



July 24, 2024

Melanie A. Bachman
Members of the Siting Council
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

**RE: Notice of Exempt Modification // Site: Burling 2 CT (ATC: 209185)
87 Mounce Road, Burlington, CT 06013
N 41.73913611 // W 72.90779444**

Dear Ms. Bachman:

Cellco Partnership d/b/a Verizon Wireless currently maintains (6) antennas at the 91 -foot mount on the existing 120-foot monopole tower, located at 87 Mounce Road, Burlington, CT. The tower is owned by American Tower. The property is owned by Town of Burlington. Verizon Wireless facility was approved for colocation by the Council in 2020. Verizon Wireless now intends install (3) additional antennas for the LTE (3700 MHz) replacements for its 5G upgrade. Additionally, Verizon Wireless will install (3) remote radio head units (RRHs); altogether updating leased equipment rights, as reflected by the final configuration outlined in the structural analysis and proposed hereby.

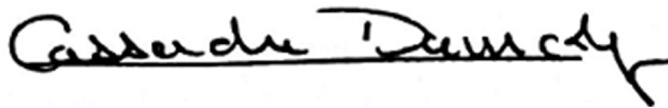
Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies §16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Town of Burlington as property owner First Selectman, Douglas K. Thompson, Zoning Enforcement Officer, Jerry Burns and the tower owner, American Tower.

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2). Enclosed to accommodate this filing are construction drawings dated July 17, 2024 by American Tower Engineering Services, Inc., a structural analysis dated July 2, 2024 by A.T. Engineering Service, LLC, and a structural mount analysis by Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT dated March 19, 2024, and radio frequency (RF) analysis table showing worst-case RF emission calculation by Verizon Wireless RF Design Engineering.

1. The proposed modifications will not result in an increase in the height of the existing structure.
2. The proposed modifications 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 operation of the new antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard.
5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
6. The existing structure and its foundation can support the proposed loading, as shown in the attached structural analyses by A.T. Engineering Service, PLLC, dated July 2, 2024 and structural mount analyses by Colliers Engineering & Design, Architecture, Landscape Architecture, Surveying, CT dated March 19, 2024 pursuant to certain conditions defined therein. Design and engineering is fully illustrated within final mount modification and construction drawings dated signed and stamped July 17, 2024.

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

Sincerely,

A handwritten signature in black ink that reads "Cassandra Darmody". The signature is written in a cursive, flowing style with a long horizontal line extending from the end.

Cassandra Darmody
Agent for American Tower
c/o Pyramid Network Services, LLC
6615 Towpath Road
East Syracuse, NY 13057
Cell (315) 569-9241
Fax (315) 445-0653

Attachments

Cc: Douglas K. Thompson, First Selectman or Jerry Burns, Zoning Enforcement Officer
Town of Burlington
200 Spielman Highway
Burlington, CT 06013

Land Management
American Tower – as the tower owner
10 Presidential Way
Woburn, MA 01801



Town of Burlington

August 15, 2014

Hartford Courant
Classified Department – Legal
Via email: Publicnotices@courant.com

To Whom It May Concern:

Please publish the following legal notice **ONCE** upon receipt in Zone 5 section of your newspaper. Thank you.

**NOTICE OF DECISION
TOWN OF BURLINGTON
PLANNING & ZONING COMMISSION**

The Planning and Zoning Commission at its August 14, 2014 regular meeting took the following action:

Approved: Application 2062-Tharau-Special Use Permit-Dog Grooming-281 Spielman Highway.
IN FAVOR: Miller, Lostocco, Franciamore, Dahle, DiPaola, DiChiara, Parente. OPPOSED, none.
ABSTAINED, none.

Approved: Application 2063-Burlington Volunteer Fire Department-Site plan approval & Special Use Permit for new firehouse building to replace existing building and telecommunications tower-87 Monce Road.
IN FAVOR: Miller, Lostocco, Franciamore, Dahle, DiPaola, DiChiara, Parente. OPPOSED, none.
ABSTAINED, none.

Approved: Application 2061-Lamothe-Special Use Permit-Indoor shooting range-713 George Washington Tpke.
IN FAVOR: Miller, Lostocco, Franciamore, Dahle, DiPaola, DiChiara, Parente. OPPOSED, none.
ABSTAINED, none.

Richard Miller, Chairman
Planning & Zoning Commission
Dated this 14th Day of August 2014

Please forward an affidavit of publication with tearsheet to the Planning and Zoning Commission, ATTN:Allison Yudelson, 200 Spielman Highway, Burlington, CT, 06013.

Cc: Town Clerk
File 2062
File 2063
File 2061



Structural Analysis Report

Structure : 119 ft Monopole
ATC Asset Name : Burlington 2
ATC Asset Number : 209185
Engineering Number : 14866812_C3_03
Proposed Carrier : VERIZON WIRELESS
Carrier Site Name : BURLINGTON SW CT - A
Carrier Site Number : 5000063849
Site Location : 87 Monce Road
Burlington, CT 6013-2542
41.7392° N, 72.9078° W
County : Hartford
Date : July 1, 2024
Max Usage : 59%
Analysis Result : Pass



COA: PEC.0001553

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Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 119 ft Monopole tower to reflect the change in loading by VERIZON WIRELESS.

Supporting Documents

Tower:	Sabre Job #160579, dated April 5, 2017
Foundation:	Sabre Job #160579, dated April 5, 2017
Geotechnical:	Geotechnical Report by Dr. Clarence Welte, P.E., dated March 17, 2014

Analysis

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

Basic Wind Speed:	116 mph (3-second gust)
Basic Wind Speed w/ Ice:	50 mph (3-second gust) w/ 1.50" radial ice concurrent
Code(s):	ANSI/TIA-222-H / 2021 IBC / 2022 Connecticut State Building Code
Exposure Category:	C
Risk Category:	II
Topographic Factor Procedure:	Method 1
Topographic Category:	1
Spectral Response:	$S_s = 0.18$, $S_i = 0.05$
Site Class:	D - Stiff Soil - Default

Conclusion

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

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

Structure Usages

Structural Component	Usage	Control	Result
Pole Shaft	59.4%	1.2D + 1.0W	Pass
Serviceability Usage	27.6%	1.0D + 1.0W	Pass
Base Plate @ 0.0 ft	49.4%	Rods	Pass
Pier	47.5%	Flexure [Steel]	Pass
Mat & Pier	50.2%	Moment [Soil]	Pass

Maximum Reactions

Foundation	Moment (k-ft)	Axial (k)	Shear (k)
Monopole Base	2,665.6	46.6	30.4

**Reactions shown reflect the results from the Load Case with maximum Moment*

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

VERIZON WIRELESS Final Loading

Elev (ft)	Qty	Equipment	Lines
91.0	1	Raycap RVZDC-6627-PF-48	(1) 1 5/8" Hybriflex
	2	Kaelus KA-6030	
	3	Commscope NHH-65B-R2B	
	3	Commscope NHHSS-65B-R2BT4	
	3	Samsung B2/B66A RRH-BR049	
	3	Samsung B5/B13 RRH-BR04C	
	3	Samsung MT6413-77A	
	3	Samsung RT4423-48A	
90.0	1	Platform with Handrails	-
89.0	1	Mount Reinforcement	-

Other Existing/Reserved Loading

Elev (ft)	Qty	Equipment	Lines	Carrier
129.0	-	-	(3) 7/8" Coax	OTHER
128.9	2	22' Omni	-	OTHER
123.5	1	12' Omni	-	OTHER
118.0	3	Stand-Off	-	OTHER
111.0	-	-	(3) 2" conduit	AT&T MOBILITY
110.0	1	Square Platform with Handrails	(2) 0.39" (10mm) Fiber Trunk (8) 0.76" (19.2mm) 8 AWG 6	AT&T MOBILITY
	3	Ericsson RRUS 32 B66A		
	3	Ericsson RRUS-32 (77 lbs)		
	4	Raycap DC6-48-60-18-8F (31.25" Height)		
	6	Ericsson RRUS-11 (19.7")		
	6	Ericsson RRUS-12 B2		
	12	CCI HPA-65R-BUU-H8		
109.0	1	Mount Reinforcement	-	AT&T MOBILITY
100.0	1	Mount Reinforcement	(2) 1.99" (50.7mm) Hybrid	T-MOBILE
	1	Low Profile Platform		
	3	Ericsson 4480 BAND 71		
	3	Ericsson AIR 6419 B41		
	3	Ericsson Radio 4460 B25+B66		
	3	RFS APXVAALL24 43-U-NA20		
	3	RFS APXVLL19P_43-C-A20		
91.2	1	Raycap RVZDC-6627-PF-48	-	VERIZON WIRELESS
	3	Samsung B2/B66A RRH-BR049		
	3	Samsung B5/B13 RRH-BR04C		
91.0	-	-	(1) 1 5/8" Hybriflex	VERIZON WIRELESS
90.1	6	Commscope NHH-65B-R2B	-	VERIZON WIRELESS
70.0	1	Commscope RDIDC-9181-PF-48	(1) 1.60" (40.6mm) Hybrid	DISH WIRELESS L.L.C.
	1	Platform with Handrails		
	3	Fujitsu TA08025-B604		
	3	Fujitsu TA08025-B605		
	3	JMA Wireless MX08FRO665-21		
3.0	3	Ericsson RRUS E2	-	AT&T MOBILITY

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



Standard Conditions

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

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

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

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

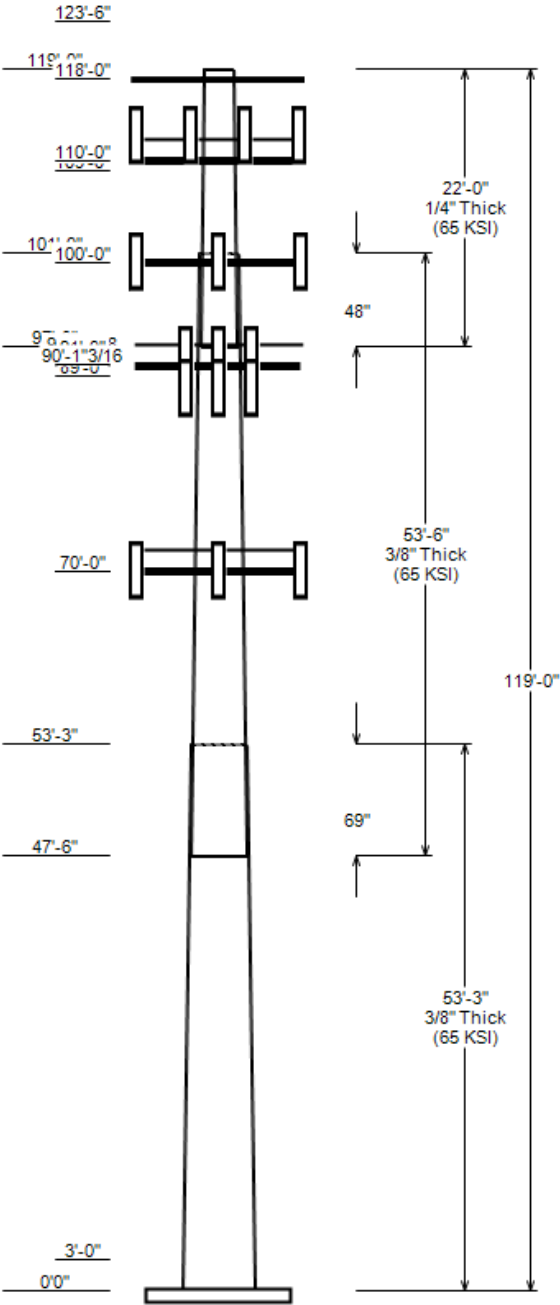
Unless explicitly agreed by both the client and A.T. Engineering Services LLC, all services will be performed in accordance with the current revision of ANSI/TIA-222.

