2C	Z	4.398	2
33	MP2C	Mx	.005	2 6
34	MP2C	X	0	6
35	MP2C	Z	4.398	6
36	MP2C	Mx	.005	- 0
37	MP3A	X	0	3 3
38	MP3A	Z	5.127	3
39	MP3A	Mx	0	3
40	MP3A	X	0	5
41	MP3A	Z	5.127	5
42	MP3A	Mx	0	
43	MP3B	X	0	3 3
44	MP3B	Z	2.787	3
45	MP3B	Mx	001	3 5
46	MP3B	X	0	3 F
47	MP3B	Z	2.787	5
48	MP3B	Mx	001	3
49	MP3C	X	00	3
50	MP3C	Z	3.296	3
51	MP3C	Mx	.001	3
52	MP3C	X	0	5
53	MP3C	Z	3.296	5
54	MP3C	Mx	.001	5
55	MP1A	X	0	2
56	MP1A	Z	4.724	2
57	MP1A	Mx	0	2



: Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP1A	X	0	6
59	MP1A		4.724	6
60	MP1A	Mx	0	6
61	MP1B	X	0	2
62	MP1B	Z	8.241	2
63	MP1B	Mx	009	2
64	MP1B	X	0	6
65	MP1B	Z	8.241	6
66	MP1B	Mx	009	6
67	MP1C	X	0	2
68	MP1C	Z	8.241	2
69	MP1C	Mx	.009	2
70	MP1C	X	0	6
71	MP1C	Z	8.241	6
72	MP1C	Mx	.009	6
73	MP4A	X	0	2
74	MP4A	Z	4.724	2
75	MP4A	Mx	0	2
76	MP4A	X	0	6
77	MP4A	Z	4.724	6
78	MP4A	Mx	0	6
79	MP4B	X	0	2
80	MP4B	Z	8.241	2
81	MP4B	Mx	009	2
82	MP4B	X	0	6
83	MP4B	Z	8.241	6
84	MP4B	Mx	009	6
85	MP4C	X	0	2
86	MP4C	Z	8.241	2
87	MP4C	Mx	.009	2
88	MP4C	X	0	6
39	MP4C	Z	8.241	6
90	MP4C	Mx	.009	6
91	M101	X	0	1
92	M101	Z	6.822	
93	M101	Mx	0	1
94	MP1A	X	0	2.5
95	MP1A	Z	3.382	2.5
96	MP1A	Mx	0	2.5
97	MP1B	X	0	2.5
98	MP1B	Z	2.547	2.5
99	MP1B	Mx	.001	2.5
00	MP1C		0	2.5
01	MP1C	X	2.729	2.5
02	MP1C	Mx	001	2.5
03	MP2A	X	0	2.5
04	MP2A	Ž	3.382	2.5
05	MP2A	Mx	0	2.5
06	MP2B	X	0	2.5
07	MP2B	Z	2.236	2.5
08	MP2B	Mx	.000968	
09	MP2C	X	0	2.5
10	MP2C	Ž	2.486	2.5
11	MP2C	Mx	000952	2.5
12	MP2B	X	000952 0	2.5
13	MP2B	Z	1	5
14	MP2B	Mx	.000217	5



: Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

Member	ds (BLC 34 : Antenna Wm (2	Magnitude[lb,k-ft]	Location[ft,%]
1 MP2	A X	-2.418	2
2 MP2	A X	4.188	2
3 MP2		.006	2
4 MP2		-2.418	6
MP2		4.188	6
MP2	A Mx	.006	6
7 MP2		-1.931	2
B MP2		3.344	2
9 MP2		004	2
0 MP2		-1.931	6
1 MP2		3.344	6
2 MP2	B Mx	004	6
3 MP2		-2.504	2
4 MP2		4.337	2
5 MP2		002	2
6 MP2		-2.504	6
7 MP2		4.337	6
8 MP2		002	6
9 MP2		-2.418	2
0 MP2		4.188	2
21 MP2		001	2
22 MP2		-2.418	6
23 MP2		4.188	6
24 MP2		001	6
25 MP2		-1.931	2
26 MP2		3.344	2
27 MP2		004	2
28 MP2		-1.931	6
29 MP2		3.344	6
30 MP2		004	6
31 MP2		-2.504	2
32 MP2		4.337	2
33 MP2	<u> </u>	.005	2
34 MP2		-2.504	6
35 MP2		4.337	6
36 MP2		.005	6
37 MP3		-2.174	3
		3.765	3
38 MP3 39 MP3	,, , , , , , , , , , , , , , , , , , ,	.001	3
40 MP3		-2.174	5
		3.765	5
	27 1	.001	5
		-1.004	3
	_	1.738	3
	70	001	3
100000000000000000000000000000000000000		-1.004	5
		1.738	5
	, ,	001	5
		-2.381	3
		4,124	3
50 MP3		.000814	3
51 MP3		-2.381	5
52 MP3		4.124	5
53 MP3	70	.000814	5
54 MP3	- 12	-2.948	2
55 MP		5.106	2
56 MP	113	.004	2
57 MP	IA IVIA		JI Dogo 9



: Colliers Engineering & Design : CL

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP1A	X	-2.948	6
59	MP1A	Z	5.106	6
60	MP1A	Mx	.004	6
61	MP1B	X	-4.706	2
62	MP1B	Z	8.152	2
63	MP1B	Mx	012	2
64	MP1B	X	-4.706	6
65	MP1B	Z	8.152	6
66	MP1B	Mx	012	6
67	MP1C	X	-2.948	2
68	MP1C	Z	5.106	2
69	MP1C	Mx	.004	2
70	MP1C	X	-2.948	6
71	MP1C	Z	5.106	6
72	MP1C	Mx	.004	6
73	MP4A	X	-2.948	2
74	MP4A	Z	5.106	2
75	MP4A	Mx	.004	2
76	MP4A	X	-2.948	6
77	MP4A	Z	5.106	6
78	MP4A	Mx	.004	6
79	MP4B	X	-4.706	2
80	MP4B	Z	8.152	2
81	MP4B	Mx	012	2
82	MP4B	X	-4.706	6
83	MP4B	Z	8.152	6
84	MP4B	Mx	012	6
85	MP4C	X	-2.948	2
86	MP4C	Z	5.106	2
87	MP4C	Mx	.004	2
88	MP4C	X	-2.948	6
89	MP4C	Z	5.106	
90	MP4C	Mx	.004	6
91	M101	X	-3.502	
92	M101	Z	6.066	1
93	M101	Mx	0	
94	MP1A	X	-1.552	2.5
95	MP1A	Z	2.688	
96	MP1A	Mx	000776	2.5
97	MP1B	X		2.5
98	MP1B	Z	-1.135	2.5
99	MP1B	Mx	1.965	2.5
100	MP1C		.001	2.5
101	MP1C	X	-1.626	2.5
102	MP1C		2.816	2.5
103	MP2A	Mx	000556	2.5
104	MP2A	X	-1.5	2.5
105		Z	2.598	2.5
106	MP2A	Mx	00075	2.5
106	MP2B	X	927	2.5
	MP2B	Z	1.606	2.5
108	MP2B	Mx	.000927	2.5
109	MP2C	X	-1.602	2.5
110	MP2C	Z	2.774	2.5
111	MP2C	Mx	000548	2.5
112	MP2B	X	318	5
113	MP2B	Z	.55	5
114	MP2B	Mx	.000159	5



RISA-3D Version 17.0.4

Company Designer Job Number Model Name

: Colliers Engineering & Design : CL : Project No. 10206276 : 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

Member Label	35 : Antenna Wm (24	Magnitude[lb,k-ft]	Location[ft,%]
1 MP2A	X	-3.626	2
2 MP2A	Z	2.093	2
MP2A	Mx	.005	2
MP2A	X	-3.626	6
MP2A	Z	2.093	
6 MP2A	Mx	.005	6
MP2B	X	-3.626	2
MP2B	Z	2.093	2 2
MP2B	Mx	002	
0 MP2B	X	-3.626	6
1 MP2B	Z	2.093	
2 MP2B	Mx	002	6 2
3 MP2C	X	-4.435	
4 MP2C	Z	2.56	2
5 MP2C	Mx	005	2
6 MP2C	X	-4.435	6
7 MP2C	Z	2.56	6
8 MP2C	Mx	005	6
9 MP2A	X	-3,626	2
0 MP2A	Z	2.093	2
MP2A	Mx	.002	2
2 MP2A	X	-3.626	6
MP2A	r Z	2.093	6
MP2A	Mx	.002	6
5 MP2B	X	-3.626	2
6 MP2B	Z	2.093	2
7 MP2B	Mx	005	2
28 MP2B	X	-3.626	6
29 MP2B	Z	2.093	6
30 MP2B	Mx	005	6
MP2C	X	-4.435	2
32 MP2C	Z	2.56	2
33 MP2C	Mx	.003	2
MP2C	X	-4.435	6
B5 MP2C	Z	2.56	6
36 MP2C	Mx	.003	6
B7 MP3A	X	-2.414	3
38 MP3A	Z	1.394	3
39 MP3A	Mx	.001	3
10 MP3A	X	-2.414	5
11 MP3A	Z	1.394	5
12 MP3A	Mx	.001	5
13 MP3B	X	-2.414	3
14 MP3B	Z	1.394	3
45 MP3B	Mx	001	3
16 MP3B	X	-2.414	5
17 MP3B	Z	1.394	5
17 MP3B 18 MP3B	Mx	001	5
19 MP3C	X	-4.359	3
	Ž	2.517	3
	Mx	000437	3
	X	-4.359	5
	Z	2.517	5
	Mx	000437	5
	X	-7.137	2
	Z	4.12	2
	Mx	.009	2
57 MP1A	IVIX	a\5000245391-VZW MT LO H.	r3dl Page 8



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP1A	X	-7.137	6
59	MP1A	Z	4.12	6
60	MP1A	Mx	.009	6
61 62	MP1B	X	-7.137	2
63	MP1B MP1B	Z	4.12	2
64	MP1B	Mx	009	2
65	MP1B	X	-7.137	6
66	MP1B	Z Mx	4.12	6
67	MP1C	X	009	6
68	MP1C	Ž	-4.091	2
69	MP1C	Mx	2.362 0	2
70	MP1C	X	-4.091	6
71	MP1C	Z	2.362	6
72	MP1C	Mx	0	6
73	MP4A	X	-7.137	2
74	MP4A	Z	4.12	2
75	MP4A	Mx	.009	2
76	MP4A	X	-7.137	6
77	MP4A	Z	4.12	6
78	MP4A	Mx	.009	6
79	MP4B	X	-7.137	2
80	MP4B	Z	4.12	2
81	MP4B	Mx	009	2
82	MP4B	X	-7.137	6
83	MP4B	Z	4.12	6
84	MP4B	Mx	009	6
85	MP4C	X	-4.091	2
86	MP4C	Z	2.362	2
87	MP4C	Mx	0	2
88	MP4C	X	-4.091	6
89	MP4C	Z	2.362	6
90	MP4C	Mx	0	6
91	M101	X	-6.92	11
92	M101	Z	3.995	1
94	M101	Mx	0	11
95	MP1A MP1A	X	-2.206	2.5
96	MP1A		1.274	2.5
97	MP1B	Mx	001	2.5
98	MP1B	X	-2.206	2.5
99	MP1B	Mx	1.274 .001	2.5
100	MP1C	X		2.5
101	MP1C	Z	-2.9 1.674	2.5
102	MP1C	Mx	.000291	2.5
103	MP2A	X	-1.937	2.5 2.5
104	MP2A	Ž	1.118	2.5
105	MP2A	Mx	000968	2.5
106	MP2B	X	-1.937	2.5
107	MP2B	Z	1.118	2.5
108	MP2B	Mx	.000968	2.5
109	MP2C	X	-2.889	2.5
110	MP2C	Ž	1.668	2.5
111	MP2C	Mx	.00029	2.5
112	MP2B	X	866	5
113	MP2B	Z	.5	5
114	MP2B	Mx	.000217	5 -



RISA-3D Version 17.0.4

: Colliers Engineering & Design : CL : Project No. 10206276 : 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

N	Member Label	6: Antenna Wm (27 Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-3.862	2
2	MP2A		0	2
3	MP2A	Mx	.004	2
4	MP2A	X	-3.862	6
5	MP2A	Z	0	6
6	MP2A	Mx	.004	6
7	MP2B	X	-4.836	2
8	MP2B	Z	0	2
9	MP2B	Mx	.001	2
10	MP2B	X	-4.836	6
11	MP2B	Z	0	6
12	MP2B	Mx	.001	6 2
13	MP2C	X	-4.624	
14	MP2C	Z	0	2
15	MP2C	Mx	006	2
16	MP2C	X	-4.624	6
17	MP2C	Z	0	6
18	MP2C	Mx	006	6 2
19	MP2A	X	-3.862	
20	MP2A	Z	0	2 2
21	MP2A	Mx	.004	6
22	MP2A	X	-3.862	6
23	MP2A	Z	0	6
24	MP2A	Mx	.004	
25	MP2B	X	-4.836	2 2
26	MP2B	Z	0	2
27	MP2B	Mx	006	2
28	MP2B	X	-4.836	6 6
29	MP2B	Z	0	
30	MP2B	Mx	006	6
31	MP2C	X	-4.624	2
32	MP2C	Z	0	2 2
33	MP2C	Mx	.000227	2
34	MP2C	X	-4.624	6
35	MP2C	Z	0	6
36	MP2C	Mx	.000227	6
37	MP3A	X	-2.007	3
38	MP3A	Z	0	3
39	МРЗА	Mx	.001	3
40	MP3A	X	-2.007	5
41	MP3A	Z	0	5
42	MP3A	Mx	.001	5
43	MP3B	X	-4.347	3
44	MP3B	Z	0	
45	MP3B	Mx	001	3 5
46	MP3B	X	-4.347	5
47	MP3B	Z	0	5
48	MP3B	Mx	001	5
49	MP3C	X	-3.838	3
50	MP3C	Z	0	3
51	MP3C	Mx	001	3
52	MP3C	X	-3.838	5
53	MP3C	Z	0	5
54	MP3C	Mx	001	5
55	MP1A	X	-9.413	2
56	MP1A	Z	0	2
57	MP1A	Mx	.012	2



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

CO.	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58 59	MP1A	X	-9.413	6
60	MP1A	Z		6
61	MP1A	Mx	.012	6
62	MP1B	X	-5.896	2
63	MP1B	Z	0	2
	MP1B	Mx	004	2
64	MP1B	X	-5.896	6
65	MP1B	Z	0	6
66	MP1B	Mx	004	6
57	MP1C	X	-5.896	2
86	MP1C	Z	0	2
69	MP1C	Mx	004	2
70	MP1C	X	-5.896	6
71	MP1C	Z	0	6
72	MP1C	Mx	004	6
73	MP4A	X	-9.413	2
74	MP4A	Z	0	2
75	MP4A	Mx	.012	2
76	MP4A	X	-9.413	6
77	MP4A	Z	0	6
78	MP4A	Mx	.012	6
79	MP4B	X	-5.896	2
80	MP4B	Z	0	2
31	MP4B	Mx	004	2
32	MP4B	X	-5.896	6
33	MP4B	Z	0	6
34	MP4B	Mx	004	6
85	MP4C	X	-5.896	2
36	MP4C	Z	0	2
87	MP4C	Mx	004	2
38	MP4C	X	-5.896	6
39	MP4C	Z	0	6
90	MP4C	Mx	004	6
91	M101	X	-8.795	1
92	M101	Z	0	1
93	M101	Mx	0	1
94	MP1A	X	-2.269	2.5
95	MP1A	Z	0	2.5
96	MP1A	Mx	001	2.5
97	MP1B	X	-3.104	2.5
98	MP1B	Z	0	2.5
99	MP1B	Mx	.000776	2.5
00	MP1C	X	-2.922	2.5
01	MP1C	Z	0	2.5
02	MP1C	Mx	.000939	2.5
03	MP2A	X	-1.855	2.5
04	MP2A	Z	0	2.5
05	MP2A	Mx	000927	2.5
06	MP2B	X	-3	2.5
07	MP2B	Z	Ö	2.5
80	MP2B	Mx	.00075	2.5
09	MP2C	X	-2.751	2.5
10	MP2C	Z	0	2.5
11	MP2C	Mx	.000884	2.5
12	MP2B	X	-1.73	5
13	MP2B	Z	0	5
14	MP2B	Mx	.000216	5



: Colliers Engineering & Design : CL

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

Member	Label Direction	Magnitude[lb,k-ft]	Location[ft,%]
1 MP2	ZA X	-3.626	2 2
2 MP2		-2.093	2
3 MP2		.002	6
4 MP2	PA X	-3.626	6
5 MP2	PA Z	-2.093	6
6 MP2	PA Mx	.002	2
7 MP2	2B X	-4.469	2
8 MP2	2B Z	-2.58	2
9 MP2	2B Mx	.004	6
0 MP2	2B X	-4.469	6
1 MP2	2B Z	-2.58	
2 MP2	2B Mx	.004	6 2
3 MP2	C X	-3.476	2
4 MP2	C Z	-2.007	
5 MP2	2C Mx	005	2
6 MP2	C X	-3.476	6
7 MP2	C Z	-2.007	6
8 MP2	PC Mx	005	6
9 MP2	PA X	-3.626	2
0 MP2	ZA Z	-2.093	2
1 MP:	2A Mx	.005	2
2 MP2	PA X	-3.626	6
MP:		-2.093	6
MP:		.005	6
.5 MP2	PB X	-4.469	2
6 MP		-2.58	2
7 MP:		004	2
8 MP		-4.469	6
9 MP:		-2.58	6
BO MP		004	6
31 MP2	PC X	-3.476	2
32 MP2		-2.007	2
MP2		002	2
34 MP2	C X	-3.476	6
35 MP2	- 100	-2.007	6
36 MP2		002	6
B7 MP		-2.414	3
38 MP	5/1	-1.394	3
39 MP		.001	3
10 MP	0,1	-2.414	5
11 MP	-	-1.394	5
12 MP		.001	5
13 MP		-4.44	3
14 MP		-2.564	3
15 MP		0	3
46 MP		-4.44	5
		-2.564	5
17 MP 18 MP	OD	0	5
		-2.054	3
		-1.186	3
	J. C.	001	3
		-2.054	5
		-1.186	5
MP	00	001	5
54 MP		-7.137	2
55 MP		-4.12	2
56 MP	1/3	.009	2
57 MP	I/A IVIX	01D:\5000345301 \/ZW MT LO H	r3d1 Page 88



: Colliers Engineering & Design : CL : Project No. 10206276 : 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP1A	X	-7.137	6
59	MP1A	Z	-4.12	6
60	MP1A	Mx	.009	6
61	MP1B	X	-4.091	2
62	MP1B	Z	-2.362	2
63	MP1B	Mx	0	2
64	MP1B	X	-4.091	6
65	MP1B	Z	-2.362	6
66	MP1B	Mx	- 0	6
67	MP1C	X	-7.137	2
68	MP1C	Z	-4.12	2
69	MP1C	Mx	009	2
70	MP1C	X	-7.137	6
71	MP1C	Z	-4.12	6
72	MP1C	Mx	009	6
73	MP4A	X	-7.137	2
74	MP4A	Z	-4.12	2
75	MP4A	Mx	.009	2
76	MP4A	X	-7.137	6
77	MP4A	Z	-4.12	6
78	MP4A	Mx	.009	6
79	MP4B	X	-4.091	2
80	MP4B	Z	-2.362	2
81	MP4B	Mx	0	2
82	MP4B	X	-4.091	6
83	MP4B	Z	-2.362	6
84	MP4B	Mx	0	6
85	MP4C	X	-7.137	0
86	MP4C	Ž	-4.12	2 2
87	MP4C	Mx	-009	2
88	MP4C	X		2
89	MP4C	Z	-7.137	6
90	MP4C	Mx	-4.12	6
91	M101		009	6
92	M101	X	-7.459	11
93	M101		-4.306	1
94	MP1A	Mx	0	
95	MP1A MP1A	Z	-2.206	2.5
96	MP1A		-1.274	2.5
97	MP1B	Mx	001	2.5
98	MP1B MP1B	X	-2.929	2.5
99	MP1B	Z	-1.691	2.5
		Mx	0	2.5
00 01	MP1C MP1C	X	-2.078	2.5
02		Z	-1.2	2.5
03	MP1C	Mx	.001	2.5
04	MP2A	X	-1.937	2.5
05	MP2A	Z	-1.118	2.5
	MP2A	Mx	000968	2.5
06	MP2B	<u>X</u>	-2.929	2.5
07	MP2B	Z	-1.691	2.5
80	MP2B	Mx	0	2.5
09	MP2C	X	-1.761	2.5
10	MP2C	<u>Z</u>	-1.017	2.5
11	MP2C	Mx	.000956	2.5
12	MP2B	X	-1.814	5
13	MP2B	Z	-1.047	5
14	MP2B	Mx	0	5



RISA-3D Version 17.0.4

Company Designer Job Number Model Name

Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

	Point Loads (BLC 3	Direction	Magnitude[lb,k-ft]	Location[ft,%]
	Member Label MP2A	X	-2.418	2
1 —	MP2A	Z	-4.188	2
2	MP2A	Mx	001	2
3	MP2A	X	-2.418	6
4	MP2A	Ž	-4.188	6
5	MP2A	Mx	001	6
6	MP2B	X	-2.418	2
7	MP2B	Ž	-4.188	2
8	MP2B	Mx	.006	2
9	MP2B	X	-2.418	6
0	MP2B	Z	-4.188	6
1	MP2B	Mx	.006	6
2	MP2C	X	-1.951	2
3	MP2C	Ž	-3.378	2
4		Mx	003	2
5	MP2C	X	-1.951	6
6	MP2C	Z	-3.378	6
7	MP2C	Mx	003	6
8	MP2C	X	-2.418	2
19	MP2A	Z	-4.188	2
20	MP2A	Mx	.006	2
21	MP2A	X	-2.418	6
22	MP2A	Z	-4.188	6
23	MP2A	Mx	.006	6
24	MP2A	X	-2.418	2
25	MP2B	Z	-4.188	2
26	MP2B	Mx	001	2
27	MP2B	X	-2.418	6
28	MP2B	Z	-4,188	6
29	MP2B	Mx	001	6
30	MP2B	X	-1.951	2
31	MP2C	Z	-3.378	2
32	MP2C	Mx	004	2
33	MP2C	X	-1.951	6
34	MP2C	Z	-3.378	6
35	MP2C	Mx	004	6
36	MP2C	X	-2.174	3
37	MP3A	Ž	-3.765	3
38	MP3A	Mx	.001	3
39	MP3A	X	-2.174	5
40	MP3A		-3.765	5
41	MP3A	Mx	.001	5
42	MP3A	X	-2.174	3
43	MP3B	Ž	-3.765	3
44	MP3B		.001	3
45	MP3B	Mx	-2.174	5
46	MP3B	X Z	-3.765	5
47	MP3B		.001	5
48	MP3B	Mx	-1.051	3
49	MP3C	X	-1.82	3
50	MP3C	Z	001	3
51	MP3C	Mx	-1.051	5
52	MP3C	X	-1.82	5
53	MP3C	Z	-1.82	5
54	MP3C	Mx	-2.948	2
55	MP1A	X	-5.106	2
56	MP1A	Z	.004	2
57	MP1A	Mx	.004	



Colliers Engineering & Design CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

CO.	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP1A	X	-2,948	6
59 60	MP1A	Z	-5.106	6
61	MP1A MP1B	Mx	.004	6
62	MP1B MP1B	X	-2.948	2
63	MP1B	Z	-5.106	2
64	MP1B	Mx	.004	2
65	MP1B	X	-2.948	6
66	MP1B		-5.106	6
67	MP1C	Mx	.004	6
68	MP1C	X	-4.706	2
69	MP1C MP1C		-8.152	2
70	MP1C	Mx	012	2
71	MP1C	X	-4.706	6
72	MP1C		-8.152	6
73	MP4A	Mx	012	6
74	MP4A	X	-2.948	2
75	MP4A	Mx	<u>-5.106</u>	2
76	MP4A	X	.004	2
77	MP4A	Z	-2.948 F 100	6
78	MP4A	Mx	-5.106 .004	6
79	MP4B	X		6
80	MP4B	Ž	-2.948	2
81	MP4B	Mx	-5.106	2
82	MP4B	X	.004	2
83	MP4B	Z	-2.948 -5.100	6
84	MP4B	Mx	-5.106	6
85	MP4C	X	.004 -4.706	6
86	MP4C	Z	-8.152	2
87	MP4C	Mx	-0.132	2
88	MP4C	X	-4.706	2
89	MP4C	Ž	-8.152	6
90	MP4C	Mx	-0.132	6
91	M101	X	-3.813	1
92	M101	Ž	-6.604	1
93	M101	Mx	0	
94	MP1A	X	-1.552	2.5
95	MP1A	Z	-2.688	2.5
96	MP1A	Mx	000776	2.5
97	MP1B	X	-1.552	2.5
98	MP1B	Z	-2.688	2.5
99	MP1B	Mx	000776	2.5
00	MP1C		-1.151	2.5
01	MP1C	Z	-1.994	2.5
02	MP1C	Mx	.001	2.5
03	MP2A		-1.5	2.5
04	MP2A	X Z	-2.598	2.5
05	MP2A	Mx	00075	2.5
06	MP2B	X	-1.5	2.5
07	MP2B	Z	-2.598	2.5
08	MP2B	Mx	00075	2.5
09	MP2C	X	95	2.5
10	MP2C	Z	-1.646	2.5
11	MP2C	Mx	.000936	2.5
12	MP2B	X	865	5
13	MP2B	Z	-1.498	5
14	MP2B	Mx	000216	5



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

Membe	r Point Loads (BLC 7	7 : Lm1)		
mornis	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
	M1	Y	-500	%97
	IVI I			

Member Point Loads (BLC 78 : Lm2)

	Direction	Magnitude[lb,k-ft]	Location[ft,%]
Member Label	Direction	-500	%62
M1	Y	-300	

Member Point Loads (BLC 79 : Lv1)

MI OIII G	TOTAL EGGG (DEG.)	Direction	Magnitude[lb.k-ft]	Location[ft,%]
	Member Label	Direction	-250	%50
1	M1	Y	-200	7000

Member Point Loads (BLC 80 : Lv2)

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

Member Point Loads (BLC 81 : Antenna Ev)

1 2 3 4 5	Member Label MP2A MP2A MP2A MP2A	Direction Y Mv	0	2
2 3 4 5	MP2A	B.A.		
3 4 5	MP2A	IV(V	0	2
5		Mz	0	2
5	MP2A	Y	0	6
	MP2A	My	0	6
6	MP2A	Mz	0	6
7	MP2B	Y	0	2
8	MP2B	My	0	2
9	MP2B	Mz	0	2
10	MP2B	Y	0	6
11	MP2B	My	0	6
12	MP2B	Mz	0	6
13	MP2C	Y	0	2
14	MP2C	My	0	2
15	MP2C	Mz	0	2
16	MP2C	Y	0	6
17	MP2C	Mv	0	6
18	MP2C	Mz	0	6
19	MP2A	Y	0	2
20	MP2A	My	0	2
21	MP2A	Mz	0	2
22	MP2A	Y	0	6
23	MP2A	My	0	6
24	MP2A	Mz	0	6
25	MP2B	Y	0	2
26	MP2B	My	0	2
27	MP2B	Mz	0	2
28	MP2B	Y	0	6
	MP2B	My	0	6
29 30	MP2B	Mz	0	6
30	MP2C	Y	0	2
	MP2C	My	0	2
32	MP2C	Mz	0	2
33	MP2C	Y	0	6
34	MP2C	My	0	6
35	MP2C	Mz	0	6
36	MP3A	Y	0	3
37	MP3A	My	0	3
38	MP3A	Mz	0	3



Colliers Engineering & Design

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

M	ember Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
40	MP3A	Y	0	5
41	MP3A	My	0	5
42	MP3A	Mz	0	5
43	MP3B	Y	0	3
44	MP3B	My	0	3
45	MP3B	Mz	0	3
46	MP3B	Y	0	5
47	MP3B	My	0	5
48	MP3B	Mz	0	5
49	MP3C	Y	0	3
50	MP3C	My		
51	MP3C	Mz	0	3
52	MP3C	Y	0	5
53	MP3C	My	0	5
54	MP3C	Mz	0	5
55	MP1A	Y	0	2
56	MP1A	My	0	2
57	MP1A	Mz	0	2
58	MP1A	ΥΥ	0	6
59	MP1A	My	0	6
60	MP1A	Mz	0	6
61	MP1B	Y	0	2
62	MP1B	My	0	2
63	MP1B	Mz	0	2
64	MP1B	Y	0	6
65	MP1B	My	0	6
66	MP1B	Mz	0	6
67	MP1C	Υ	0	2
68	MP1C	My	0	2
69	MP1C	Mz	0	2
70	MP1C	Y	0	6
71	MP1C	My	0	6
72	MP1C	Mz	0	6
73	MP4A	Y	0	2
74	MP4A	My	0	2
75	MP4A	Mz Mz	0	2
76	MP4A	Y	0	6
77	MP4A	My	0	6
78	MP4A	Mz	0	6
79	MP4B	Y	0	2
80 81	MP4B	My	0	2
	MP4B	Mz	0	2
32 33	MP4B	Y	0	6
34	MP4B MP4B	My	0	6
35	MP4C	Mz	0	66
		Y	0	2
36 37	MP4C	My	0	2
37	MP4C	Mz	0	2
	MP4C	Y	0	6
	MP4C	My	0	6
90	MP4C	Mz	0	6
91	M101	Y	0	11
92	M101	My	0	1
93	M101	Mz	0	111
94	MP1A	Y	0	2.5
95	MP1A	My	0	2.5
70	MP1A	Mz	0	2.5



Colliers Engineering & Design

CL

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Markadahal	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	Member Label	Dijection V	0	2.5
97	MP1B	NA	0	2.5
98	MP1B	My	0	2.5
99	MP1B	Mz		2.5
100	MP1C	Y	0	2.5
101	MP1C	My	0	2.5
102	MP1C	Mz	0	
103	MP2A	Y	0	2.5
104	MP2A	My	0	2.5
105	MP2A	Mz	0	2.5
106	MP2B	Y	0	2.5
107	MP2B	My	0	2.5
108	MP2B	Mz	0	2.5
	MP2C	Y	0	2.5
109	MP2C	Mv	0	2.5
110		Mz	0	2.5
111	MP2C	- WIZ	Ō	5
112	MP2B		0	5
113	MP2B	My	0	5
114	MP2B	Mz	0	

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

	Point Loads (BLC 8 Member Label	Direction	Magnitude[lb,k-ft]	Location[ft.%]
1	MP2A	Z	69	2
2	MP2A	Mx	000575	2
3	MP2A	Z	69	6
	MP2A	Mx	000575	6
4	MP2B	Z	69	2
5	MP2B	Mx	.000835	2
6	MP2B	Z	69	6
7	MP2B	Mx	.000835	6
8	MP2B MP2C	Z	69	2
9		Mx	000115	2
10	MP2C	Z	69	6
11	MP2C	Mx	000115	6
12	MP2C	Z	69	2 2
13	MP2A	Mx	.000575	2
14	MP2A	Z	69	6
15	MP2A	Mx	.000575	6
16	MP2A	Z	69	2
17	MP2B	Mx	.00026	2
18	MP2B	Z	69	6
19	MP2B		.00026	6
20	MP2B	Mx	69	2
21	MP2C	Z	000854	2
22	MP2C	Mx	69	6
23	MP2C	Z	000854	6
24	MP2C	Mx	-1.306	3
25	MP3A	Z	-1.306	3
26	MP3A	Mx	-1.306	5
27	MP3A	Z		5
28	MP3A	Mx	0	3
29	MP3B	Z	-1.306	3
30	MP3B	Mx	.000566	5
31	MP3B	Z	-1.306	5
32	MP3B	Mx	.000566	3
33	MP3C	Z	-1.306	
34	MP3C	Mx	0005	3
35	MP3C	Z	-1.306	5



: Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
36	MP3C	Mx	0005	5
37	MP1A	Z	315	2
38	MP1A	Mx	0	2
39	MP1A	Z	315	6
40	MP1A	Mx	0	6
41	MP1B	Z	315	2
42	MP1B	Mx	.000341	2
43	MP1B	Z	315	6
44	MP1B	Mx	.000341	6
45	MP1C	Z	315	2
46	MP1C	Mx	000341	2
47	MP1C	Z	315	6
48	MP1C	Mx	000341	6
49	MP4A	Z	315	2
50	MP4A	Mx	0	2
51	MP4A	Z	315	6
52	MP4A	Mx	0	6
53	MP4B	Z	315	2
54	MP4B	Mx	.000341	2
55	MP4B	Z	315	6
56	MP4B	Mx	.000341	6
57	MP4C	Z	315	2
58	MP4C	Mx	000341	Ž
59	MP4C	Z	315	6
60	MP4C	Mx	000341	6
61	M101	7	96	1
62	M101	Mx	0	
63	MP1A	Z	-2.532	2.5
64	MP1A	Mx	0	2.5
65	MP1B	Z	-2.532	2.5
66	MP1B	Mx	001	2.5
67	MP1C	Z	-2.532	2.5
68	MP1C	Mx	.00097	2.5
69	MP2A	Z	-2.109	2.5
70	MP2A	Mx	0	2.5
71	MP2B	Z	-2.109	2.5
72	MP2B	Mx	000913	2.5
73	MP2C	Z	-2.109	2.5
74	MP2C	Mx	.000808	2.5
75	MP2B	Z	528	5
76	MP2B	Mx	000114	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	.69	2
2	MP2A	Mx	000633	2
3	MP2A	X	.69	6
4	MP2A	Mx	000633	6
5	MP2B	X	.69	2
6	MP2B	Mx	000182	2
7	MP2B	X	.69	6
8	MP2B	Mx	000182	6
9	MP2C	X	.69	2
10	MP2C	Mx	.000847	2
11	MP2C	X	.69	6
12	MP2C	Mx	.000847	6



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Point Loads (BLC 8 Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
3	MP2A	X	.69	2 2
4	MP2A	Mx	000633	6
5	MP2A	X	.69	6
6	MP2A	Mx	000633	2
7	MP2B	X	.69 .000814	2
8	MP2B	Mx	.69	6
9	MP2B	X	.000814	6
20	MP2B	Mx	.69	2
21	MP2C	X	-3.4e-5	2
2	MP2C	Mx X	.69	6
23	MP2C_		-3.4e-5	6
24	MP2C	Mx X	1.306	3
25	MP3A		000653	3
26	MP3A	Mx X	1.306	5
27	MP3A		000653	5
28	MP3A	Mx X	1.306	3
29	MP3B	Mx	.000327	3
30	MP3B	X	1.306	5
31	MP3B	Mx	.000327	5
32	MP3B	X	1.306	3
33	MP3C	Mx	.00042	3
34	MP3C	X	1.306	5
35	MP3C	Mx	.00042	5
36	MP3C	X	.315	2
37	MP1A	Mx	000394	2
38	MP1A	X	.315	6
39	MP1A	Mx	000394	6
40	MP1A	X	.315	2
11	MP1B	Mx	.000197	2
42	MP1B	X	.315	6
43	MP1B	Mx	.000197	6
44	MP1B	X	.315	2
45	MP1C	Mx	.000197	2
46	MP1C	X	.315	6
47	MP1C	Mx	.000197	6
48	MP1C MP4A	X	.315	2
49	MP4A MP4A	Mx	000394	2
50	MP4A MP4A	X	.315	6
51	MP4A MP4A	Mx	000394	6
52 53	MP4B	X	.315	2
	MP4B	Mx	.000197	2
54 55	MP4B	X	.315	6
56	MP4B	Mx	.000197	6
57	MP4C	X	,315	2
58	MP4C	Mx	.000197	2
59	MP4C	X	.315	6
60	MP4C	Mx	.000197	6
61	M101	X	.96	
62	M101	Mx	0	11
63	MP1A	X	2.532	2.5
64	MP1A	Mx	.001	2.5
65	MP1B	X	2.532	2.5
66	MP1B	Mx	000633	2.5
67	MP1C	X	2.532	2.5
68	MP1C	Mx	000814	2.5
69	MP2A	X	2.109	2.5