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

ANALYSIS PARAMETERS			
Design Wind:	116 mph	Ice Wind:	50 mph w/ 1.5" ice
Risk Category:	II	Exposure:	C
Topo Factor:	Method 1	Topo Feature:	
Structure Height:	119.0 ft	Base Elevation:	0.00 ft
Base Diameter:	53.34 in	Base Rotation:	0.00°
Service Wind:	60 mph	S _g :	0.184
		S _i :	0.054
		Topo Category:	1
		Structure Type:	Taper
		Taper:	0.2780 (in/ft)

POLE SECTION PROPERTIES							
Section	Length (ft)	Flat Diameter (in)		Thick (in)	Joint Type	Joint Length (in)	Pole Shape
		Top	Bottom				
1	53.250	38.56	53.34	0.375		0.00	18 Sides
2	53.500	26.05	40.90	0.375	Slip Joint	69.00	18 Sides
3	22.000	21.55	27.66	0.250	Slip Joint	48.00	18 Sides

DISCRETE APPURTENANCE		LINEAR APPURTENANCE	
Elev (ft)	Description	Elev To (ft)	Description
128.9	(2) Generic 22' Omni	129.0	(3) 7/8" Coax
123.5	(1) Generic 12' Omni	111.0	(3) 2" conduit
118.0	(3) Generic Flat Stand-Off	110.0	(2) 0.39" (10mm) Fiber Trunk
110.0	(3) Ericsson RRUS 32 B66A	110.0	(8) 0.76" (19.2mm) 8 AWG 6
110.0	(4) Raycap DC6-48-60-18-8F (31.25" Hei	100.0	(1) 1.99" (50.7mm) Hybrid
110.0	(12) CCI HPA-65R-BUU-H8	100.0	(1) 1.99" (50.7mm) Hybrid
110.0	(1) Generic Square Platform with Handrai	91.0	(1) 1 5/8" Hybriflex
110.0	(6) Ericsson RRUS-11 (19.7")	91.0	(1) 1 5/8" Hybriflex
110.0	(6) Ericsson RRUS-12 B2	70.0	(1) 1.60" (40.6mm) Hybrid
110.0	(3) Ericsson RRUS-32 (77 lbs)		
109.0	(1) Generic Mount Reinforcement		
100.0	(3) Ericsson 4480 BAND 71		
100.0	(3) Ericsson Radio 4460 B25+B66		
100.0	(1) Generic Mount Reinforcement		
100.0	(1) Generic Round Low Profile Platform		
100.0	(3) Ericsson AIR 6419 B41		
100.0	(3) RFS APXVLL19P_43-C-A20		
100.0	(3) RFS APXVAALL24 43-U-NA20		
91.2	(3) Samsung B5/B13 RRH-BR04C		
91.2	(3) Samsung B2/B66A RRH-BR049		
91.2	(1) Raycap RVZDC-6627-PF-48		
91.0	(3) Samsung MT6413-77A		
91.0	(3) Samsung RT4423-48A		
91.0	(3) Samsung B2/B66A RRH-BR049		
91.0	(3) Samsung B5/B13 RRH-BR04C		
91.0	(3) Commscope NHHSS-65B-R2BT4		
91.0	(2) Kaelus KA-6030		
91.0	(1) Raycap RVZDC-6627-PF-48		
91.0	(3) Commscope NHH-65B-R2B		
90.1	(6) Commscope NHH-65B-R2B		
90.0	(1) Generic Round Platform with Handrail		
89.0	(1) Generic Mount Reinforcement		
70.0	(1) Generic Round Platform with Handrail		
70.0	(3) Fujitsu TA08025-B604		
70.0	(3) JMA Wireless MX08FRO665-21		
70.0	(3) Fujitsu TA08025-B605		
70.0	(1) Commscope RDIDC-9181-PF-48		
3.0	(3) Ericsson RRUS E2		



GLOBAL BASE REACTIONS

Load Case	Moment (kip-ft)	Axial (kip)	Shear (kip)
1.2D + 1.0W	2665.64	46.64	30.36
0.9D + 1.0W	2642.57	34.97	30.35
1.2D + 1.0Di + 1.0Wi	851.89	73.31	9.46
1.2D + 1.0Ev + 1.0Eh	118.05	47.31	1.24
0.9D - 1.0Ev + 1.0Eh	116.70	32.86	1.24
1.0D + 1.0W	634.70	38.89	7.26

ANALYSIS PARAMETERS

Location:	Hartford County,CT	Height:	119 ft
Type and Shape:	Taper, 18 Sides	Base Diameter:	53.34 in
Manufacturer:	Sabre	Top Diameter:	21.55 in
K _d (non-service):	0.95	Taper:	0.2780 in/ft
K _e :	0.99	Rotation:	0.000°

ICE & WIND PARAMETERS

Risk Category:	II	Design Wind Speed:	116 mph
Exposure Category:	C	Design Wind Speed w/ Ice:	50 mph
Topo Factor Procedure:	Method 1	Design Ice Thickness:	1.50 in
Topographic Category:	1	Service Wind Speed:	60 mph
Crest Height:	0 ft	HMSL:	288.00 ft

SEISMIC PARAMETERS

Analysis Method:	Equivalent Lateral Force Method				
Site Class:	D - Stiff Soil	Period Based on Rayleigh Method (sec):			1.81
T _L (sec):	6	P:	1	C _s :	0.032
S _{ds} :	0.196	S _{d1} :	0.086	C _s Max:	0.032
S _s :	0.184	S ₁ :	0.054	C _s Min:	0.030
F _a :	1.600	F _v :	2.400		

LOAD CASES

1.2D + 1.0W	116 mph Wind with No Ice
0.9D + 1.0W	116 mph Wind with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	50 mph Wind with 1.5" Radial Ice
1.2D + 1.0Ev + 1.0Eh	Seismic
0.9D - 1.0Ev + 1.0Eh	Seismic (Reduced DL)
1.0D + 1.0W	60 mph Wind with No Ice

SHAFT SECTION PROPERTIES																			
Section	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Joint Len (in)	Weight (lb)	Bottom						Top						Taper (in/ft)
							Dia (in)	Elev (ft)	Area (in²)	Ix (in⁴)	W/t Ratio	D/t Ratio	Dia (in)	Elev (ft)	Area (in²)	Ix (in⁴)	W/t Ratio	D/t Ratio	
1-18	53.25	0.3750	65		0.00	9,828	53.34	0.000	63.04	22,343.1	23.32	142.24	38.56	53.25	45.44	8,369.4	16.37	102.81	0.2776
2-18	53.50	0.3750	65	Slip	69.00	7,172	40.90	47.500	48.24	10,009.2	17.47	109.07	26.05	101.00	30.56	2,544.4	10.48	69.46	0.2776
3-18	22.00	0.2500	65	Slip	48.00	1,447	27.66	97.000	21.75	2,064.1	17.74	110.63	21.55	119.00	16.90	968.8	13.44	86.20	0.2776
Total Shaft Weight						18,447													

DISCRETE APPURTENANCE PROPERTIES										
Attach Elev (ft)	Description	Qty	Ka	Vert Ecc (ft)	No Ice			Ice		
					Weight (lb)	EPAA (sf)	Orientation Factor	Weight (lb)	EPAA (sf)	Orientation Factor
128.90	Generic 22' Omni	2	1.00	0.000	70.00	6.600	1.00	231.75	14.214	1.00
123.50	Generic 12' Omni	1	1.00	0.000	40.00	3.600	1.00	128.86	7.805	1.00
118.00	Generic Flat Stand-Off	3	1.00	0.000	187.50	6.300	0.67	317.68	9.345	0.67
110.00	CCI HPA-65R-BUU-H8	12	0.75	1.600	68.00	12.976	0.67	317.50	16.452	0.67
110.00	Generic Square Platform with H	1	1.00	0.000	3790.00	49.300	1.00	8097.15	132.007	1.00
110.00	Raycap DC6-48-60-18-8F (31.25"	4	0.75	0.000	32.80	3.340	0.67	127.36	4.761	0.67
110.00	Ericsson RRUS-32 (77 lbs)	3	0.75	0.000	77.00	3.314	0.71	171.43	4.560	0.71
110.00	Ericsson RRUS-12 B2	6	0.75	0.000	58.00	3.145	0.62	136.55	4.270	0.62
110.00	Ericsson RRUS-11 (19.7")	6	0.75	0.000	51.00	2.791	0.67	124.90	3.854	0.67
110.00	Ericsson RRUS 32 B66A	3	0.75	0.000	50.70	2.720	0.67	121.87	3.850	0.67
109.00	Generic Mount Reinforcement	1	1.00	0.000	200.00	7.500	1.00	387.49	14.753	1.00
100.00	Generic Round Low Profile Plat	1	1.00	0.000	1875.00	21.700	1.00	2653.10	40.146	1.00
100.00	RFS APXVAALL24 43-U-NA20	3	0.80	0.000	122.80	20.243	0.63	497.03	23.806	0.63
100.00	RFS APXVLL19P_43-C-A20	3	0.75	0.000	40.90	8.250	0.65	187.31	11.088	0.65
100.00	Generic Mount Reinforcement	1	1.00	0.000	200.00	7.500	1.00	385.94	14.694	1.00
100.00	Ericsson AIR 6419 B41	3	0.75	0.000	68.50	5.600	0.60	184.59	7.122	0.60
100.00	Ericsson 4480 BAND 71	3	0.80	0.000	81.00	2.878	0.67	154.14	3.957	0.67
100.00	Ericsson Radio 4460 B25+B66	3	0.75	0.000	109.00	2.564	0.67	193.92	3.577	0.67
91.20	Raycap RVZDC-6627-PF-48	1	0.75	0.000	32.00	3.781	0.69	136.54	5.042	0.69
91.20	Samsung B5/B13 RRH-BR04C	3	0.75	0.000	70.30	1.875	0.50	124.83	2.735	0.50
91.20	Samsung B2/B66A RRH-BR049	3	0.75	0.000	84.40	1.875	0.50	145.22	2.735	0.50
91.00	Commscope NHH-65B-R2B	3	0.75	0.000	43.70	8.079	0.69	209.81	10.733	0.69
91.00	Samsung MT6413-77A	3	0.75	0.000	57.30	3.805	0.61	138.19	5.070	0.61
91.00	Raycap RVZDC-6627-PF-48	1	0.75	0.000	32.00	3.781	1.00	136.48	5.041	1.00
91.00	Samsung B5/B13 RRH-BR04C	3	0.75	0.000	70.30	1.875	0.50	124.80	2.735	0.50
91.00	Commscope NHHSS-65B-R2BT4	3	0.75	0.000	51.00	8.079	0.69	216.59	10.744	0.69
91.00	Kaelus KA-6030	2	0.75	0.000	17.60	0.963	0.50	40.06	1.586	0.50
91.00	Samsung RT4423-48A	3	0.75	0.000	18.70	0.855	0.50	40.35	1.449	0.50
91.00	Samsung B2/B66A RRH-BR049	3	0.75	0.000	84.40	1.875	0.50	145.18	2.735	0.50
90.10	Commscope NHH-65B-R2B	6	0.75	-1.000	43.70	8.079	0.69	209.72	10.732	0.69
90.00	Generic Round Platform with Ha	1	1.00	0.000	2500.00	27.200	1.00	4041.36	50.462	1.00
89.00	Generic Mount Reinforcement	1	1.00	0.000	200.00	7.500	1.00	383.65	14.605	1.00
70.00	Generic Round Platform with Ha	1	1.00	0.000	2500.00	27.200	1.00	3998.49	49.815	1.00
70.00	JMA Wireless MX08FRO665-21	3	0.75	0.000	64.50	12.489	0.64	302.29	15.089	0.64
70.00	Fujitsu TA08025-B605	3	0.75	0.000	75.00	1.962	0.50	132.96	2.813	0.50
70.00	Fujitsu TA08025-B604	3	0.75	0.000	63.90	1.962	0.50	117.85	2.813	0.50
70.00	Commscope RDIDC-9181-PF-48	1	0.75	0.000	21.90	1.867	1.00	74.55	2.700	1.00
3.00	Ericsson RRUS E2	3	1.00	0.000	52.90	2.475	0.67	92.46	3.127	0.67
Totals		Row Count: 38		109		17,850.90		38,969.19		

LINEAR APPURTENANCE PROPERTIES													
Load Case Azimuth (deg): 0.00													
Elev From (ft)	Elev To (ft)	Qty	Description	Diameter (in)	Weight (lb/ft)	Flat	Max/ Row	Distance Between Rows(in)	Distance Between Cols(in)	Azimuth (deg)	Distance From Face (in)	Exposed To Wind	Carrier
0.00	129.00	3	7/8" Coax	1.09	0.33	N	0	0	0	0	0	N	OTHER
0.00	111.00	3	2" conduit	2.38	3.65	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	110.00	8	0.76" (19.2mm) 8 AWG	0.76	0.53	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	110.00	2	0.39" (10mm) Fiber Tr	0.39	0.06	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	100.00	1	1.99" (50.7mm) Hybrid	1.99	1.9	N	0	0	0	0	0	N	T-MOBILE

LINEAR APPURTENANCE PROPERTIES

Load Case Azimuth (deg): 0.00

Elev From (ft)	Elev To (ft)	Qty	Description	Diameter (in)	Weight (lb/ft)	Flat	Max/ Row	Distance Between Rows(in)	Distance Between Cols(in)	Azimuth (deg)	Distance From Face (in)	Exposed To Wind	Carrier
0.00	100.00	1	1.99" (50.7mm) Hybrid	1.99	1.9	N	0	0	0	0	0	N	T-MOBILE
0.00	91.00	1	1 5/8" Hybriflex	1.98	1.3	N	0	0	0	0	0	N	VERIZON WIRELESS
0.00	91.00	1	1 5/8" Hybriflex	1.98	1.3	N	0	0	0	0	0	N	VERIZON WIRELESS
0.00	70.00	1	1.60" (40.6mm) Hybrid	1.6	2.34	N	0	0	0	0	0	N	DISH WIRELESS L.L.C.

SEGMENT PROPERTIES												
Seg Top Elev (ft)	Description	(Max Length: 5 ft)	Thick (in)	Flat Dia (in)	Area (in²)	Ix (in⁴)	W/t Ratio	D/t Ratio	F'y (ksi)	S (in³)	Z (in³)	Weight (lb)
0.00			0.3750	53.340	63.039	22,343.10	23.32	142.24	74	825.0	0.0	0.0
3.00			0.3750	52.507	62.048	21,305.40	22.93	140.02	74.4	799.2	0.0	638.5
5.00			0.3750	51.952	61.387	20,631.80	22.66	138.54	74.7	782.2	0.0	420.0
10.00			0.3750	50.564	59.735	19,010.30	22.01	134.84	75.5	740.5	0.0	1,030.4
15.00			0.3750	49.175	58.082	17,476.00	21.36	131.13	76.3	700.0	0.0	1,002.3
20.00			0.3750	47.787	56.430	16,026.60	20.71	127.43	77	660.6	0.0	974.2
25.00			0.3750	46.399	54.778	14,659.70	20.05	123.73	77.8	622.3	0.0	946.0
30.00			0.3750	45.011	53.126	13,372.70	19.40	120.03	78.6	585.2	0.0	917.9
35.00			0.3750	43.622	51.473	12,163.40	18.75	116.33	79.3	549.2	0.0	889.8
40.00			0.3750	42.234	49.821	11,029.20	18.10	112.62	80.1	514.4	0.0	861.7
45.00			0.3750	40.846	48.169	9,967.90	17.44	108.92	80.9	480.7	0.0	833.6
47.50	Bot - Section 2		0.3750	40.152	47.343	9,463.80	17.12	107.07	81.3	464.2	0.0	406.3
50.00			0.3750	39.458	46.516	8,976.90	16.79	105.22	81.7	448.1	0.0	806.0
53.25	Top - Section 1		0.3750	39.305	46.335	8,872.40	16.72	104.81	81.7	444.6	0.0	1,026.8
55.00			0.3750	38.819	45.757	8,544.30	16.49	103.52	82	433.5	0.0	274.2
60.00			0.3750	37.431	44.105	7,651.70	15.84	99.82	82.6	402.6	0.0	764.4
65.00			0.3750	36.043	42.452	6,823.50	15.18	96.11	82.6	372.9	0.0	736.3
70.00			0.3750	34.655	40.800	6,057.40	14.53	92.41	82.6	344.3	0.0	708.2
75.00			0.3750	33.266	39.148	5,350.90	13.88	88.71	82.6	316.8	0.0	680.1
80.00			0.3750	31.878	37.495	4,701.60	13.23	85.01	82.6	290.5	0.0	652.0
85.00			0.3750	30.490	35.843	4,107.00	12.57	81.31	82.6	265.3	0.0	623.9
89.00			0.3750	29.379	34.521	3,669.20	12.05	78.35	82.6	246.0	0.0	478.9
90.00			0.3750	29.102	34.191	3,564.80	11.92	77.60	82.6	241.3	0.0	116.9
90.10			0.3750	29.074	34.158	3,554.50	11.91	77.53	82.6	240.8	0.0	11.6
91.00			0.3750	28.824	33.860	3,462.40	11.79	76.86	82.6	236.6	0.0	104.2
91.20			0.3750	28.769	33.794	3,442.20	11.76	76.72	82.6	235.7	0.0	23.0
95.00			0.3750	27.714	32.539	3,072.60	11.27	73.90	82.6	218.4	0.0	428.9
97.00	Bot - Section 3		0.3750	27.158	31.878	2,889.10	11.01	72.42	82.6	209.5	0.0	219.2
100.00			0.3750	26.325	30.886	2,627.90	10.62	70.20	82.6	196.6	0.0	539.0
101.00	Top - Section 2		0.2500	26.548	20.866	1,823.20	16.96	106.19	81.5	135.3	0.0	175.9
105.00			0.2500	25.437	19.985	1,601.80	16.18	101.75	82.4	124.0	0.0	278.0
109.00			0.2500	24.326	19.104	1,399.10	15.39	97.31	82.6	113.3	0.0	266.0
110.00			0.2500	24.049	18.884	1,351.30	15.20	96.20	82.6	110.7	0.0	64.6
115.00			0.2500	22.661	17.782	1,128.40	14.22	90.64	82.6	98.1	0.0	311.9
118.00			0.2500	21.828	17.121	1,007.20	13.63	87.31	82.6	90.9	0.0	178.2
119.00			0.2500	21.550	16.901	968.80	13.44	86.20	82.6	88.5	0.0	57.9
Total:												18,446.8

CALCULATED FORCES													
Load Case: 1.2D + 1.0W			116 mph Wind with No Ice									21 Iterations	
Gust Response Factor:		1.10											
Dead load Factor:		1.20											
Wind Load Factor:		1.00											
Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (ft-kips)	Phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-46.64	-30.36	0.00	-2,665.6	0.00	2,665.64	4,197.01	1,106.34	5,292.54	4,577.40	0	0	0.594
3.00	-45.55	-30.03	0.00	-2,574.6	0.00	2,574.57	4,156.73	1,088.94	5,127.40	4,461.67	0.03	-0.1	0.589
5.00	-44.93	-29.78	0.00	-2,514.5	0.00	2,514.51	4,129.42	1,077.34	5,018.76	4,384.81	0.09	-0.17	0.585
10.00	-43.45	-29.43	0.00	-2,365.6	0.00	2,365.61	4,059.55	1,048.34	4,752.26	4,193.75	0.36	-0.34	0.576
15.00	-42.02	-29.08	0.00	-2,218.5	0.00	2,218.46	3,987.39	1,019.35	4,493.02	4,004.43	0.8	-0.51	0.565
20.00	-40.62	-28.72	0.00	-2,073.0	0.00	2,073.05	3,912.95	990.35	4,241.06	3,817.03	1.43	-0.68	0.554
25.00	-39.25	-28.34	0.00	-1,929.5	0.00	1,929.46	3,836.23	961.35	3,996.37	3,631.76	2.24	-0.86	0.542
30.00	-37.92	-27.96	0.00	-1,787.8	0.00	1,787.75	3,757.23	932.35	3,758.94	3,448.80	3.24	-1.04	0.529
35.00	-36.62	-27.56	0.00	-1,648.0	0.00	1,647.97	3,675.94	903.36	3,528.79	3,268.37	4.43	-1.22	0.515
40.00	-35.36	-27.17	0.00	-1,510.2	0.00	1,510.16	3,592.36	874.36	3,305.91	3,090.65	5.81	-1.41	0.499
45.00	-34.15	-26.86	0.00	-1,374.3	0.00	1,374.33	3,506.51	845.36	3,090.30	2,915.85	7.38	-1.59	0.482
47.50	-33.55	-26.66	0.00	-1,307.2	0.00	1,307.18	3,462.72	830.86	2,985.22	2,829.60	8.24	-1.69	0.473
50.00	-32.47	-26.41	0.00	-1,240.5	0.00	1,240.54	3,418.37	816.36	2,881.95	2,744.16	9.15	-1.79	0.463
53.25	-31.10	-26.18	0.00	-1,154.7	0.00	1,154.71	3,408.56	813.18	2,859.53	2,725.51	10.41	-1.91	0.434

CALCULATED FORCES													
55.00	-30.68	-25.91	0.00	-1,108.9	0.00	1,108.90	3,377.08	803.03	2,788.61	2,666.32	11.13	-1.98	0.426
60.00	-29.55	-25.49	0.00	-979.4	0.00	979.35	3,276.75	774.03	2,590.88	2,492.78	13.29	-2.15	0.403
65.00	-28.46	-25.08	0.00	-851.9	0.00	851.88	3,153.99	745.04	2,400.42	2,308.60	15.63	-2.32	0.379
70.00	-23.75	-22.37	0.00	-726.5	0.00	726.49	3,031.23	716.04	2,217.23	2,131.50	18.15	-2.48	0.350
75.00	-22.76	-21.95	0.00	-614.6	0.00	614.65	2,908.48	687.04	2,041.31	1,961.46	20.84	-2.64	0.322
80.00	-21.81	-21.54	0.00	-504.9	0.00	504.90	2,785.72	658.04	1,872.66	1,798.48	23.69	-2.79	0.290
85.00	-20.90	-21.17	0.00	-397.2	0.00	397.21	2,662.96	629.05	1,711.29	1,642.58	26.69	-2.93	0.251
89.00	-19.99	-20.61	0.00	-312.5	0.00	312.54	2,564.76	605.85	1,587.42	1,522.95	29.18	-3.03	0.214
90.00	-16.89	-19.20	0.00	-291.9	0.00	291.94	2,540.21	600.05	1,557.18	1,493.74	29.82	-3.05	0.203
90.10	-16.61	-18.05	0.00	-290.0	0.00	290.02	2,537.75	599.47	1,554.17	1,490.84	29.88	-3.05	0.202
91.00	-15.31	-16.21	0.00	-273.8	0.00	273.77	2,515.65	594.25	1,527.23	1,464.83	30.46	-3.07	0.194
91.20	-14.69	-15.76	0.00	-270.5	0.00	270.53	2,510.74	593.09	1,521.27	1,459.08	30.59	-3.08	0.192
95.00	-14.08	-15.52	0.00	-210.6	0.00	210.65	2,417.45	571.05	1,410.34	1,351.98	33.07	-3.15	0.162
97.00	-13.77	-15.32	0.00	-179.6	0.00	179.62	2,368.35	559.45	1,353.64	1,297.25	34.4	-3.19	0.145
100.00	-9.27	-10.95	0.00	-133.7	0.00	133.66	2,294.69	542.05	1,270.77	1,217.28	36.42	-3.23	0.114
101.00	-9.05	-10.76	0.00	-122.7	0.00	122.71	1,529.64	366.21	869.88	826.32	37.09	-3.25	0.155
105.00	-8.65	-10.46	0.00	-79.7	0.00	79.67	1,481.61	350.74	797.97	766.26	39.84	-3.29	0.111
109.00	-8.04	-9.91	0.00	-37.8	0.00	37.84	1,419.33	335.28	729.16	701.36	42.61	-3.34	0.060
110.00	-1.46	-1.90	0.00	-22.2	0.00	22.16	1,402.96	331.41	712.44	685.20	43.31	-3.34	0.033
115.00	-1.09	-1.61	0.00	-12.7	0.00	12.66	1,321.13	312.08	631.76	607.20	46.82	-3.36	0.022
118.00	-0.24	-0.84	0.00	-7.8	0.00	7.82	1,272.02	300.48	585.68	562.66	48.93	-3.37	0.014
119.00	0.00	-0.83	0.00	-7.0	0.00	6.98	1,255.66	296.61	570.71	548.20	49.64	-3.37	0.013

CALCULATED FORCES

Load Case: 0.9D + 1.0W

116 mph Wind with No Ice (Reduced DL)