: Colliers Engineering & Design

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
70	MP2A	Mx	.001	2.5
71	MP2B	X	2.109	2.5
72	MP2B	Mx	000527	2.5
73	MP2C	X	2.109	2.5
74	MP2C	Mx	000678	2.5
75	MP2B	X	.528	5
76	MP2B	Mx	-6.6e-5	5

Joint Loads and Enforced Displacements

Joint Label	L,D,M	Direction	Magnitude[(lb,k-ft), (in,rad), (lb*s^2/
	No Data to Print		and a second sec

Member Distributed Loads (BLC 40 : Structure Di)

	Member Label	Direction	Start Magnitude[lb/ft,	End Magnitude[lb/ft,F	. Start Location[ft,%]	End Location[ft,%]
1	M1	Y	-6.708	-6.708	0	%100
2	M4	Υ	-9.804	-9.804	0	%100
3	M10	Y	-9.804	-9.804	0	%100
4	MP3A	Y	-5.094	-5.094	0	%100
5	MP4A	Y	-5.094	-5.094	0	%100
6	MP2A	Y	-5.811	-5.811	0	%100
7	MP1A	Y	-5.094	-5.094	0	%100
8	M43	Y	-9.804	-9.804	0	%100
9	M46	Y	-10.326	-10.326	0	%100
10	M51B	Y	-5.745	-5.745	0	%100
11	M52B	Υ	-5.745	-5.745	0	%100
12	M76	Y	-10.313	-10.313	0	%100
13	M77	Υ	-10.313	-10.313	0	%100
14	M80	Y	-10.326	-10.326	0	%100
15	M84	Υ	-10.313	-10.313	0	%100
16	M85	Y	-10.313	-10.313	0	%100
17	M91	Y	-10.326	-10.326	0	%100 %100
18	M34	Y	-9.804	-9.804	Ö	%100 %100
19	M35	Y	-9.804	-9.804	0	%100 %100
20	M36	Y	-9.804	-9.804	Ö	%100 %100
21	M37	Y	-10.326	-10.326	0	%100 %100
22	M40	Υ	-5.745	-5.745	0	%100 %100
23	M41	Y	-5.745	-5.745	0	%100 %100
24	M45	Y	-10.313	-10.313	Ö	%100
25	M46A	Y	-10.313	-10.313	Ö	%100 %100
26	M48	Y	-10.326	-10.326	0	%100 %100
27	M50A	Y	-10.313	-10.313	0	%100 %100
28	M51C	Y	-10.313	-10.313	0	%100 %100
29	M53	Ý	-10.326	-10.326	0	%100 %100
30	M58A	Y	-9.804	-9.804	Ö	%100 %100
31	M59A	Y	-9.804	-9.804	0	%100 %100
32	M60	Ý	-9.804	-9.804	0	%100 %100
33	M61	Ý	-10.326	-10.326	0	%100 %100
34	M64	Ý	-5.745	-5.745	Ö	
35	M65	Y	-5.745	-5.745	0	%100 %100
36	M69	Y	-10.313	-10.313	0	%100 %100
37	M70	Y	-10.313	-10.313	0	%100 %100
38	M72	Ÿ	-10.326	-10.313	0	%100
39	M74	Y	-10.313	-10.328	0	
40	M75	Y	-10.313	-10.313		%100
	iii o		-10.313	-10.313	0	%100



Colliers Engineering & Design

: CL : Project No. 10206276 : 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	er Distributed Le	Direction	Start Magnitude(lb/ft	End Magnitude[lb/ft,F	. Start Location[ft,%]	End Location[ft,%]
	Member Label	Direction	-10.326	-10.326	0	%100
41	M77A	Y	-6.708	-6.708	0	%100
42	M82	Y	and the same of th	-5.094	0	%100
43	MP3C	Υ	-5.094		0	%100
44	MP4C	Y	-5.094	-5.094	0	%100
45	MP2C	Y	-5.811	-5.811	0	%100
46	MP1C	Υ	-5.094	-5.094	0	
47	M91A	Y	-6.708	-6.708	0	%100
48	MP3B	Y	-5.094	-5.094	0	%100
	MP4B	Y	-5.094	-5.094	0	%100
49		V	-5.811	-5.811	0	%100
50	MP2B	V	-5.094	-5.094	0	%100
51	MP1B	+ - ' -	-5.094	-5.094	0	%100
52	M101	 	-5.811	-5.811	0	%100
53	M102	Y		-5.811	0	%100
54	M107	Y	-5.811	-5.811	0	%100
55	M112	Υ	-5.811		0	%100
56	M123	Y	-7.774	7.774	0	%100
57	M124	Υ	-7.774	-7.774		%100
58	M125	Y	-7.774	-7.774	0	76100

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

	er Distributed Lo	Direction	Start Magnitude(lb/ft	End Magnitude[lb/ft,F	Start Location[ft,%]	End Location[ft,%]
4	Member Label M1	X	O O	0	0	%100
1		Z	-12.218	-12.218	0	%100
2	M1	X	0	0	0	%100
3	M4	Z	0	0	0	%100
4	M4	X	0	0	0	%100
5	M10	Z	-10.501	-10.501	0	%100
6	M10	X	0	0	0	%100
7	MP3A	Z	-8.291	-8.291	0	%100
8	MP3A	X	0.231	0	0	%100
9	MP4A	Z	-8.291	-8.291	0	%100
10	MP4A		0	0.20	0	%100
11	MP2A	X Z	-10.036	-10.036	0	%100
12	MP2A		0	0	0	%100
13	MP1A	X	-8.291	-8.291	0	%100
14	MP1A	Z	-0.291	0	Ö	%100
15	M43	<u>X</u>	-10.501	-10.501	0	%100
16	M43	Z		0	0	%100
17	M46	X	0 0000	-20.946	Ö	%100
18	M46	Z	-20.946	-20.940	0	%100
19	M51B	X	0	-2.908	Ö	%100
20	M51B	Z	-2.908	-2.900	<u> </u>	%100
21	M52B	X	0	9	0	%100
22	M52B	Z	-2.908	-2.908	0	%100
23	M76	X		0.	0	%100
24	M76	Z	0	0	0	%100
25	M77	X	0	0	0	%100
26	M77	Z	-5.333	-5.333	0	%100
27	M80	X	0	0		%100
28	M80	Z	-5.618	-5.618	0	%100 %100
29	M84	X	0	0	0	%100
30	M84	Z	0	0	0	%100 %100
31	M85	X	0	0	0	
32	M85	Z	-5.333	-5.333	0	%100
33	M91	X	0	0	0	%100
34	M91	Z	-5.618	-5.618	0	%100
35	M34	X	0	0	0	%100



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start Magnitude[lb/ft,	End Magnitude[lb/ft,F.	Start Location[ft,%]	End Location[ft,%]
36	M34	Z	-9.308	-9.308	0	%100
37	M35	X	0	0	0	%100
38	M35	Z	-2.625	-2.625	0	%100
39	M36	X	0	0	0	%100
40	M36	Z	-2.625	-2.625	0	%100
41	M37	X	0	0	0	%100
42	M37	Z	-5.236	-5.236	0	%100
43	M40	X	0	0	0	%100
44	M40	Z	-2.908	-2.908	0	%100
45	M41	X	0	0	0	%100
46	M41	Z	-11.631	-11.631	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	-15.709	-15.709	0	%100 %100
49	M46A	X	0	0	0	%100 %100
50	M46A	Z	-5.333	-5.333	0	%100
51	M48	X	0	-5.555	0	
52	M48	Z	-5.618	-5.618	0	%100
53	M50A	X	-5.016	-5.616		%100
54	M50A	Z	-15.709	-15.709	0	%100
55	M51C	X	13.709		0	%100
56	M51C	Z	-21.334	0	0	%100
57	M53	X		-21.334	0	%100
58	M53	Ž	-22.47	0	0	%100
59	M58A	X		-22.47	0	%100
60	M58A	Z	0 200	0	0	%100
61	M59A	X	-9.308	-9.308	0	%100
62	M59A		0	0	0	%100
63	M60	Z	-2.625	-2.625	0	%100
64	M60		0	0		%100
65	M61	Z	-2.625	-2.625	0	%100
66	M61	X	0	0	0	%100
67	M64	Z	-5.236	-5.236	0	%100
		X	0	0	0	%100
68 69	<u>M64</u> M65	Z	-11.631	-11.631	0	%100
70		X	0	0	0	%100
	M65	Z	-2.908	-2.908	0	%100
71	M69	X	0	0	0	%100
72	M69	Z	-15.709	-15.709	0	%100
73	M70	X	0	0	0	%100
74	M70	Z	-21.334	-21.334	0	%100
75	M72	X	0	0	0	%100
76	M72	Z	-22.47	-22.47	0	%100
77	M74	X	0	0	0	%100
78	M74	Z	-15.709	-15.709	0	%100
79	M75	X	0	0	0	%100
80	M75	Z	-5.333	-5.333	0	%100
81	M77A	X	0	0	0	%100
82	M77A	Z	-5.618	-5.618	0	%100
83	M82	X	0	0	0	%100
84	M82	Z	-3.055	-3.055	0	%100
85	MP3C	X	0	0	0	%100
86	MP3C	Z	-8.291	-8.291	0	%100
87	MP4C	X	0	0	0	%100
88	MP4C	Z	-8.291	-8.291	0	%100
89	MP2C	X	0	0	0	%100
90	MP2C	Z	-10.036	-10.036	0	%100
91	MP1C	X	0	0	0	%100
92	MP1C	Z	-8.291	-8.291	0	%100



RISA-3D Version 17.0.4

Company Designer Job Number Model Name

Colliers Engineering & Design

CL

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	er Distributed Lo	Direction	Start MagnitudeIlb/ft.	End Magnitude[lb/ft.F	. Start Location[ft,%]	End Location[ft,%]
1	Member Label	X	Otal (Magnitosejis)	0	0	%100
93	M91A		-3.055	-3.055	0	%100
94	M91A	<u>Z</u>	-5.000	0	0	%100
95	MP3B		-8.291	-8.291	0	%100
96	MP3B	Z	-0.291	0.251	0	%100
97	MP4B	X		-8.291	0	%100
98	MP4B	Z	-8.291	-0.231	0	%100
99	MP2B	X	0		0	%100
100	MP2B	Z	-10.036	-10.036	0	%100
101	MP1B	X	0	0 004	0	%100
102	MP1B	Z	-8.291	-8.291		%100 %100
103	M101	X	0	0	0	%100 %100
104	M101	Z	-6.78	-6.78	0	
105	M102	X	0	0	0	%100
106	M102	7	-10.036	-10.036	0	%100
	M107	X	0	0	0	%100
107	M107	7	-2.509	-2.509	0	%100
108		X	0	0	0	%100
109	M112	7	-2.509	-2.509	0	%100
110	M112	X	-2.000	0	0	%100
111	M123		-2.761	-2.761	0	%100
112	M123	Z	-2.701	0	0	%100
113	M124	X	0.764	-2.761	O O	%100
114	M124	Z	-2.761	-2.701	0	%100
115	M125	X	11010	11.046	0	%100
116	M125	Z	-11.046	-11.046	U	7,0100

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

	er Distributed Lo	Direction	Start Magnitude[]b/ft	End Magnitude[lb/ft,F	Start Location[ft,%]	End Location[ft,%
4	Member Label M1	X	4.582	4.582	0	%100
1	The state of the s	Z	-7.936	-7.936	0	%100
2	M1	X	1.551	1.551	0	%100
3	M4	Z	-2.687	-2.687	0	%100
4	M4	X	3.938	3.938	0	%100
5	M10		-6.821	-6.821	0	%100
6	M10	Z	4.146	4.146	0	%100
7	MP3A	X	-7.18	-7.18	0	%100
8	MP3A	Z	4.146	4.146	0	%100
9	MP4A	<u>X</u>	-7.18	-7.18	0	%100
10	MP4A	Z	5.018	5.018	0	%100
11	MP2A	X	-8.692	-8.692	Ö	%100
12	MP2A	Z		4.146	0	%100
13	MP1A	X	4.146	-7.18	0	%100
14	MP1A	Z	-7.18	3.938	0	%100
15	M43	X	3.938	-6.821	0	%100
16	M43	Z	-6.821		0	%100
17	M46	X	7.855	7.855	0	%100
18	M46	Z	-13.605	-13.605	0	%100
19	M51B	X	4.362	4.362	0	%100
20	M51B	Z	-7.554	-7.554	0	%100
21	M52B	X	0	0	0	%100
22	M52B	Z	0	0	0	%100
23	M76	X	2.618	2.618		%100
24	M76	Z	-4.535	-4.535	0	%100
25	M77	X	8	8	0	%100
26	M77	Z	-13.857	-13.857	0	%100 %100
27	M80	X	8.426	8.426	0	%100
28	M80	Z	-14.595	-14.595	0	
29	M84	X	2.618	2.618	0	%100



Colliers Engineering & Design

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

30	Member Label	Direction	Start Magnitude[lb/ft,	End Magnitude[lb/ft,F	. Start Location[ft,%]	End Location[ft,%]
31	M84 M85	Z	-4.535	-4.535	0	%100
32		X	0	0	0	%100
33	M85	Z	0	0	0	%100
34	M91 M91	X	0	0	0	%100
35		Z	0	0	0	%100
	M34	X	1.551	1.551	0	%100
36	M34	Z	-2.687	-2.687	0	%100
	M35	X	3.938	3.938	0	%100
38	M35	Z	-6.821	-6.821	0	%100
39	M36	X	3.938	3.938	0	%100
40	M36	Z	-6.821	-6.821	0	%100
41	M37	X	7.855	7.855	0	%100
42	M37	Z	-13.605	-13.605	0	%100
43	M40	X	0	0	0	%100
44	M40	Z	0	0	0	%100
45	M41	X	4.362	4.362	0	%100
46	M41	Z	-7.554	-7.554	0	%100
47	M45	X	2.618	2.618	0	%100
48	M45	Z	-4.535	-4.535	0	%100
49	M46A	X	0	0	0	%100
50	M46A	Z	0	0	0	%100
51	M48	X	0	0	0	%100
52	M48	Z	0	0	0	%100
53	M50A	X	2.618	2.618	Ö	%100
54	M50A	Z	-4.535	-4.535	0	%100
55	M51C	X	8	8	0	%100
56	M51C	Z	-13.857	-13.857	0	%100
57	M53	X	8.426	8.426	0	%100
58	M53	Z	-14.595	-14.595	0	%100
59	M58A	X	6.205	6.205	0	%100
60	M58A	Z	-10.748	-10.748	0	%100
61	M59A	X	0	0	0	%100
62	M59A	Z	0	o i	Ö	%100
63	M60	X	0	Ö	0	%100
64	M60	Z	0	Ö	Ō	%100
65	M61	X	0	0	0	%100
66	M61	Z	Ō	0	Ö	%100 %100
67	M64	X	4.362	4.362	0	%100 %100
68	M64	Z	-7.554	-7.554	0	%100 %100
69	M65	X	4.362	4.362	0	%100 %100
70	M65	Z	-7.554	-7.554	0	%100
71	M69	X	10.473	10.473	0	%100
72	M69	Z	-18.14	-18.14	Ö	%100
73	M70	X	8	8	0	%100
74	M70	Z	-13.857	-13.857	0	
75	M72	X	8.426	8.426	0	%100
76	M72	Z	-14.595	-14.595		%100
77	M74	X	10.473	10.473	0	%100
78	M74	Z	-18.14	-18.14	0	%100
79	M75	X	8	-10.14	0	%100
80	M75	Z	-13.857	-13.857		%100
81	M77A	X	8.426	8.426	0	%100
82	M77A	Z	-14.595	-14.595	0	%100
83	M82	X	4.582		0	%100
84	M82	Z	-7.936	4.582	0	%100
85	MP3C	X	4.146	-7.936	0	%100
86	MP3C	Z	-7.18	4.146	0	%100
			-1,10	-7.18	0	%100



Company Designer Job Number Colliers Engineering & Design

CL

Number : Project No. 10206276 del Name : 5000245391-VZW_MT_LO_H July 5, 2023 5:39 PM Checked By: DX

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

	Mambar Label	Direction	Start Magnitude(lb/ft.	End Magnitude[lb/ft,F	Start Location[ft,%]	End Location[ft,%
07	Member Label	X	4.146	4.146	0	%100
87	MP4C	Z	-7.18	-7.18	0	%100
88	MP4C	X X	5.018	5.018	0	%100
89	MP2C	Ž	-8.692	-8.692	0	%100
90	MP2C	X	4.146	4.146	0	%100
91	MP1C	7	-7.18	-7.18	0	%100
92	MP1C		0	0	0	%100
93	M91A	Z	0	Ö	0	%100
94	M91A		4.146	4.146	0	%100
95	MP3B	X	-7.18	-7.18	0	%100
96	MP3B	Z	4.146	4.146	0	%100
97	MP4B	<u>X</u>	-7.18	-7.18	0	%100
98	MP4B	Z		5.018	0	%100
99	MP2B	X	5.018	-8.692	0	%100
100	MP2B	Z	-8.692	4.146	0	%100
101	MP1B	X	4.146	-7.18	0	%100
102	MP1B	Z	-7.18	3.39	Ö	%100
103	M101	X	3.39	-5.872	0	%100
104	M101	Z	-5.872		0	%100
105	M102	X	3.764	3.764	0	%100
106	M102	Z	-6.519	-6.519	0	%100
107	M107	X	3.764	3.764	0	%100
108	M107	Z	-6.519	-6.519	0	%100
109	M112	X	0	0		%100
110	M112	Z	0	0	0	%100 %100
111	M123	X	4.142	4.142	0	%100
112	M123	Z	-7.175	-7.175	0	%100 %100
113	M124	X	0	0	0	
114	M124	Z	0	0	0	%100
115	M125	X	4.142	4.142	0	%100
116	M125	Z	-7.175	-7.175	0	%100

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

. 0.1110	<u>er Distributed Lo</u>	Direction	Start Magnitudellb/ft.	End Magnitude[lb/ft,F	. Start Location[ft.%]	End Location[ft,%]
- T	Member Label	Direction	2.645	2.645	0	%100
1	M1	2	-1.527	-1.527	0	%100
2	M1	<u>Z</u>	8.061	8.061	0	%100
3	M4	X 7	-4.654	-4.654	Ō	%100
4	M4			2.274	0	%100
5	M10	X	2.274	-1.313	0	%100
6	M10	Z	-1.313		0	%100
7	MP3A	X	7.18	7.18	0	%100
8	MP3A	Z	-4.146	-4.146	0	%100
9	MP4A	X	7.18	7.18		%100
10	MP4A	Z	-4.146	-4.146	0	
11	MP2A	X	8.692	8.692	0	%100
12	MP2A	Z	-5.018	-5.018	0	%100
	MP1A	X	7.18	7.18	0	%100
13	MP1A	7	-4.146	-4.146	0	%100
14		X	2.274	2.274	0	%100
15	M43	Z	-1.313	-1.313	0	%100
16	M43	X	4.535	4.535	0	%100
17	M46	Z	-2.618	-2.618	0	%100
18	M46		10.073	10.073	0	%100
19	M51B	X		-5.815	Ŏ	%100
20	M51B	Z	-5.815	2.518	Ŏ	%100
21	M52B	X	2.518		Ö	%100
22	M52B	Z	-1.454	-1.454	0	%100
23	M76	X	13.605	13.605	U	70100



: Colliers Engineering & Design : CL : Project No. 10206276 : 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

24	Member Label	Direction	Start Magnitude[lb/ft	End Magnitude[lb/ft,F	. Start Location[ft,%]	End Location[ft,%]
25	M76	Z	-7.855	-7.855	0	%100
	M77	<u>X</u>	18.475	18.475	0	%100
26	M77	Z	-10.667	-10.667	0	%100
	M80	X	19.46	19.46	0	%100
28	M80	Z	-11.235	-11.235	0	%100
	M84	X	13.605	13.605	0	%100
30	M84	Z	-7.855	-7.855	0	%100
31	M85	X	4.619	4.619	0	%100
32	M85	Z	-2.667	-2.667	0	%100
33	M91	X	4.865	4.865	0	%100
34	M91	Z	-2.809	-2.809	0	%100
35	M34	X	0	0	0	%100
36	M34	Z	0	0	0	%100
37	M35	X	9.094	9.094	0	%100
38	M35	Z	-5.251	-5.251	0	%100
39	M36	X	9.094	9.094	0	%100
40	M36	Z	-5.251	-5.251	0	%100
41	M37	X	18.14	18.14	0	%100
42	M37	Z	-10.473	-10.473	0	%100
43	M40	X	2.518	2.518	0	%100
44	M40	Z	-1.454	-1.454	0	%100
45	M41	X	2.518	2.518	0	%100
46	M41	Z	-1.454	-1.454	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	0	0	0	%100
49	M46A	X	4.619	4.619	0	%100
50	M46A	Z	-2.667	-2.667	0	%100
51	M48	X	4.865	4.865	0	%100
52	M48	Z	-2.809	-2.809	Ö	%100
53	M50A	X	0	0	0	%100 %100
54	M50A	Z	0	Ö	0	%100 %100
_55	M51C	X	4.619	4.619	0	%100 %100
56	M51C	Z	-2.667	-2.667	0	%100
57	M53	X	4.865	4.865	Ö	%100 %100
58	M53	Z	-2.809	-2.809	0	%100 %100
59	M58A	X	8.061	8.061	0	%100 %100
60	M58A	Z	-4.654	-4.654	Ö	%100
61	M59A	X	2.274	2.274	0	%100 %100
62	M59A	Z	-1.313	-1.313	0	%100
63	M60	X	2.274	2.274	0	%100
64	M60	Z	-1.313	-1.313	0	%100 %100
65	M61	X	4.535	4.535	0	%100 %100
66	M61	Z	-2.618	-2.618	0	
67	M64	X	2.518	2.518	0	%100 %100
68	M64	Z	-1.454	-1.454	0	%100 %100
69	M65	X	10.073	10.073	0	
70	M65	Z	-5.815	-5.815	0	%100 %100
71	M69	X	13.605	13.605	0	%100 %100
72	M69	Z	-7.855	-7.855		%100
73	M70	X	4.619	4.619	0	%100
74	M70	Z	-2.667		0	%100
75	M72	X	4.865	-2.667	0	%100
76	M72	Z	-2.809	4.865	0	%100
77	M74	X		-2.809	0	%100
78	M74	Z	13.605	13.605	0	%100
79	M75	X	-7.855	-7.855	0	%100
80	M75	Z	18.475	18.475	0	%100
50	IVI U		-10.667	-10.667	0	%100



Company Designer Job Number

Colliers Engineering & Design

CL

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start Magnitude[lb/ft	End Magnitude[lb/ft,F	Start Location[ft,%]	End Location[ft,%]
04	Member Laber	X	19.46	19.46	. 0	%100
81	M77A	Z	-11.235	-11.235	0	%100
82	M82	X	10.581	10.581	0	%100
83	M82	Z	-6.109	-6.109	0	%100
84		X	7.18	7.18	0	%100
85	MP3C	Z	-4.146	-4.146	0	%100
86	MP3C	X	7.18	7.18	0	%100
87	MP4C	Z	-4.146	-4.146	0	%100
88	MP4C	X	8.692	8.692	0	%100
89	MP2C	Z	-5.018	-5.018	0	%100
90	MP2C	X	7.18	7.18	0	%100
91	MP1C		-4.146	-4.146	0	%100
92	MP1C	Z	2.645	2.645	0	%100
93	M91A	X 7	-1.527	-1.527	0	%100
94	M91A		7.18	7.18	0	%100
95	MP3B	X	-4.146	-4.146	0	%100
96	MP3B	Z	7.18	7.18	0	%100
97	MP4B	X		-4.146	0	%100
98	MP4B	Z	-4.146	8.692	0	%100
99	MP2B	X	8.692	-5.018	0	%100
100	MP2B	Z	-5.018	7.18	0	%100
101	MP1B	X	7.18	-4.146	Ö	%100
102	MP1B	Z	-4.146	5.872	0	%100
103	M101	X	5.872		0	%100
104	M101	Z	-3.39	-3.39 2.173	0	%100
105	M102	X	2.173		0	%100
106	M102	Z	-1.255	-1.255	0	%100
107	M107	X	8.692	8.692	0	%100
108	M107	Z	-5.018	-5.018	0	%100
109	M112	X	2.173	2.173		%100
110	M112	Z	-1.255	-1.255	0	%100
111	M123	X	9.566	9.566		%100
112	M123	Z	-5.523	-5.523	0	%100
113	M124	X	2.392	2.392	0	%100 %100
114	M124	Z	-1.381	-1.381	0	
115	M125	X	2.392	2.392	0	%100 %100
116	M125	7	-1.381	-1.381	0	%100

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

	er Distributed Lo	Direction	Start Magnitudellb/ft	End Magnitude[lb/ft,F.,	. Start Location[ft,%]	End Location[ft,%]
	Member Label	Direction	Otart Wagning as passage	0	0	%100
1	M1		0	0	0	%100
2	M1	Z	10.44	12.41	0	%100
3	M4	X	12.41	0	0	%100
4	M4	Z	0	0	0	%100
5	M10	X	0	- 0	0	%100
6	M10	Z	0	0.004	0	%100
7	MP3A	X	8.291	8.291	0	%100
8	MP3A	Z	0	0	0	%100
9	MP4A	X	8.291	8.291	0	
10	MP4A	Z	0	0	. 0 .	%100
	MP2A	X	10.036	10.036	0	%100
11		7	0	0	0	%100
12	MP2A	X	8.291	8.291	0	%100
13	MP1A	Z	0	0	0	%100
14	MP1A		1 0	0	0	%100
15	M43	X		Ů,	0	%100
16	M43	Z	0	0	0	%100
17	M46	X	0			



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

18	Member Label M46	Direction Z		.End Magnitude[lb/ft,F.		End Location[ft,%]
19	M51B	X	0 722	0 700	0	%100
20	M51B	Z	8.723	8.723	0	%100
21	M52B	X	0 700	0 700	0	%100
22	M52B		8.723	8.723	0	%100
23	M76	X	0	0	0	%100
24	M76		20.946	20.946	0	%100
25	M77	Z	0	0	0	%100
26	M77	X	16	16	0	%100
27	M80	Z	0	0	0	%100
28	M80	X	16.853	16.853	0	%100
29	M84	Z	0	0	0	%100
30	M84	X	20.946	20.946	0	%100
31	M85	Z	0	0	0	%100
32	M85	X	16	16	0	%100
33	M91	Z	0	0	0	%100
34		X	16.853	16.853	0	%100
35	M91	Z	0	0	0	%100
36	M34	X	3.103	3.103	0	%100
37	M34	Z	0	0	0	%100
38	M35	X	7.876	7.876	0	%100
	M35	Z	0	0	0	%100
39	M36	X	7.876	7.876	0	%100
40	M36	Z	0	0	0	%100
41	M37	X	15.709	15.709	0	%100
42	M37	Z	0	0	0	%100
43	M40	X	8.723	8.723	0	%100
44	M40	Z	0	0	0	%100
45	M41	X	0	0	0	%100
46	M41	Z	0	0	0	%100
47	M45	X	5.236	5.236	0	%100
48	M45	Z	0	0	0	%100
49	M46A	X	16	16	0	%100
50	M46A	Z	0	0	0	%100
51	M48	X	16.853	16.853	0	%100
52	M48	Z	0	0	0	%100
53	M50A	X	5.236	5.236	0	%100
54	M50A	Z	0	0	0	%100
55	M51C	X	0	0	0	%100
56	M51C	Z	0	0	0	%100
57	M53	X	0	0	0	%100
58	M53	Z	0	0	0	%100
59	M58A	X	3.103	3.103	0	%100
60	M58A	Z	0	0	0	%100
61	M59A	X	7.876	7.876	0	%100
62	M59A	Z	0	0	0	%100
63	M60	X	7.876	7.876	0	%100
64	M60	Z	0	0	0	%100
65	M61	X	15.709	15.709	0	%100
66	M61	Z	0	0	0	%100
67	M64	X	0	0	0	%100
68	M64	Z	0	0	0	%100
69	M65	X	8.723	8.723	0	%100
70	M65	Z	0	0	0	%100
71	M69	X	5.236	5.236	Ö	%100
72	M69	Z	0	0	Ö	%100
73	M70	X	0	0	0	%100
74	M70	Z	0	0	0	%100



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start Magnitude[lb/ft,	End Magnitude[lb/ft,F	Start Location[ft,%]	End Location[ft,%]
75	M72	X	0	0	0	%100 %400
76	M72	Z	0	0	0	%100
77	M74	X	5.236	5.236	0	%100
78	M74	Z	0	0	0	%100
79	M75	X	16	16	0	%100
80	M75	Z	0	0	0	%100
81	M77A	X	16.853	16.853	0	%100
82	M77A	Ž	0	0	0	%100
83	M82	X	9.164	9.164	0	%100
	M82	Z	0	0	0	%100
84 85	MP3C	X	8.291	8.291	0	%100
86	MP3C	Z	0	0	0	%100
87	MP4C	X	8.291	8.291	0	%100
	MP4C	Z	0	0	0	%100
88	MP2C	X	10.036	10.036	0	%100
89		Ž	0	0	0	%100
90	MP2C	X	8.291	8.291	0	%100
91	MP1C	Z	0	0	0	%100
92	MP1C	X	9.164	9.164	0	%100
93	M91A	Z	0	0	0	%100
94	M91A	X	8.291	8.291	0	%100
95	MP3B	Ž	0.231	0	0	%100
96	MP3B	X	8.291	8.291	0	%100
97	MP4B	Ž	0.231	0	0	%100
98	MP4B	X	10.036	10.036	0	%100
99	MP2B	Z	0	0	0	%100
100	MP2B		8.291	8.291	0	%100
101	MP1B	Z	0.291	0	0	%100
102	MP1B		6.78	6.78	Ö	%100
103	M101	X	0.76	0	Ö	%100
104	M101	Z	0	0	0	%100
105	M102	X	0	0	Ö	%100
106	M102	Z	7.527	7.527	0	%100
107	M107	X		0	Ö	%100
108	M107	Z	7.507	7.527	0	%100
109	M112	X	7.527	0	0	%100
110	M112	Z	0	8.284	0	%100
111	M123	X	8.284	0.284	0	%100
112	M123	Z	0		0	%100
113	M124	X	8.284	8.284	0	%100
114	M124	Z	0	0	0	%100
115	M125	X	0	0	0	%100
116	M125	Z	0	0	U	/0100

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

1011110	er Distributed LC	Direction		End Magnitude[lb/ft,F	. Start Location[ft,%]	End Location[ft,%]
4 0	Member Label	Direction	2.645	2.645	0	%100
1	M1	^	1.527	1.527	0	%100
2	M1	<u>Z</u>	8.061	8.061	0	%100
3	M4		4.654	4.654	0	%100
4	M4			2.274	0	%100
5	M10	<u> </u>	2.274	1.313	0	%100
6	M10		1.313	7.18	0	%100
7	MP3A	X	7.18		Ô	%100
8	MP3A	Z	4.146	4.146	0	%100
9	MP4A	X	7.18	7.18	0	%100
10	MP4A	Z	4.146	4.146	0	%100 %100
11	MP2A	X	8.692	8.692	U	/0100



: Colliers Engineering & Design : CL : Project No. 10206276 : 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

12	Member Label	Direction	Start Magnitude[lb/ft	End Magnitude[lb/ft,F.	Start Location[ft,%]	End Location[ft,%]
13	MP2A	Z	5.018	5.018	0	%100
	MP1A	X	7.18	7.18	0	%100
14	MP1A	Z	4.146	4.146	0	%100
15	M43	X	2.274	2.274	0	%100
16	M43	Z	1.313	1.313	0	%100
17	M46	X	4.535	4.535	0	%100
18	M46	Z	2.618	2.618	0	%100
19	M51B	X	2.518	2.518	0	%100
20	M51B	Z	1.454	1.454	0	%100
21	M52B	X	10.073	10.073	0	%100
22	M52B	Z	5.815	5.815	0	%100
23	M76	X	13.605	13.605	0	%100
24	M76	Z	7.855	7.855	Ö	%100
25	M77	X	4.619	4.619	Ö	%100
26	M77	Z	2.667	2.667	0	%100 %100
27	M80	X	4.865	4.865	0	%100 %100
28	M80	Z	2.809	2.809	0	
29	M84	X	13.605	13.605	0	%100 %100
30	M84	Z	7.855	7.855	0	%100
31	M85	X	18.475			%100
32	M85	Z	10.667	18.475	0	%100
33	M91	X		10.667	0	%100
34	M91	Z	19.46	19.46	0	%100
35	M34	X	11.235	11.235	0	%100
36	M34		8.061	8.061	0	%100
37	M35	Z	4.654	4.654	0	%100
38	M35	X	2.274	2.274	0	%100
39		Z	1.313	1.313	0	%100
	M36	<u>X</u>	2.274	2.274	0	%100
40	M36	Z	1.313	1.313	0	%100
41	M37	X	4.535	4.535	0	%100
42	M37	Z	2.618	2.618	0	%100
43	M40	X	10.073	10.073	0	%100
44	M40	Z	5.815	5.815	0	%100
45	M41	X	2.518	2.518	0	%100
46	M41	Z	1.454	1.454	0	%100
47	M45	X	13.605	13.605	0	%100
48	M45	Z	7.855	7.855	0	%100
49	M46A	X	18.475	18.475	0	%100
50	M46A	Z	10.667	10.667	0	%100
51	M48	X	19.46	19.46	0	%100
52	M48	Z	11.235	11.235	0	%100
53	M50A	X	13.605	13.605	0	%100
54	M50A	Z	7.855	7.855	Ö	%100
55	M51C	X	4.619	4.619	0	%100 %100
56	M51C	Z	2.667	2.667	0	%100 %100
57	M53	X	4.865	4.865	0	%100 %100
58	M53	Z	2.809	2.809	0	%100
59	M58A	X	0	2.809	0	%100 %100
60	M58A	Z	0	0	0	
61	M59A	X	9.094	9.094	0	%100 %100
62	M59A	Z	5.251	5.251		%100
63	M60	X	9.094		0	%100
64	M60	Z		9.094	0	%100
65	M61	X	5.251	5.251	0	%100
66	M61		18.14	18.14	0	%100
67	M64	Z	10.473	10.473	0	%100
68	M64	X	2.518	2.518	0	%100
UO	10104		1.454	1.454	0	%100



Colliers Engineering & Design

CL

rer : Project No. 10206276 me : 5000245391-VZW_MT_LO_H July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start Magnitude[lb/ft,	.End Magnitude[lb/ft,F.	. Start Location[ft,%]	End Location[ft.% %100
69	M65	X	2.518	2.518	U	%100 %100
70	M65	Z	1.454	1.454	0	
71	M69	X	0	0	0	%100
72	M69	Z	0	0	0	%100
73	M70	X	4.619	4.619	0	%100
74	M70	Z	2.667	2.667	0	%100
75	M72	X	4.865	4.865	0	%100
	M72	Z	2.809	2.809	0	%100
76	M74	X	0	0	0	%100
77	M74	Z	0	0	0	%100
78	M75	X	4.619	4.619	0	%100
79	M75	Ž	2.667	2.667	0	%100
80	M77A	X	4.865	4.865	0	%100
81		Z	2.809	2.809	0	%100
82	M77A	X	2.645	2.645	0	%100
83	M82	Z	1.527	1.527	0	%100
84	M82	X	7.18	7.18	0	%100
85	MP3C	Z	4.146	4.146	0	%100
86	MP3C	X	7.18	7.18	0	%100
87	MP4C	- ^ Z	4.146	4.146	0	%100
88	MP4C	X	8.692	8.692	0	%100
89	MP2C		5.018	5.018	0	%100
90	MP2C	Z X	7.18	7.18	0	%100
91	MP1C		4.146	4.146	0	%100
92	MP1C	Z	10.581	10.581	0	%100
93	M91A	X	6.109	6.109	0	%100
94	M91A	Z	7.18	7.18	0	%100
95	MP3B	X	4.146	4.146	0	%100
96	MP3B	Z	7.18	7.18	0	%100
97	MP4B	X		4.146	Ö	%100
98	MP4B	Z	4.146	8.692	Ő	%100
99	MP2B	X	8.692	5.018	Ö	%100
100	MP2B	Z	5.018	7.18	0	%100
101	MP1B	X	7.18	4.146	0	%100
102	MP1B	Z	4.146		0	%100
103	M101	X	5.872	5.872	0	%100
104	M101	Z	3.39	3.39	0	%100
105	M102	X	2.173	2.173	0	%100
106	M102	Z	1.255	1.255	0	%100
107	M107	X	2.173	2.173	0	%100
108	M107	Z	1.255	1.255	0	%100
109	M112	X	8.692	8.692		%100 %100
110	M112	Z	5.018	5.018	0	%100
111	M123	X	2.392	2.392	0	%100 %100
112	M123	Z	1.381	1.381	0	%100 %100
113	M124	X	9.566	9.566	0	
114	M124	Z	5.523	5.523	0	%100
115	M125	X	2.392	2.392	0	%100
116	M125	Z	1.381	1.381	0	%100

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

RISA-3D Version 17.0.4

Cino	er Distributed Le	Direction	Start Magnitude[]b/ft	End Magnitude[lb/ft,F	Start Location[ft.%]	End Location[ft,%]
	Member Label	Direction	4.582	4.582	0	%100
1	M1		7.936	7.936	0	%100
2	M1		The second secon	1.551	n	%100
3	M4	X	1.551		<u> </u>	%100
4	M4	Z	2.687	2.687	0	%100
5	M10	X	3.938	3.938	U	76100



: Colliers Engineering & Design CL Project No. 10206276 : 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	ember Label	Direction	Start Magnitude[lb/ft	End Magnitude[lb/ft,F	Start Location[ft %	1 End Location[ft,9
6	M10	Z	6.821	6.821	0	%100
7	MP3A	X	4.146	4.146	0	%100
8	MP3A	Z	7.18	7.18	0	%100
9	MP4A	X	4.146	4.146	0	%100
10	MP4A	Z	7.18	7.18	Ö	%100
11	MP2A	X	5.018	5.018	0	%100 %100
12	MP2A	Z	8.692	8.692	0	%100 %100
13	MP1A	X	4.146	4.146	0	%100 %100
14	MP1A	Z	7.18	7.18	0	%100 %100
15	M43	X	3.938	3.938	0	
16	M43	Z	6.821	6.821	0	%100
17	M46	X	7.855	7.855	0	%100
18	M46	Z	13.605	13.605		%100
19	M51B	X	0		0	%100
20	M51B	Z	0	0	0	%100
21	M52B	X	4.362	0	0	%100
22	M52B	Z		4.362	0	%100
23	M76		7.554	7.554	0	%100
24	M76	Z	2.618	2.618	0	%100
25	M77	X	4.535	4.535	0	%100
26	M77		0	0	0	%100
27	M80	Z	0	0	0	%100
28		X	0	0	0	%100
	M80	Z	0	0	0	%100
29	M84	X	2.618	2.618	0	%100
30	M84	Z	4.535	4.535	0	%100
31	M85	X	8	8	0	%100
32	M85	Z	13.857	13.857	0	%100
33	M91	X	8.426	8.426	0	%100
34	M91	Z	14.595	14.595	0	%100
35	M34	X	6.205	6.205	0	%100
36	M34	Z	10.748	10.748	0	%100
37	M35	X	0	0	0	%100
38	M35	Z	0	0	0	%100
39	M36	X	0	0	0	%100
40	M36	Z	0	0	0	%100
41	M37	X	0	0	0	%100
42	M37	Z	0	0	0	%100
43	M40	X	4.362	4.362	0	%100
44	M40	Z	7.554	7.554	0	%100
45	M41	X	4.362	4.362	0	%100
46	M41	Z	7.554	7.554	Ö	%100 %100
47	M45	X	10.473	10.473	0	%100 %100
48	M45	Z	18.14	18.14	Ö	%100
	M46A	X	8	8	0	%100
	M46A	Z	13.857	13.857	0	
51	M48	X	8.426	8.426	0	%100
52	M48	Z	14.595	14.595	0	%100
	M50A	X	10.473	10.473		%100
	M50A	Z	18.14	18.14	0	%100
	M51C	X	8		0	%100
	M51C	Ž	13.857	8	0	%100
	M53	X		13.857	0	%100
	M53	Z	8.426	8.426	0	%100
	M58A		14.595	14.595	0	%100
	VIDOA VIDOA	X	1.551	1.551	0	%100
		Z	2.687	2.687	0	%100
	M59A	X	3.938	3.938	0	%100
)	M59A	Z	6.821	6.821	0	%100



Colliers Engineering & Design

: CL : Project No. 10206276 : 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start Magnitude[lb/ft,	.End Magnitude[lb/ft,F.	Start Location[ft,%]	End Location[ft,%
63	M60	X	3.938	3.938	0	%100
64	M60	Z	6.821	6.821	0	%100
35	M61	X	7.855	7.855	0	%100
36	M61	Z	13.605	13.605	0	%100
57	M64	X	4.362	4.362	0	%100
38	M64	Z	7.554	7.554	0	%100
59	M65	X	0	0	0	%100
70	M65	Z	0	0	0	%100
71	M69	X	2.618	2.618	0	%100
72	M69	Z	4.535	4.535	0	%100
	M70	X	8	8	0	%100
73	M70	Z	13.857	13.857	0	%100
74	M72	X	8.426	8.426	0	%100
75		Z	14.595	14.595	0	%100
76	M72	X	2.618	2.618	0	%100
77	M74	Z	4.535	4.535	0	%100
78	M74	X	0	0	0	%100
79	M75	Ž	Ö	0	0	%100
30	M75	X	0	0	0	%100
31	M77A		0	0	0	%100
32	M77A	Z X	0	Ö	0	%100
83	M82	Z	0	0	0	%100
84	M82		4.146	4.146	0	%100
35	MP3C	X	7.18	7.18	0	%100
86	MP3C	Z	4.146	4.146	0	%100
37	MP4C	X	7.18	7.18	0	%100
88	MP4C	Z	5.018	5.018	Ö	%100
89	MP2C	X		8.692	0	%100
90	MP2C	Z	8.692	4.146	Ö	%100
91	MP1C	X	4.146	7.18	Ö	%100
92	MP1C	Z	7.18	4.582	0	%100
93	M91A	X	4.582	7.936	0	%100
94	M91A	Z	7.936		0	%100
95	MP3B	X	4.146	4.146	0	%100
96	MP3B	Z	7.18	7.18	0	%100
97	MP4B	X	4.146	4.146	0	%100
98	MP4B	Z	7.18	7.18	0	%100
99	MP2B	X	5.018	5.018	0	%100
100	MP2B	Z	8.692	8.692		%100
01	MP1B	X	4.146	4.146	0	%100
02	MP1B	Z	7.18	7.18		%100
103	M101	X	3.39	3.39	0	%100
104	M101	Z	5.872	5.872		%100
105	M102	X	3.764	3.764	0	%100 %100
106	M102	Z	6.519	6.519	0	
107	M107	X	0	0	0	%100
108	M107	Z	0	0	0	%100
109	M112	X	3.764	3.764	0	%100
110	M112	Z	6.519	6.519	0	%100
111	M123	X	0	0	0	%100
112	M123	Z	0	0	0	%100
113	M124	X	4.142	4.142	0	%100
	M124	Z	7.175	7.175	0	%100
114	M125	X	4.142	4.142	0	%100
115	M125	Z	7.175	7.175	0	%100

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

200 A 10 March	Direction	Start Magnitudellh/ft	populudellb/ft Fad Magayudellau F Sala Sala Sala Sala Sala Sala Sala Sa	End Location(ft.9/1	
Mombor Label	rD:/ / / /	\ \ \Rev 0\Risa\5	000245391-VZW M	T LO H.r3d]	Page 110



: Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction		End Magnitude[lb/ft.F.		End Location[ft,%]
2	M1 M1	X	0	0	0	%100
3	M4	Z	12.218	12.218	0	%100
4	M4	X	0	0	0	%100
5	M10	Z	0	0	0	%100
6	M10	X	0	0	0	%100
7		Z	10.501	10.501	. 0	%100
8	MP3A	X	0	00	0	%100
	MP3A	Z	8.291	8.291	0	%100
9	MP4A	X	0	0	0	%100
10	MP4A	Z	8.291	8.291	0	%100
11	MP2A	<u>X</u>	0	.00	0	%100
12	MP2A	Z	10.036	10.036	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	8.291	8.291	0	%100
15	M43	X	0	0	0	%100
16	M43	Z	10.501	10.501	0	%100
17	M46	X	0	0	0	%100
18	M46	Z	20.946	20.946	0	%100
19	M51B	X	1 0	0	0	%100
20	M51B	Z	2.908	2.908	0	%100
21	M52B	X	0	0	0	%100
22	M52B	Z	2.908	2.908	0	%100
23	M76	X	0	0	0	%100
24	M76	Z	0	0	0	%100
25	M77	X	0	0	0	%100
26	M77	Z	5.333	5.333	0	%100
27	M80	X	0	0	0	%100
28	M80	Z	5.618	5.618	0	%100
29	M84	X	0	0	Ö	%100
30	M84	Z	0	0	0	%100
31	M85	X	0	0	0	%100
32	M85	Z	5.333	5.333	0	%100
33	M91	X	0	0	0	%100
34	M91	Z	5.618	5.618	0	%100
35	M34	X	0	0	0	%100
36	M34	Z	9.308	9.308	0	%100
37	M35	X	0	0	0	%100
38	M35	Z	2.625	2.625	0	%100
39	- M36	X	0	0	0	%100
40	M36	Z	2.625	2.625	0	%100
41	M37	X	0	0	0	%100
42	M37	Z	5.236	5.236	0	%100
43	M40	X	0	0	0	%100
44	M40	Z	2.908	2.908	0	%100
45	M41	X	0	0	0	%100
46	M41	Z	11.631	11.631	ŏ	%100 %100
47	M45	X	0	0	0	%100
48	M45	Z	15.709	15.709	ŏ	%100
49	M46A	X	0	0	. 0	%100
50	M46A	Z	5.333	5.333	ő	%100
51	M48	X	0	0	Ö	%100
52	M48	Z	5.618	5.618	0	%100
53	M50A	X	0	0	0	%100 %100
54	M50A	Z	15.709	15.709	0	
55	M51C	X	0	0	0	%100 %100
56	M51C	Z	21.334	21.334	0	%100 %100
57	M53	X	0	0	0	76 IUU



: Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

FO.	Member Label	Direction Z	Start Magnitude[lb/ft, 22.47	End Magnitude[lb/ft,F 22,47	Start Location[ft,%]	End Location[ft,%] %100
58	M53	X	0	0	0	%100
59	M58A	Z	9.308	9.308	0	%100
60	M58A	X	0	0	0	%100
61	M59A	Z	2.625	2.625	0	%100
62	M59A	X	0	0	0	%100
63	M60		2.625	2.625	0	%100
64	M60	Z	0	0	0	%100
65	M61	X	5.236	5.236	0	%100
36	M61	Z	0	0	0	%100
67	M64	X	11.631	11.631	Ö	%100
68	M64	Z		11.001	Ö	%100
69	M65	X	0	2.908	Ŏ	%100
70	M65	Z	2.908	2.900	0	%100
71	M69	X	0		ŏ	%100
72	M69	Z	15.709	15.709	0	%100
73	M70	X	0	0	ŏ	%100
74	M70	Z	21.334	21.334	0	%100
75	M72	X	0	0	0	%100
76	M72	Z	22.47	22.47		%100
77	M74	X	0	0	0	%100
78	M74	Z	15.709	15.709	0	%100 %100
79	M75	X	0	0	0	
80	M75	Z	5.333	5.333	0	%100
81	M77A	X	0	0	0	%100
82	M77A	Z	5.618	5.618	0	%100
83	M82	X	0	0	0	%100
	M82	Z	3.055	3.055	0	%100
84	MP3C	X	0	0	0	%100
85	MP3C	Z	8.291	8.291	0	%100
86	MP4C	X	0	0	0	%100
87		Z	8.291	8.291	0	%100
88	MP4C	X	0	0	0	%100
89	MP2C	Ž	10.036	10.036	0	%100
90	MP2C	X	0	0	0	%100
91	MP1C	Z	8.291	8.291	0	%100
92	MP1C		0.231	0	0	%100
93	M91A	X	3.055	3.055	0	%100
94	M91A	Z	0	0.000	0	%100
95	MP3B	X	8,291	8.291	Ö	%100
96	MP3B	Z		0.201	0	%100
97	MP4B	X	0	8.291	0	%100
98	MP4B	Z	8.291		0	%100
99	MP2B	X	0	0	Ö	%100
100	MP2B	Z	10.036	10.036	0	%100
101	MP1B	X	0	0	0	%100
102	MP1B	Z	8.291	8.291	0	%100
103	M101	X	0	0 70	0	%100
104	M101	Z	6.78	6.78		%100
105	M102	X	0	0	0	%100
106	M102	Z	10.036	10.036	0	
107	M107	X	0	0	0	%100
108	M107	Z	2.509	2.509	0	%100
109	M112	X	0	0	0	%100
110	M112	Z	2.509	2.509	0	%100
	M123	X	0	0	0	%100
111	M123	Z	2.761	2.761	0	%100
112	M124	X	0	0	0	%100
113	M124	Z	2,761	2.761	0	%100



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start Magnitude[lb/ft,	End Magnitude[lb/ft,F.	. Start Location(ft.%)	End Location[ft,%]
115	M125	X	0	0	0	%100
116	M125	Z	11.046	11.046	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,	End Magnitude[lb/ft,F.	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-4.582	-4.582	0	%100
2	M1	Z	7.936	7.936	0	%100
3	M4	X	-1.551	-1.551	0	%100
4	M4	Z	2.687	2.687	0	%100
5	M10	X	-3.938	-3.938	0	%100
6	M10	Z	6.821	6.821	0	%100
7	MP3A	X	-4.146	-4.146	0	%100
8	MP3A	Z	7.18	7.18	0	%100
9	MP4A	X	-4.146	-4.146	0	%100
10	MP4A	Z	7.18	7.18	0	%100
11	MP2A	X	-5.018	-5.018	0	%100
12	MP2A	Z	8.692	8.692	0	%100
13	MP1A	X	-4.146	-4.146	0	%100
14	MP1A	Z	7.18	7.18	0	%100
15	M43	X	-3.938	-3.938	0	%100 %100
16	M43	Z	6.821	6.821	0	%100
17	M46	X	-7.855	-7.855	0	%100
18	M46	Z	13.605	13.605	0	%100
19	M51B	X	-4.362	-4.362	0	%100
20	M51B	Z	7.554	7.554	Ō	%100
21	M52B	X	0	0	0	%100
22	M52B	Z	0	0	0	%100 %100
23	M76	X	-2.618	-2.618	0	%100 %100
24	M76	Z	4.535	4.535	0	%100
25	M77	X	-8	-8	0	%100
26	M77	Z	13.857	13.857	Ö	%100 %100
27	M80	X	-8.426	-8.426	0	%100
28	M80	Z	14.595	14.595	0	%100 %100
29	M84	X	-2.618	-2.618	0	%100 %100
30	M84	Z	4.535	4.535	0	%100
31	M85	X	0	0	0	%100 %100
32	M85	Z	Ŏ	0	0	
33	M91	X	Ö	0	0	%100 %100
34	M91	Z	0	Ö	0	%100 %100
35	M34	X	-1.551	-1.551	0	%100 %400
36	M34	Z	2.687	2.687	Ö	%100 %100
37	M35	X	-3.938	-3.938		%100
38	M35	Z	6.821	6.821	0	%100
39	M36	X	-3.938	-3.938		%100
40	M36	Z	6.821	6.821	0	%100
41	M37	X	-7.855	-7.855	0	%100
42	M37	Z	13.605		0	%100
43	M40	X	0	13.605	0	%100
44	M40	Z	0			%100
45	M41	X	-4.362	0	0	%100
46	M41	Ž	7.554	-4.362 7.554	0	%100
47	M45	X		7.554	0	%100
48	M45	Z	-2.618	-2.618	0	%100
49	M46A	- -	4.535	4.535	0	%100
50	M46A	X	0	0	0	%100
51	M48	Z	0	0	0	%100
31	IVI40	Λ	0	0	0	%100



RISA-3D Version 17.0.4

Company Designer Job Number Model Name

: Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start Magnitude[lb/ft,	End Magnitude[lb/ft,F.	. Start Location[ft,%]	End Location[ft,%
52	M48	Z	0	0	0	%100 %100
53	M50A	X	-2.618	-2.618	0	
54	M50A	Z	4.535	4.535	0	%100
55	M51C	X	-8	-8	00	%100
	M51C	Z	13.857	13.857	0	%100
56	M53	X	-8.426	-8.426	0	%100
57	M53	Z	14.595	14.595	0	%100
8		X	-6.205	-6.205	0	%100
59	M58A	Z	10.748	10.748	0	%100
0	M58A	X	0	0	0	%100
31	M59A	Ž	Ŏ	0	0	%100
2	M59A		0	0	0	%100
3	M60	X		0	Ö	%100
34	M60	Z	0	0	Ŏ	%100
35	M61	X	0	0	Ö	%100
6	M61	Z	0	-4.362	0	%100
37	M64	X	-4.362		0	%100
88	M64	Z	7.554	7.554		%100
39	M65	X	-4.362	-4.362	0	%100 %100
0	M65	Z	7.554	7.554	0	%100
1	M69	X	-10.473	-10.473	0	%100
2	M69	Z	18.14	18.14	0	
3	M70	X	-8	-8	0	%100
4	M70	Z	13.857	13.857	0	%100
5	M72	X	-8.426	-8.426	0	%100
6	M72	Z	14.595	14.595	0	%100
	M74	X	-10.473	-10.473	0	%100
7	M74	Z	18.14	18.14	0	%100
8	M75	X	-8	-8	0	%100
9		Z	13.857	13.857	0	%100
30	M75	X	-8.426	-8.426	0	%100
31	M77A	Z	14.595	14.595	0	%100
32	M77A		-4.582	-4.582	0	%100
33	M82	X	7.936	7.936	0	%100
34	M82	Z	-4.146	-4.146	0	%100
35	MP3C	X	7.18	7.18	0	%100
36	MP3C	Z		-4.146	0	%100
37	MP4C	X	-4.146	7.18	Ö	%100
38	MP4C	Z	7.18		0	%100
39	MP2C	X	-5.018	-5.018	0	%100
90	MP2C	Z	8.692	8.692		%100
91	MP1C	X	-4.146	-4.146	0	%100
92	MP1C	Z	7.18	7.18	0	%100 %100
93	M91A	X	0	0	0	
94	M91A	Z	0	0	0	%100
95	MP3B	X	-4.146	-4.146	0	%100
	MP3B	Z	7.18	7.18	0	%100
96	MP4B	X	-4.146	-4.146	0	%100
97	MP4B	Z	7.18	7.18	0	%100
8		X	-5.018	-5.018	0	%100
99	MP2B	Z	8.692	8.692	0	%100
00	MP2B		-4.146	-4.146	0	%100
01	MP1B	X	7.18	7.18	0	%100
02	MP1B	Z	-3.39	-3.39	0	%100
03	M101	X		5.872	0	%100
04	M101	Z	5.872		+ 0	%100
05	M102	X	-3.764	-3.764	Ö	%100
06	M102	Z	6.519	6.519	0	%100
107	M107	X	-3.764	-3.764	0	%100
108	M107	Z	6.519	6.519	U	76100



: Colliers Engineering & Design : CL : Project No. 10206276 : 5000245304 \ \ --

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start Magnitude[lb/ft.	End Magnitude[lb/ft,F	Start Location(ft %)	End Location[ft,%]
109	M112	X	0	0	0	%100
110	M112	Z	0	0	0	%100
111	M123	X	-4.142	-4.142	0	%100
112	M123	Z	7.175	7.175	0	%100
113	M124	X	0	0	0	%100
114	M124	Z	0	0	0	%100
115	M125	X	-4.142	-4.142	0	%100
116	M125	Z	7,175	7.175	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,	End Magnitude[lb/ft,F	. Start Location[ft,%]	End Location[ft,%]
1	M1	X	-2.645	-2.645	0	%100
2	M1	Z	1.527	1.527	0	%100
3	M4	X	-8.061	-8.061	0	%100
4	M4	Z	4.654	4.654	0	%100
5	M10	X	-2.274	-2.274	0	%100
6	M10	Z	1.313	1.313	0	%100
7	MP3A	X	-7.18	-7.18	0	%100
8	MP3A	Z	4.146	4.146	0	%100
9	MP4A	X	-7.18	-7.18	0	%100
10	MP4A	Z	4.146	4.146	0	%100
11	MP2A	X	-8.692	-8.692	0	%100
12	MP2A	Z	5.018	5.018	0	%100
13	MP1A	X	-7.18	-7.18	0	%100
14	MP1A	Z	4.146	4.146	Ö	%100
15	M43	X	-2.274	-2,274	Ö	%100
16	M43	Z	1.313	1.313	Ö	%100
17	M46	X	-4.535	-4.535	0	%100
18	M46	Z	2.618	2.618	Ö	%100
19	M51B	X	-10.073	-10.073	Ö	%100
20	M51B	Z	5.815	5.815	Ö	%100
21	M52B	X	-2.518	-2.518	0	%100 %100
22	M52B	Z	1.454	1.454	ŏ	%100
23	M76	X	-13.605	-13.605	0	%100
24	M76	Z	7.855	7.855	Ŏ	%100
25	M77	X	-18.475	-18.475	0	%100
26	M77	Z	10.667	10.667	0	%100
27	M80	X	-19.46	-19.46	0	%100
28	M80	Z	11.235	11.235	0	%100 %100
29	M84	X	-13.605	-13.605	0	%100 %100
30	M84	Z	7.855	7.855	Ö	%100
31	M85	X	-4.619	-4.619	0	%100
32	M85	Z	2.667	2.667	0	%100 %100
33	M91	X	-4.865	-4.865	0	%100 %100
34	M91	Z	2.809	2.809	0	%100 %100
35	M34	X	2.003	0	0	
36	M34	Z	Ö	0	0	%100
37	M35	X	-9.094	-9.094	0	%100
38	M35	Z	5.251	5.251	0	%100
39	M36	X	-9.094	-9.094	0	%100
40	M36	Z	5.251	5.251	0	%100
41	M37	X	-18.14	-18.14	0	%100
42	M37	Z	10.473			%100
43	M40	X	-2.518	10.473 -2.518	0	%100
44	M40	Ž			0	%100
45	M41	X	1.454	1.454	0	%100
10	IVITI		-2.518	-2.518	0	%100



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start Magnitude[lb/ft	.End Magnitude(lb/ft,F	. Start Location[ft,%]	End Location[ft,% %100
16	M41	Z	1.454	1.454	0	%100 %100
7	M45	X	0		0	%100
8	M45	Z	0	0	0	%100 %100
9	M46A	X	-4.619	-4.619	0	%100 %100
0	M46A	Z	2.667	2.667	0	
51	M48	X	-4.865	-4.865	0	%100
2	M48	Z	2.809	2.809	0	%100
3	M50A	X	0	0	0	%100
4	M50A	Z	0	0	0	%100
55	M51C	X	-4.619	-4.619	0	%100
6	M51C	Z	2.667	2.667	0	%100_
7	M53	X	-4.865	-4.865	0	%100
8	M53	Z	2.809	2.809	0	%100
9	M58A	X	-8.061	-8.061	0	%100
60	M58A	Z	4.654	4.654	0	%100
	M59A	X	-2.274	-2.274	0	%100
51	M59A	Z	1.313	1.313	0	%100
2	M60	X	-2.274	-2.274	0	%100
3	M60	Z	1.313	1.313	0	%100
34	M61	X	-4.535	-4.535	0	%100
55	M61	Z	2.618	2.618	0	%100
6	M64	X	-2.518	-2.518	0	%100
7	M64	Z	1.454	1.454	0	%100
88	M65	X	-10.073	-10.073	0	%100
9	M65	Z	5.815	5.815	0	%100
70		X	-13.605	-13,605	0	%100
11	M69	Z	7.855	7.855	0	%100
2	M69	X	-4.619	-4.619	0	%100
73	M70	Z	2.667	2.667	0	%100
74	M70	X	-4.865	-4.865	0	%100
75	M72	Z	2.809	2.809	0	%100
76	M72	X	-13.605	-13.605	0	%100
77	M74		7.855	7.855	0	%100
78	M74	Z	-18.475	-18.475	0	%100
79	M75	Z	10.667	10.667	0	%100
30	M75		-19.46	-19.46	0	%100
31	M77A	X	11.235	11.235	0	%100
32	M77A	Z	-10.581	-10.581	0	%100
33	M82	Z	6.109	6.109	0	%100
34	M82		-7.18	-7.18	0	%100
35	MP3C	X	4.146	4,146	0	%100
36	MP3C	Z	-7.18	-7.18	0	%100
87	MP4C	X	4.146	4.146	0	%100
38	MP4C	Z	-8.692	-8.692	0	%100
39	MP2C	X	5.018	5.018	Ō	%100
90	MP2C	Z	The state of the s	-7.18	0	%100
91	MP1C	X	-7.18	4.146	Ů.	%100
92	MP1C	Z	4.146	-2.645	Ö	%100
93	M91A	X	-2.645	1.527	0	%100
94	M91A	Z	1.527	-7.18	0	%100
95	MP3B	Z	-7.18	4.146	0	%100
96	мР3В		4.146		0	%100
97	MP4B	X	-7.18	-7.18	0	%100
98	MP4B	Z	4.146	4.146		%100
99	MP2B	X	-8.692	-8.692	0	%100
100	MP2B	Z	5.018	5.018	0	%100
101	MP1B	X	-7.18	-7.18	0	%100
102	MP1B	Z	4.146	4.146	U	/0100



Company Designer Job Number

Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start Magnitude[lb/ft	End Magnitude[lb/ft,F	Start Location[ft %]	End Location[ft,%]
103	M101	X	-5.872	-5.872	0	%100
104	M101	Z	3.39	3.39	0	%100
105	M102	X	-2.173	-2.173	0	%100
106	M102	Z	1,255	1.255	0	%100
107	M107	X	-8.692	-8.692	0	%100 %100
108	M107	Z	5.018	5.018	Ŏ	%100
109	M112	X	-2.173	-2.173	0	%100
110	M112	Z	1.255	1.255	n	%100
111	M123	X	-9.566	-9,566	0	%100 %100
112	M123	Z	5.523	5.523	ň	%100
113	M124	X	-2.392	-2.392	ñ	%100
114	M124	Z	1.381	1.381	0	%100
115	M125	X	-2.392	-2.392	0	%100 %100
116	M125	Z	1.381	1.381	0	%100

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

4 1	Member Label	Direction	Start Magnitude[lb/ft,	End Magnitude[lb/ft,F	. Start Location[ft,%]	End Location[ft,%]
1	<u>M1</u>	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M4	X	-12.41	-12.41	0	%100
4	M4	Z	0	0	0	%100
5	M10	X	0	0	0	%100
6	M10	Z	0	0	0	%100
7	MP3A	X	-8.291	-8.291	0	%100
8	MP3A	Z	0	0	0	%100
9	MP4A	X	-8.291	-8.291	0	%100
10	MP4A	Z	0	0	0	%100
11	MP2A	X	-10.036	-10.036	0	%100
12	MP2A	Z	0	0	0	%100
13	MP1A	X	-8.291	-8.291	0	%100
14	MP1A	Z	0	0	Ö	%100
15	M43	X	0	0	0	%100
16	M43	Z	0	Ŏ	ŏ	%100
17	M46	X	0	0	Ö	%100 %100
18	M46	Z	0	Ö	Ö	%100
19	M51B	X	-8.723	-8.723	0	%100
20	M51B	Z	0	0	Ö	%100 %100
21	M52B	X	-8.723	-8.723	0	%100 %100
22	M52B	Z	0.720	0.725	Ö	%100 %100
23	M76	X	-20.946	-20.946	0	%100 %100
24	M76	Z	0	0	Ö	%100 %100
25	M77	X	-16	-16	0	%100 %100
26	M77	Z	0	0	0	%100 %100
27	M80	X	-16.853	-16.853	0	%100 %100
28	M80	Z	0.000	0	0	%100 %100
29	M84	X	-20.946	-20.946	0	%100
30	M84	Z	0	-20.940	0	
31	M85	X	-16	-16	0	%100
32	M85	Z	0	0	0	%100
33	M91	X	-16.853	-16.853		%100
34	M91	Z	0	-10.655	0	%100
35	M34	X	-3.103	-3.103	0	%100
36	M34	Z	-3.103	-3.103		%100
37	M35	X	-7.876		0	%100
38	M35	Z	-7.076	-7.876	0	%100
39	M36	X	-7.876	7 076	0	%100
00	IVIOU		-1.010	-7.876	0	%100



: Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction		End Magnitude[lb/ft,F	Start Location[ft,%]	End Location[ft,% %100
10	M36	Z	0	0	0	%100
11	M37	Χ	-15.709	-15.709	0	%100 %100
2	M37	Z	0	0	0	%100
13	M40	X	-8.723	-8.723	0	
4	M40	Z	0	0	0	%100
15	M41	X	0	0	0	%100
16	M41	Z	0	0	0	%100
7	M45	X	-5.236	-5.236	0	%100
	M45	Ž	0	0	0	%100
8		X	-16	-16	0	%100
19	M46A	Z	0	0	0	%100
0	M46A	X	-16.853	-16.853	0	%100
1	M48	Z	0	0	0	%100
52	M48	X	-5.236	-5.236	0	%100
3	M50A	Z	0	0	0	%100
54	M50A		0	0	Ö	%100
55	M51C	X	0	0	0	%100
6	M51C	Z		0	0	%100
57	M53	X	0	0	Ŏ	%100
8	M53	Z		-3.103	i · ŏ	%100
9	M58A	X	-3.103	-3.103	Ö	%100
60	M58A	Z	0 7 076	-7.876	Ö	%100
51	M59A	X	-7.876	-7.676	Ö	%100
32	M59A	Z	0		0	%100
3	M60	X	-7.876	-7.876	0	%100
64	M60	Z	0	0	0	%100
55	M61	X	-15.709	-15.709		%100
6	M61	Z	0	0	0	%100
57	M64	X	0		0	%100
88	M64	Z	0	0	0	%100
69	M65	X	-8.723	-8.723	0	
70	M65	Z	0	0	0	%100
71	M69	X	-5.236	-5.236	0	%100
72	M69	Z	0	0	0	%100
73	M70	X	0	0	0	%100
74	M70	Z	0	0	0	%100
	M72	X	0	0	0	%100
75		Z	0	0	0	%100
76	M72	X	-5.236	-5.236	0	%100
77	M74	Z	0.200	0	0	%100
78	M74	X	-16	-16	0	%100
79	M75	Ž	0	0	0	%100
30	M75		-16.853	-16.853	0	%100
81	M77A	X	-10.655	0	0	%100
32	M77A	Z	-9.164	-9.164	0	%100
33	M82	X		0	0	%100
34	M82	Z	0 201	-8.291	Ō	%100
85	MP3C	X	-8.291	-0.291	0	%100
36	MP3C	Z	0 004	-8.291	0	%100
37	MP4C	X	-8.291		0	%100
88	MP4C	Z	0	10.036	0	%100
89	MP2C	X	-10.036	-10.036	0	%100
90	MP2C	Z	0	0		%100
91	MP1C	X	-8.291	-8.291	0	%100
92	MP1C	Z	0	0	0	
93	M91A	X	-9.164	-9.164	0	%100
94	M91A	Z	0	0	0	%100
95	MP3B	X	-8.291	-8.291	0	%100
96	MP3B	7	0	0	0	%100
90	IVII JD			5000245391-VZW_I		Page 118



: Colliers Engineering & Design CL : Project No. 10206276 : 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start Magnitude[lb/ft,	End Magnitude[lb/ft,F	Start Location[ft.%]	End Location[ft,%]
97	MP4B	X	-8.291	-8.291	0	%100
98	MP4B	Z	0	0	0	%100
99	MP2B	X	-10.036	-10.036	0	%100
100	MP2B	Z	0	0	0	%100
101	MP1B	X	-8.291	-8.291	0	%100
102	MP1B	Z	0	0	Ö	%100
103	M101	X	-6.78	-6.78	0	%100
104	M101	Z	0	0	Ö	%100
105	M102	X	0	0	0	%100 %100
106	M102	Z	0	Ö	Ö	%100
107	M107	X	-7.527	-7.527	Ö	%100 %100
108	M107	Z	0	0	ŏ	%100
109	M112	X	-7.527	-7.527	Ö	%100
110	M112	Z	0	0	0	%100
111	M123	X	-8.284	-8.284	0	%100 %100
112	M123	Z	0	0	0	%100 %100
113	M124	X	-8.284	-8.284	0	%100 %100
114	M124	Z	0	0	Ö	%100 %100
115	M125	X	0	0	0	%100 %100
116	M125	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft	End Magnitude[lb/ft.F	Start Location[ft.%]	End Location[ft,%]
_1	M1	X	-2.645	-2.645	0	%100
2	M1	Z	-1.527	-1.527	0	%100
3	M4	X	-8.061	-8.061	0	%100
4	M4	Z	-4.654	-4.654	0	%100
5	M10	X	-2.274	-2.274	0	%100
6	M10	Z	-1.313	-1.313	0	%100
7	MP3A	X	-7.18	-7.18	0	%100
8	MP3A	Z	-4.146	-4.146	0	%100
9	MP4A	X	-7.18	-7.18	0	%100
10	MP4A	Z	-4.146	-4.146	0	%100
11	MP2A	X	-8.692	-8.692	0	%100
12	MP2A	Z	-5.018	-5.018	0	%100
13	MP1A	X	-7.18	-7.18	0	%100
14	MP1A	Z	-4.146	-4.146	0	%100
15	M43	X	-2.274	-2.274	0	%100
16	M43	Z	-1.313	-1.313	Ö	%100
17	M46	X	-4.535	-4.535	0	%100
18	M46	Z	-2.618	-2.618	Ŏ	%100
19	M51B	X	-2.518	-2.518	0	%100
20	M51B	Z	-1.454	-1.454	Ö	%100
21	M52B	X	-10.073	-10.073	Ŏ	%100
22	M52B	Z	-5.815	-5.815	ŏ	%100
23	M76	X	-13.605	-13.605	Ö	%100 %100
24	M76	Z	-7.855	-7.855	Ö	%100
25	M77	X	-4.619	-4.619	0	%100 %100
26	M77	Z	-2.667	-2.667	Ö	%100
27	M80	X	-4.865	-4.865	0	%100 %100
28	M80	Z	-2.809	-2.809	Ö	%100
29	M84	X	-13.605	-13.605	0	%100 %100
30	M84	7	-7.855	-7.855	0	
31	M85	Z	-18.475	-18.475	0	%100 %100
32	M85	Z	-10.667	-10.667	0	%100 %100
33	M91	X	-19.46	-19.46	0	%100
	1,1101		-13.40	-13.40	U	%100