21 Iterations

Gust Response Factor: 1.10
 Dead Load Factor: 0.90
 Wind Load Factor: 1.00

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (ft-kips)	Phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-34.97	-30.35	0.00	-2,642.6	0.00	2,642.57	4,197.01	1,106.34	5,292.54	4,577.40	0	0	0.586
3.00	-34.15	-30.00	0.00	-2,551.5	0.00	2,551.53	4,156.73	1,088.94	5,127.40	4,461.67	0.03	-0.1	0.581
5.00	-33.66	-29.73	0.00	-2,491.5	0.00	2,491.53	4,129.42	1,077.34	5,018.76	4,384.81	0.09	-0.17	0.577
10.00	-32.54	-29.35	0.00	-2,342.9	0.00	2,342.88	4,059.55	1,048.34	4,752.26	4,193.75	0.35	-0.33	0.567
15.00	-31.44	-28.97	0.00	-2,196.1	0.00	2,196.14	3,987.39	1,019.35	4,493.02	4,004.43	0.79	-0.5	0.557
20.00	-30.37	-28.58	0.00	-2,051.3	0.00	2,051.31	3,912.95	990.35	4,241.06	3,817.03	1.41	-0.68	0.546
25.00	-29.33	-28.17	0.00	-1,908.4	0.00	1,908.42	3,836.23	961.35	3,996.37	3,631.76	2.22	-0.85	0.534
30.00	-28.31	-27.76	0.00	-1,767.6	0.00	1,767.56	3,757.23	932.35	3,758.94	3,448.80	3.21	-1.03	0.521
35.00	-27.32	-27.34	0.00	-1,628.8	0.00	1,628.76	3,675.94	903.36	3,528.79	3,268.37	4.38	-1.21	0.507
40.00	-26.35	-26.92	0.00	-1,492.0	0.00	1,492.05	3,592.36	874.36	3,305.91	3,090.65	5.75	-1.39	0.491
45.00	-25.44	-26.60	0.00	-1,357.4	0.00	1,357.44	3,506.51	845.36	3,090.30	2,915.85	7.31	-1.58	0.474
47.50	-24.98	-26.39	0.00	-1,290.9	0.00	1,290.94	3,462.72	830.86	2,985.22	2,829.60	8.16	-1.67	0.464
50.00	-24.16	-26.13	0.00	-1,225.0	0.00	1,224.97	3,418.37	816.36	2,881.95	2,744.16	9.06	-1.77	0.454
53.25	-23.12	-25.90	0.00	-1,140.0	0.00	1,140.05	3,408.56	813.18	2,859.53	2,725.51	10.31	-1.89	0.426
55.00	-22.80	-25.62	0.00	-1,094.7	0.00	1,094.72	3,377.08	803.03	2,788.61	2,666.32	11.01	-1.95	0.418
60.00	-21.94	-25.19	0.00	-966.6	0.00	966.64	3,276.75	774.03	2,590.88	2,492.78	13.15	-2.73	0.396
65.00	-21.11	-24.76	0.00	-840.7	0.00	840.71	3,153.99	745.04	2,400.42	2,308.60	15.47	-2.29	0.372
70.00	-17.59	-22.08	0.00	-716.9	0.00	716.91	3,031.23	716.04	2,217.23	2,131.50	17.96	-2.46	0.343
75.00	-16.84	-21.66	0.00	-606.5	0.00	606.51	2,908.48	687.04	2,041.31	1,961.46	20.62	-2.61	0.316
80.00	-16.12	-21.24	0.00	-498.2	0.00	498.21	2,785.72	658.04	1,872.66	1,798.48	23.43	-2.76	0.284
85.00	-15.43	-20.87	0.00	-392.0	0.00	392.00	2,662.96	629.05	1,711.29	1,642.58	26.4	-2.89	0.246
89.00	-14.75	-20.32	0.00	-308.5	0.00	308.51	2,564.76	605.85	1,587.42	1,522.95	28.86	-2.99	0.209
90.00	-12.43	-18.96	0.00	-288.2	0.00	288.19	2,540.21	600.05	1,557.18	1,493.74	29.49	-3.01	0.199
90.10	-12.24	-17.80	0.00	-286.3	0.00	286.29	2,537.75	599.47	1,554.17	1,490.84	29.55	-3.02	0.198
91.00	-11.28	-15.98	0.00	-270.3	0.00	270.27	2,515.65	594.25	1,527.23	1,464.83	30.12	-3.04	0.190
91.20	-10.82	-15.54	0.00	-267.1	0.00	267.07	2,510.74	593.09	1,521.27	1,459.08	30.25	-3.04	0.188
95.00	-10.37	-15.30	0.00	-208.0	0.00	208.02	2,417.45	571.05	1,410.34	1,351.98	32.7	-3.11	0.159
97.00	-10.13	-15.11	0.00	-177.4	0.00	177.42	2,368.35	559.45	1,353.64	1,297.25	34.01	-3.15	0.142
100.00	-6.82	-10.81	0.00	-132.1	0.00	132.09	2,294.69	542.05	1,270.77	1,217.28	36.01	-3.2	0.112
101.00	-6.65	-10.62	0.00	-121.3	0.00	121.28	1,529.64	366.21	869.88	826.32	36.68	-3.21	0.152
105.00	-6.35	-10.32	0.00	-78.8	0.00	78.81	1,481.61	350.74	797.97	766.26	39.39	-3.25	0.108
109.00	-5.90	-9.78	0.00	-37.5	0.00	37.53	1,419.33	335.28	729.16	701.36	42.13	-3.3	0.059
110.00	-1.07	-1.87	0.00	-22.0	0.00	21.98	1,402.96	331.41	712.44	685.20	42.83	-3.3	0.033
115.00	-0.79	-1.60	0.00	-12.6	0.00	12.61	1,321.13	312.08	631.76	607.20	46.29	-3.32	0.021
118.00	-0.17	-0.84	0.00	-7.8	0.00	7.82	1,272.02	300.48	585.68	562.66	48.38	-3.33	0.014
119.00	0.00	-0.83	0.00	-7.0	0.00	6.98	1,255.66	296.61	570.71	548.20	49.08	-3.33	0.013

ASSET: 209185, Burlington 2
CUSTOMER: VERIZON WIRELESS

CODE: ANSI/TIA-222-H
PROJECT: 14866812_C3_03

CALCULATED FORCES

Load Case: 1.2D + 1.0Di + 1.0Wi				50 mph Wind with 1.5" Radial Ice								20 Iterations			
Gust Response Factor:		1.10	Ice Dead Load Factor			1.00		Ice Importance Factor							1.00
Dead load Factor:		1.20													
Wind Load Factor:		1.00													
Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (ft-kips)	Phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio		
0.00	-73.31	-9.46	0.00	-851.9	0.00	851.89	4,197.01	1,106.34	5,292.54	4,577.40	0	0	0.204		
3.00	-71.94	-9.38	0.00	-823.5	0.00	823.51	4,156.73	1,088.94	5,127.40	4,461.67	0.01	-0.03	0.202		
5.00	-71.21	-9.32	0.00	-804.8	0.00	804.75	4,129.42	1,077.34	5,018.76	4,384.81	0.03	-0.05	0.201		
10.00	-69.40	-9.23	0.00	-758.2	0.00	758.15	4,059.55	1,048.34	4,752.26	4,193.75	0.11	-0.11	0.198		
15.00	-67.60	-9.14	0.00	-712.0	0.00	712.00	3,987.39	1,019.35	4,493.02	4,004.43	0.26	-0.16	0.195		
20.00	-65.84	-9.05	0.00	-666.3	0.00	666.29	3,912.95	990.35	4,241.06	3,817.03	0.46	-0.22	0.191		
25.00	-64.12	-8.95	0.00	-621.0	0.00	621.05	3,836.23	961.35	3,996.37	3,631.76	0.72	-0.28	0.188		
30.00	-62.43	-8.85	0.00	-576.3	0.00	576.31	3,757.23	932.35	3,758.94	3,448.80	1.04	-0.33	0.184		
35.00	-60.78	-8.74	0.00	-532.1	0.00	532.08	3,675.94	903.36	3,528.79	3,268.37	1.42	-0.39	0.179		
40.00	-59.17	-8.63	0.00	-488.4	0.00	488.39	3,592.36	874.36	3,305.91	3,090.65	1.86	-0.45	0.175		
45.00	-57.61	-8.54	0.00	-445.2	0.00	445.23	3,506.51	845.36	3,090.30	2,915.85	2.37	-0.51	0.169		
47.50	-56.84	-8.49	0.00	-423.9	0.00	423.87	3,462.72	830.86	2,985.22	2,829.60	2.65	-0.54	0.166		
50.00	-55.59	-8.42	0.00	-402.6	0.00	402.65	3,418.37	816.36	2,881.95	2,744.16	2.94	-0.57	0.163		
53.25	-53.99	-8.35	0.00	-375.3	0.00	375.29	3,408.56	813.18	2,859.53	2,725.51	3.35	-0.61	0.154		
55.00	-53.47	-8.28	0.00	-360.7	0.00	360.67	3,377.08	803.03	2,788.61	2,666.32	3.58	-0.64	0.151		
60.00	-52.00	-8.16	0.00	-319.3	0.00	319.27	3,276.75	774.03	2,590.88	2,492.78	4.27	-0.69	0.144		
65.00	-50.59	-8.04	0.00	-278.5	0.00	278.48	3,153.99	745.04	2,400.42	2,308.60	5.03	-0.75	0.137		
70.00	-43.27	-7.21	0.00	-238.3	0.00	238.30	3,031.23	716.04	2,217.23	2,131.50	5.84	-0.8	0.126		
75.00	-41.96	-7.08	0.00	-202.3	0.00	202.26	2,908.48	687.04	2,041.31	1,961.46	6.71	-0.85	0.118		
80.00	-40.70	-6.95	0.00	-166.9	0.00	166.86	2,785.72	658.04	1,872.66	1,798.48	7.63	-0.9	0.108		
85.00	-39.48	-6.83	0.00	-132.1	0.00	132.11	2,662.96	629.05	1,711.29	1,642.58	8.61	-0.95	0.095		
89.00	-38.14	-6.64	0.00	-104.8	0.00	104.77	2,564.76	605.85	1,587.42	1,522.95	9.42	-0.98	0.084		
90.00	-33.61	-6.13	0.00	-98.1	0.00	98.14	2,540.21	600.05	1,557.18	1,493.74	9.62	-0.99	0.079		
90.10	-32.43	-5.83	0.00	-97.5	0.00	97.52	2,537.75	599.47	1,554.17	1,490.84	9.64	-0.99	0.078		
91.00	-29.45	-5.33	0.00	-92.3	0.00	92.28	2,515.65	594.25	1,527.23	1,464.83	9.83	-1	0.075		
91.20	-28.43	-5.19	0.00	-91.2	0.00	91.21	2,510.74	593.09	1,521.27	1,459.08	9.87	-1	0.074		
95.00	-27.59	-5.11	0.00	-71.5	0.00	71.48	2,417.45	571.05	1,410.34	1,351.98	10.68	-1.02	0.064		
97.00	-27.16	-5.05	0.00	-61.3	0.00	61.26	2,368.35	559.45	1,353.64	1,297.25	11.11	-1.04	0.059		
100.00	-19.42	-3.78	0.00	-46.1	0.00	46.12	2,294.69	542.05	1,270.77	1,217.28	11.77	-1.05	0.046		
101.00	-19.14	-3.72	0.00	-42.4	0.00	42.35	1,529.64	366.21	869.88	826.32	11.99	-1.06	0.064		
105.00	-18.50	-3.61	0.00	-27.5	0.00	27.48	1,481.61	350.74	797.97	766.26	12.88	-1.07	0.048		
109.00	-17.48	-3.41	0.00	-13.0	0.00	13.05	1,419.33	335.28	729.16	701.36	13.79	-1.09	0.031		
110.00	-2.70	-0.68	0.00	-8.3	0.00	8.28	1,402.96	331.41	712.44	685.20	14.02	-1.09	0.014		
115.00	-2.05	-0.58	0.00	-4.9	0.00	4.87	1,321.13	312.08	631.76	607.20	15.16	-1.1	0.010		
118.00	-0.68	-0.34	0.00	-3.1	0.00	3.14	1,272.02	300.48	585.68	562.66	15.85	-1.1	0.006		
119.00	0.00	-0.33	0.00	-2.8	0.00	2.79	1,255.66	296.61	570.71	548.20	16.08	-1.1	0.005		