RISA-3D Version 17.0.4

Company Designer Job Number Model Name

Colliers Engineering & Design

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start Magnitude[lb/ft	.End Magnitude[lb/ft,F.	Start Location[ft,%]	End Location[ft,% %100
34	M91	Z	-11.235	-11.235	0	%100 %100
35	M34	X	-8.061	-8.061	0	%100
36	M34	Z	-4.654	-4.654	0	%100 %100
37	M35	X	-2.274	-2.274	0	%100 %100
38	M35	Z	-1.313	-1.313	0	%100
39	M36	X	-2.274	-2.274	0	%100
40	M36	Z	-1.313	-1.313	0	%100
41	M37	X	-4.535	-4.535	0	%100 %100
42	M37	Z	-2.618	-2.618	0	%100 %100
43	M40	X	-10.073	-10.073	0	%100
14	M40	Z	-5.815	-5.815	0	%100
45	M41	X	-2.518	-2.518	0	%100
46	M41	Z	-1.454	-1.454	0	%100 %100
47	M45	X	-13.605	-13.605	0	%100 %100
48	M45	Z	-7.855	-7.855	0	%100 %100
49	M46A	X	-18.475	-18.475	0	%100
50	M46A	Z	-10.667	-10.667	0	%100
51	M48	X	-19.46	-19.46	0	%100
52	M48	Z	-11.235	-11.235	0	%100 %100
53	M50A	X	-13.605	-13.605	0	%100 %100
54	M50A	Z	-7.855	-7.855	0	%100 %100
55	M51C	X	-4.619	-4.619	0	
56	M51C	Z	-2.667	-2.667	0	%100
57	M53	X	-4.865	-4.865	0	%100 %100
58	M53	Z	-2.809	-2.809	0	
59	M58A	X	0	0	0	%100
50	M58A	Z	0	0	0	%100
51	M59A	X	-9.094	-9.094	00	%100
62	M59A	Z	-5.251	-5.251	0	%100
63	M60	X	-9.094	-9.094	0	%100
64	M60	Z	-5.251	-5.251	0	%100
65	M61	X	-18.14	-18.14	0	%100
66	M61	Z	-10.473	-10.473	0	%100
67	M64	X	-2.518	-2.518	0	%100
68	M64	Z	-1.454	-1.454	0	%100
69	M65	X	-2.518	-2.518	0	%100
70	M65	Z	-1.454	-1.454	0	%100
71	M69	X	0	0	0	%100
72	M69	Z	0	0	0	%100
73	M70	X	-4.619	-4.619	0	%100
74	M70	Z	-2.667	-2.667	0	%100
75	M72	X	-4.865	-4.865	0	%100
76	M72	Z	-2.809	-2.809	0	%100
77	M74	X	0	0	0	%100
78	M74	Z	0	0	0	%100
78 79	M75	X	-4.619	-4.619	0	%100
	M75	Z	-2.667	-2.667	0	%100
80 81	M77A	X	-4.865	-4.865	0	%100
	M77A	Z	-2.809	-2.809	0	%100
82	M82	X	-2.645	-2.645	0	%100
83	M82	Z	-1.527	-1.527	0	%100
84		X	-7.18	-7.18	0	%100
85	MP3C	Ž	-4.146	-4.146	0	%100
86	MP3C	X	-7.18	-7.18	0	%100
87	MP4C	Ž	-4.146	-4.146	0	%100
88	MP4C MP2C	X	-8.692	-8.692	0	%100
89					0	%100



Colliers Engineering & Design CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start Magnitude(lb/ft	End Magnitude[lb/ft,F	Start Location[ft %]	End Location[ft,%]
91	MP1C	X	-7.18	-7.18	0	%100
92	MP1C	Z	-4.146	-4.146	0	%100
93	M91A	X	-10.581	-10.581	0	%100
94	M91A	Z	-6.109	-6.109	0	%100
95	MP3B	X	-7.18	-7.18	0	%100
96	MP3B	Z	-4.146	-4.146	Ö	%100
97	MP4B	X	-7.18	-7.18	0	%100
98	MP4B	Z	-4.146	-4.146	0	%100 %100
99	MP2B	X	-8.692	-8.692	0	%100 %100
100	MP2B	Z	-5.018	-5.018	Ö	%100
101	MP1B	X	-7.18	-7.18	0	%100
102	MP1B	7	-4.146	-4.146	0	%100
103	M101	X	-5.872	-5.872	0	%100 %100
104	M101	Z	-3.39	-3.39	0	%100 %100
105	M102	X	-2.173	-2.173	0	%100 %100
106	M102	Z	-1.255	-1.255	Ö	%100 %100
107	M107	X	-2.173	-2.173	0	%100 %100
108	M107	Z	-1.255	-1.255	0	%100
109	M112	X	-8.692	-8.692	0	%100 %100
110	M112	Z	-5.018	-5.018	0	
111	M123	X	-2.392	-2.392	0	<u>%100</u> %100
112	M123	Z	-1.381	-1.381	0	
113	M124	X	-9.566	-9.566	0	%100 %100
114	M124	Z	-5.523	-5.523	0	%100
115	M125	X	-2.392	-2.392	0	%100 %100
116	M125	Z	-1.381	-1.381	0	%100 %100

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

	Member Label	Direction	Start Magnitude[]b/ft.	End Magnitude[lb/ft,F	Start Location[ft %]	End Location(ft,%)
1	M1	X	-4.582	-4.582	0	%100
2	M1	Z	-7.936	-7.936	0	%100
3	M4	X	-1.551	-1.551	0	%100
4	M4	Z	-2.687	-2.687	0	%100
5	M10	X	-3.938	-3.938	0	%100
6	M10	Z	-6.821	-6.821	0	%100
7	MP3A	X	-4.146	-4.146	0	%100
8	MP3A	Z	-7.18	-7.18	Ŏ	%100
9	MP4A	X	-4.146	-4.146	0	%100
10	MP4A	Z	-7.18	-7.18	0	%100
11	MP2A	X	-5.018	-5.018	0	%100
12	MP2A	Z	-8.692	-8.692	0	%100
13	MP1A	X	-4.146	-4.146	0	%100
14	MP1A	Z	-7.18	-7.18	0	%100
15	M43	X	-3.938	-3.938	0	%100 %100
16	M43	Z	-6.821	-6.821	0	%100 %100
17	M46	X	-7.855	-7.855	0	%100 %100
18	M46	Z	-13.605	-13.605	0	%100
19	M51B	X	0	0	0	%100
20	M51B	Z	0	0	0	%100 %100
21	M52B	X	-4.362	-4.362	0	%100 %100
22	M52B	Z	-7.554	-7.554	0	%100
23	M76	X	-2.618	-2.618	0	%100 %100
24	M76	Z	-4.535	-4.535	0	
25	M77	X	4.555	-4.555	0	%100 %100
26	M77	Z	0	0		%100 %100
27	M80	X	0	0	0	%100 %100



Colliers Engineering & Design CL
Project No. 10206276 Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction		.End Magnitude[lb/ft,F.	Start Location[ft,%]	End Location[ft.%
28	M80	Z	0	0	0	%100 %100
29	M84	X	-2.618	-2.618	0	
30	M84	Z	-4.535	-4.535	0	%100
1	M85	X	-8	-8	0	%100
	M85	Z	-13.857	-13.857	0	%100
2	M91	X	-8.426	-8.426	0	%100
3		Z	-14.595	-14.595	0	%100
4	M91	X	-6.205	-6.205	0	%100
35	M34	Z	-10.748	-10.748	0	%100
6	M34	X	0	0	0	%100
7	M35		0	0	0	%100
88	M35	Z	0	Ö	0	%100
39	M36	X		0	0	%100
10	M36	Z	0	0	0	%100
11	M37	X	0	0	Ŏ	%100
2	M37	Z	0	-4.362	Ö	%100
3	M40	X	-4.362		0	%100
4	M40	Z	-7.554	-7.554	0	%100 %100
5	M41	X	-4.362	-4.362		%100
6	M41	Z	-7.554	-7.554	0	%100
7	M45	X	-10.473	-10,473	0	%100 %100
8	M45	Z	-18.14	-18.14	0	
9	M46A	X	-8	-8	0	%100
50	M46A	Z	-13.857	-13.857	0	%100
	M48	X	-8.426	-8.426	0	%100
1	M48	Z	-14.595	-14.595	0	%100
2	M50A	X	-10.473	-10.473	0	%100
3		Z	-18.14	-18.14	0	%100
4	M50A	X	-8	-8	0	%100
5	M51C	Z	-13.857	-13.857	0	%100
6	M51C	X	-8.426	-8.426	0	%100
57	M53	Z	-14.595	-14.595	0	%100
8	M53		-1.551	-1.551	0	%100
59	M58A	X	-2.687	-2.687	0	%100
30	M58A	Z		-3.938	0	%100
31	M59A	X	-3.938	-6.821	0	%100
52	M59A	Z	-6.821	-3.938	0	%100
33	M60	X	-3.938		0	%100
64	M60	Z	-6.821	-6.821	0	%100
35	M61	X	-7.855	-7.855	0	%100
66	M61	Z	-13.605	-13.605		%100 %100
37	M64	X	-4.362	-4.362	0	%100
68	M64	Z	-7.554	-7.554	0	
39	M65	X	0	0	0	%100
70	M65	Z	0	0	0	%100
	M69	X	-2.618	-2.618	0	%100
71	M69	Z	-4.535	-4.535	0	%100
72	M70	X	-8	-8	0	%100
73		Z	-13.857	-13.857	0	%100
74	M70	X	-8.426	-8.426	0	%100
75	M72		-14.595	-14.595	0	%100
76	M72	Z	-2.618	-2.618	0	%100
77	M74	X	-4.535	-4.535	0	%100
78	M74	Z		0	Ö	%100
79	M75	X	0	0	Ŏ	%100
30	M75	Z	0	The second secon	0	%100
81	M77A	X	0	0	0	%100
82	M77A	Z	0	0	0	%100
83	M82	X	0	0	0	%100
84	M82	7	0	0	U	/0100



Colliers Engineering & Design

CL

Project No. 10206276 5000245391-VZW_MT_LO_H July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start Magnitude[lb/ft,	End Magnitude[lb/ft,F	. Start Location[ft.%]	End Location[ft,%]
85	MP3C	X	-4.146	-4.146	0	%100
86	MP3C	Z	-7.18	-7.18	0	%100
87	MP4C	X	-4.146	-4.146	0	%100
88	MP4C	Z	-7.18	-7.18	0	%100
89	MP2C	X	-5.018	-5.018	0	%100
90	MP2C	Z	-8.692	-8.692	0	%100
91	MP1C	X	-4.146	-4.146	Ō	%100
92	MP1C	Z	-7.18	-7.18	Ö	%100
93	M91A	X	-4.582	-4.582	0	%100
94	M91A	Z	-7.936	-7.936	ŏ	%100 %100
95	MP3B	X	-4.146	-4.146	Ö	%100 %100
96	MP3B	Z	-7.18	-7.18	ő	%100
97	MP4B	X	-4.146	-4,146	0	%100
98	MP4B	Z	-7.18	-7.18	0	%100 %100
99	MP2B	X	-5.018	-5.018	0	%100 %100
100	MP2B	Z	-8.692	-8.692	ő	%100
101	MP1B	X	-4.146	-4.146	0	%100 %100
102	MP1B	Z	-7.18	-7.18	ŏ	%100 %100
103	M101	X	-3.39	-3.39	0	%100 %100
104	M101	Z	-5.872	-5.872	Ö	%100 %100
105	M102	X	-3.764	-3.764	0	%100 %100
106	M102	Z	-6.519	-6.519	0	%100 %100
107	M107	X	0.0.0	0.010	0	%100 %100
108	M107	Z	0	0	0	%100 %100
109	M112	X	-3.764	-3.764	0	%100 %100
110	M112	Z	-6.519	-6.519	0	%100
111	M123	X	0.575	0	0	%100
112	M123	Z	, o	0	0	%100 %100
113	M124	X	-4.142	-4.142	0	%100 %100
114	M124	Z	-7.175	-7.175	0	%100 %100
115	M125	X	-4.142	-4.142	0	%100 %100
116	M125	Z	-7.175	-7.175	0	%100 %100

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

	Member Label	Direction	Start Magnitude[lb/ft.	End Magnitude[lb/ft,F.,	Start Location[ft %]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-3.545	-3.545	0	%100
3	M4	X	0	0	Ō	%100
4	M4	Z	0	0	0	%100
5	M10	X	0	0	0	%100
6	M10	Z	-2.908	-2,908	Ŏ	%100
7	MP3A	X	0	0	0	%100
8	MP3A	Z	-2.863	-2.863	0	%100
9	MP4A	X	0	0	0	%100
10	MP4A	Z	-2.863	-2.863	0	%100
11	MP2A	X	0	0	0	%100
12	MP2A	Z	-3.166	-3.166	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	-2.863	-2.863	0	%100
15	M43	X	0	0	0	%100
16	M43	Z	-2.908	-2.908	0	%100
17	M46	X	0	0	0	%100
18	M46	Z	-4.54	-4.54	Ö	%100
19	M51B	X	0	0	0	%100 %100
20	M51B	Z	836	836	Ö	%100 %100
21	M52B	X	0	0	ŏ	%100



RISA-3D Version 17.0.4

Company Designer Job Number Model Name

Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label		Start Magnitude[lb/ft	End Magnitude(lb/ft,F	Start Location[ft,%]	End Location[ft,%
22	M52B	Z	836	836	0	%100
23	M76	X	0	0		%100
4	M76	Z	0	0	0	%100
5	M77	X	0	0	0	%100
26	M77	Z	-1.134	-1.134	0	
27	M80	X	0	0	0	%100
28	M80	Z	-1.183	-1.183	0	%100
29	M84	X	0	0	0	%100
30	M84	Z	0	0	0	%100
1	M85	X	0	0	0	%100
32	M85	Z	-1.134	-1.134	0	%100
33	M91	X	0	0	0	%100
34	M91	Z	-1.183	-1.183	0	%100
35	M34	X	0	0	0	%100
	M34	Z	-2.684	-2.684	0	%100
36 37	M35	X	0	0	0	%100
	M35	Z	727	727	0	%100
38	M36	X	0	0	0	%100
39	M36	Z	727	727	0	%100
10		X	0	0	0	%100
11	M37	Z	-1.135	-1.135	0	%100
12	M37	X	0	0	0	%100
13	M40	Ž	836	836	0	%100
14	M40	X	0	0	0	%100
15	M41	Z	-3.344	-3.344	0	%100
16	M41		0	0	0	%100
17	M45	X	-3.35	-3.35	0	%100
18	M45	Z	-3.33	0	0	%100
49	M46A	X	-1.134	-1.134	0	%100
50	M46A	Z	0	0	0	%100
51	M48	X	-1.183	-1.183	0	%100
52	M48	Z	-1.163	0	0	%100
53	M50A	<u>X</u>		-3.35	ŏ	%100
54	M50A	Z	-3.35	0	Ö	%100
55	M51C	X	0	-4.534	Ö	%100
56	M51C	Z	-4.534	-4.554	0	%100
57	M53	X	0		0	%100
58	M53	Z	-4.732	-4.732	0	%100
59	M58A	X	0	0	0	%100
60	M58A	Z	-2.684	-2.684	0	%100
61	M59A	X	0	0	0	%100
62	M59A	Z	727	727	0	%100
63	M60	X	0	0		%100
64	M60	Z	727	727	0	%100
35	M61	X	0	0	0	%100 %100
66	M61	Z	-1.135	-1,135	0	
37	M64	X	0	0	0	%100
68	M64	Z	-3.344	-3.344	0	%100
39	M65	X	0	0	0	%100
70	M65	Z	836	836	0	%100
71	M69	X	0	0	0	%100
72	M69	Z	-3.35	-3.35	0	%100
73	M70	X	0	0	0	%100
	M70	Z	-4.534	-4.534	0	%100
74	M72	X	0	0	0	%100
75		Z	-4.732	-4.732	0	%100
76	M72 M74	X	0	0	0	%100
77					0	%100



Colliers Engineering & Design

CL

: Project No. 10206276 : 5000245391-VZW_MT_LO_H July 5, 2023 5:39 PM Checked By: DX

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

1	Member Label	Direction	Start Magnitude[lb/ft,	End Magnitude[lb/ft,F.,	Start Location[ft,%]	End Location[ft,%]
79	<u>M75</u>	X	0	0	0	%100
80	M75	Z	-1.134	-1.134	0	%100
81	M77A	X	0	0	0	%100
82	M77A	Z	-1.183	-1.183	0	%100
83	M82	X	0	0	0	%100
84	M82	Z	886	886	0	%100
85	MP3C	X	0	0	0	%100
86	MP3C	Z	-2.863	-2.863	0	%100
87	MP4C	X	0	0	0	%100
88	MP4C	Z	-2.863	-2.863	0	%100
89	MP2C	X	0	0	0	%100
90	MP2C	Z	-3.166	-3.166	0	%100
91	MP1C	X	0	0	0	%100
92	MP1C	Z	-2.863	-2.863	0	%100
93	M91A	X	0	0	0	%100
94	M91A	Z	886	886	Ŏ	%100
95	MP3B	X	0	0	0	%100
96	MP3B	Z	-2.863	-2.863	Ö	%100
97	MP4B	X	0	0	0	%100
98	MP4B	Z	-2.863	-2.863	0	%100
99	MP2B	X	0	0	Ö	%100 %100
100	MP2B	Z	-3.166	-3.166	Ö	%100
101	MP1B	X	0	0	0	%100 %100
102	MP1B	Z	-2.863	-2.863	Ö	%100
103	M101	X	0	0	Ö	%100
104	M101	Z	-2.346	-2.346	0	%100
105	M102	X	0	0	0	%100
106	M102	Z	-3.166	-3.166	0	%100
107	M107	X	0	0	0	%100
108	M107	Z	792	792	0	%100
109	M112	X	0	0	0	%100
110	M112	Z	792	792	0	%100 %100
111	M123	X	0	0	0	%100 %100
112	M123	Z	704	704	0	%100 %100
113	M124	X	0	0	0	%100
114	M124	Z	704	704	0	%100
115	M125	X	0	704	0	%100
116	M125	Z	-2.816	-2.816	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,	End Magnitude[lb/ft,F	. Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.329	1.329	0	%100
2	M1	Z	-2.303	-2.303	0	%100
3	M4	X	.447	.447	0	%100
4	M4	Z	775	775	Ö	%100
5	M10	X	1.09	1.09	0	%100
6	M10	Z	-1.889	-1.889	Ō	%100
7	MP3A	X	1.432	1.432	0	%100
8	MP3A	Z	-2.48	-2.48	0	%100
9	MP4A	X	1.432	1.432	0	%100
10	MP4A	Z	-2.48	-2.48	Ŏ	%100
11	MP2A	X	1.583	1.583	0	%100
12	MP2A	Z	-2.742	-2.742	Ŏ	%100
13	MP1A	X	1.432	1.432	0	%100
14	MP1A	Z	-2.48	-2.48	Ŏ	%100
15	M43	X	1.09	1.09	0	%100 %100



: Colliers Engineering & Design

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start Magnitude[lb/ft,	End Magnitudellb/ft,F	Start Location[ft,%]	End Location[ft,% %100
6	M43	Z	-1.889	-1.889	0	%100
7	M46	X	1.702	1.702		%100
8	M46	Z	-2.949	-2.949	0	%100
9	M51B	X	1.254	1.254	0	%100
0	M51B	Z	-2.172	-2.172	0	%100 %100
1	M52B	X	0	0	0	%100
2	M52B	Z	0	0	0	%100
3	M76	X	.558	.558	0	%100
4	M76	Z	967	967	0	%100
5	M77	X	1.7	1.7	0	%100
	M77	Z	-2.945	-2.945	0	%100
6 7	M80	X	1.774	1.774	0	%100
	M80	Z	-3.073	-3.073	0	%100
8	M84	X	.558	.558	0	%100
9	M84	Z	967	967	0	%100
0		X	0	0	0	%100
1	M85	Z	0	0	0	%100
2	M85	X	0	0	0	%100
3	M91	Z	0	0	0	%100
4	M91		.447	.447	0	%100
5	M34	Z	775	775	0	%100
6	M34		1.09	1.09	0	%100
7	M35	X	-1.889	-1.889	0	%100
8	M35	Z	1.09	1.09	0	%100
9	M36	X	-1.889	-1.889	0	%100
0	M36	Z		1.702	0	%100
1	M37	X	1.702	-2.949	Ö	%100
2	M37	Z	-2.949	0	0	%100
3	M40	X	0	0	ŏ	%100
4	M40	Z	0	1.254	Ö	%100
5	M41	X	1.254	-2.172	Ö	%100
6	M41	Z	-2.172		0	%100
7	M45	X	.558	.558	0	%100
8	M45	Z	967	967	0	%100
19	M46A	X	0	0	0	%100
50	M46A	Z	0	0	0	%100
51	M48	X	0	0		%100
52	M48	Z	0	0	0	%100
53	M50A	X	.558	.558	0	%100
54	M50A	Z	967	967	0	%100 %100
55	M51C	X	1.7	1.7	0	
56	M51C	Z	-2.945	-2.945	0	%100
	M53	X	1.774	1.774	0	%100
57	M53	Z	-3.073	-3.073	0	%100
58	M58A	X	1.789	1.789	0	%100
9		Z	-3.099	-3.099	0	%100
30	M58A	X	0	0	0	%100
31	M59A	Z	0	0	0	%100
62	M59A	X	0	0	0	%100
33	M60	Z	Ŏ	Ö	0	%100
64	M60		0	0	0	%100
65	M61	X	0	0	0	%100
66	M61	Z	1.254	1.254	0	%100
67	M64	X	-2.172	-2.172	0	%100
68	M64	Z		1.254	0	%100
69	M65	X	1.254	-2.172	Ö	%100
70	M65	Z	-2.172	2.233	0	%100
71	M69	X	2.233		0	%100
72	M69	Z	-3.869	-3.869		70100



Colliers Engineering & Design CL Project No. 10206276

5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Discotion	O			Blue Non No Supplies
73	M70	Direction X	Start Magnitude[lb/ft,	End Magnitude[lb/ft,F.		End Location[ft,%]
74	M70	Ž	1.7	1.7	0	%100
75	M72	X	-2.945	-2.945	0	%100
76	M72		1.774	1.774	0	%100
77	M74	Z	-3.073	-3.073	0	%100
78	M74	X	2.233	2.233	0	%100
79	M75	Z	-3.869	-3.869	0	%100
80	M75	X	1.7	1.7	0	%100
81	M77A	Z	-2.945	-2.945	0	%100
82	M77A	X	1.774	1.774	0	%100
83		Z	-3.073	-3.073	0	%100
84	M82	X	1.329	1.329	0	%100
85	M82	Z	-2.303	-2.303	0	%100
	MP3C	X	1.432	1.432	0	%100
86	MP3C	Z	-2.48	-2.48	0	%100
87	MP4C	X	1.432	1,432	0	%100
88	MP4C	Z	-2.48	-2.48	0	%100
89	MP2C	X	1.583	1.583	0	%100
90	MP2C	Z	-2.742	-2.742	0	%100
91	MP1C	X	1.432	1.432	0	%100
92	MP1C	Z	-2.48	-2.48	0	%100
93	M91A	X	0	0	0	%100
94	M91A	Z	0	0	0	%100
95	MP3B	X	1.432	1.432	0	%100
96	MP3B	Z	-2.48	-2.48	0	%100
97	MP4B	X	1.432	1.432	0	%100
98	MP4B	Z	-2.48	-2.48	0	%100
99	MP2B	X	1.583	1.583	0	%100
100	MP2B	Z	-2.742	-2.742	0	%100
101	MP1B	X	1.432	1.432	Ō	%100
102	MP1B	Z	-2.48	-2.48	0	%100
103	M101	X	1.173	1.173	0	%100
104	M101	Z	-2.031	-2.031	0	%100
105	M102	X	1.187	1.187	0	%100
106	M102	Z	-2.057	-2.057	0	%100 %100
107	M107	X	1.187	1.187	0	%100
108	M107	Z	-2.057	-2.057	0	%100
109	M112	X	0	0	0	%100
110	M112	Z	0	Ö	0	%100
111	M123	X	1.056	1.056	0	%100 %100
112	M123	Z	-1.829	-1.829	0	%100
113	M124	X	0	0	0	
114	M124	Z	0	0	0	%100
115	M125	X	1.056	1.056	0	%100
116	M125	Z	-1.829	-1.829		%100
10	IVITZO		-1.029	-1.829	0	%100

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

	Member Label	Direction	Start Magnitude(lb/ft	End Magnitude[lb/ft,F.,	Start Location[ft %]	End Location[ft,%]
1	M1	X	.768	.768	0.011.20001101111.701	%100
2	M1	Z	443	443	0	%100
3	M4	X	2.324	2.324	0	%100 %100
4	M4	Z	-1.342	-1.342	0	%100 %100
5	M10	X	.63	.63	0	%100 %100
6	M10	Z	363	363	ň	%100 %100
7	MP3A	X	2.48	2.48	0	%100 %100
8	MP3A	Z	-1.432	-1.432	N N	
9	MP4A	X	2,48	2.48	0	<u>%100</u> %100



Colliers Engineering & Design

CL

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start Magnitude[lb/ft	.End Magnitude[lb/ft,F.	Start Location[ft,%]	End Location[ft,%
0	MP4A	Z	-1.432	-1.432	0	%100
1	MP2A	X	2.742	2.742	0	%100
2	MP2A	Z	-1.583	-1.583	0	%100
3	MP1A	X	2.48	2.48	0	%100
4	MP1A	Z	-1.432	-1.432	0	%100
5	M43	X	.63	.63	0	%100
16	M43	Z	363	363	0	%100
7	M46	X	.983	.983	0	%100
8	M46	Z	567	567	0	%100
9	M51B	X	2.896	2.896	0	%100
20	M51B	Z	1.672	-1.672	0	%100
21	M52B	X	.724	.724	0	%100
22	M52B	Z	418	418	0	%100
23	M76	X	2.901	2.901	0	%100
24	M76_	Z	-1.675	-1.675	0	%100
25	M77	X	3.927	3.927	00	%100
26	M77	Z	-2.267	-2.267	0	%100
27	M80	X	4.098	4.098	0	%100
28	M80	Z	-2.366	-2.366	0	%100
29	M84	X	2.901	2.901	0	%100
30	M84	Z	-1.675	-1.675	0	%100
31	M85	X	.982	.982	0	%100
32	M85	Z	567	567	0	%100
33	M91	X	1.024	1.024	0	%100
34	M91	Z	591	591	0	%100
35	M34	X	0	0	0	%100
36	M34	Z	0	0	0	%100
37	M35	X	2.518	2.518	0	%100
38	M35	Z	-1.454	-1.454	0	%100
39	M36	X	2.518	2.518	0	%100
40	M36	Z	-1.454	-1.454	0	%100
11	M37	X	3.932	3.932	0	%100
12	M37	Z	-2.27	-2.27	0	%100
43	M40	X	.724	.724	0	%100
14	M40	Z	418	418	0	%100
45	M41	X	.724	.724	0	%100
46	M41	Z	418	418	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	0	0	0	%100
49	M46A	X	.982	.982	0	%100
50	M46A	Z	567	567	0	%100
51	M48	X	1.024	1.024	0	%100
52	M48	Z	591	591	0	%100
53	M50A	X	0	0	0	%100
54	M50A	Z	0	0	0	%100
55	M51C	X	.982	.982	0	%100
56	M51C	Z	567	567	0	%100
57	M53	X	1.024	1.024	0	%100
58	M53	Z	591	591	0	%100
59	M58A	X	2.324	2.324	0	%100
60	M58A	Ž	-1.342	-1.342	0	%100
61	M59A	X	.63	.63	0	%100
62	M59A	Z	363	363	0	%100
	M60	X	.63	.63	0	%100
63	M60	Z	363	363	0	%100
64 65	M61	X	.983	.983	0	%100
CO	IVIOT	Z	567	567	0	%100



Colliers Engineering & Design

CL

Project No. 10206276 5000245391-VZW_MT_LO_H July 5, 2023 5:39 PM Checked By: DX

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

C7	Member Label	Direction	Start Magnitude[lb/ft,	End Magnitude[lb/ft,F.	Start Location[ft,%]	End Location[ft,%]
67	M64	X	.724	.724	0	%100
68	M64	Z	418	418	0	%100
69	M65	X	2.896	2.896	0	%100
70	M65	Z	-1.672	-1.672	0	%100
71	M69	X	2.901	2.901	0	%100
72	M69	Z	-1.675	-1.675	0	%100
73	M70	X	.982	.982	0	%100
74	M70	Z	567	567	0	%100
75	M72	X	1.024	1.024	0	%100
76	M72	Z	591	591	0	%100
77	M74	X	2.901	2.901	0	%100
78	M74	Z	-1.675	-1.675	0	%100
79	M75	X	3.927	3.927	0	%100
80	M75	Z	-2.267	-2.267	0	%100
81	M77A	X	4.098	4.098	0	%100
82	M77A	Z	-2.366	-2.366	0	%100
83	M82	X	3.07	3.07	0	%100
84	M82	Z	-1.773	-1.773	0	%100
85	MP3C	X	2.48	2.48	0	%100
86	MP3C	Z	-1.432	-1.432	0	%100
87	MP4C	X	2.48	2.48	0	%100
88	MP4C	Z	-1.432	-1.432	0	%100
89	MP2C	X	2.742	2.742	0	%100 %100
90	MP2C	Z	-1.583	-1.583	0	%100
91	MP1C	X	2.48	2.48	0	%100 %100
92	MP1C	Z	-1.432	-1.432	0	%100 %100
93	M91A	X	.768	.768	0	%100 %100
94	M91A	Z	443	443	0	%100 %100
95	MP3B	X	2.48	2.48	0	%100 %100
96	MP3B	Z	-1.432	-1.432	0	%100 %100
97	MP4B	X	2.48	2.48	0	%100 %100
98	MP4B	Z	-1.432	-1.432	0	%100 %100
99	MP2B	X	2.742	2.742	0	
100	MP2B	Z	-1.583	-1.583	0	%100
101	MP1B	X	2.48	2.48	0	%100
102	MP1B	Z	-1.432	-1.432	0	%100
103	M101	X	2.031	2.031		%100
104	M101	Z	-1.173	-1.173	0	%100
105	M102	X	.686		0	%100
106	M102	Z	396	.686	0	%100
107	M107	X	2.742	396	0	%100
108	M107	Ž		2.742	0	%100
109	M112		-1.583	-1.583	0	%100
110	M112	Z	.686	.686	0	%100
111	M123		396	396	0	%100
112	M123	X	2.439	2.439	0	%100
113		Z	-1.408	-1.408	0	%100
	M124	X	.61	.61	0	%100
114	M124	Z	352	352	0	%100
115	M125	X	.61	.61	0	%100
116	M125	Z	352	352	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,	End Magnitude[lb/ft,F	. Start Location[ft.%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M4	X	3.578	3.578	0	%100



RISA-3D Version 17.0.4

Company Designer Job Number Model Name Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction			Start Location[ft,%]	End Location[ft.%
4	M4	Z	0	0	0	%100
5	M10	X	0	0		%100
6	M10	Z	0	0	0	%100
7	MP3A	X	2.863	2.863	0	%100
В	MP3A	Z	0	0	0	%100 %100
9	MP4A	X	2.863	2.863	0	
0	MP4A	Z	0	0	0	%100
1	MP2A	X	3.166	3.166	0	%100
2	MP2A	Z	0	0	0	%100
	MP1A	X	2.863	2.863	0	%100
13		Z	0	0	0	%100
4	MP1A	X	Ö	0	0	%100
5	M43	Z	0	0	0	%100
6	M43	X	Ö	0	0	%100
7	M46	Z	Ö	0	0	%100
8	M46	X	2.508	2.508	0	%100
19	M51B		0	0	0	%100
20	M51B	Z	2.508	2.508	0	%100
21	M52B	X	2.508	0	0	%100
22	M52B	Z		4.467	0	%100
23	M76	X	4.467	0	Ö	%100
24	M76	Z	0		0	%100
25	M77	X	3.401	3.401	0	%100
26	M77	Z	0	0	0	%100
27	M80	X	3.549	3.549		%100
28	M80	Z	0	0	0	%100
29	M84	X	4.467	4.467	0	
30	M84	Z	0	0	0	%100
31	M85	X	3.401	3.401	0	%100
32	M85	Z	0	0	0	%100
33	M91	X	3.549	3.549	0	%100
	M91	Z	0	0	0	%100
34	M34	X	.895	.895	0	%100
35	M34	Z	0	0	0	%100
36		X	2.181	2.181	0	%100
37	M35	Z	0	0	0	%100
38	M35	X	2.181	2.181	0	%100
39	M36	Z	0	0	0	%100
40	M36		3.405	3.405	0	%100
41	M37	Z	0	0	0	%100
42	M37		2.508	2.508	0	%100
43	M40	X		0	Ö	%100
44	M40	Z	0	0	Ů 0	%100
45	M41	X	0	0	Ŏ	%100
46	M41	Z	0	1.117	0	%100
47	M45	X	1.117		0	%100
48	M45	Z	0	0		%100
49	M46A	X	3.401	3,401	0	%100
50	M46A	Z	0	0	0	%100
51	M48	X	3.549	3.549	0	
52	M48	Z	0	0	0	%100
53	M50A	X	1.117	1.117	0	%100
54	M50A	Z	0	0	0	%100
	M51C	X	0	0	0	%100
55	M51C	Z	0	0	0	%100
56		X	0	0	0	%100
57	M53	Z	Ŏ	0	0	%100
58 59	M53	X	.895	.895	0	%100
EO I	M58A	Z	0	0	0	%100



Colliers Engineering & Design CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

C4	Member Label	Direction	Start Magnitude[lb/ft,	End Magnitude[lb/ft,F	. Start Location[ft,%]	End Location[ft,%]
61	M59A	X	2.181	2.181	0	%100
62	M59A	Z	0	0	0	%100
63	M60	X	2.181	2.181	0	%100
64	M60	Z	0	0	0	%100
65	M61	X	3.405	3.405	0	%100
66	M61	Z	0	0	0	%100
67	M64	X	0	0	0	%100
68	M64	Z	0	0	0	%100
69	M65	X	2.508	2.508	0	%100
70	M65	Z	0	0	0	%100
71	M69	X	1.117	1,117	0	%100
72	M69	Z	0	0	0	%100
73	M70	X	0	0	0	%100
74	M70	Z	0	0	Ö	%100
75	M72	X	0	0	0	%100
76	M72	Z	0	0	ŏ	%100
77	M74	X	1.117	1.117	ő	%100 %100
78	M74	Z	0	0	0	%100
79	M75	X	3.401	3.401	0	%100 %100
80	M75	Z	0	0	0	%100 %100
81	M77A	X	3.549	3.549	0	%100 %100
82	M77A	Z	0.545	0	0	
83	M82	X	2.659	2.659	0	%100
84	M82	Z	0	0	0	%100
85	MP3C	X	2.863	2.863		%100
86	MP3C	Z	0		0	%100
87	MP4C	X	2.863	0	0	%100
88	MP4C	Z		2.863	0	%100
89	MP2C	X	3.166	0	0	%100
90	MP2C	Z		3.166	0	%100
91	MP1C	X	0	0	0	%100
92	MP1C	Z	2.863	2.863	0	%100
93	M91A		0	0	0	%100
94	M91A	X	2.659	2.659	0	%100
95	MP3B	Z	0	0	0	%100
96	MP3B	X	2.863	2.863	0	%100
97		Z	0	0	0	%100
98	MP4B	X	2.863	2.863	0	%100
99	MP4B	Z	0	0	0	%100
100	MP2B	X	3.166	3.166	0	%100
101	MP2B	Z	0	0	0	%100
	MP1B	X	2.863	2.863	0	%100
102	MP1B	Z	0	0	0	%100
103	M101	X	2.346	2.346	0	%100
104	M101	Z	0	0	0	%100
105	M102	X	0	0	0	%100
106	M102	Z	0	0	0	%100
107	M107	X	2.375	2.375	0	%100
108	M107	Z	0	0	Ō	%100
109	M112	X	2.375	2.375	0	%100
110	M112	Z	0	0	Ŏ	%100
111	M123	X	2.112	2.112	Ö	%100 %100
112	M123	Z	0	0	0	%100
113	M124	X	2.112	2.112	0	%100 %100
114	M124	Z	0	0	0	%100 %100
115	M125	X	0	0	0	%100 %100
116	M125	Z	0	0	0	%100 %100



RISA-3D Version 17.0.4

Company Designer Job Number Model Name

Colliers Engineering & Design

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start Magnitude[lb/ft,	End Magnitude[lb/ft,F.	Start Location[ft.%]	End Location[ft,%] %100
1	M1	X	.768	.768 .443	0	%100
2	M1	Z	.443	2.324	0	%100
3	M4	X	2.324	1.342	0	%100
4	M4	Z	1.342	.63	0	%100
5	M10	X	.63	.363	0	%100
6	M10	Z	.363	2.48	0	%100
7	MP3A	X	2.48	1.432	0	%100
8	MP3A	Z	1.432		0	%100
9	MP4A	X	2,48	2.48 1.432	0	%100
10	MP4A	Z	1.432		0	%100
11	MP2A	X	2.742	2.742	0	%100
12	MP2A	Z	1.583	1.583 2.48	0	%100
13	MP1A	X	2.48		0	%100
14	MP1A	Z	1.432	1.432	0	%100
15	M43	X	.63	.63	0	%100
16	M43	Z	.363	.363	0	%100
17	M46	X	.983	.983	0	%100
18	M46	Z	.567	.567	0	%100
19	M51B	X	.724	.724	0	%100
20	M51B	Z	.418	.418	0	%100
21	M52B	X	2.896	2.896	0	%100
22	M52B	Z	1.672	1.672	0	%100
23	M76	X	2.901	2.901	0	%100
24	M76	Z	1.675	1.675	0	%100
25	M77	X	.982	.982	0	%100
26	M77	Z	.567	.567	0	%100
27	M80	X	1.024	1.024	0	%100
28	M80	Z	.591	.591	0	%100
29	M84	X	2.901	2.901	0	%100
30	M84	Z	1.675	1.675		%100
31	M85	X	3.927	3.927	0	%100
32	M85	Z	2.267	2.267	0	%100
33	M91	X	4.098	4.098	0	%100
34	M91	Z	2.366	2.366		%100
35	M34	X	2.324	2.324	0	%100
36	M34	Z	1.342	1.342		%100
37	M35	X	.63	.63	0	%100
38	M35	Z	.363	.363	0	%100
39	M36	X	.63	.63	0	%100
40	M36	Z	.363	.363	0	%100 %100
41	M37	X	.983	.983	0	%100 %100
42	M37	Z	.567	.567	0	%100 %100
43	M40	X	2.896	2.896	0	%100
44	M40	Z	1.672	1.672	0	%100
45	M41	X	.724	.724	0	%100
46	M41	Z	.418	.418	0	%100
47	M45	X	2.901	2.901	0	%100
48	M45	Z	1.675	1.675	0	%100 %100
49	M46A	X	3.927	3.927	0	%100
50	M46A	Z	2.267	2.267	0	%100 %100
51	M48	X	4.098	4.098	0	
52	M48	Z	2.366	2.366	0	%100
53	M50A	X	2.901	2.901	0	%100
54	M50A	Z	1.675	1.675	0	%100 %100
55	M51C	X	.982	.982	0	%100
56	M51C	Z	.567	.567	0	%100
57	M53	X	1.024	1.024	0	%100



Colliers Engineering & Design CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

Eo I	Member Label	Direction	Start Magnitude[lb/ft,	End Magnitude[lb/ft,F	. Start Location[ft,%]	End Location[ft.%]
58	M53	Z	.591	.591	0	%100
59	M58A	X	0	0	0	%100
60	M58A	Z	0	0	0	%100
61	M59A	X	2.518	2.518	0	%100
62	M59A	Z	1.454	1.454	0	%100
63	M60	X	2.518	2.518	0	%100
64	M60	Z	1.454	1.454	0	%100
65	M61	X	3.932	3.932	0	%100
66	M61	Z	2.27	2.27	0	%100
67	M64	X	.724	.724	0	%100
68	M64	Z	.418	.418	0	%100
69	M65	X	.724	.724	0	%100
70	M65	Z	.418	.418	0	%100
71	M69	X	0	0	0	%100
72	M69	Z	0	0	0	%100
73	M70	X	.982	.982	Ö	%100
74	M70	Z	.567	.567	0	%100
75	M72	X	1.024	1.024	0	%100
76	M72	Z	.591	.591	0	%100
77	M74	X	0	0	Ö	%100
78	M74	Z	0	0	0	%100
79	M75	X	.982	.982	0	%100
80	M75	Z	.567	.567	0	%100
81	M77A	X	1.024	1.024	0	%100
82	M77A	Z	.591	.591	0	%100
83	M82	X	.768	.768	0	%100
84	M82	Z	.443	.443	0	%100
85	MP3C	X	2.48	2.48	0	%100
86	MP3C	Z	1.432	1.432	Ō	%100
87	MP4C	X	2.48	2.48	0	%100
88	MP4C	Z	1.432	1.432	0	%100
89	MP2C	X	2,742	2.742	0	%100
90	MP2C	Z	1.583	1.583	0	%100 %100
91	MP1C	X	2.48	2.48	Ö	%100 %100
92	MP1C	Z	1,432	1.432	0	%100 %100
93	M91A	X	3.07	3.07	0	%100 %100
94	M91A	Z	1.773	1.773	0	%100 %100
95	MP3B	X	2.48	2.48	Ö	%100
96	MP3B	Z	1.432	1.432	Ö	%100 %100
97	MP4B	X	2.48	2.48	0	%100
98	MP4B	Z	1.432	1.432	0	%100
99	MP2B	X	2.742	2.742	0	%100
100	MP2B	Z	1.583	1.583	0	%100 %100
101	MP1B	X	2.48	2.48	Ö	%100
102	MP1B	Z	1.432	1.432	0	%100
103	M101	X	2.031	2.031	Ö	%100 %100
104	M101	Z	1.173	1,173	0	%100 %100
105	M102	X	.686	.686	0	%100 %100
106	M102	Z	.396	.396	0	%100
107	M107	X	.686	.686	0	%100 %100
108	M107	Z	.396	396	0	%100 %100
109	M112	X	2.742	2.742	0	
110	M112	Z	1.583	1.583		%100 %100
111	M123	X	.61	.61	0	%100
112	M123	Z	.352	.352	0	%100
113	M124	X	2.439		0	%100
114	M124	Ž	1.408	2.439 1.408	0	%100 %100



RISA-3D Version 17.0.4

Company Designer Job Number Model Name : Colliers Engineering & Design

: CL : Pro

: Project No. 10206276 : 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

- Michina	Member Label	Direction	Start Magnitude[lb/ft.	End Magnitude[lb/ft,F.	Start Location[ft,%]	End Location[ft,%]
115	M125	X	.61	.61	0	%100
	M125	7	.352	.352	0	%100
116	WIZO		1			

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

	Member Label	Direction	Start Magnitude[lb/ft	.End Magnitude[lb/ft,F	. Start Location[ii, 76]	End Location[ft,%] %100
1	M1	X	1.329	1.329	0	%100
2	M1	Z	2.303	2.303	0	%100
3	M4	X	.447	.447	0	%100
4	M4	Z	.775	.775	0	
5	M10	X	1.09	1.09	0	%100
6	M10	Z	1.889	1.889	0	%100
7	MP3A	X	1.432	1.432	0	%100
8	MP3A	Z	2.48	2.48	0	%100
	MP4A	X	1.432	1.432	0	%100
9		Z	2.48	2.48	0	%100
10	MP4A	X	1.583	1.583	0	%100
11	MP2A	Z	2.742	2.742	0	%100
12	MP2A	X	1.432	1.432	0	%100
13	MP1A	Z	2.48	2.48	0	%100
14	MP1A		1.09	1.09	Ö	%100
15	M43	X	1.889	1.889	Ö	%100
16	M43	Z		1.702	0	%100
17	M46	X	1.702	2.949	Ö	%100
18	M46	Z	2.949	0	Ö	%100
19	M51B	X	0	0	ŏ	%100
20	M51B	Z	0		0	%100
21	M52B	X	1.254	1.254	0	%100
22	M52B	Z	2.172	2.172		%100
23	M76	X	.558	.558	0	%100
24	M76	Z	.967	.967	0	%100
25	M77	X	0	0	0	%100
26	M77	Z	0	0	0	%100
27	M80	X	.0	00	0	
28	M80	Z	0	0	0	%100
29	M84	X	.558	.558	0	%100
30	M84	Z	.967	.967	0	%100
	M85	X	1.7	1.7	0	%100
31	M85	Z	2.945	2.945	0	%100
32		X	1.774	1.774	0	%100
33	M91	Ž	3.073	3.073	0	%100
34	M91	X	1.789	1.789	0	%100
35	M34		3.099	3.099	0	%100
36	M34	Z	0	0	0	%100
37	M35		Ö	Ö	0	%100
38	M35	Z	0	0	0	%100
39	M36	X	0	0	Ö	%100
40	M36	Z		0	0	%100
41	M37	X	0	0	0	%100
42	M37	Z	0		0	%100
43	M40	X	1.254	1.254	0	%100
44	M4.0	Z	2.172	2.172	0	%100
45	M41	X	1.254	1.254		%100
46	M41	Z	2.172	2.172	0	%100
47	M45	X	2.233	2.233	0	
48	M45	Z	3.869	3.869	0	%100
49	M46A	X	1.7	1.7	0	%100
50	M46A	Z	2.945	2.945	0	%100
51	M48	X	1.774	1.774	0	%100



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start Magnitude[lb/ft,	End Magnitude[lb/ft,F	. Start Location[ft,%]	End Location[ft,%]
52	M48	Z	3.073	3.073	0	%100
53	M50A	X	2.233	2.233	0	%100
54	M50A	Z	3.869	3.869	0	%100
55	M51C	X	1.7	1.7	0	%100
56	M51C	Z	2.945	2.945	0	%100
57	M53	X	1.774	1.774	0	%100
58	M53	Z	3.073	3.073	0	%100
59	M58A	X	.447	.447	0	%100
60	M58A	Z	.775	.775	0	%100
61	M59A	X	1.09	1.09	0	%100
62	M59A	Z	1.889	1.889	0	%100
63	M60	X	1.09	1.09	0	%100
64	M60	Z	1.889	1.889	Ö	%100
65	M61	X	1.702	1.702	0	%100
66	M61	Z	2.949	2.949	Ö	%100
67	M64	X	1.254	1.254	Ŏ	%100 %100
68	M64	Z	2.172	2.172	ő	%100 %100
69	M65	X	0	0	Ö	%100 %100
70	M65	Z	0	Ö	0	%100 %100
71	M69	X	.558	.558	0	%100 %100
72	M69	Z	.967	.967	Ö	%100 %100
73	M70	X	1.7	1.7	0	%100 %100
74	M70	Z	2.945	2.945	0	%100 %100
75	M72	X	1.774	1.774	0	%100 %100
76	M72	Z	3.073	3.073	0	%100 %100
77	M74	X	.558	.558	0	%100 %100
78	M74	Z	.967	.967	0	%100
79	M75	X	0	0	0	%100 %100
80	M75	Z	Ŏ	0	0	
81	M77A	X	0	0	0	%100 %400
82	M77A	Z	Ŏ	0	0	%100
83	M82	X	0	0		%100
84	M82	Z	0	0	0	%100
85	MP3C	X	1.432	1.432	0	%100
86	MP3C	Z	2.48	2.48		%100
87	MP4C	X	1.432	1.432	0	%100
88	MP4C	Ž	2.48	2.48	0	%100
89	MP2C	X	1.583		0	%100
90	MP2C	Ž	2.742	1.583	0	<u>%100</u>
91	MP1C	X	1.432	2.742	0	%100
92	MP1C	Z		1.432	0	%100
93	M91A	X	2.48 1.329	2.48	0	%100
94	M91A	Z		1.329	0	%100
95	MP3B	X	2.303 1.432	2.303 1.432	0	%100
96	MP3B	Z			0	%100
97	MP4B	X	2.48	2.48	0	%100
98	MP4B	Z	1.432	1.432	0	%100
99	MP2B	X	2.48	2.48	0	%100
100	MP2B	Z	1.583	1.583	0	%100
101	MP1B		2.742	2.742	0	%100
102	MP1B	X	1.432	1.432	0	%100
103	M101	Z	2.48	2.48	0	%100
103		X	1.173	1.173	0	%100
105	M101	Z	2.031	2.031	0	%100
106	M102	X	1.187	1.187	0	%100
106	M102	Z	2.057	2.057	0	%100
108	M107	X	0	0	0	%100
100	M107	Z	0	0	0	%100



Company Designer Job Number

Colliers Engineering & Design

CL

Model Name

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

VICITIO	Member Label	Direction	Start Magnitude(lb/ft	End Magnitude[lb/ft,F.,	. Start Location[ft,%]	End Location[ft,%]
		Direction	1.187	1.187	0	%100
109	M112			2.057	0	%100
110	M112	Z	2.057	2.037	0	%100
111	M123	X	0	0	0	%100
112	M123	Z	0		0	%100
113	M124	X	1.056	1.056	0	
		7	1.829	1.829	0	%100
114	M124		1.056	1.056	0	%100
115	M125			1.829	0	%100
116	M125	Z	1.829	1.025		- Optionista

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

	Member Label	Direction		End Magnitude[lb/ft,F	. Start Location[it,76]	End Location[ft,% %100
1	M1	X	0	0 515		%100
2	M1	Z	3.545	3.545	0	%100
3	M4	X	0	0		%100
4	M4	Z	0	0	0	%100 %100
5	M10	X	0	0	0	%100 %100
6	M10	Z	2.908	2.908	0	%100
7	MP3A	X	0	0	0	%100
8	мР3А	Z	2.863	2.863	0	%100
9	MP4A	X	0	0	0	%100 %100
10	MP4A	Z	2.863	2.863	0	%100
11	MP2A	X	0	0	0	%100
12	MP2A	Z	3.166	3.166	0	%100 %100
13	MP1A	X	0	0	0	
14	MP1A	Z	2.863	2.863	0	%100 %100
15	M43	X	0	0	0	%100
16	M43	Z	2.908	2.908	0	%100
17	M46	X	0	0	0	%100
18	M46	Z	4.54	4.54	0	%100
19	M51B	X	0	0	0	%100
20	M51B	Z	.836	.836	0	%100
21	M52B	X	0	0	0	%100
22	M52B	Z	.836	.836	0	%100
23	M76	X	0	0	0	%100
24	M76	Z	0	0	0	%100
	M77	X	0	0	0	%100
25	M77	Z	1.134	1.134	0	%100
26	M80	X	0	0	0	%100
27	M80	Ž	1.183	1.183	0	%100
28	M84	X	0	0	0	%100
29	M84	Z	0	0	0	%100
30	M85	X	0	0	0	%100
31		Z	1.134	1.134	0	%100
32	M85	X	0	0	0	%100
33	M91	Ž	1.183	1.183	0	%100
34	M91	X	0	0	0	%100
35	M34	Z	2.684	2.684	0	%100
36	M34	X	0	0	0	%100
37	M35	ż	.727	.727	0	%100
38	M35	X	0	0	0	%100
39	M36	Z	.727	.727	0	%100
40	M36		0	0	0	%100
41	M37	X	1.135	1.135	0	%100
42	M37	Z	0	0	0	%100
43	M40	X	.836	.836	0	%100
44	M40	Z		0	0	%100
45	M41	X	0	U		



Colliers Engineering & Design CL

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

40	Member Label	Direction	Start Magnitude[lb/ft	.End Magnitude[lb/ft,F	. Start Location[ft,%]	End Location[ft,%]
46	M41	Z	3.344	3.344	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	3.35	3.35	0	%100
49	M46A	X	0	0	0	%100
50	M46A	Z	1.134	1.134	0	%100
51	M48	X	0	0	0	%100
52	M48	Z	1.183	1.183	0	%100
53	M50A	X	0	0	0	%100
54	M50A	Z	3.35	3.35	0	%100
55	M51C	X	0	0	0	%100
56	M51C	Z	4.534	4.534	0	%100
57	M53	X	0	0	Ō	%100
58	M53	Z	4.732	4.732	0	%100
59	M58A	X	0	0	0	%100
60	M58A	Z	2.684	2.684	Ö	%100
61	M59A	X	0	0	Ö	%100
62	M59A	Z	.727	.727	Ŏ	%100 %100
63	M60	X	0	0	0	%100 %100
64	M60	Z	.727	.727	0	%100 %100
65	M61	X	0	0	0	%100 %100
66	M61	Z	1.135	1.135	0	%100 %100
67	M64	X	0	0	0	
68	M64	Z	3.344	3.344	0	%100
69	M65	X	0	0	0	%100
70	M65	Z	.836	.836	0	%100
71	M69	X	0			%100
72	M69	Z	3.35	0	0	%100
73	M70	X	0	3.35	0	%100
74	M70	Z	4.534	0	0	%100
75	M72	X	0	4.534	0	%100
76	M72	Ž		0	0	%100
77	M74		4.732	4.732	0	%100
78	M74	X Z	0	0	0	%100
79	M75	X	3.35	3.35	0	%100
80	M75		0	0	0	%100
81	M77A	Z X	1.134	1.134	0	%100
82	M77A	Z	0	0	0	%100
83	M82		1.183	1.183	0	%100
84	M82	X	0	0	0	%100
85	MP3C	Z	.886	.886	0	%100
86		X	0	0	0	%100
	MP3C	Z	2.863	2.863	0	%100
87 88	MP4C	X	0	0	0	%100
	MP4C	Z	2.863	2.863	0	%100
89	MP2C	X	0	0	0	%100
90	MP2C	Z	3.166	3.166	0	%100
91	MP1C	X	0	0	0	%100
92	MP1C	Z	2.863	2.863	0	%100
93	M91A	X	0	0	0	%100
94	M91A	Z	.886	.886	0	%100
95	MP3B	X	0	0	0	%100
96	MP3B	Z	2.863	2.863	0	%100
97	MP4B	X	0	0	0	%100
98	MP4B	Z	2.863	2.863	0	%100
99	MP2B	X	0	0	0	%100
100	MP2B	Z	3.166	3.166	0	%100
101	MP1B	X	0	0	0	%100
102	MP1B	Z	2.863	2.863	Ö	%100 %100



: Colliers Engineering & Design

CL

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

11011110	er Distributed Lt	Direction	Start Magnitudellb/ft	End Magnitude[lb/ft,F	. Start Location[ft,%]	End Location[ft.%]
	Member Label	Direction	Start Wagnitude partition	0	0	%100
103	M101		2.246	2.346	0	%100
104	M101		2.346	2.540	0	%100
105	M102	X	0	0.400	0	%100
106	M102	Z	3.166	3.166	0	%100
107	M107	X	0	0	0	%100
108	M107	Z	.792	.792	0	The state of the s
109	M112	X	0	0	0	%100
	M112	7	.792	.792	0	%100
110		Y	0	0	0	%100
111	M123	7	.704	.704	0	%100
112	M123	- Z	101	0	0	%100
113	M124		704	.704	0	%100
114	M124		.704	0	0	%100
115	M125	X	0 010	2.816	0	%100
116	M125	Z	2.816	2.010	U	70.100

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

	Member Label	Direction	Start Magnitude[lb/ft,	End Magnitude[lb/ft,F	Start Location[ft,%]	End Location[ft,%
1	M1	X	-1.329	-1.329	U	%100
2	M1	Z	2.303	2.303	0	%100
3	M4	X	447	447	0	%100
4	M4	Z	.775	.775	0	%100
5	M10	X	-1.09	-1.09	0	%100
6	M10	Z	1.889	1.889	0	%100
7	MP3A	X	-1.432	-1.432	0	%100
	MP3A	Z	2.48	2.48	0	%100
9	MP4A	X	-1.432	-1.432	0	%100
	MP4A	Z	2.48	2.48	0	%100
10	MP2A	X	-1.583	-1.583	0	%100
11	MP2A	Z	2.742	2.742	0	%100
12		X	-1.432	-1.432	0	%100
13	MP1A	Z	2.48	2.48	0	%100
14	MP1A	X	-1.09	-1.09	0	%100
15	M43	Z	1.889	1.889	0	%100
16	M43	X	-1.702	-1.702	0	%100
17	M46	Z	2.949	2.949	0	%100
18	M46	X	-1.254	-1.254	0	%100
19	M51B	Ž	2.172	2.172	0	%100
20	M51B		0	0	0	%100
21	M52B	Z	0	0	0	%100
22	M52B		558	558	0	%100
23	M76	<u>X</u>	.967	.967	0	%100
24	M76	<u>Z</u>	-1.7	-1.7	0	%100
25	M77	<u> </u>		2.945	0	%100
26	M77	Z	2.945 -1.774	-1.774	0	%100
27	M80	X		3.073	0	%100
28	M80	Z	3.073	558	0	%100
29	M84	X	558	.967	Ö	%100
30	M84	Z	.967		0	%100
31	M85	X	0	0	0	%100
32	M85	Z	0		0	%100
33	M91	X	0	0	0	%100
34	M91	Z	0	0	0	%100
35	M34	X	447	447		%100
36	M34	Z	.775	.775	0	%100
37	M35	X	-1.09	-1.09	0	%100
38	M35	Z	1.889	1.889	0	%100
39	M36	X	-1.09	-1.09	0	/6100



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction		End Magnitude[lb/ft,F		End Location[ft,%]
40	M36	Z	1.889	1.889	0	%100
41	M37	X	-1.702	-1.702	0	%100
42	M37	Z	2.949	2.949	0	%100
43	M40	X	0	0	0	%100 %100
44	M40	Z	0	0	Ö	%100
45	M41	X	-1.254	-1.254	0	%100 %100
46	M41	Z	2.172	2.172	0	%100
47	M45	X	558	558	0	%100 %100
48	M45	Z	.967	.967	0	%100 %100
49	M46A	X	0	0	0	%100 %100
50	M46A	Z	0	0	0	
51	M48	X	0	0	0	%100 %100
52	M48	Z	0	0	0	
53	M50A	X	558	558	0	%100
54	M50A	Z	.967	.967		%100
55	M51C	X	-1.7	-1.7	0	%100
56	M51C	Z	2.945	2.945	0	%100
57	M53	X	-1.774		0	%100
58	M53	Z	3.073	-1.774 3.0 7 3	0	%100
59	M58A	X	-1.789		0	%100
60	M58A	Z	3.099	-1.789	0	%100
61	M59A	X	3.099	3.099	0	%100
62	M59A	Z	0	0	0	%100
63	M60	X	0	0	0	%100
64	M60	Z		0	0	%100
65	M61	X	0	0	0	%100
66	M61	Z	0	0	0	%100
67	M64		0	0	0	%100
68	M64	X Z	-1.254	-1.254	0	%100
69	M65	X	2.172	2.172	0	%100
70	M65	Ž	-1.254	-1.254	0	%100
71	M69		2.172	2.172	0	%100
72	M69	Z	-2.233	-2.233	0	%100
73	M70		3.869	3.869	0	%100
74	M70	X	-1.7	-1.7	0	%100
75	M72	Z	2.945	2.945	0	%100
76	M72	X	-1.774	-1.774	0	%100
77		Z	3.073	3.073	0	%100
78	M74	X	-2.233	-2.233	0	%100
	M74	Z	3.869	3.869	0	%100
79	M75	X	-1.7	-1.7	0	%100
80	M75	Z	2.945	2.945	0	%100
81	M77A	X	-1.774	-1.774	0	%100
82	M77A	Z	3.073	3.073	0	%100
83	M82	X	-1.329	-1.329	0	%100
84	M82	Z	2.303	2.303	0	%100
85	MP3C	X	-1.432	-1.432	0	%100
86	MP3C	Z	2.48	2.48	0	%100
87	MP4C	X	-1.432	-1,432	0	%100
88	MP4C	Z	2.48	2.48	0	%100
89	MP2C	X	-1.583	-1.583	0	%100
90	MP2C	Z	2.742	2.742	0	%100
91	MP1C	X	-1.432	-1.432	0	%100
92	MP1C	Z	2.48	2.48	0	%100
93	M91A	X	0	0	0	%100
94	M91A	Z	0	0	0	%100
95	MP3B	X	-1.432	-1.432	0	%100
96	MP3B	Z	2.48	2.48	0	%100



Company Designer Job Number

Colliers Engineering & Design

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Mambal abol	Direction	Start Magnitude(lb/ft	End Magnitude[lb/ft,F	Start Location[ft,%]	End Location[ft,%]
07	Member Label	Y	-1.432	-1.432	0	%100
97	MP4B	7	2.48	2.48	0	%100
98	MP4B		-1.583	-1.583	0	%100
99	MP2B	X		2.742	0	%100
100	MP2B	Z	2.742	-1.432	0	%100
101	MP1B	X	-1.432		0	%100
102	MP1B	Z	2.48	2.48	0	%100
103	M101	X	-1.173	-1.173		
104	M101	Z	2.031	2.031	0	%100
105	M102	X	-1.187	-1.187	0	%100
	M102	7	2.057	2.057	0	%100
106	M107	Y	-1.187	-1.187	0	%100
107	THE RESERVE OF THE PARTY OF THE	7	2.057	2.057	0	%100
108	M107	V	2.001	0	0	%100
109	M112		0	0	0	%100
110	M112	Z		-1.056	0	%100
111	M123	<u>X</u>	-1.056	1.829	Ŏ	%100
112	M123	Z	1.829	1.025	0	%100
113	M124	X	0	0		%100
114	M124	Z	0	0	0	%100 %100
115	M125	X	-1.056	-1.056	0	
116	M125	Z	1.829	1.829	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,	End Magnitude[lb/ft,F	. Start Location[ft,%]	End Location[ft,%]
1	M1	X	768	768	0	%100
2	M1	Z	.443	.443	0	%100
3	M4	X	-2.324	-2.324	0	%100
	M4	Z	1.342	1.342	0	%100
4	M10	X	63	63	0	%100
5		Z	.363	.363	0	%100
6	M10	X	-2.48	-2.48	0	%100
7	MP3A	Z	1,432	1.432	0	%100
8	MP3A	X	-2.48	-2.48	0	%100
9	MP4A	ż	1.432	1.432	0	%100
10	MP4A	X	-2.742	-2.742	0	%100
11	MP2A		1.583	1.583	0	%100
12	MP2A	Z	-2.48	-2.48	0	%100
13	MP1A	X	1.432	1.432	Ö	%100
14	MP1A	Z		63	Ö	%100
15	M43	X	63	.363	0	%100
16	M43	Z	.363	983	0	%100
17	M46	X	983	.567	0	%100
18	M46	Z	.567		0	%100
19	M51B	X	-2.896	-2.896	0	%100
20	M51B	Z	1.672	1.672	0	%100
21	M52B	X	724	724		%100
22	M52B	Z	.418	.418	0	%100
23	M76	X	-2.901	-2.901	0	%100 %100
24	M76	Z	1.675	1.675	0	
25	M77	X	-3.927	-3.927	0	%100
26	M77	Z	2.267	2.267	0	%100
27	M80	X	-4.098	-4.098	00	%100
28	M80	Z	2.366	2.366	0	%100
29	M84	X	-2.901	-2.901	0	%100
30	M84	Z	1.675	1.675	0	%100
	M85	X	982	982	0	%100
31	M85	Z	.567	.567	0	%100
32	M91	X	-1.024	-1.024	0	%100
33	IVIÐ I					



Colliers Engineering & Design CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

04	Member Label	Direction	Start Magnitude[lb/ft,	End Magnitude[lb/ft,F.	Start Location[ft,%]	End Location[ft,%]
34	M91	Z	.591	.591	0	%100
35	M34	X	0	00	00	%100
36	M34	Z	0	0	0	%100
37	M35	X	-2.518	-2.518	0	%100
38	M35	Z	1.454	1.454	0	%100
39	M36	X	-2.518	-2.518	0	%100
40	M36	Z	1.454	1.454	0	%100
41	M37	X	-3.932	-3.932	0	%100
42	M37	Z	2.27	2.27	0	%100
43	M40	X	724	724	0	%100
44	M40	Z	.418	.418	0	%100
45	M41	X	724	724	0	%100
46	M41	Z	.418	.418	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	0	0	0	%100
49	M46A	X	982	982	0	%100
50	M46A	Z	.567	.567	0	%100
51	M48	X	-1.024	-1.024	0	%100
52	M48	Z	.591	.591	0	%100
53	M50A	X	0	0	0	%100
54	M50A	Z	0	0	Ö	%100
55	M51C	X	982	982	0	%100 %100
56	M51C	Z	.567	.567	Ö	%100
57	M53	X	-1.024	-1.024	0	%100 %100
58	M53	Z	.591	.591	Ō	%100 %100
59	M58A	X	-2.324	-2.324	0	%100 %100
60	M58A	Z	1.342	1.342	Ö	%100 %100
61	M59A	X	63	63	0	%100 %100
62	M59A	Z	.363	.363	ŏ	%100 %100
63	M60	X	63	63	0	%100 %100
64	M60	Z	.363	.363	0	%100 %100
65	M61	X	,983	983	Ö	%100
66	M61	Z	.567	.567	Ö	%100 %100
67	M64	X	724	724	ő	%100 %100
68	M64	Z	.418	.418	0	%100
69	M65	X	-2.896	-2.896	0	%100 %100
70	M65	Z	1.672	1.672	0	%100 %100
71	M69	X	-2.901	-2.901	0	%100
72	M69	Z	1.675	1.675	0	
73	M70	X	982	982	0	%100 %100
74	M70	Z	.567	.567	0	%100 %100
75	M72	X	-1.024	-1.024	0	
76	M72	Z	.591	.591	0	%100
77	M74	X	-2.901	-2.901	0	%100
78	M74	Z	1.675	1.675		%100
79	M75	X	-3.927	-3.927	0	%100
80	M75	Z	2.267			%100
81	M77A	X	-4.098	2.267 -4.098	0	%100
82	M77A	Z	2.366		0	%100
83	M82	X	-3.07	2.366	0	%100
84	M82	Z	1.773	-3.07	0	%100
85	MP3C	X		1.773	0	%100
86	MP3C	Z	-2.48	-2.48	0	%100
87	MP4C	X	1.432	1.432	0	%100
88	MP4C	Z	-2.48	-2.48	0	%100
89	MP2C	X	1.432	1.432	0	%100
90	MP2C		-2.742	-2.742	0	%100
50	IVII ZU	Z	1.583	1.583	0	%100



Colliers Engineering & Design

CL

mber : Project No. 10206276 Name : 5000245391-VZW_MT_LO_H July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start Magnitude[lb/ft.	End Magnitude[lb/ft,F	. Start Location[ft,%]	End Location[ft,%]
04	MP1C	X	-2.48	-2.48	0	%100
91	MP1C	Z	1.432	1.432	0	%100
92		X	768	768	0	%100
93	M91A	Z	.443	.443	0	%100
94	M91A	X	-2.48	-2.48	0	%100
95	MP3B	7	1.432	1.432	0	%100
96	MP3B		-2.48	-2.48	0	%100
97	MP4B	X	1.432	1.432	0	%100
98	MP4B		-2.742	-2.742	0	%100
99	MP2B	X 7	1.583	1.583	0	%100
100	MP2B			-2.48	0	%100
101	MP1B	X	-2.48	1.432	0	%100
102	MP1B	Z	1.432		0	%100
103	M101	X	-2.031	-2.031 1.173	0	%100
104	M101	Z	1.173		0	%100
105	M102	X	686	686	0	%100
106	M102	Z	.396	.396	0	%100
107	M107	X	-2.742	-2.742		%100 %100
108	M107	Z	1.583	1.583	0	%100
109	M112	X	686	686	0	The second secon
110	M112	Z	.396	.396	0	%100 %100
111	M123	X	-2.439	-2.439	0	%100
112	M123	Z	1.408	1.408	0	%100
113	M124	X	61	61	0	%100
114	M124	Z	.352	.352	0	%100
115	M125	X	61	61	0	%100
116	M125	7	.352	.352	0	%100

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

	er Distributed Lo	Direction	Start Magnitude(Ib/ft	End Magnitude[lb/ft,F	. Start Location[ft,%]	End Location[ft,%]
-	Member Label	X	O O	0	0	%100
1	M1	Z	0	0	0	%100
2	M1		-3.578	-3.578	0	%100
3	M4	X Z	-3.370	0.0.0	0	%100
4	M4		0	0	0	%100
5	M10	X	0	0	0	%100
6	M10	Z		-2.863	0	%100
7	MP3A	X	-2.863	-2.003	0	%100
8	MP3A	Z		-2.863	0	%100
9	MP4A	X	-2.863	-2.803	0	%100
10	MP4A	Z	0		0	%100
11	MP2A	X	-3.166	-3.166	0	%100
12	MP2A	Z	0	0	0	%100
13	MP1A	X	-2.863	-2.863	0	%100
14	MP1A	Z	0	0	0	%100
15	M43	X	0	0		%100
16	M43	Z	0	0	0	%100
17	M46	X	0	0	0	
18	M46	Z	0	0	0	%100
19	M51B	X	-2.508	-2.508	0	%100
20	M51B	Z	0	0	0	%100
21	M52B	X	-2.508	-2.508	0	%100
22	M52B	7	0	0	0	%100
23	M76	X	-4.467	-4.467	0	%100
	M76	Z	0	0	0	%100
24		X	-3.401	-3.401	0	%100
25	M77	Z	0	0	0	%100
26 27	M77 M80	X	-3.549	-3.549	0	%100



: Colliers Engineering & Design : CL : Project No. 10206276 : 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start Magnitude[lb/ft	.End Magnitude[lb/ft,F.	. Start Location[ft,%]	End Location[ft,%]
28	M80	Z	0	0	0	%100
29	M84	X	-4.467	-4.467	0	%100
30	M84	Z	0	0	0	%100
31	M85	X	-3.401	-3.401	0	%100
32	M85	Z	0	0	0	%100
33	M91	X	-3.549	-3.549	0	%100
34	M91	Z	0	0	0	%100
35	M34	X	895	895	0	%100
36	M34	Z	0	0	0	%100
37	M35	X	-2.181	-2.181	0	%100
38	M35	Z	0	0	0	%100
39	M36	X	-2.181	-2.181	0	%100
40	M36	Z	0	0	0	%100
41	M37	X	-3.405	-3.405	0	%100
42	<u>M37</u>	Z	0	0	0	%100
43	M40	X	-2.508	-2.508	0	%100
44	M40	Z	0	0	0	%100
45	M41	X	0	0	0	%100
46	M41	Z	0	0	0	%100
47	M45	X	-1.117	-1.117	0	%100
48	M45	Z	0	0	0	%100
49	M46A	X	-3.401	-3.401	0	%100
50	M46A	Z	0	0	0	%100
51	M48	X	-3.549	-3.549	0	%100
52	M48	Z	0	0	0	%100
53	M50A	X	-1.117	-1,117	0	%100
54	M50A	Z	0	0	0	%100
55	M51C	X	0	0	0	%100
56	M51C	Z	0	0	0	%100
57	M53	X	0	0	0	%100
58	M53	Z	0	0	0	%100
59	M58A	X	895	895	0	%100
60	M58A	Z	0	0	0	%100
61	M59A	X	-2.181	-2.181	0	%100
62	M59A	Z	0	0	0	%100
63	M60	X	-2.181	-2.181	0	%100
64	M60	Z	0	0	0	%100
65	M61	X	-3.405	-3.405	0	%100
66	M61	Z	0	0	0	%100
67	M64	X	0	0	0	%100
68	M64	Z	0	0	0	%100
69	M65	X	-2.508	-2.508	0	%100
70	M65	Z	0	0	0	%100
71	M69	X	-1.117	-1.117	0	%100
72	M69	Z	0	0	0	%100
73	M70	X	Ö	Ŏ I	0	%100 %100
74	M70	Z	0	Ö	Ö	%100 %100
75	M 7 2	X	0	Ö	0	%100
76	M72	Z	Ö	0	0	%100 %100
77	M74	X	-1.117	-1.117	0	%100 %100
78	M74	Z	0	0	0	%100
79	M75	X	-3.401	-3.401	0	%100 %100
80	M75	Z	0	0	0	%100 %100
81	M77A	X	-3.549	-3.549	0	%100 %100
82	M77A	Z	0	-5.549	0	%100 %100
83	M82	X	-2.659	-2.659	0	%100 %100
84	M82	Z		2.000	0	%100 %100



Company : Colliers Engineering & Design
Designer : CL
Job Number : Project No. 10206276
Model Name : 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