CALCULATED FORCES

Load Case: 1.0D + 1.0W

60 mph Wind with No Ice

20 Iterations

Gust Response Factor: 1.10
Dead Load Factor: 1.00
Wind Load Factor: 1.00

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (ft-kips)	Phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-38.89	-7.26	0.00	-634.7	0.00	634.70	4,197.01	1,106.34	5,292.54	4,577.40	0	0	0.148
3.00	-38.01	-7.18	0.00	-612.9	0.00	612.90	4,156.73	1,088.94	5,127.40	4,461.67	0.01	-0.02	0.147
5.00	-37.54	-7.12	0.00	-598.5	0.00	598.54	4,129.42	1,077.34	5,018.76	4,384.81	0.02	-0.04	0.146
10.00	-36.38	-7.03	0.00	-562.9	0.00	562.94	4,059.55	1,048.34	4,752.26	4,193.75	0.08	-0.08	0.143
15.00	-35.25	-6.94	0.00	-527.8	0.00	527.78	3,987.39	1,019.35	4,493.02	4,004.43	0.19	-0.12	0.141
20.00	-34.14	-6.85	0.00	-493.1	0.00	493.06	3,912.95	990.35	4,241.06	3,817.03	0.34	-0.16	0.138
25.00	-33.07	-6.76	0.00	-458.8	0.00	458.80	3,836.23	961.35	3,996.37	3,631.76	0.53	-0.2	0.135
30.00	-32.02	-6.66	0.00	-425.0	0.00	425.01	3,757.23	932.35	3,758.94	3,448.80	0.77	-0.25	0.132
35.00	-31.00	-6.56	0.00	-391.7	0.00	391.71	3,675.94	903.36	3,528.79	3,268.37	1.05	-0.29	0.128
40.00	-30.01	-6.47	0.00	-358.9	0.00	358.89	3,592.36	874.36	3,305.91	3,090.65	1.38	-0.33	0.125
45.00	-29.05	-6.39	0.00	-326.6	0.00	326.56	3,506.51	845.36	3,090.30	2,915.85	1.76	-0.38	0.120
47.50	-28.58	-6.34	0.00	-310.6	0.00	310.59	3,462.72	830.86	2,985.22	2,829.60	1.96	-0.4	0.118
50.00	-27.71	-6.28	0.00	-294.7	0.00	294.74	3,418.37	816.36	2,881.95	2,744.16	2.18	-0.42	0.116
53.25	-26.60	-6.22	0.00	-274.3	0.00	274.33	3,408.56	813.18	2,859.53	2,725.51	2.48	-0.45	0.109
55.00	-26.28	-6.16	0.00	-263.4	0.00	263.43	3,377.08	803.03	2,788.61	2,666.32	2.65	-0.47	0.107
60.00	-25.38	-6.06	0.00	-232.6	0.00	232.64	3,276.75	774.03	2,590.88	2,492.78	3.16	-0.51	0.101
65.00	-24.52	-5.96	0.00	-202.4	0.00	202.35	3,153.99	745.04	2,400.42	2,308.60	3.72	-0.55	0.095
70.00	-20.56	-5.31	0.00	-172.6	0.00	172.57	3,031.23	716.04	2,217.23	2,131.50	4.32	-0.59	0.088
75.00	-19.76	-5.21	0.00	-146.0	0.00	146.00	2,908.48	687.04	2,041.31	1,961.46	4.96	-0.63	0.081
80.00	-18.99	-5.11	0.00	-119.9	0.00	119.94	2,785.72	658.04	1,872.66	1,798.48	5.63	-0.66	0.074
85.00	-18.25	-5.03	0.00	-94.4	0.00	94.37	2,662.96	629.05	1,711.29	1,642.58	6.35	-0.7	0.064
89.00	-17.48	-4.89	0.00	-74.3	0.00	74.27	2,564.76	605.85	1,587.42	1,522.95	6.94	-0.72	0.056
90.00	-14.85	-4.56	0.00	-69.4	0.00	69.37	2,540.21	600.05	1,557.18	1,493.74	7.09	-0.72	0.052
90.10	-14.58	-4.29	0.00	-68.9	0.00	68.92	2,537.75	599.47	1,554.17	1,490.84	7.11	-0.73	0.052
91.00	-13.41	-3.85	0.00	-65.1	0.00	65.06	2,515.65	594.25	1,527.23	1,464.83	7.24	-0.73	0.050
91.20	-12.89	-3.74	0.00	-64.3	0.00	64.29	2,510.74	593.09	1,521.27	1,459.08	7.28	-0.73	0.049
95.00	-12.39	-3.69	0.00	-50.1	0.00	50.07	2,417.45	571.05	1,410.34	1,351.98	7.87	-0.75	0.042
97.00	-12.13	-3.64	0.00	-42.7	0.00	42.70	2,368.35	559.45	1,353.64	1,297.25	8.18	-0.76	0.038
100.00	-8.20	-2.60	0.00	-31.8	0.00	31.79	2,294.69	542.05	1,270.77	1,217.28	8.66	-0.77	0.030
101.00	-8.01	-2.56	0.00	-29.2	0.00	29.18	1,529.64	366.21	869.88	826.32	8.82	-0.77	0.041
105.00	-7.66	-2.48	0.00	-19.0	0.00	18.96	1,481.61	350.74	797.97	766.26	9.47	-0.78	0.030
109.00	-7.13	-2.35	0.00	-9.0	0.00	9.02	1,419.33	335.28	729.16	701.36	10.14	-0.79	0.018
110.00	-1.30	-0.45	0.00	-5.3	0.00	5.28	1,402.96	331.41	712.44	685.20	10.3	-0.79	0.009
115.00	-0.98	-0.38	0.00	-3.0	0.00	3.02	1,321.13	312.08	631.76	607.20	11.14	-0.8	0.006
118.00	-0.24	-0.20	0.00	-1.9	0.00	1.87	1,272.02	300.48	585.68	562.66	11.64	-0.8	0.004
119.00	0.00	-0.20	0.00	-1.7	0.00	1.67	1,255.66	296.61	570.71	548.20	11.81	-0.8	0.003

EQUIVALENT LATERAL FORCES METHOD ANALYSIS

(Based on ASCE7-16 Chapters 11, 12 and 15)

Spectral Response Acceleration for Short Period (S_S):	0.184
Spectral Response Acceleration at 1.0 Second Period (S_1):	0.054
Long-Period Transition Period (T_L – Seconds):	6
Importance Factor (I_e):	1.000
Site Coefficient F_a :	1.600
Site Coefficient F_v :	2.400
Response Modification Coefficient (R):	1.500
Design Spectral Response Acceleration at Short Period (S_{ds}):	0.196
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.086
Seismic Response Coefficient (C_s):	0.032
Upper Limit C_s :	0.032
Lower Limit C_s :	0.030
Period based on Rayleigh Method (sec):	1.810
Redundancy Factor (p):	1.000
Seismic Force Distribution Exponent (k):	1.650
Total Unfactored Dead Load:	38.890 k
Seismic Base Shear (E):	1.240 k

SEISMIC FORCES

1.2D + 1.0Ev + 1.0Eh

Seismic

Segment	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
35	118.5	59	158	0.003	4	73
34	116.5	181	472	0.009	12	224
33	112.5	328	807	0.016	20	406
32	109.5	81	191	0.004	5	100
31	107	331	751	0.015	18	410
30	103	343	730	0.014	18	425
29	100.5	192	393	0.008	10	238
28	98.5	599	1,185	0.023	29	743
27	96	259	491	0.010	12	321
26	93.1	505	910	0.018	22	626
25	91.1	27	47	0.001	1	34
24	90.55	125	214	0.004	5	154
23	90.05	14	24	0.000	1	17
22	89.5	140	236	0.005	6	173
21	87	570	917	0.018	22	706
20	82.5	737	1,087	0.021	27	914
19	77.5	765	1,018	0.020	25	949
18	72.5	794	945	0.019	23	983
17	67.5	833	882	0.017	22	1,033
16	62.5	862	803	0.016	20	1,068
15	57.5	890	722	0.014	18	1,102
14	54.125	318	234	0.005	6	394
13	51.625	1,108	753	0.015	18	1,373
12	48.75	869	537	0.011	13	1,076
11	46.25	469	266	0.005	6	581
10	42.5	959	472	0.009	12	1,188
9	37.5	987	395	0.008	10	1,223
8	32.5	1,015	321	0.006	8	1,258
7	27.5	1,043	250	0.005	6	1,293
6	22.5	1,071	184	0.004	4	1,328
5	17.5	1,099	125	0.002	3	1,362
4	12.5	1,127	73	0.001	2	1,397
3	7.5	1,156	32	0.001	1	1,432
2	4	470	5	0.000	0	583
1	1.5	714	1	0.000	0	884
Generic 22' Omni	119	140	378	0.007	9	173
Generic 12' Omni	119	40	108	0.002	3	50
Generic Flat Stand-Off	118	562	1,499	0.030	37	697

SEISMIC FORCES						
1.2D + 1.0Ev + 1.0Eh	Seismic					
Segment	Height Above Base (ft)	Weight (lb)	W _z (lb-ft)	C _{vx}	Horizontal Force (lb)	Vertical Force (lb)
Ericsson RRUS 32 B66A	110	152	361	0.007	9	188
Ericsson RRUS-11 (19.7")	110	306	726	0.014	18	379
Ericsson RRUS-12 B2	110	348	826	0.016	20	431
Ericsson RRUS-32 (77 lbs)	110	231	548	0.011	13	286
Raycap DC6-48-60-18-8F (31.25" Height)	110	131	311	0.006	8	163
CCI HPA-65R-BUU-H8	110	816	1,936	0.038	47	1,011
Generic Square Platform with Handrails	110	3,790	8,992	0.177	220	4,697
Generic Mount Reinforcement	109	200	467	0.009	11	248
Generic Mount Reinforcement	100	200	405	0.008	10	248
Generic Mount Reinforcement	89	200	334	0.007	8	248
Ericsson Radio 4460 B25+B66	100	327	663	0.013	16	405
Ericsson 4480 BAND 71	100	243	492	0.010	12	301
Ericsson AIR 6419 B41	100	206	416	0.008	10	255
RFS APXVLL19P_43-C-A20	100	123	249	0.005	6	152
RFS APXVAALL24 43-U-NA20	100	368	747	0.015	18	457
Generic Round Low Profile Platform	100	1,875	3,800	0.075	93	2,324
Samsung B2/B66A RRH-BR049	91.2	253	441	0.009	11	314
Samsung B2/B66A RRH-BR049	91	253	439	0.009	11	314
Samsung B5/B13 RRH-BR04C	91.2	211	367	0.007	9	261
Samsung B5/B13 RRH-BR04C	91	211	366	0.007	9	261
Raycap RVZDC-6627-PF-48	91.2	32	56	0.001	1	40
Raycap RVZDC-6627-PF-48	91	32	55	0.001	1	40
Samsung RT4423-48A	91	56	97	0.002	2	70
Kaelus KA-6030	91	35	61	0.001	1	44
Samsung MT6413-77A	91	172	298	0.006	7	213
Commscope NHHSS-65B-R2BT4	91	153	265	0.005	6	190
Commscope NHH-65B-R2B	91	131	227	0.004	6	162
Commscope NHH-65B-R2B	90.1	262	447	0.009	11	325
Generic Round Platform with Handrails	90	2,500	4,256	0.084	104	3,098
Generic Round Platform with Handrails	70	2,500	2,809	0.055	69	3,098
Commscope RDIDC-9181-PF-48	70	22	25	0.000	1	27
Fujitsu TA08025-B604	70	192	215	0.004	5	238
Fujitsu TA08025-B605	70	225	253	0.005	6	279
JMA Wireless MX08FRO665-21	70	194	217	0.004	5	240
Ericsson RRUS E2	3	159	1	0.000	0	197
Totals:		38,891	50,784	1.000	1,240	48,196

SEISMIC FORCES						
0.9D - 1.0Ev + 1.0Eh	Seismic (Reduced DL)					
Segment	Height Above Base (ft)	Weight (lb)	W _z (lb-ft)	C _{vx}	Horizontal Force (lb)	Vertical Force (lb)
35	118.5	59	158	0.003	4	51
34	116.5	181	472	0.009	12	156
33	112.5	328	807	0.016	20	282
32	109.5	81	191	0.004	5	70
31	107	331	751	0.015	18	285
30	103	343	730	0.014	18	295
29	100.5	192	393	0.008	10	165
28	98.5	599	1,185	0.023	29	516
27	96	259	491	0.010	12	223
26	93.1	505	910	0.018	22	435
25	91.1	27	47	0.001	1	23
24	90.55	125	214	0.004	5	107
23	90.05	14	24	0.000	1	12
22	89.5	140	236	0.005	6	120
21	87	570	917	0.018	22	490
20	82.5	737	1,087	0.021	27	635
19	77.5	765	1,018	0.020	25	659
18	72.5	794	945	0.019	23	683
17	67.5	833	882	0.017	22	717
16	62.5	862	803	0.016	20	742

SEISMIC FORCES						
0.9D - 1.0Ev + 1.0Eh		Seismic (Reduced DL)				
Segment	Height Above Base (ft)	Weight (lb)	W _z (lb-ft)	C _{vx}	Horizontal Force (lb)	Vertical Force (lb)
15	57.5	890	722	0.014	18	766
14	54.125	318	234	0.005	6	274
13	51.625	1,108	753	0.015	18	954
12	48.75	869	537	0.011	13	748
11	46.25	469	266	0.005	6	404
10	42.5	959	472	0.009	12	825
9	37.5	987	395	0.008	10	849
8	32.5	1,015	321	0.006	8	874
7	27.5	1,043	250	0.005	6	898
6	22.5	1,071	184	0.004	4	922
5	17.5	1,099	125	0.002	3	946
4	12.5	1,127	73	0.001	2	970
3	7.5	1,156	32	0.001	1	995
2	4	470	5	0.000	0	405
1	1.5	714	1	0.000	0	614
Generic 22' Omni	119	140	378	0.007	9	121
Generic 12' Omni	119	40	108	0.002	3	34
Generic Flat Stand-Off	118	562	1,499	0.030	37	484
Ericsson RRUS 32 B66A	110	152	361	0.007	9	131
Ericsson RRUS-11 (19.7")	110	306	726	0.014	18	263
Ericsson RRUS-12 B2	110	348	826	0.016	20	300
Ericsson RRUS-32 (77 lbs)	110	231	548	0.011	13	199
Raycap DC6-48-60-18-8F (31.25" Height)	110	131	311	0.006	8	113
CCI HPA-65R-BUU-H8	110	816	1,936	0.038	47	702
Generic Square Platform with Handrails	110	3,790	8,992	0.177	220	3,262
Generic Mount Reinforcement	109	200	467	0.009	11	172
Generic Mount Reinforcement	100	200	405	0.008	10	172
Generic Mount Reinforcement	89	200	334	0.007	8	172
Ericsson Radio 4460 B25+B66	100	327	663	0.013	16	281
Ericsson 4480 BAND 71	100	243	492	0.010	12	209
Ericsson AIR 6419 B41	100	206	416	0.008	10	177
RFS APXVLL19P_43-C-A20	100	123	249	0.005	6	106
RFS APXVAALL24 43-U-NA20	100	368	747	0.015	18	317
Generic Round Low Profile Platform	100	1,875	3,800	0.075	93	1,614
Samsung B2/B66A RRH-BR049	91.2	253	441	0.009	11	218
Samsung B2/B66A RRH-BR049	91	253	439	0.009	11	218
Samsung B5/B13 RRH-BR04C	91.2	211	367	0.007	9	182
Samsung B5/B13 RRH-BR04C	91	211	366	0.007	9	182
Raycap RVZDC-6627-PF-48	91.2	32	56	0.001	1	28
Raycap RVZDC-6627-PF-48	91	32	55	0.001	1	28
Samsung RT4423-48A	91	56	97	0.002	2	48
Kaelus KA-6030	91	35	61	0.001	1	30
Samsung MT6413-77A	91	172	298	0.006	7	148
Commscope NHHSS-65B-R2BT4	91	153	265	0.005	6	132
Commscope NHH-65B-R2B	91	131	227	0.004	6	113
Commscope NHH-65B-R2B	90.1	262	447	0.009	11	226
Generic Round Platform with Handrails	90	2,500	4,256	0.084	104	2,152
Generic Round Platform with Handrails	70	2,500	2,809	0.055	69	2,152
Commscope RDIDC-9181-PF-48	70	22	25	0.000	1	19
Fujitsu TA08025-B604	70	192	215	0.004	5	165
Fujitsu TA08025-B605	70	225	253	0.005	6	194
JMA Wireless MX08FRO665-21	70	194	217	0.004	5	167
Ericsson RRUS E2	3	159	1	0.000	0	137
Totals:		38,891	50,784	1.000	1,240	33,475

1.2D + 1.0Ev + 1.0Eh

Seismic

CALCULATED FORCES													
Seg Elev (ft)	P _u FY (-) (kips)	V _u FX (-) (kips)	T _u MY (ft-kips)	M _u MZ (fr-kips)	M _u Mx (ft-kips)	Resultant Moment (ft-kips)	Phi P _n (kips)	Phi V _n (kips)	Phi T _n (kips)	Phi M _n (kips)	Total Deflect (in)	Rotation (deg)	Ratio

CALCULATED FORCES

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (fr-kips)	Mu Mx (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (kips)	Phi Mn (kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-47.31	-1.24	0.00	-118.05	0.00	118.05	4,197.01	1,106.34	5,293	4,577.40	0.00	0.00	0.04
3.00	-46.53	-1.24	0.00	-114.33	0.00	114.33	4,156.73	1,088.94	5,127	4,461.67	0.00	0.00	0.04
5.00	-45.10	-1.25	0.00	-111.84	0.00	111.84	4,129.42	1,077.34	5,019	4,384.81	0.00	-0.01	0.04
10.00	-43.70	-1.25	0.00	-105.60	0.00	105.60	4,059.55	1,048.34	4,752	4,193.75	0.02	-0.01	0.04
15.00	-42.34	-1.25	0.00	-99.35	0.00	99.35	3,987.39	1,019.35	4,493	4,004.43	0.04	-0.02	0.04
20.00	-41.01	-1.25	0.00	-93.08	0.00	93.08	3,912.95	990.35	4,241	3,817.03	0.06	-0.03	0.04
25.00	-39.72	-1.25	0.00	-86.81	0.00	86.81	3,836.23	961.35	3,996	3,631.76	0.10	-0.04	0.03
30.00	-38.46	-1.25	0.00	-80.55	0.00	80.55	3,757.23	932.35	3,759	3,448.80	0.14	-0.05	0.03
35.00	-37.24	-1.24	0.00	-74.30	0.00	74.30	3,675.94	903.36	3,529	3,268.37	0.20	-0.05	0.03
40.00	-36.05	-1.24	0.00	-68.08	0.00	68.08	3,592.36	874.36	3,306	3,090.65	0.26	-0.06	0.03
45.00	-35.47	-1.23	0.00	-61.90	0.00	61.90	3,506.51	845.36	3,090	2,915.85	0.33	-0.07	0.03
47.50	-34.39	-1.22	0.00	-58.82	0.00	58.82	3,462.72	830.86	2,985	2,829.60	0.37	-0.08	0.03
50.00	-33.02	-1.20	0.00	-55.76	0.00	55.76	3,418.37	816.36	2,882	2,744.16	0.41	-0.08	0.03
53.25	-32.62	-1.20	0.00	-51.85	0.00	51.85	3,408.56	813.18	2,860	2,725.51	0.47	-0.09	0.03
55.00	-31.52	-1.18	0.00	-49.75	0.00	49.75	3,377.08	803.03	2,789	2,666.32	0.50	-0.09	0.03
60.00	-30.45	-1.17	0.00	-43.83	0.00	43.83	3,276.75	774.03	2,591	2,492.78	0.60	-0.10	0.03
65.00	-29.42	-1.15	0.00	-38.00	0.00	38.00	3,153.99	745.04	2,400	2,308.60	0.70	-0.10	0.03
70.00	-24.56	-1.03	0.00	-32.26	0.00	32.26	3,031.23	716.04	2,217	2,131.50	0.81	-0.11	0.02
75.00	-23.61	-1.01	0.00	-27.10	0.00	27.10	2,908.48	687.04	2,041	1,961.46	0.93	-0.12	0.02
80.00	-22.69	-0.98	0.00	-22.06	0.00	22.06	2,785.72	658.04	1,873	1,798.48	1.06	-0.12	0.02
85.00	-21.99	-0.96	0.00	-17.15	0.00	17.15	2,662.96	629.05	1,711	1,642.58	1.20	-0.13	0.02
89.00	-21.57	-0.95	0.00	-13.31	0.00	13.31	2,564.76	605.85	1,587	1,522.95	1.31	-0.14	0.02
90.00	-18.45	-0.83	0.00	-12.37	0.00	12.37	2,540.21	600.05	1,557	1,493.74	1.34	-0.14	0.02
90.10	-17.97	-0.82	0.00	-12.28	0.00	12.28	2,537.75	599.47	1,554	1,490.84	1.34	-0.14	0.02
91.00	-16.65	-0.77	0.00	-11.55	0.00	11.55	2,515.65	594.25	1,527	1,464.83	1.36	-0.14	0.02
91.20	-15.41	-0.72	0.00	-11.39	0.00	11.39	2,510.74	593.09	1,521	1,459.08	1.37	-0.14	0.01
95.00	-15.08	-0.71	0.00	-8.65	0.00	8.65	2,417.45	571.05	1,410	1,351.98	1.48	-0.14	0.01
97.00	-14.34	-0.68	0.00	-7.22	0.00	7.22	2,368.35	559.45	1,354	1,297.25	1.54	-0.14	0.01
100.00	-9.96	-0.50	0.00	-5.18	0.00	5.18	2,294.69	542.05	1,271	1,217.28	1.63	-0.14	0.01
101.00	-9.54	-0.48	0.00	-4.69	0.00	4.69	1,529.64	366.21	870	826.32	1.66	-0.14	0.01
105.00	-9.13	-0.46	0.00	-2.78	0.00	2.78	1,481.61	350.74	798	766.26	1.78	-0.15	0.01
109.00	-8.78	-0.44	0.00	-0.95	0.00	0.95	1,419.33	335.28	729	701.36	1.90	-0.15	0.01
110.00	-1.22	-0.07	0.00	-0.51	0.00	0.51	1,402.96	331.41	712	685.20	1.94	-0.15	0.00
115.00	-0.99	-0.05	0.00	-0.18	0.00	0.18	1,321.13	312.08	632	607.20	2.09	-0.15	0.00
118.00	-0.22	-0.01	0.00	-0.01	0.00	0.01	1,272.02	300.48	586	562.66	2.18	-0.15	0.00
119.00	0.00	-0.01	0.00	0.00	0.00	0.00	1,255.66	296.61	571	548.20	2.21	-0.15	0.00

0.9D - 1.0Ev + 1.0Eh Seismic (Reduced DL)

CALCULATED FORCES

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (fr-kips)	Mu Mx (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (kips)	Phi Mn (kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-32.86	-1.24	0.00	-116.70	0.00	116.70	4,197.01	1,106.34	5,293	4,577.40	0.00	0.00	0.03
3.00	-32.32	-1.24	0.00	-112.98	0.00	112.98	4,156.73	1,088.94	5,127	4,461.67	0.00	0.00	0.03
5.00	-31.32	-1.24	0.00	-110.49	0.00	110.49	4,129.42	1,077.34	5,019	4,384.81	0.00	-0.01	0.03
10.00	-30.35	-1.25	0.00	-104.28	0.00	104.28	4,059.55	1,048.34	4,752	4,193.75	0.02	-0.01	0.03
15.00	-29.41	-1.25	0.00	-98.05	0.00	98.05	3,987.39	1,019.35	4,493	4,004.43	0.04	-0.02	0.03
20.00	-28.49	-1.25	0.00	-91.82	0.00	91.82	3,912.95	990.35	4,241	3,817.03	0.06	-0.03	0.03
25.00	-27.59	-1.24	0.00	-85.59	0.00	85.59	3,836.23	961.35	3,996	3,631.76	0.10	-0.04	0.03
30.00	-26.71	-1.24	0.00	-79.38	0.00	79.38	3,757.23	932.35	3,759	3,448.80	0.14	-0.05	0.03
35.00	-25.86	-1.23	0.00	-73.19	0.00	73.19	3,675.94	903.36	3,529	3,268.37	0.20	-0.05	0.03
40.00	-25.04	-1.22	0.00	-67.04	0.00	67.04	3,592.36	874.36	3,306	3,090.65	0.26	-0.06	0.03
45.00	-24.63	-1.22	0.00	-60.93	0.00	60.93	3,506.51	845.36	3,090	2,915.85	0.33	-0.07	0.03
47.50	-23.89	-1.21	0.00	-57.88	0.00	57.88	3,462.72	830.86	2,985	2,829.60	0.36	-0.07	0.03
50.00	-22.93	-1.19	0.00	-54.87	0.00	54.87	3,418.37	816.36	2,882	2,744.16	0.40	-0.08	0.03
53.25	-22.66	-1.18	0.00	-51.01	0.00	51.01	3,408.56	813.18	2,860	2,725.51	0.46	-0.08	0.03
55.00	-21.89	-1.17	0.00	-48.94	0.00	48.94	3,377.08	803.03	2,789	2,666.32	0.49	-0.09	0.03
60.00	-21.15	-1.15	0.00	-43.11	0.00	43.11	3,276.75	774.03	2,591	2,492.78	0.59	-0.10	0.02
65.00	-20.43	-1.13	0.00	-37.36	0.00	37.36	3,153.99	745.04	2,400	2,308.60	0.69	-0.10	0.02
70.00	-17.06	-1.02	0.00	-31.72	0.00	31.72	3,031.23	716.04	2,217	2,131.50	0.80	-0.11	0.02

CALCULATED FORCES													
Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu Mx (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (kips)	Phi Mn (kips)	Total Deflect (in)	Rotation (deg)	Ratio
75.00	-16.40	-0.99	0.00	-26.64	0.00	26.64	2,908.48	687.04	2,041	1,961.46	0.92	-0.12	0.02
80.00	-15.76	-0.97	0.00	-21.68	0.00	21.68	2,785.72	658.04	1,873	1,798.48	1.05	-0.12	0.02
85.00	-15.27	-0.94	0.00	-16.86	0.00	16.86	2,662.96	629.05	1,711	1,642.58	1.18	-0.13	0.02
89.00	-14.98	-0.93	0.00	-13.08	0.00	13.08	2,564.76	605.85	1,587	1,522.95	1.29	-0.13	0.01
90.00	-12.82	-0.82	0.00	-12.16	0.00	12.16	2,540.21	600.05	1,557	1,493.74	1.32	-0.13	0.01
90.10	-12.48	-0.80	0.00	-12.07	0.00	12.07	2,537.75	599.47	1,554	1,490.84	1.32	-0.13	0.01
91.00	-11.56	-0.76	0.00	-11.35	0.00	11.35	2,515.65	594.25	1,527	1,464.83	1.34	-0.13	0.01
91.20	-10.70	-0.71	0.00	-11.20	0.00	11.20	2,510.74	593.09	1,521	1,459.08	1.35	-0.14	0.01
95.00	-10.48	-0.70	0.00	-8.50	0.00	8.50	2,417.45	571.05	1,410	1,351.98	1.46	-0.14	0.01
97.00	-9.96	-0.67	0.00	-7.10	0.00	7.10	2,368.35	559.45	1,354	1,297.25	1.52	-0.14	0.01
100.00	-6.92	-0.49	0.00	-5.09	0.00	5.09	2,294.69	542.05	1,271	1,217.28	1.61	-0.14	0.01
101.00	-6.62	-0.47	0.00	-4.61	0.00	4.61	1,529.64	366.21	870	826.32	1.64	-0.14	0.01
105.00	-6.34	-0.45	0.00	-2.73	0.00	2.73	1,481.61	350.74	798	766.26	1.76	-0.14	0.01
109.00	-6.10	-0.43	0.00	-0.94	0.00	0.94	1,419.33	335.28	729	701.36	1.88	-0.14	0.01
110.00	-0.85	-0.07	0.00	-0.50	0.00	0.50	1,402.96	331.41	712	685.20	1.91	-0.15	0.00
115.00	-0.69	-0.05	0.00	-0.17	0.00	0.17	1,321.13	312.08	632	607.20	2.06	-0.15	0.00
118.00	-0.15	-0.01	0.00	-0.01	0.00	0.01	1,272.02	300.48	586	562.66	2.15	-0.15	0.00
119.00	0.00	-0.01	0.00	0.00	0.00	0.00	1,255.66	296.61	571	548.20	2.18	-0.15	0.00