Hember	7.73 ar 7.01 Tay and	Direction	Start Magnitude[lb/ft	End Magnitude[lb/ft,F	. Start Location[ft,%]	End Location[ft,%]
0.5	Member Label MP3C	X	-2.863	-2.863	0	%100
85	MP3C	Z	0	0	0	%100
86		X	-2.863	-2.863	0	%100
87	MP4C	Z	0	0	0	%100
88	MP4C	X	-3.166	-3.166	0	%100
89	MP2C	Ž	-5.100	0	0	%100
90	MP2C		-2.863	-2.863	0	%100
91	MP1C	X	-2.803	0	0	%100
92	MP1C	Z	-2.659	-2.659	0	%100
93	M91A	X		0	0	%100
94	M91A	Z	0	-2.863	0	%100
95	MP3B	X	-2.863	-2.003	Ö	%100
96	MP3B	Z	0		0	%100
97	MP4B	X	-2.863	-2.863	0	%100
98	MP4B	Z	0	0	0	%100
99	MP2B	X	-3,166	-3.166		%100
100	MP2B	Z	0	0	0	%100
101	MP1B	X	-2.863	-2.863	0	%100
102	MP1B	Z	0	0	0	%100
103	M101	X	-2.346	-2.346	0	
104	M101	Z	0	0	0	%100
105	M102	X	0	0	00	%100
106	M102	Z	0	0	0	%100
107	M107	X	-2.375	-2.375	0	%100
	M107	Ž	0	0	0	%100
108	M112	X	-2.375	-2.375	0	%100
109		Z	0	0	0	%100
110	M112	X	-2.112	-2.112	0	%100
111	M123	Z	0	0	0	%100
112	M123	X	-2.112	-2.112	0	%100
113	M124	Z	0	0	0	%100
114	M124		0	0	0	%100
115	M125	X	0	0	0	%100
116	M125	Z				

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

Cilio		Direction	Start Magnitude(lb/ft	End Magnitude[lb/ft,F	Start Location[ft,%]	End Location[ft,%]
2 1	Member Label	V	768	768	0	%100
1	M1		443	443	0	%100
2	M1		-2.324	-2.324	0	%100
3	M4	X		-1.342	0	%100
4	M4	Z	-1.342	63	0	%100
5	M10	X	63		Ö	%100
6	M10	Z	363	363	0	%100
7	MP3A	X	-2.48	-2.48	0	%100
8	MP3A	Z	-1.432	-1.432	0	%100
9	MP4A	X	-2.48	-2.48		%100
10	MP4A	Z	-1.432	-1.432	0	%100 %100
11	MP2A	X	-2.742	-2.742	0	
12	MP2A	Z	-1.583	-1.583	0	%100
13	MP1A	X	-2.48	-2.48	0	%100
14	MP1A	Z	-1.432	-1.432	0	%100
15	M43	X	63	63	0	%100
	M43	Z	363	-,363	0	%100
16		X	983	983	0	%100
17	M46	7	567	567	0	%100
18	M46	+ Z	724	724	0	%100
19	M51B	Ż	418	-,418	0	%100
20	M51B M52B	X	-2.896	-2.896	0	%100



; Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

00	Member Label	Direction	Start Magnitude[lb/ft	.End Magnitude[lb/ft,F.,	. Start Location[ft,%]	End Location[ft,%]
22	M52B	Z	-1.672	-1.672	0	%100
23	M76	X	-2.901	-2.901	0	%100
24	M76	Z	-1.675	-1.675	0	%100
25	M77	X	982	982	0	%100
26	M77	Z	567	567	0	%100
27	M80	X	-1.024	-1.024	0	%100
28	M80	Z	591	591	0	%100
29	M84	X	-2.901	-2.901	0	%100
30	M84	Z	-1.675	-1.675	Ö	%100
31	M85	X	-3.927	-3.927	0	%100 %100
32	M85	Z	-2.267	-2.267	0	%100
33	M91	X	-4.098	-4.098	0	%100 %100
34	M91	Z	-2.366	-2.366		
35	M34	X	-2.324		0	%100
36	M34	Z	-1.342	-2.324	0	%100
37	M35	X		-1.342	0	%100
38	M35	Ž	63	63	0	%100
39	M36		363	363	0	%100
40		X	63	63	0	%100
	M36	Z	363	363	0	%100
41	M37	X	983	983	0	%100
42	M37	Z	567	567	0	%100
43	M40	X	-2.896	-2.896	0	%100
44	M40	Z	-1.672	-1.672	0	%100
45	M41	X	724	724	0	%100
46	M41	Z	418	418	0	%100
47	M45	X	-2.901	-2.901	0	%100
48	M45	Z	-1.675	-1.675	0	%100
49	M46A	X	-3.927	-3.927	0	%100 %100
50	M46A	Z	-2.267	-2.267	Ö	%100 %100
51	M48	X	-4.098	-4.098	0	%100 %100
52	M48	Z	-2.366	-2.366	0	%100 %100
53	M50A	X	-2.901	-2.901	0	%100 %100
54	M50A	Z	-1.675	-1.675	0	
55	M51C	X	982	982		%100
56	M51C	Z	567	567	0	%100
57	M53	X	-1.024		0	%100
58	M53	Ž		-1.024	0	%100
59	M58A	X	591	591	0	%100
60	M58A	Z	0	0	0	%100
61	M59A		0	0	0	%100
		X	-2.518	-2.518	0	%100
62	M59A	Z	-1.454	-1.454	0	%100
63	M60	X	-2.518	-2.518	0	%100
64	M60	Z	-1.454	-1.454	0	%100
65	M61	X	-3.932	-3.932	0	%100
66	M61	Z	-2.27	-2.27	0	%100
67	M64	X	724	724	Ō	%100
68	M64	Z	418	418	0	%100
69	M65	X	724	724	0	%100 %100
70	M65	Z	418	418	0	%100
71	M69	X	0	0	0	%100
72	M69	Z	0	0	0	%100 %100
73	M70	X	982	982	0	
74	M70	Z	567	567	0	%100
75	M72	X	-1.024	-1.024		%100 %100
76	M72	Z	-1.024		0	%100
77	M74	X		591	0	%100
78	M74	Ž	0	0	0	%100
	WILT		U	0	0	%100



: Colliers Engineering & Design : CL

Company : Colliers Ling
Designer : CL
Job Number : Project No. 10206276
Model Name : 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

Page 146

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

	Member Label	Direction	Start Magnitude[lb/ft,	End Magnitude[lb/ft,F.	. Start Location[ft,%]	End Location[ft,%
70	Member Label M75	X	982	982	<u> </u>	%100
79	M75	Z	567	567	0	%100
80		X	-1.024	-1.024	0	%100
81	M77A	Z	591	591	0	%100
82	M77A	X	768	768	0	%100
83	M82	Z	443	443	0	%100
84	M82	X	-2.48	-2.48	0	%100
85	MP3C	Z	-1.432	-1.432	0	%100
86	MP3C		-2.48	-2.48	0	%100
87	MP4C	X	-1.432	-1.432	0	%100
88	MP4C	Z	-2.742	-2.742	Ö	%100
89	MP2C	X		-1.583	0	%100
90	MP2C	Z	-1.583	-2.48	0	%100
91	MP1C	X	-2.48	-1.432	0	%100
92	MP1C	Z	-1.432	-3.07	0	%100
93	M91A	X	-3.07		0	%100
94	M91A	Z	-1.773	-1.773	0	%100
95	MP3B	X	-2.48	-2.48	0	%100
96	MP3B	Z	-1.432	-1.432		%100
97	MP4B	X	-2.48	-2.48	0	%100
98	MP4B	Z	-1.432	-1.432	0	%100
99	MP2B	X	-2.742	-2.742	0	%100
100	MP2B	Z	-1.583	-1.583	0	%100
101	MP1B	X	-2.48	-2.48	0	
102	MP1B	Z	-1.432	-1.432	0	%100
103	M101	X	-2.031	-2.031	0	%100
104	M101	Z	-1.173	-1.173	0	%100
105	M102	X	686	686	0	%100
	M102	Z	396	396	0	%100
106	M107	X	686	686	0	%100
107	M107	Z	396	396	0	%100
108		X	-2.742	-2.742	0	%100
109	M112	Z	-1.583	-1.583	0	%100
110	M112	X	61	61	0	%100
111	M123	Ž	352	352	0	%100
112	M123		-2.439	-2.439	0	%100
113	M124	X	-1.408	-1.408	0	%100
114	M124		61	61	0	%100
115	M125	X		352	0	%100
116	M125	Z	352	002	·	

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

RISA-3D Version 17.0.4

ICITIO	er Distributed Lo	Direction	Start Magnitude[]b/ft	End Magnitude[lb/ft,F	Start Location[ft,%]	End Location[ft,%]
	Member Label	Direction	-1.329	-1.329	0	%100
1	M1	<u> </u>		-2.303	0	%100
2	M1	Z	-2.303		0	%100
3	M4	X	447	447	0	%100
4	M4	Z	775	775		%100
5	M10	X	-1.09	-1.09	0	
6	M10	7	-1.889	-1.889	0	%100
7	MP3A	X	-1.432	-1.432	0	%100
	The state of the s	7	-2.48	-2.48	0	%100
8	MP3A	+	-1.432	-1.432	0	%100
9	MP4A		-2.48	-2.48	0	%100
10	MP4A			-1.583	0	%100
11	MP2A	<u>X</u>	-1.583	-2.742	0	%100
12	MP2A		-2.742	The state of the s	0	%100
13	MP1A	X	-1.432	-1.432		%100
14	MP1A	Z	-2.48	-2.48	0	
15	M43	X	-1.09	-1.09	0	%100



Colliers Engineering & Design CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

10	Member Label	Direction	Start Magnitude[lb/ft,	.End Magnitude[lb/ft,F	Start Location[ft,%]	End Location[ft,%]
16	M43	Z	-1.889	-1.889	0	%100
17	M46	X	-1.702	-1.702	0	%100
18	M46	Z	-2.949	-2.949	0	%100
19	M51B	X	0	0	0	%100
20	M51B	Z	0	0	0	%100
21	M52B	X	-1.254	-1.254	0	%100
22	M52B	Z	-2.172	-2.172	0	%100
23	M76	X	558	558	0	%100
24	M76	Z	967	967	0	%100
25	M77	X	0	0	0	%100
26	M77	Z	0	0	0	%100
27	M80	X	0	0	0	%100
28	M80	Z	0	0	0	%100
29	M84	X	558	558	0	%100
30	M84	Z	967	967	0	%100
31	M85	X	-1.7	-1.7	0	%100
32	M85	Z	-2.945	-2.945	0	%100 %100
33	M91	X	-1.774	-1.774	0	%100 %100
34	M91	Z	-3.073	-3.073	0	%100 %100
35	M34	X	-1.789	-1.789	0	%100 %100
36	M34	Z	-3.099	-3.099	Ö	%100 %100
37	M35	X	0	0	0	%100
38	M35	Z	0	0	Ö	%100 %100
39	M36	X	0	0	0	%100 %100
40	M36	Z	0	0	0	%100 %100
41	M37	X	0	0	0	%100 %100
42	M37	Z	0	0	0	%100 %100
43	M40	X	-1.254	-1.254	0	%100 %100
44	M40	Z	-2.172	-2.172	Ö	%100 %100
45	M41	X	-1.254	-1.254	0	%100 %100
46	M41	Z	-2.172	-2.172	0	%100
47	M45	X	-2.233	-2.233	0	
48	M45	Z	-3.869	-3.869	0	%100
49	M46A	X	-1.7	-1.7	0	%100
50	M46A	Z	-2.945	-2.945	0	%100
51	M48	X	-1.774	-1.774	0	%100
52	M48	Z	-3.073	-3.073	0	%100
53	M50A	X	-2.233	-2.233		%100
54	M50A	Z	-3.869	-3.869	0	%100
55	M51C	X	-1.7	-1.7	0	%100
56	M51C	Z	-2.945	-2.945	0	%100
57	M53	X	-1.774	-1.774	0	%100
58	M53	Z	-3.073	-3.073	0	%100
59	M58A	X	447		0	%100
60	M58A	Z	775	447	0	%100
61	M59A	X	-1.09	775	0	%100
62	M59A	Z	-1.889	-1.09	0	%100
63	M60	X		-1.889	0	%100
64	M60	Z	-1.09	-1.09	0	%100
65	M61	X	-1.889	-1.889	0	%100
66	M61	Ž	-1.702	-1.702	0	%100
67	M64	X	-2.949	-2.949	0	%100
68	M64	Z	-1.254	-1.254	0	%100
69	M65		-2.172	-2.172	0	%100
70	M65	Z	0	0	0	%100
71	M69		0	0	0	%100
72	M69	X	558	558	0	%100
16	IVIUƏ	Z	967	967	0	%100



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

vicinio.	× 52 500	Direction	Start Magnitudellb/ft	End Magnitude[lb/ft,F	. Start Location[ft,%]	End Location[ft,%]
70	Member Label	X	-1.7	-1.7	0	%100
73	M70 M70	Z	-2.945	-2.945	0	%100
74	M70 M72	X	-1.774	-1.774	0	%100
75		Z	-3.073	-3.073	0	%100
76	M72	X	558	558	0	%100
77	M74		967	967	0	%100
78	M74	Z X	907	0	0	%100
79	M75		0	0	0	%100
80	M75	Z	0	0	0	%100
81	M77A	X	0	0	Ŏ	%100
82	M77A	Z		0	0	%100
83	M82	<u> </u>	0	0	Ö	%100
84	M82	Z	0	-1.432	0	%100
85	MP3C	X	-1.432	-2.48	0	%100
86	MP3C	Z	-2.48		0	%100
87	MP4C	X	-1.432	-1.432	0	%100
88	MP4C	Z	-2.48	-2.48	0	%100
89	MP2C	X	-1.583	-1.583	0	%100
90	MP2C	Z	-2.742	-2.742	0	%100
91	MP1C	X	-1.432	-1.432		%100
92	MP1C	Z	-2.48	-2.48	0	%100
93	M91A	X	-1.329	-1.329	0	
94	M91A	Z	-2.303	-2.303	0	%100 %100
95	MP3B	X	-1.432	-1.432	0	
96	MP3B	Z	-2.48	-2.48	0	%100
97	MP4B	X	-1.432	-1.432	0	%100
98	MP4B	Z	-2.48	-2.48	0	%100
99	MP2B	X	-1.583	-1.583	0	%100
100	MP2B	Z	-2.742	-2.742	0	%100
101	MP1B	X	-1.432	-1.432	0	%100
102	MP1B	Z	-2.48	-2.48	0	%100
103	M101	X	-1.173	-1.173	0	%100
104	M101	Z	-2.031	-2.031	0	%100
105	M102	X	-1.187	-1.187	0	%100
106	M102	Z	-2.057	-2.057	0	%100
	M102 M107	X	0	0	0	%100
107	M107	Z	0	0	0	%100
108		X	-1.187	-1.187	0	%100
109	M112	Z	-2.057	-2.057	0	%100
110	M112	X	0	0	0	%100
111	M123	Z	0	0	0	%100
112	M123	X	-1.056	-1.056	0	%100
113	M124		-1.829	-1.829	0	%100
114	M124	Z	-1.056	-1.056	0	%100
115	M125	X	-1.829	-1.829	0	%100
116	M125	Z	-1.029	*1.020		

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

	er Distributed Lo	Direction	Start Magnitude(lb/ft	End Magnitude[lb/ft,F	Start Location[ft,%]	End Location[ft,%]
	Member Label	Direction	0	0	0	%100
1	M1		704	764	0	%100
2	M1	Z	764	704		%100
3	M4	X	0	U		
4	M4	7	0	0	0	%100
4	- Andrews	V	0	0	0	%100
5	M10		656	656	0	%100
6	M10		000	050	0	%100
7	MP3A	X	0		0	
8	MP3A	7	518	518	0	%100
a	MP4A	X	0	0	0	%100



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

40	Member Label	Direction	Start Magnitude[lb/ft,	End Magnitude[lb/ft,F.,	Start Location[ft,%]	End Location[ft,%]
10	MP4A	Z	518	518	0	%100
11	MP2A	X	. 0	0	0	%100
12	MP2A	Z	627	627	Q	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	518	-,518	0	%100
15	M43	X	0	0	0	%100
16	M43	Z	656	656	0	%100
17	M46	X	0	0	0	%100
18	M46	Z	-1.309	-1.309	0	%100
19	M51B	X	0	0	0	%100
20	M51B	Z	182	182	0	%100
21	M52B	X	0	0	0	%100
22	M52B	Z	182	182	0	%100
23	M76	X	0	0	0	%100
24	M76	Z	0	0	0	%100
25	M77	X	0	0	0	%100
26	M77	Z	333	333	0	%100
27	M80	X	0	0	0	%100
28	M80	Z	351	351	Ö	%100
29	M84	X	0	0	0	%100
30	M84	Z	0	0	0	%100
31	M85	X	0	0	0	%100
32	M85	Z	333	333	0	%100
33	M91	X	0	0	0	%100
34	M91	Z	351	351	0	%100
35	M34	X	0	0	0	%100
36	M34	Z	582	582	0	%100
37	M35	X	0	0	0	%100
38	M35	Z	164	164	0	%100
39	M36	X	0	0	0	%100
40	M36	Z	164	164	Ö	%100
41	M37	X	0	0	0	%100
42	M37	Z	327	327	Ō	%100
43	M40	X	0	0	0	%100
44	M40	Z	182	182	0	%100
45	M41	X	0	0	0	%100 %100
46	M41	Z	727	727	Ö	%100
47	M45	X	0	0	Ö	%100 %100
48	M45	Z	982	982	0	%100
49	M46A	X	0	0	Ö	%100 %100
50	M46A	Z	333	333	Ö	%100
51	M48	X	0	0	ő	%100 %100
52	M48	Z	351	351	Ö	%100 %100
53	M50A	X	0	0	0	%100 %100
54	M50A	Z	982	982	0	%100
55	M51C	X	0	0	ŏ	%100 %100
56	M51C	Z	-1.333	-1.333	0	%100 %100
57	M53	X	0	0	0	%100 %100
58	M53	Z	-1.404	-1.404	0	%100
59	M58A	X	0	0	0	%100 %100
60	M58A	Z	582	582	ő	%100 %100
61	M59A	X	0	362	0	
62	M59A	Z	164	164		%100
63	M60	X	0	104	0	%100
64	M60	Z	164	164	0	%100
65	M61	X	0		0	%100
66	M61	Z	327	0	0	%100



Colliers Engineering & Design

CL

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction		End Magnitude[lb/ft,F	. Start Location[π,%]	End Location[ft.% %100
67	M64	<u>X</u>	0	727	Ö	%100
68	M64	Z	727	0	0	%100
69	M65	X	0	182	0	%100
70	M65	Z	182	-, 102	0	%100
71	M69	X	0	982	0	%100
72	M69	Z	982		0	%100
73	M70	X	0	0	0	%100
74	M70	Z	-1.333	-1.333	0	%100
75	M72	X	0	0	0	%100
76	M72	Z	-1.404	-1.404	0	%100
77	M74	X	0	0	0	%100
78	M74	Z	982	982		%100
79	M75	X	0	0	0	%100
80	M75	Z	333	333		%100
81	M77A	X	0	0	0	%100
82	M77A	Z	351	351	0	%100
83	M82	X	0	0	0	%100
84	M82	Z	191	191	0	%100
85	MP3C	X	0	0	0	%100
86	MP3C	Z	518	518	0	%100 %100
87	MP4C	X	0	0	0	
88	MP4C	Z	518	518	0	%100
89	MP2C	X	0	0	0	%100
90	MP2C	Z	627	627	0	%100
91	MP1C	X	0	0	0	%100
92	MP1C	Z	518	518	0	%100
93	M91A	X	0	0	0	%100
94	M91A	Z	191	191	0	%100
95	MP3B	X	0	0	0	%100
96	MP3B	Z	518	518	0	%100
97	MP4B	X	0	0	0	%100
	MP4B	Z_	518	518	0	%100
98	MP2B	X	0	0	0	%100
99	MP2B	Z	627	627	0	%100
100	MP1B	X	0	0	0	%100
101	MP1B	Z	518	518	0	%100
102	M101	X	0	0	0	%100
103	M101	Z	424	424	0	%100
104	M102	X	0	0	0	%100
105		Ž	627	627	0	%100
106	M102	X	0	0	0	%100
107	M107	Z	157	157	0	%100
108	M107		0	0	0	%100
109	M112	Z	157	157	0	%100
110	M112	X	0	0	0	%100
111	M123		-,173	173	0	%100
112	M123	Z	0	0	0	%100
113	M124	<u>^</u>	173	173	0	%100
114	M124	Z	0	0	0	%100
115	M125 M125	X Z	69	69	0	%100

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

HOIII	er Distributed Le		Start Magnitude[lb/ft,	End Magnitude[lb/ft,F.,	Start Location[ft,%]	End Location[ft,%]
	Member Label	Direction	.286	.286	0	%100
1	M1		496	496	0	%100
2	M1			.097	0	%100
3	M4	X	.097	.091	0	70.100



: Colliers Engineering & Design : CL : Project No. 10206276 : 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

4	Member Label M4	Direction	Start Magnitude[lb/ft	.End Magnitude[lb/ft,F		End Location[ft,%]
5	M10	Z	168	168	0	%100
6	M10	X	.246	.246	0	%100
7	MP3A	Z	426	426	0	%100
		X	.259	.259	0	%100
8	MP3A	Z	-,449	449	0	%100
9	MP4A	X	.259	.259	0	%100
10	MP4A	Z	449	449	0	%100
11	MP2A	X	.314	.314	0	%100
12	MP2A	Z	543	543	0	%100
13	MP1A	X	.259	.259	0	%100
14	MP1A	Z	449	449	0	%100
15	M43	X	.246	.246	Ö	%100
16	M43	Z	426	426	Ö	%100
17	M46	X	.491	.491	Ö	%100 %100
18	M46	Z	85	85	0	%100 %100
19	M51B	X	.273	.273	0	%100 %100
20	M51B	Z	472	472	0	
21	M52B	X	0	0	0	%100 %100
22	M52B	Z	0	0		%100
23	M76	X	.164		0	%100
24	M76	Z	283	.164	0	%100
25	M77	X		283	0	%100
26	M77	Ž	.5	.5	0	%100
27	M80		866	866	0	%100
28		X	.527	.527	0	%100
29	M80	Z	912	912	0	%100
	M84	X	.164	.164	0	%100
30	M84	Z	283	283	0	%100
31	M85	X		0	0	%100
32	M85	Z	0	0	0	%100
33	M91	X	0	0	0	%100
34	M91	Z	0	0	0	%100
35	M34	X	.097	.097	0	%100
36	M34	Z	168	168	0	%100
37	M35	X	.246	.246	0	%100
38	M35	Z	426	426	0	%100
39	M36	X	.246	.246	Ō	%100
40	M36	Z	426	426	0	%100
41	M37	X	.491	.491	Ö	%100
42	M37	Z	85	85	Ö	%100
43	M40	X	0	83	0	%100 %100
44	M40	Z	0	0	0	%100 %100
45	M41	X	.273	.273	0	
46	M41	Ž	472	100		%100
47	M45	X	.164	472 .164	0	%100
48	M45	Z			0	%100
49	M46A	X	283	283	0	%100
50	M46A		0	0	0	%100
51	M48	Z	0	0	0	%100
52		X	0	0	0	%100
	M48	Z	0	0	0	%100
53	M50A	X	.164	.164	0	%100
54	M50A	Z	283	283	0	%100
55	M51C	X	.5	.5	0	%100
56	M51C	Z	866	866	0	%100
57	M53	X	.527	.527	0	%100
58	M53	Z	912	912	0	%100
59	M58A	X	.388	.388	0	%100
60	M58A	Z	672	672	0	%100 %100



: Colliers Engineering & Design : CL : Project No. 10206276 : 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction		End Magnitude[lb/ft,F	Start Location[ft,%]	End Location[ft.% %100
61	M59A	X	0	0	0	%100
62	M59A	Z		0	Ō	%100
63	M60	X	0	0	0	%100
64	M60	Z	0	0	0	%100
35	M61	X	0	0	0	%100
36	M61	Z	0	.273	0	%100
67	M64	X	.273	472	0	%100
86	M64	Z	472	.273	0	%100
69	M65	<u>X</u>	.273	472	0	%100
70	M65	Z	472	.655	0	%100
71	M69	<u>X</u>	.655	-1.134	0	%100
72	M69	Z	-1.134	.5	0	%100
73	M70	X	.5	866	0	%100
74	M70	Z	866	.527	0	%100
75	M72	X	.527	912	0	%100
76	M72	Z	912	.655	0	%100
77	M74	X	.655	-1.134	Ö	%100
78	M74	Z	-1.134	.5	0	%100
79	M75	X	.5	866	0	%100
30	M75	Z	866	.527	0	%100
31	M77A	X	.527	912	0	%100
32	M77A	Z	912	.286	0	%100
33	M82	X	.286		0	%100
34	M82	Z	496	496 .259	0	%100
35	MP3C	X	.259		0	%100
36	MP3C	Z	449	449	0	%100
37	MP4C	X	.259	.259	0	%100
88	MP4C	Z	449	449	0	%100
39	MP2C	X	.314	.314	ő	%100
90	MP2C	Z	543	543	Ö	%100
91	MP1C	X	.259	.259	0	%100
92	MP1C	Z	-,449	449	0	%100
93	M91A	X	0	0	0	%100
94	M91A	Z	0	0		%100
95	MP3B	X	.259	.259	0	%100
96	MP3B	Z	449	449		%100
97	MP4B	X	.259	.259	0	%100
98	MP4B	Z	449	449	0	%100 %100
99	MP2B	X	.314	.314	0	%100
00	MP2B	Z	543	543	0	%100
01	MP1B	X	.259	.259	0	%100 %100
102	MP1B	Z	449	449	0	
103	M101	X	.212	.212	0	%100 %100
104	M101	Z	367	367	0	%100 %100
105	M102	X	,235	.235	0	%100
106	M102	Z	407	407	0	
107	M107	X	.235	.235	0	%100 %100
108	M107	Z	407	407	0	
109	M112	X	0	0	0	%100
110	M112	Z	0	0	0	%100
111	M123	X	.259	.259	0	%100
112	M123	Z	448	448	0	%100
113	M124	X	0	0	0	%100_
114	M124	Z	0	0	0	%100
115	M125	X	.259	.259	0	%100
116	M125	Z	-,448	448	0	%100



: Colliers Engineering & Design : CL : Project No. 10206276 : 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start Magnitude[lb/ft	.End Magnitude[lb/ft,F	. Start Location[ft,%]	End Location[ft,%]
2	M1	X	.165	.165	0	%100
	M1	Z	095	095	0	%100
3	M4	X	.504	.504	0	%100
4	M4	Z	291	291	0	%100
5	M10	X	.142	.142	0	%100
6	M10	Z	082	082	0	%100
7	MP3A	X	.449	.449	0	%100
8	MP3A	Z	259	259	0	%100
9	MP4A	X	.449	,449	0	%100
10	MP4A	Z	259	259	0	%100
11	MP2A	X	.543	.543	0	%100
12	MP2A	Z	.314	314	0	%100
13	MP1A	X	.449	.449	0	%100
14	MP1A	Z	259	259	Ŏ	%100
15	M43	X	.142	.142	0	%100
16	M43	Z	082	082	0	%100
17	M46	X	.283	.283	Ö	%100
18	M46	Z	164	164	Ö	%100 %100
19	M51B	X	.63	.63	0	%100 %100
20	M51B	Z	363	363	0	
21	M52B	X	.157	.157	0	%100
22	M52B	Z	091	091		%100
23	M76	X	.85	.85	0	%100
24	M76	Z	491		0	%100
25	M77	X	1.155	491	0	%100
26	M77	Z		1.155	0	%100
27	M80	X	667	667	0	%100
28	M80		1.216	1.216	0	%100
29	M84	Z	702	702	0	%100
30	M84	Z	.85	.85	0	%100
31	M85		491	491	0	%100
32	M85	X	.289	.289	0	%100
33	M91	Z	167	167	0	%100
34	M91	X	.304	.304	0	%100
35	M34	Z	176	176	0	%100
36		X	0	0	0	%100
37	M34	Z	0	0	0	%100
	M35	X	.568	.568	0	%100
38	M35	Z	328	328	0	%100
39	M36	X	.568	.568	0	%100
40	M36	Z	328	328	0	%100
41	M37	X	1.134	1.134	0	%100
42	M37	Z	655	655	0	%100
43	M40	X	.157	.157	0	%100
44	M40	Z	091	091	0	%100
45	M41	X	.157	.157	0	%100
46	M41	Z	091	091	0	%100
47	M45	X	0	0	Ŏ I	%100
48	M45	Z	0	0	0	%100
49	M46A	X	.289	.289	0	%100
50	M46A	Z	167	167	Ö	%100
51	M48	X	.304	.304	0	%100
52	M48	Z	176	176	ő	%100
53	M50A	X	0	0	0	%100 %100
54	M50A	Z	Ö	0	0	
55	M51C	X	.289	.289	0	%100 %100
56	M51C	Z	167	167		%100
57	M53	X	.304	.304	0	%100
			.504	.504	0	%100



: Colliers Engineering & Design : CL : Project No. 10206276

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start Magnitude[lb/ft	End Magnitude[lb/ft,F	Start Location[ft,%]	End Location[ft,% %100
8	M53	Z	176	176	0	%100
9	M58A	X	.504	.504		%100 %100
0	M58A	Z	291	291	0	%100 %100
1	M59A	X	.142	.142	0	%100 %100
2	M59A	Z	082	082	0	%100 %100
3	M60	X	.142	.142	0	
4	M60	Z	082	082	0	%100
5	M61	X	.283	.283	0	%100
6	M61	Z	164	164	0	%100
	M64	X	.157	.157	0	%100
7	M64	Z	091	091	0	%100
8	M65	X	.63	.63	0	%100
9	M65	Ž	363	363	0	%100
0	M69	X	.85	.85	0	%100
1		Z	491	491	0	%100
2	M69	X	.289	.289	0	%100
3	M70	Ž	167	167	0	%100
4	M70	X	.304	.304	0	%100
5	M72	Ž	176	176	0	%100
6	M72		.85	.85	0	%100
7	M74	Z	491	491	0	%100
8	M74		1.155	1.155	0	%100
9	M75	X	667	667	Ō	%100
0	M75	Z	1.216	1.216	0	%100
1	M77A	X	702	702	0	%100
2	M77A	Z		.661	0	%100
3	M82	X	.661	382	Ō	%100
34	M82	Z	382	.449	0	%100
35	MP3C	X	.449	259	Ö	%100
36	MP3C	Z	259	.449	0	%100
37	MP4C	X	.449	259	0	%100
38	MP4C	Z	259		0	%100
39	MP2C	X	.543	.543	0	%100
90	MP2C	Z	314	314	0	%100
91	MP1C	X	.449	.449	0	%100
92	MP1C	Z	259	259	0	%100
93	M91A	X	.165	.165		%100
94	M91A	Z	095	095	0	%100
95	MP3B	X	.449	.449	0	%100
96	MP3B	Z	259	259	0	
97	MP4B	X	.449	.449	0	%100
98	MP4B	Z	259	259	0	%100
	MP2B	X	.543	.543	0	%100
99	MP2B	Z	314	314	0	%100
00	MP1B	X	.449	.449	0	%100
01	MP1B	Z	259	259	0	%100
02		X	.367	.367	0	%100
03	M101	Z	212	212	0	%100
04	M101	X	.136	.136	0	%100
05	M102	Ž	078	078	0	%100
06	M102	X	.543	.543	0	%100
07	M107		314	314	0	%100
08	M107	Z	.136	.136	0	%100
09	M112	X	078	078	0	%100
10	M112	Z		.598	0	%100
111	M123	X	.598	345	Ö	%100
112	M123	Z	345	.149	0	%100
113	M124	X	.149	086	0	%100
14	M124	Z	086	.5000245391-VZW_I		Page 154



Colliers Engineering & Design

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start MagnitudeIlb/ft	End Magnitude[lb/ft,F	Start Location(# %1	End Location[ft.%]
115	M125	X	.149	.149	Otare Eodadonjie, 76j	%100
116	M125	Z	086	086	0	%100

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

4	Member Label	Direction	Start Magnitude[lb/ft,.	End Magnitude[lb/ft,F.	. Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M4	X	.776	.776	0	%100
4	M4	Z	0	0	0	%100
5	M10	X	0_	0	0	%100
6	M10	Z	0	0	0	%100
7	MP3A	X	.518	.518	0	%100
8	MP3A	Z	0	0	0	%100
9	MP4A	X	.518	.518	0	%100
10	MP4A	Z	0	0	0	%100
11	MP2A	X	.627	.627	0	%100
12	MP2A	Z	0	0	0	%100
13	MP1A	X	.518	.518	0	%100
14	MP1A	Z	00	0	0	%100
15	M43	X		0	0	%100
16	M43	Z	0	0	0	%100
17	M46	X	0	0	0	%100
18	M46	Z	0	0	0	%100
19	M51B	X	.545	.545	0	%100
20	M51B	Z	0	0	0	%100
21	M52B	X	.545	.545	0	%100
22	M52B	Z	0	0	0	%100
23	M76	X	1.309	1.309	0	%100
24	M76	Z	0	0	0	%100
25	M77	X	1	1	0	%100
26	M77	Z	0	0	0	%100
27	M80	X	1.053	1.053	0	%100
28	M80	Z	0	0	0	%100
29	M84	X	1.309	1.309	0	%100
30	M84	Z	0	0	0	%100
31	M85	X	1	1	0	%100 %100
32	M85	Z	0	0	0	%100
33	M91	X	1.053	1.053	Ō	%100
34	M91	Z	0	0	0	%100
35	M34	X	.194	.194	0	%100
36	M34	Z	0	0	0	%100
37	M35	X	.492	.492	0	%100
38	M35	Z	0	0	0	%100
39	M36	X	.492	.492	0	%100
40	M36	Z	0	0	ŏ	%100
41	M37	X	.982	.982	0	%100
42	M37	Z	0	0	ŏ	%100 %100
43	M40	X	.545	.545	Ů.	%100
44	M40	Z	0	0	Ö	%100
45	M41	X	Ö	0	0	%100
46	M41	Z	0	0	Ö	%100
47	M45	X	.327	.327	0	%100 %100
48	M45	Z	0	0	o o	%100
49	M46A	X	1	1	0	%100 %100
50	M46A	Z	0	Ö	Ö	%100
51	M48	X	1.053	1.053	0	%100 %100



RISA-3D Version 17.0.4

Company Designer Job Number

: Project No. 10206276 : 5000245391-VZW_MT_LO_H Model Name

: Colliers Engineering & Design : CL : Project No. 10206276 July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start Magnitude[lb/ft,E	nd Magnitude[lb/ft,F. 0	Start Location[π,%]	End Location[ft,% %100
52	M48	Z	.327	.327	0	%100
53	M50A	X		0	Ō	%100
54	M50A	Z	0	0	0	%100
55	M51C	X	0	0	0	%100
56	M51C	Z	0	0	0	%100
57	M53	X	0	0	0	%100
58	M53	Z	.194	.194	Ö	%100
59	M58A	X	0	0	Ō	%100
60	M58A	Z	.492	.492	Ö	%100
31	M59A	X	.492	0	Ö	%100
62	M59A	Z	.492	.492	Ö	%100
63	M60	X		0	Ō	%100
64	M60	Z	.982	.982	0	%100
35	M61	X		0	Ö	%100
66	M61	Z	0	Ö	0	%100
67	M64	X	0	0	Ö	%100
68	M64	Z	.545	.545	0	%100
39	M65	X	.545	0	Ö	%100
70	M65		.327	.327	Ö	%100
71	M69	X		0	Ö	%100
72	M69	Z	0	0	0	%100
73	M70	X	0	0	Ö	%100
74	M70	Z	0	0	0	%100
75	M72	X	0	Ō	0	%100
76	M72	Z	.327	.327	0	%100
77	M74	X		0	0	%100
78	M74	Z	0	1	0	%100
79	M75	X	0	0	Ů O	%100
80	M75	Z		1.053	0	%100
81	M77A	X	1.053	0	0	%100
82	M77A	Z	.573	.573	0	%100
83	M82	X		.575	Ö	%100
84	M82	Z	0	.518	0	%100
85	MP3C	X	.518	.516	0	%100
86	MP3C	Z	0	.518	0	%100
87	MP4C	X	.518	0	0	%100
88	MP4C	Z	0	.627	0	%100
89	MP2C	X	.627	0	Ö	%100
90	MP2C	Z	0	.518	Ö	%100
91	MP1C	X	.518	.516	0	%100
92	MP1C	Z	0	.573	0	%100
93	M91A	X	.573		0	%100
94	M91A	Z	0	.518	0	%100
95	MP3B	X	.518	.516	0	%100
96	MP3B	Z	0	.518	0	%100
97	MP4B	X	.518		0	%100
98	MP4B	Z	0	.627	0	%100
99	MP2B	X	.627		0	%100
100	MP2B	Z	0	0	0	%100
101	MP1B	X	.518	.518	0	%100
102	MP1B	Z	0	0	0	%100
103	M101	X	.424	.424	0	%100
104	M101	Z	0	0	0	%100
105	M102	X	0	0		%100
106	M102	Z	0	0	0	%100
107	M107	X	.47	.47	, o	%100 %100
108	M107	Z	0	0	0	76 100