ANALYSIS SUMMARY

Load Case	Base Reactions						Max Usage	
	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Elev (ft)	Interaction Ratio
1.2D + 1.0W	30.36	0.00	46.64	0.00	0.00	2665.64	0.00	0.59
0.9D + 1.0W	30.35	0.00	34.97	0.00	0.00	2642.57	0.00	0.59
1.2D + 1.0Di + 1.0Wi	9.46	0.00	73.31	0.00	0.00	851.89	0.00	0.2
1.2D + 1.0Ev + 1.0Eh	1.24	0.00	47.31	0.00	0.00	118.05	0.00	0.04
0.9D - 1.0Ev + 1.0Eh	1.24	0.00	32.86	0.00	0.00	116.70	0.00	0.03
1.0D + 1.0W	7.26	0.00	38.89	0.00	0.00	634.70	0.00	0.15

ASSET: 209185, Burlington 2
CUSTOMER: VERIZON WIRELESS

CODE: ANSI/TIA-222-H
PROJECT: 14866812

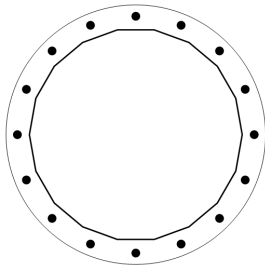
BASE PLATE ANALYSIS @ 0 FT

APPLIED REACTIONS

Moment (k-ft)	Axial (k)	Shear (k)
2665.64	46.64	30.36

PLATE PARAMETERS (ID# 10190)

Width:	65.75	in
Shape:	Round	
Thickness:	2	in
Grade:	A572-50	
Yield Strength:	50	ksi
Tensile Strength:	65	ksi
Rod Detail Type:	d	
Clear Distance	3.25	in
Base Weld Size:	0.125	in
Orientation Offset:	-	°
Analysis Type:	Plastic	
Neutral Axis:	79	°



ANCHOR ROD PARAMETERS

Class	Arrangement	Quantity	Diameter (in)	Circle (in)	Grade	F _y (ksi)	F _u (ksi)	Spacing (in)	Offset (°)
Original [ID#986]	Radial	16	2.25	60	A615-75	75	100	-	-

COMPONENT PROPERTIES

Component	ID	Gross Area (in ²)	Net Area (in ²)	Individual Inertia (in ⁴)	Moment of Inertia (in ⁴)	Threads/in
Pole	53.34"Ø x 0.375" (18 Sides)	62.0816	-	-	21772.55	-
Bolt Group	Original (16) 2.25"Ø	3.9761	3.2477	0.8393	21395.50	4.5

REACTION DISTRIBUTION

Component	ID	Moment M _u (k-ft)	Axial Load P _u (k)	Shear V _u (k)	Moment Factor
Pole	53.34"Ø x 0.375" (18 Sides)	2665.6	46.64	30.36	1.000
Bolt Group	Original (16) 2.25"Ø	2665.6	-	30.36	1.000

BASE PLATE BEND LINE ANALYSIS @ 0 FT

POLE PROPERTIES					PLATE PROPERTIES		
Flat-to-Flat Diameter:	53.46	in	Flat Width:	9.427	in	Neutral Axis:	79 °
Point-to-Point Diameter:	54.29	in	Flat Radians:	0.349	rad	Bend Line Limits:	2.482 to 3.409 rad
Orientation Offset:	-	°					
Bend Line	Chord Length (in)	Additional Length (in)	Section Modulus (in ³)	Applied Moment M _u (k-in)	Moment Capacity ΦM _n (k-in)	Flexure Result M _u /ΦM _n	
Flats	34.056	0.00	34.056	391.7	1532.5	25.6%	✓
Corners	32.725	0.00	32.725	276.6	1472.6	18.8%	✓
Circumferential	39.251	0.00	39.251	430.5	1766.3	24.4%	✓

PLASTIC ANCHOR ROD ANALYSIS

Class	Group Quantity	Rod Diameter (in)	Applied Axial Load P _u (k)	Applied Shear Load V _u (k)	Compressive Capacity ΦP _n (k)	Interaction Result
Original	16	2.25	114.5	2.9	243.6	49.4% ✓

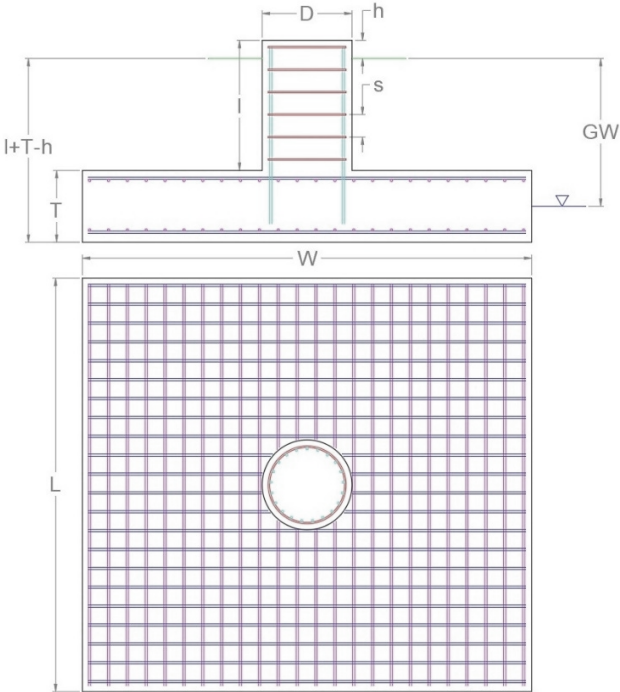
MONOLITHIC MAT & PIER FOUNDATION ANALYSIS

APPLIED GLOBAL REACTIONS

Moment (k-ft)	Axial (k)	Shear (k)
2,665.64	46.64	30.36

FOUNDATION PARAMETERS

Mat Length:	L	24	ft
Mat Width:	W	24	ft
Mat Thickness:	T	1.5	ft
Base Depth:	L+T-h	6	ft
Pier Shape:		Round	
Pier Diameter:	D	8	ft
Pier Height above Grade:	h	0.5	ft
Concrete Compressive Strength:		4,500	psi
Mat Top Rebar:		(52) #8 bars [60 ksi]	
Mat Bottom Rebar:		(52) #8 bars [60 ksi]	
Pier Vertical Rebar:		(48) #8 bars [60 ksi]	
Pier Rebar Ties:	s	#5 bars @ 12.0" c/c [60 ksi]	
Rebar Clear Cover:		3.0	in
Tower Eccentricity:	ecc	0	ft
Tower Leg Count		1	



SOIL PARAMETERS

Water Table Depth [BGL]:	GW	ft
Soil Unit Weight:	125	pcf
Ultimate Skin Friction:		psf
Ultimate Bearing Pressure:	8,000	psf
Bearing Pressure Type:	Net	
Coefficient of Shear Friction:	0.2	

SOIL STRENGTH ANALYSIS

Soil Strength Reduction Factor, Φ_s	Uplift Strength Reduction Factor, Φ_s	Asset Dead Load Factor	Dead Load Factor
0.75	0.75	0.9	1.2

SOIL OVERTURNING ANALYSIS

Design Moment, $M_{u,Design}$ (k-ft)	Nominal Overturning Capacity, $\Phi_m M_n$ (k-ft)	Soil Overturning Usage, $M_{u,Design} / \Phi_m M_n$
2,862.98	5,699.98	50.2%

SOIL BEARING ANALYSIS

Net Bearing Pressure, $P_{u,Net}$ (psf)	Nominal Bearing Capacity, $\Phi_b P_n$ (psf)	Bearing Pressure Controlling Load Direction	Soil Bearing Usage, $P_{u,net} / \Phi_b P_n$
1,677.00	6,562.00	Diagonal to Pad Edge	25.6%

SOIL SLIDING SHEAR ANALYSIS

Applied Shear Force, V_u (k)	Friction Resistance (k)	Passive Pressure (psf)	Passive Pressure Resistance (k)	Nominal Shear Capacity, Φ_s V_n (k)	Soil Sliding Shear Usage, $V_u / \Phi_s V_n$
30.36	100.38	656.2	23.62	93.00	33.0%

MAT REINFORCING STEEL STRENGTH ANALYSIS

Steel Elastic Modulus, E (ksi)	Strength Bending/Tension Reduction Factor, Φ_b	Strength Shear Reduction Factor, Φ_v	Strength Compression Reduction Factor, Φ_c
29,000	0.9	0.75	0.65

MAT REINFORCING ONE WAY SHEAR ANALYSIS

One Way Design Shear, V_u (k)	Nominal One Way Shear Capacity, $\Phi_c V_n$ (k)	One Way Shear Controlling Load Direction	Mat One Way Shear Usage, $V_u / \Phi_c V_n$
129.15	399.08	Diagonal to Pad Edge	32.4%



MAT REINFORCING PUNCHING SHEAR ANALYSIS

Punching Shear Design Stress, v_u (psi)	Nominal Punching Shear Capacity, $\Phi_c V_n$ (psi)	Mat Punching Shear Usage, $v_u / \Phi_c V_n$
90.3	182.2	49.6%



MAT REINFORCING MOMENT TRANSFER ANALYSIS

Moment Transfer Effective Flexural Width, w_t (in)	Neutral Axis Depth (in)	Pier Moment at Joint, M_{ut} (k-in)	Nominal Moment Transfer Capacity, $\Phi M_{sc,f}$ (k-in)	Mat Moment Transfer Usage, $0.6 M_{ut} / \Phi M_{sc,f}$
12.50	2.33	0.00	15,638.6	0.0%



MAT REINFORCING FLEXURE ANALYSIS – UPPER STEEL

Factored Moment, M_u (k-ft)	Nominal Flexural Capacity, ΦM_n (k-ft)	Flexural Steel Controlling Load Direction	Mat Upper Rebar Flexure Usage, $M_u / \Phi M_n$
604.80	2,412.25	Parallel to Pad Edge	25.1%



MAT REINFORCING FLEXURE ANALYSIS – LOWER STEEL

Factored Moment, M_u (k-ft)	Nominal Flexural Capacity, ΦM_n (k-ft)	Flexural Steel Controlling Load Direction	Mat Lower Rebar Flexure Usage, $M_u / \Phi M_n$
1,035.00	2,412.25	Parallel to Pad Edge	42.9%



PIER REINFORCING STEEL STRENGTH ANALYSIS

Rebar Cage Diameter (in)	Steel Elastic Modulus, E (ksi)	Strength Bending/Tension Reduction Factor, Φ_b	Strength Shear Reduction Factor, Φ_v	Strength Compression Reduction Factor, Φ_c
87.75	29,000	0.9	0.75	0.65

PIER REINFORCING MOMENT ANALYSIS

Design Moment, M_u (k-ft)	Nominal Moment Capacity, $\Phi_b M_n$ (k-ft)	Bending Reinforcement Ratio	Pier Rebar Flexure Usage, $M_u / \Phi_b M_n$
2,817.44	7,322.04	0.005	38.5%



PIER REINFORCING COMPRESSION ANALYSIS

Design Compression, P_u (k)	Nominal Compressive Capacity, $\Phi_p P_n$ (k)	Pier Rebar Compressive Usage, $P_u / \Phi_p P_n$
46.64	14,346.06	0.3%



PIER REINFORCING SHEAR ANALYSIS

Design Shear, V_u (k)	Nominal Shear Capacity, $\Phi_v V_n$ (k)	Pier Rebar Shear Usage, $V_u / \Phi_v V_n$
30.36	909.24	3.3%