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start Magnitude[lb/ft	End Magnitude[lb/ft,F.,	Start Location(ft %)	End Location[ft,%]
109	M112	X	.47	47	0	%100
110	M112	Z	0	Ö	0	%100 %100
111	M123	X	.518	.518	Ō	%100 %100
112	M123	Z	0	0	ň	%100
113	M124	X	.518	.518	n	%100 %100
114	M124	Z	0	0	Ů.	%100
115	M125	X	0	0	0	%100 %100
116	M125	Z	0	0	0	%100

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

1	Member Label	Direction	Start Magnitude[lb/ft,.	End Magnitude[lb/ft,F	. Start Location[ft,%]	End Location[ft,%]
-	M1	X	.165	.165	0	%100
2	M1	Z	.095	.095	0	%100
3	M4	X	.504	.504	0	%100
4	M4	Z	.291	.291	0	%100
5	M10	X	.142	.142	0	%100
6	M10	Z	.082	.082	0	%100
7	MP3A	X	.449	.449	0	%100
8	MP3A	Z	.259	.259	0	%100
9	MP4A	X	.449	.449	0	%100
10	MP4A	Z	.259	.259	0	%100
11	MP2A	X	.543	.543	Ō	%100
12	MP2A	Z	.314	.314	0	%100
13	MP1A	X	.449	.449	0	%100
14	MP1A	Z	.259	.259	0	%100
15	M43	X	.142	.142	0	%100 %100
16	M43	Z	.082	.082	Ö	%100 %100
17	M46	X	.283	.283	0	%100 %100
18	M46	Z	.164	.164	Ö	%100 %100
19	M51B	X	.157	.157	0	%100 %100
20	M51B	Z	.091	.091	0	%100
21	M52B	X	.63	.63	0	
22	M52B	Z	.363	.363	0	%100
23	M76	X	.85	.85	0	%100
24	M76	Z	.491	.491	0	%100 %400
25	M77	X	.289	.289	0	%100
26	M77	Z	.167	.167	0	%100
27	M80	X	.304	.304	0	%100
28	M80	Ž	.176	.176		%100
29	M84	X	.85	.85	0	%100
30	M84	Z	.491	.65	0	%100
31	M85	X	1.155	1.155	0	%100
32	M85	Z	.667	.667	0	%100
33	M91	X	1.216		0	%100
34	M91	Ž	.702	1.216	. 0	%100
35	M34	X		.702	0	%100
36	M34	Ž	.504	.504	0	%100
37	M35	X	.291	.291	0	%100
38	M35	Z		.142	0	%100
39	M36		.082	.082	0	%100
40	M36	X	.142	.142	0	%100
41	M37	Z	.082	.082	0	%100
42		X	.283	.283	0	%100
43	M37 M40	Z	.164	.164	0	%100
		X	.63	.63	0	%100
44 45	M40	Z	.363	.363	0	%100
40	M41	X	.157	.157	0	%100



Colliers Engineering & Design

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction		.End Magnitude[lb/ft,F	. Start Location[ft,%]	End Location[ft,%
46	M41	Z	.091	.091	0	%100
47	M45	X	.85	.85	0	%100
48	M45	Z	.491	.491	0	%100
49	M46A	X	1.155	1.155	0	%100
50	M46A	Z	.667	.667	0	%100
51	M48	X	1.216	1.216	0	%100
52	M48	Z	.702	.702	0	%100
53	M50A	X	.85	.85	0	%100
54	M50A	Z	.491	.491	0	%100
55	M51C	X	.289	.289	0	%100
	M51C	Z	.167	.167	0	%100
56	M53	X	.304	.304	0	%100
57	M53	Z	.176	.176	0	%100
58	M58A	X	0	0	0	%100
59		Z	0	0	0	%100
60	M58A	X	.568	.568	0	%100
61	M59A	Z	.328	.328	0	%100
52	M59A	X	.568	.568	0	%100
33	M60 M60	Z	.328	.328	0	%100
64		X	1.134	1.134	0	%100
35	M61	Ž	.655	.655	0	%100
66	M61	X	.157	.157	0	%100
67	M64	Z	.091	.091	0	%100
86	M64	X	.157	.157	0	%100
39	M65	Z	.091	.091	0	%100
70	M65	X	0	0	0	%100
71	M69	Z	0	0	0	%100
72	M69	X	.289	.289	0	%100
73	M70	ż	.167	.167	0	%100
74	M70		.304	.304	0	%100
75	M72	X	.176	.176	0	%100
76	M72	Z	0	0	0	%100
77	M74	X	0	Ŏ	0	%100
78	M74	Z	.289	.289	0	%100
79	M75	X	.167	.167	0	%100
80	M75	Z	.304	.304	0	%100
81	M77A	<u>X</u>	.176	.176	0	%100
82	M77A	Z	.165	.165	0	%100
83	M82	X	.095	.095	0	%100
84	M82	Z		.449	0	%100
85	MP3C	X	.449	.259	0	%100
86	MP3C	Z	.449	.449	0	%100
87	MP4C	X		.259	Ö	%100
88	MP4C	Z	.259	.543	0	%100
89	MP2C	X	.543	.314	0	%100
90	MP2C	Z	.314	.449	Ö	%100
91	MP1C	X	.449	.259	0	%100
92	MP1C	Z	.259	.661	0	%100
93	M91A	X	.661	.382	0	%100
94	M91A	Z	.382	.449	0	%100
95	MP3B	X	.449	.259	0	%100
96	MP3B	Z	.259		0	%100
97	MP4B	X	.449	.449	0	%100
98	MP4B	Z	.259	.259	0	%100
99	MP2B	X	.543	.543	0	%100
100	MP2B	Z	.314	.314	0	%100
101	MP1B	X	.449	.449	0	%100
102	MP1B	Z	.259	.259	U	/0100



Colliers Engineering & Design

CL Project No. 10206276

Project No. 10206276 5000245391-VZW_MT_LO_H July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start Magnitude[lb/ft.	End Magnitude[lb/ft,F	Start Location(ft %)	End Location[ft,%]
103	M101	X	.367	.367	0	%100
104	M101	Z	.212	.212	Û	%100
105	M102	X	.136	.136	0	%100 %100
106	M102	Z	.078	.078	Ō	%100
107	M107	X	.136	.136	0	%100
108	M107	Z	.078	.078	Ŏ	%100
109	M112	X	.543	.543	0	%100
110	M112	Z	.314	.314	ñ	%100
111	M123	X	.149	.149	n n	%100
112	M123	Z	.086	.086	Ö	%100 %100
113	M124	X	.598	.598	0	%100 %100
114	M124	Z	.345	.345	Ö	%100 %100
115	M125	X	.149	.149	0	%100 %100
116	M125	Z	.086	.086	0	%100

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

	Member Label	Direction	Start Magnitude(lb/ft	End Magnitude[lb/ft,F	Start LocationIft %I	End Location(ft,%)
1	M1	X	.286	.286	0	%100
2	M1	Z	.496	.496	0	%100
3	M4	X	.097	.097	Ō	%100 %100
4	M4	Z	.168	.168	0	%100
5	M10	X	.246	.246	0	%100
6	M10	Z	.426	.426	0	%100
7	MP3A	X	.259	.259	0	%100
8	MP3A	Z	.449	.449	0	%100
9	MP4A	X	.259	.259	0	%100
10	MP4A	Z	.449	.449	0	%100
11	MP2A	X	.314	.314	0	%100 %100
12	MP2A	Z	.543	.543	Ō	%100
13	MP1A	X	.259	.259	0	%100
14	MP1A	Z	,449	.449	0	%100
15	M43	X	.246	.246	0	%100 %100
16	M43	Z	.426	.426	0	%100
17	M46	X	.491	.491	0	%100
18	M46	Z	.85	.85	Ö	%100
19	M51B	X	0	0	0	%100
20	M51B	Z	0	0	0	%100
21	M52B	X	.273	.273	0	%100
22	M52B	Z	.472	.472	Ŏ	%100
23	M76	X	.164	.164	0	%100
24	M76	Z	.283	.283	Ŏ	%100
25	M77	X	0	0	0	%100
26	M77	Z	0	0	Ŏ	%100
27	M80	X	0	0	0	%100 %100
28	M80	Z	0	0	ŏ	%100
29	M84	X	.164	.164	0	%100
30	M84	Z	.283	.283	Ö	%100
31	M85	X	.5	.5	0	%100
32	M85	Z	.866	.866	0	%100
33	M91	X	.527	.527	Ö	%100
34	M91	Z	.912	.912	0	%100
35	M34	X	.388	.388	0	%100
36	M34	Z	.672	.672	0	%100
37	M35	X	0	0	0	%100
38	M35	Z	0	Ö	0	%100
39	M36	X	0	0	0	%100



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction		End Magnitude(lb/ft,F	Start Location[π,%]	End Location[ft,% %100
10	M36	Z	0	0	0	%100
11	M37	X	0	0	Ö	%100
12	M37	Z	0	.273	0	%100
3	M40	X	.273		0	%100
4	M40	Z	.472	.472	0	%100
5	M41	X	.273	.273	0	%100
6	M41	Z	.472	.472		%100
7	M45	X	.655	.655	0	%100
8	M45	Z	1.134	1.134	0	%100
9	M46A	X	.5	.5	0	%100
0	M46A	Z	.866	.866	0	%100 %100
51	M48	X	.527	.527	0	%100
2	M48	Z	.912	.912	0	
3	M50A	X	.655	.655	0	%100
4	M50A	Z	1.134	1.134	0	%100
	M51C	X	.5	.5	0	%100
55	M51C	Z	.866	.866	0	%100
66	M53	X	.527	.527	0	%100
7	M53	Z	.912	.912	0	%100
8	M58A	X	.097	.097	0	%100
9		Z	.168	.168	0	%100
60	M58A	X	.246	.246	0	%100
31	M59A	Z	.426	.426	0	%100
52	M59A	X	.246	.246	0	%100
3	M60	Z	.426	.426	0	%100
34	M60	X	.491	.491	0	%100
35	M61		.85	.85	0	%100
66	M61	Z	.273	.273	0	%100
57	M64	X	.472	.472	0	%100
86	M64	Z		0	0	%100
39	M65	X	0	0	0	%100
70	M65	Z	.164	.164	0	%100
71	M69	X		.283	0	%100
72	M69	Z	.283	.5	0	%100
73	M70	X	.5	.866	0	%100
74	M70	Z	.866	.527	0	%100
75	M72	X	.527	.912	0	%100
76	M72	Z	.912	.164	0	%100
77	M74	X	.164		0	%100
78	M74	Z	.283	.283	0	%100
79	M75	X	0	0	0	%100
80	M75	Z	0	0	0	%100
81	M77A	X	0	0	0	%100
82	M77A	Z	0	0	0	%100
83	M82	X	0	0		%100
84	M82	Z	0	0	0	%100
85	MP3C	X	.259	.259	0	%100
86	MP3C	Z	.449	.449	0	%100
87	MP4C	X	.259	.259	0	%100
88	MP4C	Z	.449	.449	0	
	MP2C	X	.314	.314	0	%100
89	MP2C	Z	.543	.543	0	%100
90	MP1C	X	.259	.259	0	%100
91		Z	.449	.449	0	%100
92	MP1C	X	.286	.286	0	%100
93	M91A	Z	.496	.496	0	%100
94	M91A	X	.259	.259	0	%100
95	MP3B	7	.449	.449	0	%100



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start Magnitude[lb/ft.	End Magnitude[lb/ft,F	Start Location(ft %)	End Location[ft,%]
97	MP4B	X	.259	.259	0	%100
98	MP4B	Z	.449	.449	0	%100
99	MP2B	X	.314	.314	0	%100 %100
100	MP2B	Z	.543	.543	0	%100 %100
101	MP1B	X	.259	.259	0	%100 %100
102	MP1B	Z	.449	.449	0	%100 %100
103	M101	X	.212	.212	0	%100 %100
104	M101	Z	.367	.367	0	%100 %100
105	M102	X	.235	.235	0	
106	M102	Z	.407	.407	0	%100 %100
107	M107	X	0	0	0	%100 %100
108	M107	Z	0	i o	Ö	%100
109	M112	X	.235	.235	0	%100
110	M112	Z	.407	.407	0	%100
111	M123	X	0	0	0	%100
112	M123	Z	0	0	0	<u>%100</u>
113	M124	X	.259	.259	0	%100
114	M124	Z	.448	.448	0	%100 %100
115	M125	X	.259	.259		<u>%100</u>
116	M125	Z	.448	.448	0	%100 %100

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

	Member Label	Direction	Start Magnitude[lb/ft,	End Magnitude[lb/ft,F	. Start Location[ft.%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	.764	.764	0	%100
3	M4	X	0	0	0	%100
4	M4	Z	0	0	0	%100
5	M10	X	0	Ō	0	%100
6	M10	Z	.656	.656	0	%100
7	MP3A	X	0	0	0	%100 %100
8	MP3A	Z	.518	.518	0	%100 %100
9	MP4A	X	0	0	0	%100 %100
10	MP4A	Z	.518	.518	ő	%100 %100
11	MP2A	X	0	.510	0	%100 %100
12	MP2A	Z	.627	.627	0	
13	MP1A	X	0	0	0	%100
14	MP1A	Z	.518	.518	0	%100
15	M43	X	0	.516		<u>%100</u>
16	M43	Z	.656	.656	0	%100
17	M46	X	0	.036	0	%100
18	M46	Z	1.309	1.309	0	%100
19	M51B	X	0	1.309	0	%100
20	M51B	Z	.182	.182	0	%100
21	M52B	X	0	.162	0	%100
22	M52B	Ž	.182		0	%100
23	M76	X		.182	0	%100
24	M76	Z	0	0	0	%100
25	M77	X	0	0	0	%100
26	M77	Z		0	0	%100
27	M80	X	.333	.333	0	%100
28	M80		0	0	0	%100
29	M84	Z	.351	.351	0	%100
30	M84	X	0	0	0	%100
31		Z	0	0	0	%100
32	M85	X	0	0	0	%100
	M85	Z	.333	.333	0	%100
33	M91	X	0	0	0	%100



RISA-3D Version 17.0.4

Company Designer Job Number Model Name Colliers Engineering & Design

CL

umber : Project No. 10206276 Name : 5000245391-VZW_MT_LO_H July 5, 2023 5:39 PM Checked By: DX

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

	er Distributed Lo Member Label	Direction	Start Magnitude[lb/ft,	End Magnitude[lb/ft,F.	Start Location[ft,%]	End Location[ft,% %100
34	M91	Z	.351	.351	0	%100
35	M34	X	0	0	0	
36	M34	Z	.582	.582	0	%100 %100
37	M35	X	0	0	0	
38	M35	Z	.164	.164	0	%100
39	M36	X	0	0	0	%100
10	M36	Z	.164	.164	0	%100
11	M37	X	0	0	0	%100
12	M37	Z	.327	.327	0	%100
	M40	X	0	0	0	%100
13	M40	Z	.182	.182	0	%100
14	M41	X	0	0	0	%100
15		Z	.727	.727	0	%100
16	M41	X	0	0	0	%100
17	M45	Ž	.982	.982	0	%100
18	M45		0	0	Ö	%100
19	M46A	X	.333	.333	0	%100
50	M46A	Z	0	0	0	%100
51	M48	X	.351	.351	0	%100
52	M48	Z		0	0	%100
53	M50A	X	0	.982	Ö	%100
54	M50A	Z	.982		Ö	%100
55	M51C	X	0	0	0	%100
56	M51C	Z	1.333	1.333	0	%100
57	M53	X	00	0		%100
58	M53	Z	1.404	1.404	0	%100
59	M58A	X	0	0		%100 %100
30	M58A	Z	.582	.582	0	%100
51	M59A	X	00	0	0	%100 %100
32	M59A	Z	.164	.164	0	
63	M60	X	0	0	0	%100
64	M60	Z	.164	.164	0	%100
65	M61	X	0	0	0	%100
66	M61	Z	.327	.327	0	%100
67	M64	X	0	0	0	%100
68	M64	Z	.727	.727	0	%100
	M65	X	0	0	0	%100
69		Ž	.182	.182	0	%100
70	M65	X	0	0	0	%100
71	M69	Z	.982	.982	0	%100
72	M69	X	0	0	0	%100
73	M70	Ž	1.333	1.333	0	%100
74	M70	X	0	0	0	%100
75	M72		1.404	1.404	0	%100
76	M72	Z	0	0	0	%100
77	M74	X	.982	.982	Ů Ú	%100
78	M74	Z		0	0	%100
79	M75	X	0	.333	0	%100
80	M75	Z	.333	.333	0	%100
81	M77A	X	0	.351	0	%100
82	M77A	Z	.351		0	%100
83	M82	X	0	0	0	%100
84	M82	Z	.191	.191	0	%100
85	MP3C	X	0	0	0	%100
86	MP3C	Z	.518	.518		
87	MP4C	X	0	0	0	%100
88	MP4C	Z	.518	.518	0	%100
89	MP2C	X	0	0	0	%100
90	MP2C	Z	.627	.627	0	%100



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start Magnitude[lb/ft	End Magnitude[lb/ft,F	Start Location(ft %)	End Location[ft,%]
91	MP1C	X	0	0	0	%100
92	MP1C	Z	.518	.518	0	%100
93	M91A	X	0	0	Ō	%100
94	M91A	Z	.191	.191	Ö	%100
95	MP3B	X	0	0	Ö	%100 %100
96	MP3B	Z	.518	.518	Ŏ	%100
97	MP4B	X	0	0	Ö	%100
98	MP4B	Z	.518	.518	0	%100 %100
99	MP2B	X	0	0	Ö	%100
100	MP2B	Z	.627	.627	0	%100 %100
101	MP1B	X	0	0	0	%100 %100
102	MP1B	Z	.518	.518	Ö	%100
103	M101	X	0	0	0	%100
104	M101	7	.424	.424	0	%100
105	M102	X	0	0	0	%100 %100
106	M102	Z	.627	.627	0	%100 %100
107	M107	X	0	0	0	%100 %100
108	M107	Z	.157	.157	0	%100 %100
109	M112	X	0	0	0	%100 %100
110	M112	Z	.157	.157	0	%100 %100
111	M123	X	0	0	0	
112	M123	7	.173	.173	0	%100 %100
113	M124	X	0	1 0	0	%100 %100
114	M124	Z	.173	.173	0	%100 %100
115	M125	X	0	0	0	%100 %100
116	M125	Z	.69	.69	0	%100 %100

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

	Member Label	Direction	Start MagnitudeIlb/ft.	End Magnitude[lb/ft,F	Start Location(ft %1	End Location[ft,%]
1	M1	X	286	286	0	%100
2	M1	Z	.496	.496	0	%100
3	M4	X	097	097	0	%100
4	M4	Z	.168	.168	Ö	%100
5	M10	X	246	246	0	%100 %100
6	M10	Z	.426	.426	0	%100
7	MP3A	X	259	259	0	%100 %100
8	MP3A	Z	.449	.449	Ŏ O	%100
9	MP4A	X	259	259	0	%100
10	MP4A	Z	.449	.449	Ō	%100 %100
11	MP2A	X	314	314	0	%100 %100
12	MP2A	Z	.543	.543	Ö	%100
13	MP1A	X	259	259	0	%100 %100
14	MP1A	Z	.449	.449	Ö	%100 %100
15	M43	X	246	246	0	%100 %100
16	M43	Z	.426	.426	Ö	%100 %100
17	M46	X	491	491	Ö	%100 %100
18	M46	Z	.85	.85	Ö	%100 %100
19	M51B	X	273	273	0	%100 %100
20	M51B	Z	.472	.472	0	%100 %100
21	M52B	X	0	0	0	%100
22	M52B	7	Ŏ	Ö	0	%100 %100
23	M76	X	164	164	0	%100
24	M76	Z	.283	.283	0	
25	M77	X	5	5	0	%100 %100
26	M77	Z	.866	.866	0	
27	M80	X	527	527	0	%100 %100



: Colliers Engineering & Design : CL

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction		End Magnitude[lb/ft,F.	Start Location[ft.%]	End Location[ft.9
28	M80	Z	.912	.912	0	%100
29	M84	X	164	164	0	%100
30	M84	Z	.283	.283	0	%100
31	M85	X	0	0	0	%100
32	M85	Z	0	0	0	%100
33	M91	X	0	0	0	%100
	M91	Z	0	0	0	%100
34	M34	X	097	097	0	%100
35		Z	.168	.168	0	%100
6	M34	X	246	246	0	%100
7	M35	Z	.426	.426	0	%100
38	M35		246	246	0	%100
9	M36	X	.426	.426	0	%100
10	M36	Z	491	491	0	%100
1	M37	X		.85	0	%100
2	M37	Z	.85	0	- 0	%100
13	M40	X	0		Ŏ	%100
14	M40	Z	0	273	0	%100
15	M41	X	273	.472	0	%100
16	M41	Z	.472		0	%100
17	M45	X	164	164	0	%100
18	M45	Z	.283	.283		%100
19	M46A	X	0	0	0	%100 %100
50	M46A	Z	0	0	0	
51	M48	X	0	0	0	%100
52	M48	Z	0	0	0	%100
53	M50A	X	164	164	0	%100
	M50A	Z	.283	.283	0	%100
54	M51C	X	5	5	00	%100
55		Ž	.866	.866	0	%100
56	M51C	X	527	527	0	%100
57	M53	Z	.912	.912	0	%100
58	M53		388	388	0	%100
59	M58A	X	.672	.672	0	%100
60	M58A	Z	0	0	0	%100
31	M59A	X	0	0	0	%100
62	M59A	Z	0	Ö	0	%100
63	M60	X		Ŏ	0	%100
64	M60	Z	0	0	0	%100
65	M61	X	0		0	%100
66	M61	Z	0	0	0	%100
67	M64	X	273	273	0	%100 %100
68	M64	Z	.472	.472		%100
69	M65	X	273	273	0	
70	M65	Z	,472	.472	0	%100 %100
71	M69	X	655	655	0	%100
72	M69	Z	1.134	1.134	0	%100
73	M70	X	5	5	0	%100
	M70	Z	.866	.866	0	%100
74	M72	X	527	527	0	%100
75	M72	Z	.912	.912	0	%100
76		X	655	655	0	%100
77	M74	Z	1.134	1.134	0	%100
78	M74		5	5	0	%100
79	M75	X	.866	.866	0	%100
80	M75	Z	527	527	Ö	%100
81	M77A	X	.912	.912	Ö	%100
82	M77A	Z		286	0	%100
83	M82	X	286	.496	0	%100
84	M82	Z	.496	.490		70,00



Colliers Engineering & Design CL Project No. 10206276

5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start Magnitude[lb/ft	End Magnitude[lb/ft,F	Start Location[ft %]	End Location[ft,%]
85	MP3C	X	259	259	0	%100
86	MP3C	Z	.449	.449	0	%100
87	MP4C	X	259	259	0	%100
88	MP4C	Z	.449	.449	Ö	%100
89	MP2C	X	314	314	0	%100
90	MP2C	Z	.543	.543	Ŏ	%100 %100
91	MP1C	X	259	259	Ö	%100
92	MP1C	Z	.449	.449	Ö	%100
93	M91A	X	0	0	0	%100
94	M91A	Z	0	0	Ö	%100
95	MP3B	X	259	259	0	%100 %100
96	MP3B	Z	.449	.449	Ö	%100
97	MP4B	X	259	259	0	%100 %100
98	MP4B	Z	.449	.449	0	%100 %100
99	MP2B	X	314	314	0	%100 %100
100	MP2B	Z	.543	.543	0	%100
101	MP1B	X	259	259	0	%100
102	MP1B	Z	449	.449	Ö	%100 %100
103	M101	X	212	212	0	%100
104	M101	Z	.367	.367	Ö	%100
105	M102	X	235	235	0	%100 %100
106	M102	Z	.407	.407	0	%100
107	M107	X	235	235	0	%100
108	M107	Z	.407	.407	0	%100
109	M112	X	0	0	0	%100 %100
110	M112	Z	Ö	0	0	%100 %100
111	M123	X	259	259	0	%100 %100
112	M123	Z	.448	.448	0	%100 %100
113	M124	X	0	0	0	%100 %100
114	M124	Z	0	0	0	
115	M125	X	259	259	0	%100 %100
116	M125	Z	.448	.448	0	%100 %100

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

	Member Label	Direction	Start Magnitude[lb/ft	End Magnitude[lb/ft.F	Start Location[ft %]	End Location[ft,%]
1	M1	X	165	165	0	%100
2	M1	Z	.095	.095	0	%100
3	M4	X	504	504	0	%100
4	M4	Z	.291	.291	0	%100
5	M10	X	142	142	0	%100
6	M10	Z	.082	.082	0	%100
7	MP3A	X	449	449	0	%100
8	MP3A	Z	.259	.259	0	%100
9	MP4A	X	449	449	Ô	%100
10	MP4A	Z	.259	.259	0	%100
11	MP2A	X	543	543	0	%100
12	MP2A	Z	.314	.314	Ö	%100
13	MP1A	X	449	449	0	%100
14	MP1A	Z	.259	.259	Ö	%100
15	M43	X	142	142	Ō	%100
16	M43	Z	.082	.082	0	%100
17	M46	X	283	283	Ö	%100
18	M46	Z	.164	.164	0	%100
19	M51B	X	63	63	0	%100 %100
20	M51B	Z	.363	.363	Ö	%100
21	M52B	X	157	157	Ö	%100 %100



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start Magnitude[lb/ft	End Magnitude(lb/ft,F	Start Location[ft,%]	End Location[ft,% %100
22	M52B	Z	.091	85	0	%100
23	M76	X	85	.491	0	%100
24	M76	Z	.491		0	%100
25	M77	X	-1.155	-1.155	0	%100
26	M77	Z	.667	.667	0	%100
7	M80	X	-1.216	-1.216		%100
8	M80	Z	.702	.702	0	%100
29	M84	X	85	85	0	%100
30	M84	Z	.491	.491	0	%100
31	M85	X	289	289	0	%100
32	M85	Z	.167	.167	0	%100 %100
33	M91	X	304	304	0	%100 %100
34	M91	Z	.176	.176	0	
35	M34	X	0	0	0	%100
36	M34	Z	0	0	. 0	%100
37	M35	X	568	568	0	%100
	M35	Z	.328	.328	0	%100
38	M36	X	568	568	0	%100
39	M36	Ž	.328	.328	0	%100
10		X	-1.134	-1.134	0	%100
11	M37	Z	.655	.655	0	%100
12	M37	X	157	157	0	%100
13	M40	Ž	.091	.091	0	%100
44	M40	X	157	157	0	%100
45	M41	Ž	.091	.091	0	%100
46	M41		0	0	0	%100
17	M45	X	0	Ö	0	%100
48	M45	Z	289	289	0	%100
49	M46A	X	.167	.167	0	%100
50	M46A	Z		304	0	%100
51	M48	X	304	.176	0	%100
52	M48	Z	.176	0	0	%100
53	M50A	X	0	0	0	%100
54	M50A	Z	0	289	0	%100
55	M51C	X	289		0	%100
56	M51C	Z	.167	.167	0	%100
57	M53	X	304	304	0	%100
58	M53	Z	.176	.176		%100
59	M58A	X	504	504	0	%100
60	M58A	Z	.291	.291	0	%100
61	M59A	X	142	142		%100 %100
62	M59A	Z	.082	.082	0	%100
63	M60	X	142	142	0	%100 %100
64	M60	Z	.082	.082	0	
65	M61	X	283	283	0	%100
66	M61	Z	.164	.164	0	%100
67	M64	X	157	157	0	%100
68	M64	Z	.091	.091	0	%100
	M65	X	63	63	0	%100
69	M65	Z	.363	.363	0	%100
70		X	85	85	0	%100
71	M69	Ž	.491	.491	0	%100
72	M69	X	289	289	0	%100
73	M70	Z	.167	.167	0	%100
74	M70		304	304	0	%100
75	M72	X	.176	.176	Ō	%100
76	M72	Z	85	85	Ö	%100
77	M74	X	.491	.491	Ů Ů	%100
78	M74	Z	.491	.751		Page 166



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

70	Member Label	Direction	Start Magnitude[lb/ft	End Magnitude[lb/ft,F	. Start Location[ft,%]	End Location[ft,%]
79	M75	X	-1.155	-1.155	0	%100
80	M75	Z	.667	.667	0	%100
81	M77A	X	-1.216	-1.216	0	%100
82	M77A	Z	.702	.702	0	%100
83	M82	X	661	661	0	%100
84	M82	Z	.382	.382	0	%100
85	MP3C	X	449	449	0	%100
86	MP3C	Z	.259	.259	0	%100
87	MP4C	X	449	449	Ö	%100
88	MP4C	Z	.259	.259	0	%100
89	MP2C	X	543	543	0	%100
90	MP2C	Z	.314	.314	Ö	%100
91	MP1C	X	449	-,449	0	%100
92	MP1C	Z	.259	.259	0	%100
93	M91A	X	165	165	Ö	%100 %100
94	M91A	Z	.095	.095	0	%100
95	MP3B	X	449	449	Ö	%100
96	MP3B	Z	.259	.259	Ö	%100
97	MP4B	X	449	449	0	%100 %100
98	MP4B	Z	.259	.259	Ö	%100 %100
99	MP2B	X	543	543	0	%100 %100
100	MP2B	Z	.314	.314	0	%100
101	MP1B	X	449	449	0	%100 %100
102	MP1B	Z	.259	.259	0	%100 %100
103	M101	X	367	367	0	%100 %100
104	M101	Z	.212	.212	0	%100 %100
105	M102	X	136	136	0	%100 %100
106	M102	Z	.078	.078	0	%100 %100
107	M107	X	543	543	0	%100 %100
108	M107	Z	.314	.314	0	%100 %100
109	M112	X	136	136	0	%100 %100
110	M112	Z	.078	.078	0	%100 %100
111	M123	X	598	598	0	%100 %100
112	M123	Z	.345	.345	0	%100 %100
113	M124	X	149	149	0	
114	M124	Z	.086	.086	0	%100 %100
115	M125	X	149	149	0	%100
116	M125	Z	.086	.086	0	%100 %100

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

	Member Label	Direction	Start Magnitude[lb/ft,	End Magnitude[lb/ft,F	. Start Location[ft.%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M4	X	776	776	0	%100
4	M4	Z	0	0	Ö	%100
5	M10	X	0	0	0	%100
6	M10	Z	0	0	Ô	%100 %100
7	MP3A	X	518	518	0	%100
8	MP3A	Z	0	0	Ŏ	%100
9	MP4A	X	518	518	0	%100
10	MP4A	Z	0	0	0	%100 %100
11	MP2A	X	627	627	0	%100 %100
12	MP2A	Z	0	0	0	%100
13	MP1A	X	518	518	0	%100 %100
14	MP1A	Z	0	0	Ŏ	%100
15	M43	X	0	0	0	%100 %100



Company Designer Job Number

Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H Model Name

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction		End Magnitude[lb/ft,F	Start Location[ft,%]	End Location[ft,%] %100
16	M43	Z	0	0	0	%100 %100
17	M46	X	0	0	0	%100 %100
18	M46	Z	0	0	0	%100 %100
19	M51B	X	545	545	0	%100
20	M51B	Z	0	0	0	%100
21	M52B	X	-,545	545	0	%100
22	M52B	Z	0	0	0	%100
23	M76	X	-1.309	-1.309		%100
24	M76	Z	0	0	0	%100
25	M77	X	-1	-1	0	%100
26	M77	Z	0	0	0	%100
27	M80	X	-1.053	-1.053	0	%100
28	M80	Z	0	1 200	0	%100
29	M84	X	-1.309	-1.309	0	%100
30	M84	Z	0	0	0	%100
31	M85	X	-1	-1	0	%100
32	M85	Z	0	0	0	%100
33	M91	X	-1,053	-1.053	0	%100
34	M91	Z	0	0	0	%100
35	M34	X	194	194	0	%100
36	M34	Z	0	0	0	%100
37	M35	X	492	492	0	%100
38	M35	Z	0	0	0	%100
39	M36	X	492	492	0	%100
40	M36	Z	0	0	0	%100
41	M37	X	982	982	0	%100
42	M37	Z	0	0	0	%100
43	M40	X	545	545	0	%100
44	M40	Z	0	0	0	%100
45	M41	X	0	0	0	%100
46	M41	Z	0	0	0	%100
47	M45	X	327	-,327	0	%100 %100
48	M45	Z	0	0	0	%100
49	M46A	X	-1	-1	0	%100
50	M46A	Z	0	0	0	%100
51	M48	X	-1.053	-1.053	0	%100
52	M48	Z	0	0	0	%100
53	M50A	X	327	327	0	%100
54	M50A	Z	0	0	0	%100 %100
55	M51C	X	0	0	0	%100 %100
56	M51C	Z	0	0	0	%100 %100
57	M53	X	0	0		%100
58	M53	Z	0	0	0	%100
59	M58A	X	194	194	0	%100 %100
60	M58A	Z	0	0	0	%100 %100
61	M59A	X	492	492	0	%100 %100
62	M59A	Z	0	0	0	%100 %100
63	M60	X	492	492	0	
64	M60	Z	0	0	0	%100 %100
65	M61	X	982	982	0	%100 %100
66	M61	Z	0	0	0	
67	M64	X	0	0	0	%100 %100
68	M64	Z	0	0	0	%100
69	M65	X	545	545	0	%100
70	M65	Z	0	0	0	%100
71	M69	X	327	327	0	%100
72	M69	Z	0	0	0	%100



Company Designer Job Number

: Colliers Engineering & Design

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

70	Member Label	Direction	Start Magnitude[lb/ft,.	End Magnitude[lb/ft,F	. Start Location[ft,%]	End Location[ft,%]
73	M70	X	0	0	0	%100
74	M70	Z	0	0	0	%100
75	M72	X	0	0	0	%100
76	M72	Z	0	0	0	%100
77	M74	X	327	327	0	%100
78	M74	Z	0	0	0	%100
79	M75	X	-1	-1	0	%100
80	M75	Z	0	0	0	%100
81	M77A	X	-1.053	-1.053	0	%100
82	M77A	Z	0	0	0	%100
83	M82	X	573	573	0	%100
84	M82	Z	0	0	0	%100
85	MP3C	X	518	518	0	%100
86	MP3C	Z	0	0	0	%100
87	MP4C	X	518	518	Ö	%100
88	MP4C	Z	0	0	Ö	%100
89	MP2C	X	627	627	0	%100
90	MP2C	Z	0	0	Ö	%100
91	MP1C	X	518	518	0	%100
92	MP1C	Z	0	0	0	%100 %100
93	M91A	X	573	573	0	%100 %100
94	M91A	Z	0	0	Ö	%100
95	MP3B	X	518	518	0	%100
96	MP3B	Z	0	0	0	%100 %100
97	MP4B	X	518	518	0	%100 %100
98	MP4B	Z	0	0	0	%100
99	MP2B	X	627	627	0	%100
100	MP2B	Z	0	0	0	%100 %100
101	MP1B	X	518	518	0	%100 %100
102	MP1B	Z	0	0	o l	%100 %100
103	M101	X	424	424	0	%100 %100
104	M101	Z	0	0	0	%100 %100
105	M102	X	0	Ŏ	0	%100 %100
106	M102	Z	Ů Ô	0	0	%100 %100
107	M107	X	47	47	0	%100 %100
108	M107	Z	0	0	0	%100 %100
109	M112	X	47	47	0	%100
110	M112	Z	0	0	0	%100 %100
111	M123	X	518	518	0	%100 %100
112	M123	Z	516	318	0	
113	M124	X	518	518		%100
114	M124	Z	518		0	%100
115	M125	X	0	0	0	%100 %100
	141120	Δ	I U	U		%100

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

	Member Label	Direction	Start Magnitude[lb/ft,	End Magnitude[lb/ft,F	. Start Location[ft,%]	End Location[ft,%]
1	M1	X	165	165	0	%100
2	M1	Z	095	095	0	%100
3	M4	X	504	504	0	%100
4	M4	Z	291	291	0	%100
5	M10	X	142	-,142	0	%100
6	M10	Z	082	082	0	%100
7	MP3A	X	449	449	0	%100
8	MP3A	Z	259	259	Ö	%100
9	MP4A	X	-,449	449	Ö	%100



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start Magnitude[lb/ft,	End Magnitude[lb/ft,F.,	. Start Location[ft,%]	End Location[ft,%]
10	MP4A	Z	259	259	0	%100
11	MP2A	X	543	543	0	%100
12	MP2A	Z	314	314	0	%100
13	MP1A	X	449	449	0	%100
14	MP1A	Z	259	259	0	%100
	M43	X	142	142	0	%100
15	M43	Z	082	082	0	%100
16		X	283	283	0	%100
17	M46	Ž	164	164	0	%100
18	M46	X	157	157	0	%100
19	M51B		091	091	0	%100
20	M51B	Z	63	63	Ō	%100
21	M52B	X	363	363	0	%100
22	M52B	Z		85	0	%100
23	M76	X	85		0	%100
24	M76	Z	491	491	0	%100
25	M77	X	289	289	0	%100
26	M77	Z	167	167		%100
27	M80	X	304	304	0	%100
28	M80	Z	176	176	0	
29	M84	X	85	85	0	%100
30	M84	Z	491	491	0	%100
31	M85	X	-1.155	-1.155	0	%100
32	M85	Z	667	667	0	%100
	M91	X	-1.216	-1.216	0	%100
33	M91	Z	702	702	0	%100
34		X	504	504	0	%100
35	M34	Z	291	291	0	%100
36	M34		142	142	0	%100
37	M35	X	082	082	0	%100
38	M35	Z	142	142	Ŏ	%100
39	M36	X		082	Ŏ	%100
40	M36	Z	082		0	%100
41	M37	X	283	283	0	%100
42	M37	Z	164	164		%100
43	M40	X	63	63	0	%100
44	M40	Z	363	363	0	%100 %100
45	M41	Χ	157	157	0	
46	M41	Z	091	091	0	%100
47	M45	X	85	85	0	%100
48	M45	Z	491	491	0	%100
49	M46A	X	-1.155	-1.155	0	%100
50	M46A	Z	667	667	0	%100
	M48	X	-1.216	-1.216	0	%100
51		Z	702	702	0	%100
52	M48	X	85	85	0	%100
53	M50A	^	491	491	0	%100
54	M50A	Z	289	289	Ö	%100
55	M51C	X		167	Ŏ	%100
56	M51C	Z	167	304	0	%100
57	M53	X	304		0	%100
58	M53	Z	176	176		%100
59	M58A	X	0	0	0	%100 %100
60	M58A	Z	0	0	0	0/100
61	M59A	X	568	568	0	%100
62	M59A	Z	328	-,328	0	%100
63	M60	X	568	568	0	%100
64	M60	Z	328	328	0	%100
	M61	X	-1.134	-1.134	0	%100
65				655	0	%100



Colliers Engineering & Design CL Project No. 10206276

5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Label	Direction	Start Magnitude[lb/ft	End Magnitude[lb/ft,F	. Start Location[ft,%]	End Location[ft,%]
67	M64	X	157	157	0	%100
68	M64	Z	091	091	0	%100
69	M65	X	157	157	0	%100
70	M65	Z	091	091	0	%100
71	M69	X	0	0	0	%100
72	M69	Z	0	0	0	%100
73	M70	X	289	289	0	%100
74	M70	Z	167	167	0	%100
75	M72	X	304	304	0	%100
76	M72	Z	176	176	0	%100
77	M74	X	0	0	0	%100
78	M74	Z	0	0	Ö	%100
79	M75	X	289	289	0	%100
80	M75	Z	167	167	0	%100
81	M77A	X	304	304	0	%100
82	M77A	Z	176	176	0	%100
83	M82	X	165	165	0	%100
84	M82	Z	095	095	0	%100
85	MP3C	X	449	449	0	%100
86	MP3C	Z	259	259	Ö	%100
87	MP4C	X	449	449	Ö	%100
88	MP4C	Z	259	259	0	%100
89	MP2C	X	543	543	0	%100
90	MP2C	Z	314	314	0	%100
91	MP1C	X	449	449	0	%100
92	MP1C	Z	259	259	0	%100
93	M91A	X	661	661	0	%100
94	M91A	Z	382	382	0	%100
95	MP3B	X	449	449	0	%100
96	MP3B	Z	259	259	0	%100
97	MP4B	X	449	449	0	%100
98	MP4B	Z	259	259	0	%100
99	MP2B	X	543	543	0	%100
100	MP2B	Z	314	314	0	%100
101	MP1B	X	449	449	Ö	%100
102	MP1B	Z	259	259	Ö	%100
103	M101	X	367	367	0	%100
104	M101	Z	212	212	0	%100
105	M102	X	136	136	0	%100
106	M102	Z	078	078	Ö	%100
107	M107	X	136	136	0	%100 %100
108	M107	Z	078	078	0	%100 %100
109	M112	X	543	543	Ö Ö	%100 %100
110	M112	Z	314	314	Ö	%100 %100
111	M123	X	149	149	0	%100
112	M123	Z	086	086	ŏ	%100 %100
113	M124	X	598	598	0	%100 %100
114	M124	Z	345	345	0	%100 %100
115	M125	X	149	149	0	%100
116	M125	Z	086	086	0	%100 %100

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

	Member Label	Direction	Start Magnitude[lb/ft,	End Magnitude[lb/ft,F	Start Location(ft.%)	End Location[ft.%]
1	M1	X	286	286	0	%100
2	M1	Z	496	496	Ō	%100
3	M4	X	097	097	0	%100



Colliers Engineering & Design

CL

bb Number : Project No. 10206276 lodel Name : 5000245391-VZW_MT_LO_H July 5, 2023 5:39 PM Checked By: DX

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

	ember Label	Direction	Start Magnitude[lb/ft,.	End Magnitude[lb/ft,F	. Start Location[ft,%]	End Location[ft.%] %100
4	M4	Z	168	168	0	%100 %100
5	M10	X	246	246		%100
6	M10	Z	426	426	0	%100
7	MP3A	X	259	259	0	
8	мРЗА	Z	449	449	0	%100
9	MP4A	X	259	259	0	%100
10	MP4A	Z	449	449	0	%100
11	MP2A	X	314	314	0	%100
12	MP2A	Z	543	543	0	%100
13	MP1A	X	259	259	0	%100
	MP1A	Z	449	449	0	%100
14	M43	X	246	246	0	%100
15		Z	426	426	0	%100
16	M43	X	491	491	0	%100
17	M46	Z	85	85	0	%100
18	M46		-,83	0	0	%100
19	M51B	X	0	Ö	0	%100
20	M51B	Z	273	273	0	%100
21	M52B	X	213	472	0	%100
22	M52B		472	164	0	%100
23	M76	X	164		0	%100
24	M76	Z	283	283	0	%100
25	M77	X	0	0	0	%100
26	M77	Z	0	0		%100
27	M80	X	0	0	0	%100
28	M80	Z	0	0	0	
29	M84	X	164	164	0	%100
30	M84	Z	283	283	0	%100
31	M85	X	5	5	0	%100
32	M85	Z	866	866	0	%100
	M91	X	527	527	0	%100
33	M91	Z	912	912	0	%100
34	M34	X	388	388	0	%100
35		Z	672	672	0	%100
36	M34	X	0	0	0	%100
37	M35	Ž	0	0	0	%100
38	M35		0	0	0	%100
39	M36	X	0	Ŏ	0	%100
40	M36	Z	0	0	0	%100
41	M37	X	0	0	Ö	%100
42	M37	Z		273	Ŏ	%100
43	M40	X	-,273	472	0	%100
44	M40	Z	472		0	%100
45	M41	X	273	273		%100
46	M41	Z	472	472	0	%100
47	M45	X	655	655	0	%100 %100
48	M45	Z	-1.134	-1.134	0	
49	M46A	X	5	5	0	%100
50	M46A	Z	866	866	0	%100
51	M48	X	527	527	0	%100
	M48	Z	912	912	0	%100
52	M50A	X	655	655	0	%100
53		Z	-1.134	-1.134	0	%100
54	M50A	X	5	5	0	%100
55	M51C	Z	866	866	0	%100
56	M51C		527	527	0	%100
57	M53	X	912	912	0	%100
58	M53	Z		097	0	%100
59	M58A	X	097	168	0	%100
60	M58A	Z	168	100		Page 172



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

61	Member Label M59A	Direction	Start Magnitude[lb/ft	.End Magnitude[lb/ft.F		End Location[ft,%]
62	M59A	X	246	246	0	%100
63	M60	Z	426	426	0	%100
64	M60	Z	246	246	0	%100
65	M61		426	426	0	%100
66	M61	X	491	491	0	%100
67		Z	85	85	0	%100
68	M64	X	273	273	0	%100
69	M64	Z	472	472	0	%100
	M65	X	0	0	0	%100
70	M65	Z	0	0	0	%100
71	M69	X	164	164	0	%100
72	M69	Z	283	283	0	%100
73	M70	X	5	5	0	%100
74	M70	Z	866	866	0	%100
75	M72	X	527	527	0	%100
76	M72	Z	912	912	0	%100
77	M74	X	164	164	0	%100
78	M74	Z	283	283	0	%100
79	M75	X	0	0	0	%100
80	M75	Z	0	0	0	%100
81	M77A	X	0	0	0	%100
82	M77A	Z	0	0	0	%100
83	M82	X	0	0	0	%100
84	M82	Z	0	0	0	%100
85	MP3C	X	259	259	0	%100
86	MP3C	Z	449	449	0	%100
87	MP4C	X	259	259	0	%100 %100
88	MP4C	Z	449	449	0	%100 %100
89	MP2C	X	314	314	0	%100 %100
90	MP2C	Z	543	543	0	%100
91	MP1C	X	259	259	0	%100 %100
92	MP1C	Z	449	449	Ö	%100
93	M91A	X	286	286	0	%100 %100
94	M91A	Z	496	496	0	%100 %100
95	MP3B	X	259	259	0	%100 %100
96	MP3B	Z	449	449	0	%100
97	MP4B	X	259	259	0	%100 %100
98	MP4B	Z	449	449	0	%100 %100
99	MP2B	X	314	314	0	%100 %100
100	MP2B	Z	543	543	0	%100 %100
101	MP1B	X	259	259	0	
102	MP1B	Z	449	449	0	%100
103	M101		212	212		%100
104	M101	X Z	367	367	0	<u>%100</u>
105	M102	X	235	235	0	%100
106	M102	Z	407		0	%100
107	M107	X	407	407	0	%100
108	M107	Z	0	0	0	%100
109	M112	X	235		0	%100
110	M112	Z		235	0	%100
111	M123	X	407	407	0	%100
112	M123	Z	0	0	0	%100
113	M124	X	0	0	0	%100
114	M124		259	259	0	%100
115	M125	Z	448	448	0	%100
116	M125	Z	259	259	0	%100
110	GZIIVI		448	448	0	%100



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

Member Distributed Loads (BLC 87 : BLC 39 Transient Area Loads)

_	Member Label	Direction		End Magnitude[lb/ft,F	Start Location[ft,%]	End Location[ft,%]
1	M40	Y	-1.664	-4.227	0	.832
1	M40	Y	-4.227	-6.899	.832	1.665
2	M40	Y	-6.899	-8.187	1.665	2.497
3		Y	-8.187	-6.544	2.497	3.329
4	M40	Y	-6.544	-3,463	3.329	4.162
5	M40	V	-3.462	-6.572	0	.832
6	M41	Y	-6.572	-8.261	.832	1.665
7	M41	Y	-8.261	-7.048	1.665	2.497
8	M41	Y	-7.048	-4.428	2.497	3.329
9	M41	Y	-4.428	-1.883	3.329	4.162
10	M41	Y	-1.879	-4.428	0	.832
11	M51B	- 	-4.428	-7.042	.832	1.665
12	M51B	Y	-7.042	-8.256	1.665	2,497
13	M51B	Y	-8.256	-6.578	2.497	3.329
14	M51B	Y	-6.578	-3.47	3.329	4.162
15	M51B			-6.545	0.025	.832
16	M52B	Y	-3.463	-8.189	.832	1.665
17	M52B	Y	-6.545	-6.9	1.665	2.497
18	M52B	Y	-8.189	-4.227	2.497	3.329
19	M52B	Y	-6.9		3.329	4.162
20	M52B	Y	-4.227	-1.665	0	.832
21	M64	Y	-1.879	-4.428	.832	1.665
22	M64	Y	-4.428	-7.042	1,665	2.497
23	M64	Y	-7.042	-8.256		3.329
24	M64	Υ	-8.256	-6.578	2.497	4.162
25	M64	Y	-6.578	-3.47	3.329	.832
26	M65	Y	-3.463	-6.545	0	
27	M65	Υ	-6.545	-8.189	.832	1.665
28	M65	Y	-8.189	-6.9	1.665	2.497
29	M65	Y	-6.9	-4.227	2.497	3.329
30	M65	Y	-4.227	-1.665	3.329	4.162

Member Distributed Loads (BLC 88 : BLC 40 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft.	End Magnitude[lb/ft,F	. Start Location[ft,%]	End Location[ft,%
1	M40	Y	-3.246	-8.25	0	.832
-	M40	Ý	-8.25	-13.464	.832	1.665
2		Y	-13.464	-15.978	1.665	2.497
3	M40	Y	-15.978	-12.772	2.497	3.329
4	M40	+	-12.772	-6.758	3.329	4.162
5	M40	V	-6.757	-12.825	0	.832
6	M41	' γ	-12.825	-16.122	.832	1.665
7	M41		-16.122	-13.754	1.665	2.497
8	M41	Y		-8.641	2.497	3.329
9	M41	Y	-13.754	-3.674	3.329	4.162
10	M41		-8.641		0	.832
11	M51B	Y	-3.668	-8.642	.832	1.665
12	M51B	Y	-8.642	-13.742		2.497
13	M51B	Υ	-13.742	-16.112	1.665	
14	M51B	Y	-16.112	-12.837	2.497	3.329
15	M51B	Y	-12.837	-6.771	3.329	4.162
16	M52B	Y	-6.758	-12.772	0	.832
17	M52B	Ý	-12.772	-15.981	.832	1.665
18	M52B	Ý	-15.981	-13.465	1.665	2.497
19	M52B	Ý	-13,465	-8.249	2.497	3.329
	M52B	Ý	-8.249	-3.25	3.329	4.162
20		Y	-3.668	-8.642	0	.832
21	M64	Y	-8.642	-13.742	.832	1.665
22	M64	Y	-13.742	-16.112	1.665	2.497
23	M64		-10.172	10		



Colliers Engineering & Design

Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

Member Distributed Loads (BLC 88 : BLC 40 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitudellb/ft	End Magnitude[lb/ft,F	Start Location(ft %)	End Location[ft,%]
24	M64	Υ	-16.112	-12.837	2.497	3.329
25	M64	Y	-12.837	-6.771	3.329	4.162
26	M65	Y	-6.758	-12.772	0	.832
27	M65	Y	-12.772	-15.981	.832	1.665
28	M65	Y	-15.981	-13,465	1.665	2.497
29	M65	Y	-13,465	-8.249	2.497	3.329
30	M65	Y	-8,249	-3.25	3.329	4.162

Member Distributed Loads (BLC 90 : BLC 85 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft	End Magnitude[lb/ft,F	Start Location[ft %]	End Location[ft,%]
1	M40	Z	05	127	0	.832
2	M40	Z	127	207	.832	1.665
3	M40	Z	207	246	1.665	2.497
4	M40	Z	246	196	2.497	3.329
5	M40	Z	196	104	3.329	4.162
6	M41	Z	104	197	0	.832
7	M41	Z	197	-,248	.832	1.665
8	M41	Z	248	-,211	1,665	2.497
9	M41	Z	211	133	2.497	3.329
10	M41	Z	133	056	3.329	4.162
11	M51B	Z	056	-,133	0.020	.832
12	M51B	Z	133	211	.832	1.665
13	M51B	Z	211	248	1.665	2.497
14	M51B	Z	248	197	2.497	3.329
15	M51B	Z	197	104	3.329	4.162
16	M52B	Z	104	196	0.025	.832
17	M52B	Z	196	246	.832	1.665
18	M52B	Z	246	207	1.665	2.497
19	M52B	Z	207	127	2.497	3.329
20	M52B	Z	127	05	3.329	4.162
21	M64	Z	056	133	0	.832
22	M64	Z	133	211	.832	1.665
23	M64	Z	211	248	1.665	2.497
24	M64	Z	248	-,197	2.497	3.329
25	M64	Z	197	104	3.329	4.162
26	M65	Z	104	196	0	.832
27	M65	Z	196	246	.832	1.665
28	M65	Z	246	207	1.665	2.497
29	M65	Z	207	127	2.497	3.329
30	M65	Z	127	05	3.329	4.162

Member Distributed Loads (BLC 91 : BLC 86 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft	End Magnitude[lb/ft,F	Start Location[ft.%]	End Location[ft,%]
1	M40	X	.05	.127	0	.832
2	M40	X	.127	.207	.832	1.665
3	M40	X	.207	.246	1.665	2.497
4	M40	X	.246	.196	2.497	3.329
5	M40	X	.196	.104	3.329	4.162
6	M41	X	.104	.197	0.020	.832
7	M41	X	.197	.248	.832	1.665
8	M41	X	.248	.211	1.665	2.497
9	M41	X	.211	.133	2.497	3.329
10	M41	X	.133	.056	3.329	4.162
11	M51B	X	.056	.133	0.020	.832
12	M51B	X	.133	.211	.832	1.665
13	M51B	X	.211	.248	1.665	2.497



Colliers Engineering & Design

CI

Number : Project No. 10206276 del Name : 5000245391-VZW_MT_LO_H July 5, 2023 5:39 PM Checked By: DX

Member Distributed Loads (BLC 91 : BLC 86 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude(Ib/ft	End Magnitude[lb/ft,F	Start Location[ft,%]	End Location[ft,%]
11	M51B	X	.248	.197	2.497	3.329
14	M51B	X	.197	.104	3.329	4.162
15		X	.104	.196	0	.832
16	M52B	X	.196	.246	.832	1.665
17	M52B	x	.246	.207	1,665	2,497
18	M52B	V	.207	.127	2.497	3,329
19	M52B		.127	.05	3.329	4.162
20	M52B	X	.056	.133	0	.832
21	M64	X	.133	.211	.832	1,665
22	<u>M64</u>	X		.248	1,665	2,497
23	M64	X	.211	.197	2.497	3.329
24	M64	X	.248		3.329	4.162
25	M64	X	.197	.104	0	.832
26	M65	X	.104	.196		1.665
27	M65	X	.196	.246	.832	2.497
28	M65	X	.246	.207	1.665	and the second s
29	M65	X	.207	.127	2.497	3.329
30	M65	X	.127	.05	3.329	4.162

Member Area Loads (BLC 39 : Structure D)

		Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
oint A	Joint B N79	N77	N54	Y	Two Way	005
133		N87C		Y	Two Way	005
N/				Y		005
١	N7 184	N7 N87B	N7 N87B N87C	N7 N87B N87C N6	N7 N87B N87C N6 Y	N7 N87B N87C N6 Y Two Way

Member Area Loads (BLC 40 : Structure Di)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N55	N79	N77	N54	Y	Two Way	01
2	N7	N87B	N87C	N6	Y	Two Way	01
3	N84	N108	N106	N83	Υ	Two Way	01

Member Area Loads (BLC 84 : Structure Ev)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
4	N55	N79	N77	N54	Y	Two Way	0
2	N7	N87B	N87C	N6	Y	Two Way	0
2	N84	N108	N106	N83	Y	Two Way	0

Member Area Loads (BLC 85 : Structure Eh (0 Deg))

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N55	N79	N77	N54	Z	Two Way	000156
2	N7	N87B	N87C	N6	Z	Two Way	000156
2		N108	N106	N83	Z	Two Way	000156
3	N84	11100	14100	1100			

Member Area Loads (BLC 86 : Structure Eh (90 Deg))

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
4	N55	N79	N77	N54	X	Two Way	.000156
0	N7	N87B	N87C	N6	X	Two Way	.000156
2	N84	N108	N106	N83	X	Two Way	.000156



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

Envelope Joint Reactions

_	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	- 1	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [LC
1	N3	m.	958.263	10	2620.923	13	2241.5	44	1	5.315	13	1.386			
2		m	-950.629	4	839.954	70	-2424.2	75	7	1.664	7	-1.404		115	
3	N52	m	1893.401	10	2504.263		1251.1			788	66	1.319		-1.47	
4		m	-2003.887	4	813,775		-1153.5			-2.437	21	-1.265	6	-4.634	121
5	N81	m.,	1864.384	11	2449.187	17	1357.4	87	12	846	74	1.258	_	4.406	
6		m	-1762.262	5	793.818		-1268.1		6	-2.825	29	-1.286	2	1.396	
7	Totals:	m	4681.554	10	7444.848		4711.8		1				7		
8		m	-4681.554	4	2464.067		-4711.8		7	- 1					\top

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

	Member Shape	Code Check	Loc[ft]	LC	Shear Check	1	Dir	I C	nhi*Pn	nhi*P	phi*Mn y.	nhi*Mn	Fon
1	M1 PIPE	.167	4.958	20	.064	9	- U.I	18	22812.	65205	5.749	5.749	
2	M4 HSS4	.345	0	16	.077	0	٧						
3	M10 HSS4	.173	2.375	14	.055	2	v	21	13626	139518		16.181	
4	MP3A PIPE	.275	4	16	.062	2					1.872	1.872	H1
5	MP4A PIPE	.224	4	15	.140	4		4		32130		1.872	H1
6	MP2A PIPE	.194	4	12	.063	4		10		50715		3.596	H1
7	MP1A PIPE	.281	4	23	.146	4				32130		1.872	H1
8	M43 HSS4	.168	0	24	.056	0	٧	17			16.181	16.181	
9	M46 PL1/2x6	177	.516	12	.121		v		66009	97200	1.012	12.15	H1
10	M51B L2x2x3	.160	4.162	2	.011	4	V			23392		1.085	H2-1
11	M52B L2x2x3	.158	0	12	.012	0	v	21		23392		1.086	H2-1
12	M76 PL3/8x6	.167	0	8	.258	0	٧			72900		9.113	H1
13	M77 PL3/8x6	.274	.167	8	.350	0	v			72900		9.113	H1
14	M80 PL1/2x6	.041	0	8	.029	0	v			97200		12.15	H1
15	M84 PL3/8x6	.246	0	6	.220	0	ý			72900		9.113	H1
16	M85 PL3/8x6	.265	.167	6	.344	O	v			72900		9.113	H1
17	M91 PL1/2x6	.054	0	12	.022		v			97200		12.15	H1
18	M34 HSS4	.348	0	24	.081	0	v				16.181	16.181	
19	M35 HSS4	.181	2.375	22	.055	2	y	17	13626	139518	16.181		
20	M36 HSS4	.169	0	20	.056	0	v	13	13626	139518	16.181	16.181	
21	M37 PL1/2x6	.174	.516	2	.122		v			97200		12.15	H1
22	M40 L2x2x3	.165	4.162	10	.012	4	v			23392	.558	1.086	H2-1
23	M41 L2x2x3	.154	0	8	.012	4	v	17	9823.1.	23392	.558	1.085	H2-1
24	M45 PL3/8x6	.161	0	9	.255	0	У	15	70647	72900		9.113	H1
25	M46A PL3/8x6	.265	.167	4	.360	0	ý	21	71583	72900	.57	9.113	H1
26	M48 PL1/2x6	.043	0	10	.032	0	v			97200		12.15	H1
27	M50A PL3/8x6	.253	0	2	.220	0	V			72900		9.113	H1
28	M51C PL3/8x6	.268	.167	2	.345	0	٧			72900		9.113	
29	M53 PL1/2x6	.052	0	8	.063	0	v			97200		12.15	H1
30	M58A HSS4	.341	0	14	.103	0	V				16.181	16.181	
31	M59A HSS4	.171	2.375	18	.055	2	V	13	13626	139518	16.181	16.181	
32	M60 HSS4	.168	0	16	.053	0	٧				16.181	16.181	
33	M61 PL1/2x6	.178	.516	4	.185		v			97200		12.15	H1
34	M64 L2x2x3	.159	4.162	6	.011	4	V		9823.1.		.558	1.085	
35	M65 L2x2x3	.156	0	4	.012	0	v	13	9823.1.	23392	.558	1.086	H2-1
36	M69 PL3/8x6	.164	0	12	.254	0	V			72900		9.113	H1
37	M70 PL3/8x6	.268	.167	12	.347	0	ý			72900		9.113	H1
38	M72 PL1/2x6	.041	0	6	.154	0	v	26	96757	97200	1.012	12.15	H1
39	M74 PL3/8x6	.250	0	4	.204	0	v			72900	.57	9.113	H1
40	M75 PL3/8x6	.254	.167	10	.338	0	v			72900		9.113	H1
41	M77A PL1/2x6	.054	0	4	.065		ý			97200		12.15	H1
42	M82 PIPE	165	9.042	16	.045	5				65205		5.749	-
43	MP3C PIPE	.261	4	24	.048	4				32130		1.872	H1
44	MP4C PIPE	.204	4	6	.139	4				32130		1.872	H1



Colliers Engineering & Design

CL Project No. 10206276 5000245391-VZW_MT_LO_H

July 5, 2023 5:39 PM Checked By: DX

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

	Member Shape	Code Check	Loc[ft]	LC	Shear Check	L	Dir	LC			phi*Mn y.	.phi*Mn .	Eqn
45		.200	4	17	.063	4		6		50715		3.596	
46		.270	4	18	.145	4		6	14916	32130		1.872	-
47	M91A PIPE	.165	9.042	24	.048	4		22	22812	65205	5.749	5.749	
48	MP3B PIPE	.287	4	20	.048	4		6	14916	32130	1.872	1.872	
49		.218	4	20	.140	4		8	14916	32130	1.872	1.872	
50	MP2B PIPE	.185	4	4	.061	4		2	30038	50715	3.596	3.596	
51	MP1B PIPE	.235	4	2	.146	4		2	14916	32130	1.872	1.872	
52		.125	2.5	4	.016	2.5		4	28843	32130	1.872	1.872	H1
	M102 PIPE	.159	8.75	22	.036	8		19	11606	50715	3.596	3.596	
53		.159	5.25	17	.038	1		21	11606	50715	3.596	3.596	H1
54	MIOI PIPE	.142	5.25	13	.039	1		17	11606	50715	3.596	3.596	H1
55	M112 PIPE	.101	.994	19	.029	0	v	6	45645	46656	1.688	3.756	H2-1
56			0	19	.042	0	v	30	45645	46656	1.688	3.756	
57	M124 L3X3X4 M125 L3X3X4	.116 .075	0	3	.026	0	v	-	45645	46656		3.756	H2-1

VzW SMART Tool[©] Vendor

Bolt Quantity per Reaction:

Client:	Verizon Wireless	Date: 7/5/20)23
Site Name:	PLYMOUTH NW CT		
MDG #:	5000245391		
Fuze ID #:	17123735	Page: 1	_
			_

Version 1.01

I. Mount-to-Tower Connection Check

No
Yes

Bolt Orientation

 $\begin{array}{l} d_x \left(\text{in} \right) \left(\text{Delta X of typ. bolt config. sketch} \right) : \\ d_y \left(\text{in} \right) \left(\text{Delta Y of typ. bolt config. sketch} \right) : \\ \text{Bolt Type:} \\ \text{Bolt Diameter (in):} \\ \text{Required Tensile Strength / bolt (kips):} \\ \text{Required Shear Strength / bolt (kips):} \\ \text{Tensile Capacity / bolt (kips):} \\ \text{Shear Capacity / bolt (kips):} \\ \end{array}$

Tower Co	nnection I	Baseplate	Checks

Bolt Overall Utilization:

Connecting Standoff Member Shape:
Weld Stiffener Configuration:
Plate Width, D_x (in):
Plate Height, D_y (in):
W1(in):
W2 (in):
Member Thickness (in):
Stiffener location a₁ (in):
Stiffener location b₁ (in):
Stiffener location a₂ (in):
Stiffener location b₂ (in):

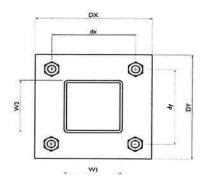
Plate Thickness (in): Length of Yield Line, L_y (in): Bolt Eccentricity, e (in): M_u (kip-in): Phi* M_n (kip-in): Plate Bending Utilization:

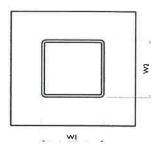
F_v (ksi, plate):

Parallel	Ų
4	ĺ
7	j
7	Š
A325N	
0.5	Ī
4.8	
0.7	
13,3	1
8.0	
36.5%	
	7

Yes

Rect Tube	
No Stiffeners	
9.5	Ī
10	
4	
4	
0.25	
	-
36	
0.5	
7.55	
2.35	
11.39	
15.29	
74.5%	





VzW SMART Tool® Vendor

Client:	Verizon Wireless	Date: 7/5/2023
Site Name:	PLYMOUTH NW CT	
PSLC#:	5000245391	Water and the second se
Fuze ID #:	17123735	Page: 2
100-041-041-301-2012-1		Version 1.01

Tower Connection Weld Checks

Weld Shape:

Weld Stiffener Configuration:

Weld Size (1/16 in):

W1 (in):

W2 (in):

Weld Total Length (in): Z_x (in³/in):

Z_y (in³/in):

J_p (in⁴/in): c_x (in)

c_y (in)

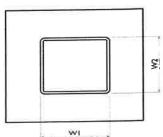
Required combined strength (kip/in):

Weld Capacity (kip/in):

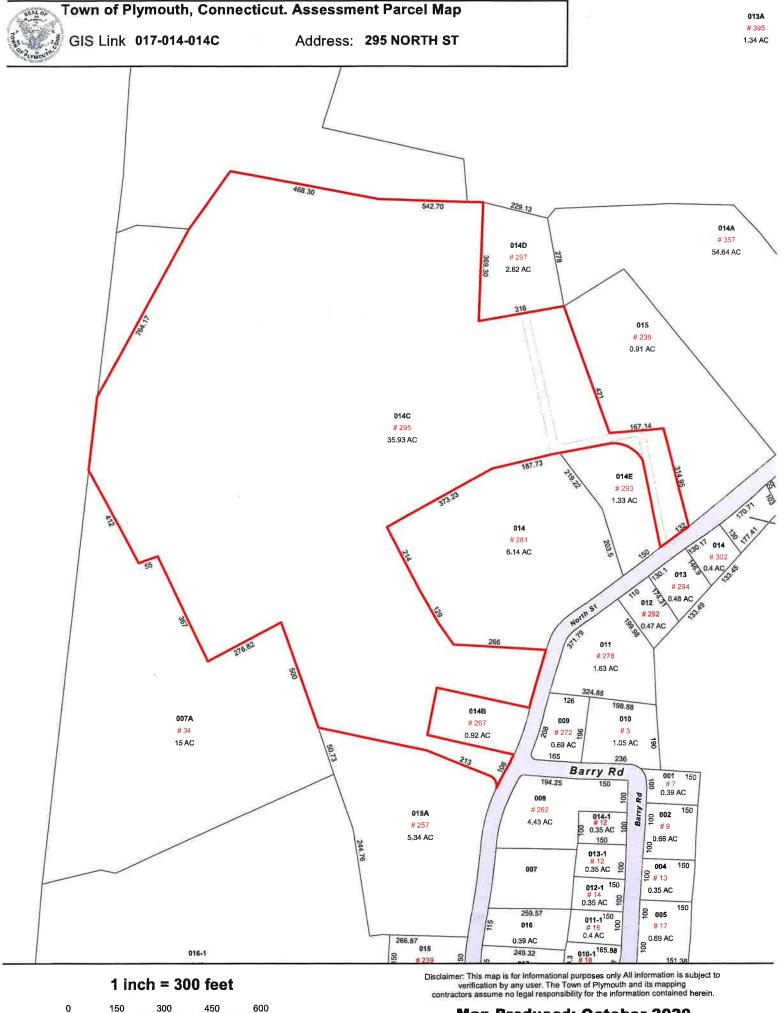
Weld Utilization:

	Rectangle	
	None	
	3	
	4	
15	4	
	16.00	
	21.33	
	21.33	
	85.33	
	2.25	
	2.25	
	2,11	
	4.18	
	50.6%	

Yes



ATTACHMENT 4





Map Block Lot

017-014-014D

Building #

Unique Identifier

00074600

Property Information

Property Location	297 NORTH ST
	297 NORTH ST
Mailing Address	PLYMOUTH CT 06782
Land Use	Residential
Zoning Code	R-40
Neighborhood	101

Valuation Summary

(Assessed value =	70% of Appraised	Value)
-------------------	------------------	--------

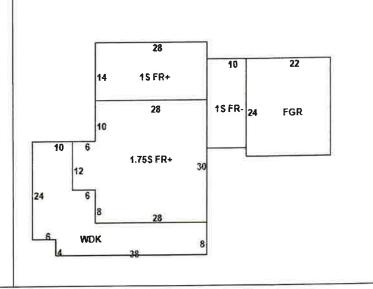
Appraised	Assessed		
189000	132300		
1000	700		
86500	60550		
276500	193550		
	189000 1000 86500		

Owner	LAGOSZ RAYMOND A & BRENDA J CO-TRUSTEES
Co-Owner	THE RAYMOND A LAGOSZ & BRENDA J LAGOSZ
Book / Page	499/ 10
Land Class	Residential
Census Tract	4253
Acreage	2.62

Utility Information

Electric	No	
Gas	No	
Sewer	No	
Public Water	No	
Well	Yes	-





Primary Construction Details

Year Built	1980
Building Desc.	Residential
Building Style	Cape
Stories	1.5
Exterior Walls	Clapboards
Exterior Walls 2	
Interior Walls	
Interior Walls 2	
Interior Floors 1	
Interior Floors 2	

Heating Fuel	Oil
Heating Type	Hot Water
AC Type	
Bedrooms	4
Full Bathrooms	2
Half Bathrooms	1
Extra Fixtures	1
Total Rooms	7
Bath Style	NA
Kitchen Style	
Occupancy	1

Building Use	Single Family
Building Condition	Average
Frame Type	Wood Frame
Fireplaces	1
Bsmt Gar	0
Fin Bsmt Area	0
Fin Bsmt Quality	
Building Grade	0
Roof Style	
Roof Cover	
	8/1/2023

Report Created On

8/1/2023

Town of Plymouth, CT **Property Listing Report** Map Block Lot Building # Unique Identifier 00074600 017-014-014D **Detached Outbuildings** Area (sq ft) Condition Year Built Type Description 192 2005 Shed Frame **Average Attached Extra Features**

Туре	Description	Area (sq ft)	Condition	Year Built
Garage	Frame	528	Average	1980
Deck	Wood	576	Average	1980
				+

Sales History	Book/ Page	Sale Date	Sale Price	
Owner of Record	DOOK/ Tage	Sale Date	Sale I lice	
LAGOSZ RAYMOND A & BRENDA J CO-TRUSTEES	499_ 10	5/2/2022	0	

ATTACHMENT 5



Certificate of Mailing — Firm

Name and Address of Sender	TOTAL NO. of Pieces Listed by Sender of Pieces Received at Post Offic	Affix Stamp Here				
Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103	Postmaster, per (name of receiving amplayee)		neopost 08/03/2023 \$003.190 POSTAGE \$003.190 POSTAGE \$003.190 POSTAGE \$003.190 POSTAGE \$003.190 POSTAGE \$000.000 POSTAGE \$000			
USPS® Tracking Number Firm-specific Identifier	Address (Name Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift	
1. 2. 3.	Joseph T. Kildieff, Mayor Town of Plymouth 80 Main Street Terryville, CT 06786 Margus Laan, Director of Planning and Econ Town of Plymouth 80 Main Street Terryville, CT 06786 Raymond and Brenda Lagosz 297 North Street Plymouth, CT 06782	omic Development	AVC 3		,	
4.			us House			
5.		28 070	AUG 3 - 2023	103		
6.			USPS			