PIER FOUNDATION ANALYSIS

GLOBAL REACTIONS

Moment (k-ft)	Axial (k)	Shear (k)
2,665.64	46.64	30.36

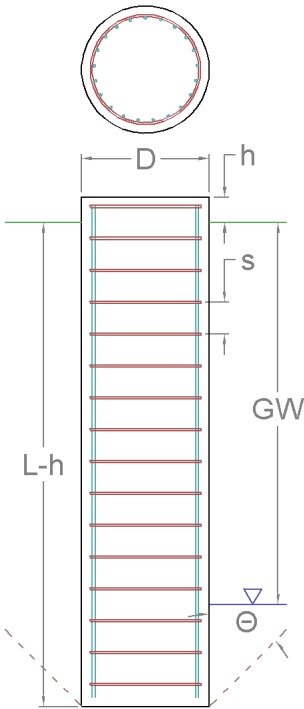
FOUNDATION PARAMETERS

Pier Diameter:	D	7.00	ft
Pier Embedment Depth:	L-h	24.0	ft
Pier Height above Grade:	h	0.50	ft
Concrete Compressive Strength:		4,500	psi
Vertical Rebar:		(34) #9 bars [60 ksi]	
Tie Rebar:	s	#5 bars @ 8.0" c/c [60 ksi]	
Rebar Clear Cover:		3.00	in

SOIL PARAMETERS

Water Table Depth [BGL]:	GW	24	ft
--------------------------	----	----	----

Layer Depth (ft)		Unit Weight	Cohesion	Friction Angle	Ultimate Skin Friction	Ultimate Net Bearing
Top	Bottom	pcf	psf	°	psf	psf
0	3	105	0	0	0	0
3	23.9	120	0	34	0	0
23.9	28.9	130	0	36	0	12,400



SOIL STRENGTH ANALYSIS

Volume of Concrete (ft³)	Buoyant Weight of Concrete (k)	Skin Friction Resistance (k)	Inflection Point [BGL] (ft)
942.87	141.43	0.00	17.15

SOIL MOMENT ANALYSIS

Total Lateral Resistance (k)	Moment at Inflection Point, M _u (k-ft)	Additional Resistance (k-ft)	Nominal Moment Capacity, ΦM _n (k-ft)	Soil Moment Usage, M _u / ΦM _n
2,104.86	3,201.38	0.00	7,149.14	44.8%

SOIL COMPRESSION ANALYSIS

Compressive Bearing Resistance (k)	Compressive Force, P _u (k)	Additional Resistance (k)	Nominal Compressive Capacity, ΦP _n (k)	Soil Compressive Usage, P _u / ΦP _n
477.21	82.21	0.00	357.91	23.0%

REINFORCING STEEL STRENGTH ANALYSIS

Rebar Cage Diameter (in)	Steel Elastic Modulus, E (ksi)	Strength Bending/Tension Reduction Factor, Φ_b	Strength Shear Reduction Factor, Φ_v	Strength Compression Reduction Factor, Φ_c
75.622	29,000	0.9	0.75	0.65

PIER REINFORCING MOMENT ANALYSIS

Design Moment, M_u (k-ft)	Nominal Moment Capacity, $\Phi_b M_n$ (k-ft)	Bending Reinforcement Ratio	Pier Rebar Flexure Usage, $M_u / \Phi_b M_n$
2,684.93	5,657.91	0.01	47.5%



PIER REINFORCING COMPRESSION ANALYSIS

Buoyant Weight of Concrete (k)	Design Compression, P_u (k)	Nominal Compressive Capacity, $\Phi_p P_n$ (k)	Pier Rebar Compressive Usage, $P_u / \Phi_p P_n$
141.43	82.21	12,015.75	0.7%



PIER REINFORCING SHEAR ANALYSIS

Design Shear, V_u (k)	Nominal Shear Capacity, $\Phi_v V_n$ (k)	Pier Rebar Shear Usage, $V_u / \Phi_v V_n$
288.92	794.34	36.4%



Colliers Engineering & Design,
Architecture, Landscape Architecture,
Surveying, CT P.C.
105 Washington Boulevard
Stamford, CT 06901
203.324.0800
peter.albano@collierseng.com

Antenna Mount Analysis Report and PMI Requirements

Mount ReAnalysis-VZW

SMART Tool Project #: 10227145
Colliers Engineering & Design Project #: 21781103 (Rev 1)

March 19, 2024

Site Information

Site ID: 5000063849-VZW / BURLINGTON SW CT - A
Site Name: BURLINGTON SW CT - A
Carrier Name: Verizon Wireless
Address: 87 Monce Road
Burlington, Connecticut 06013
Hartford County
Latitude: 41.73913611°
Longitude: -72.90780278°

Structure Information

Tower Type: 120-Ft Monopole
Mount Type: 12.50-Ft Platform

FUZE ID # 16559975

Analysis Results

Platform: 33.3% Pass*

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

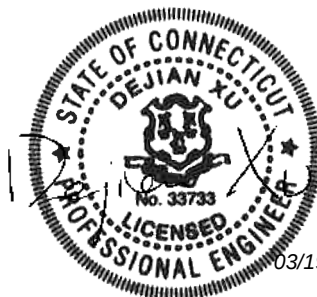
***Contractor PMI Requirements:

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: Vincent DiGirolamo



03/19/2024

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
<i>Radio Frequency Data Sheet (RFDS)</i>	<i>Verizon RFDS Site ID: 616512833 Dated March 6, 2024</i>
<i>Desktop Mapping Report</i>	<i>Colliers Engineering & Design, Project #: 21781103 Dated July 20, 2021</i>
<i>Previous Mount Analysis</i>	<i>NB+C, Project #: 100820 Dated August 7 2021</i>

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), V_{ULT} : 120 mph Ice Wind Speed (3-sec. Gust): 50 mph Design Ice Thickness: 1.50 in Risk Category: II Exposure Category: C Topographic Category: 1 Topographic Feature Considered: N/A Topographic Method: N/A Ground Elevation Factor, K_e : 0.990
Seismic Parameters:	S_s : 0.180 g S_1 : 0.054 g
Maintenance Parameters:	Wind Speed (3-sec. Gust): 30 mph Maintenance Load, L_v : 250 lbs. Maintenance Load, L_m : 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
89.75	91.20	3	Samsung	MT6413-77A	Added
		3	Samsung	RT4423-48A	
		2	KAelus	BSF0020F3V1-1	Retained
		3	Commscope	NHHSS-65B-R2BT4	
		3	Commscope	NHH-65B-R2B	
		1	Raycap	RVZDC-6627-PF-48*	
		3	Samsung	B2/B66A RRH-BR049	
		3	Samsung	B5/B13 RRH-BR04C	

* Equipment is flush mounted directly to the Monopole. It is not mounted on platform mount and is not included in this mount analysis.

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

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

Standard Conditions:

1. All engineering services are performed on the basis that the information provided to 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.
2. Mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer's specifications.

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

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

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

5. The mount was checked up to, and including, the bolts that fasten it to the mount collar/attachment and threaded rod connections in collar members if applicable. Local deformation and interaction between the mount collar/attachment and the supporting tower structure are outside the scope of this analysis.
6. All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. 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:
 - Channel, Solid Round, Angle, Plate ASTM A36 (Gr. 36)
 - HSS (Rectangular) ASTM 500 (Gr. B-46)
 - Pipe ASTM A53 (Gr. B-35)
 - Threaded Rod F1554 (Gr. 36)
 - Bolts ASTM A325

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

Analysis Results:

Component	Utilization %	Pass/Fail
<i>Standoff Horizontal</i>	<i>10.9</i>	<i>Pass</i>
<i>Corner Plates</i>	<i>22.7</i>	<i>Pass</i>
<i>Face Horizontal</i>	<i>10.0</i>	<i>Pass</i>
<i>Support Rail</i>	<i>21.9</i>	<i>Pass</i>
<i>Mount Pipe</i>	<i>29.0</i>	<i>Pass</i>
<i>Grating Angle</i>	<i>16.9</i>	<i>Pass</i>
<i>Standoff Cross Horizontal</i>	<i>13.3</i>	<i>Pass</i>
<i>Support Rail Angle</i>	<i>33.3</i>	<i>Pass</i>
<i>Kicker Kit</i>	<i>6.9</i>	<i>Pass</i>
<i>Mount Connection</i>	<i>12.9</i>	<i>Pass</i>

Structure Rating – (Controlling Utilization of all Components)	33.3%
---	--------------

Mount Connection Envelope Reactions:

Connection Description	Elev. AGL (Ft)	Node Label	Envelope Wind Reactions				Envelope Wind + Ice Reactions			
			Axial (Lbs)	Lateral (Lbs)	Moment (K-Ft)	Torsion (K-Ft)	Axial (Lbs)	Lateral (Lbs)	Moment (K-Ft)	Torsion (K-Ft)
Sector A Standoff	89.8	N87	538	3152	0.611	1.262	1114	2916	1.261	0.375
Sector C Standoff	89.8	N90	514	3124	0.571	1.187	1051	2867	1.177	0.364
Sector B Standoff	89.8	N150 A	537	3108	0.586	1.282	1100	2917	1.212	0.383
Sector B Reinf.	87.3	N189	1118	1701	0.280	0.008	1700	2573	0.425	0.002
Sector A Reinf.	87.3	N205	1123	1709	0.280	0.008	1698	2570	0.425	0.002
Sector C Reinf.	87.3	N209	1115	1696	0.278	0.008	1672	2528	0.418	0.002

Notes:

- Axial loads act along the axis of the tower
- Lateral reactions act perpendicular to the tower
- Moment loads introduce bending moment to the tower
- Torsion loads introduce twisting moment to the tower
- Batch solutions by individual load cases are included at the end of this document

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

Ice Thickness (In)	Mount Pipes Excluded		Mount Pipes Included	
	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)
0	26.8	26.8	43.9	43.9
0.5	34.8	34.8	59.1	59.1
1	42.1	42.1	73.6	73.6

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

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 shall record all dimensions and member sizes requested in the Mount Geometry Verification Requirements section of the Mount Analysis report. Contractor shall provide the requested information to Colliers Engineering & Design CT, P.C. for structural verification while on site. Contact EOR if these documents are not available to the general contractor.

Contractor shall inspect climbing facilities and safety climb, if present, and ensure they are in good condition. Contractor shall install safety climb wire rope guides in locations where wire rope is rubbing against the mount or mount-to-tower connection steel. Wire brush clean any observed corrosion and protect with two (2) coats of cold galvanization (Zinc Kote or Zinga). Contractor shall provide photos of wire rope guide installation as part of PMI documents. Contact EOR if additional guidance is required.

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 #: 5000063849

SMART Project #: 10227145

Fuze Project ID: 16559975

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

OR

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

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

Issue:

Contractor shall record all dimensions and member sizes requested in the Mount Geometry Verification Requirements section of the Mount Analysis report. Contractor shall provide the requested information to Colliers Engineering & Design CT, P.C. for structural verification while on site. Contact EOR if these documents are not available to the general contractor.

Contractor shall inspect climbing facilities and safety climb, if present, and ensure they are in good condition. Contractor shall install safety climb wire rope guides in locations where wire rope is rubbing against the mount or mount-to-tower connection steel. Wire brush clean any observed corrosion and protect with two (2) coats of cold galvanization (Zinc Kote or Zinga). Contractor shall provide photos of wire rope guide installation as part of PMI documents. Contact EOR if additional guidance is required.

Response:

Special Instruction Confirmation:

- ☐ The contractor has read and acknowledges the above special instructions.
- ☐ 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.

OR

☐ The material utilized was approved by a SMART Tool engineering vendor as an “equivalent” and this approval is included as part of the contractor submission.

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

Contractor to provide measurement from top of the highest equipment/steel to the bottom of the lowest equipment/steel by documenting it using the most appropriate illustration below along with supporting photos:

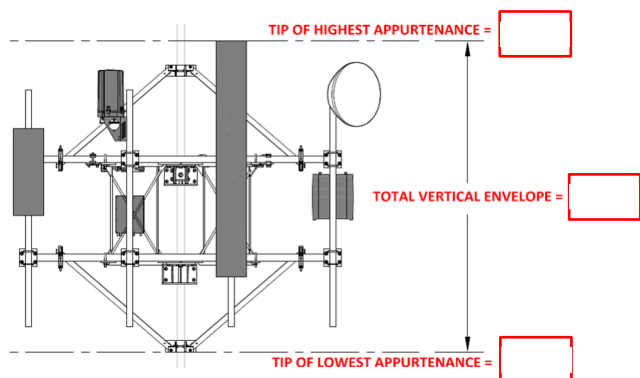


Illustration #1

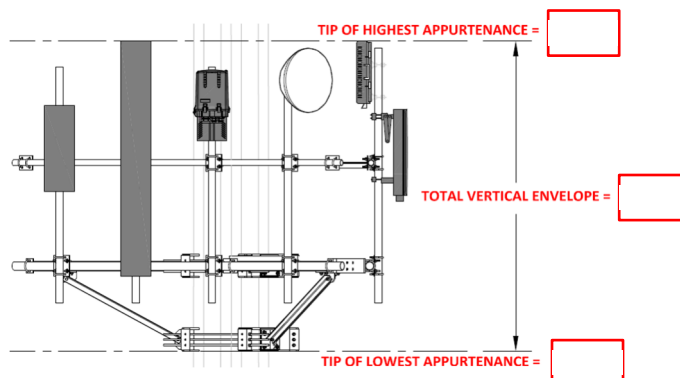
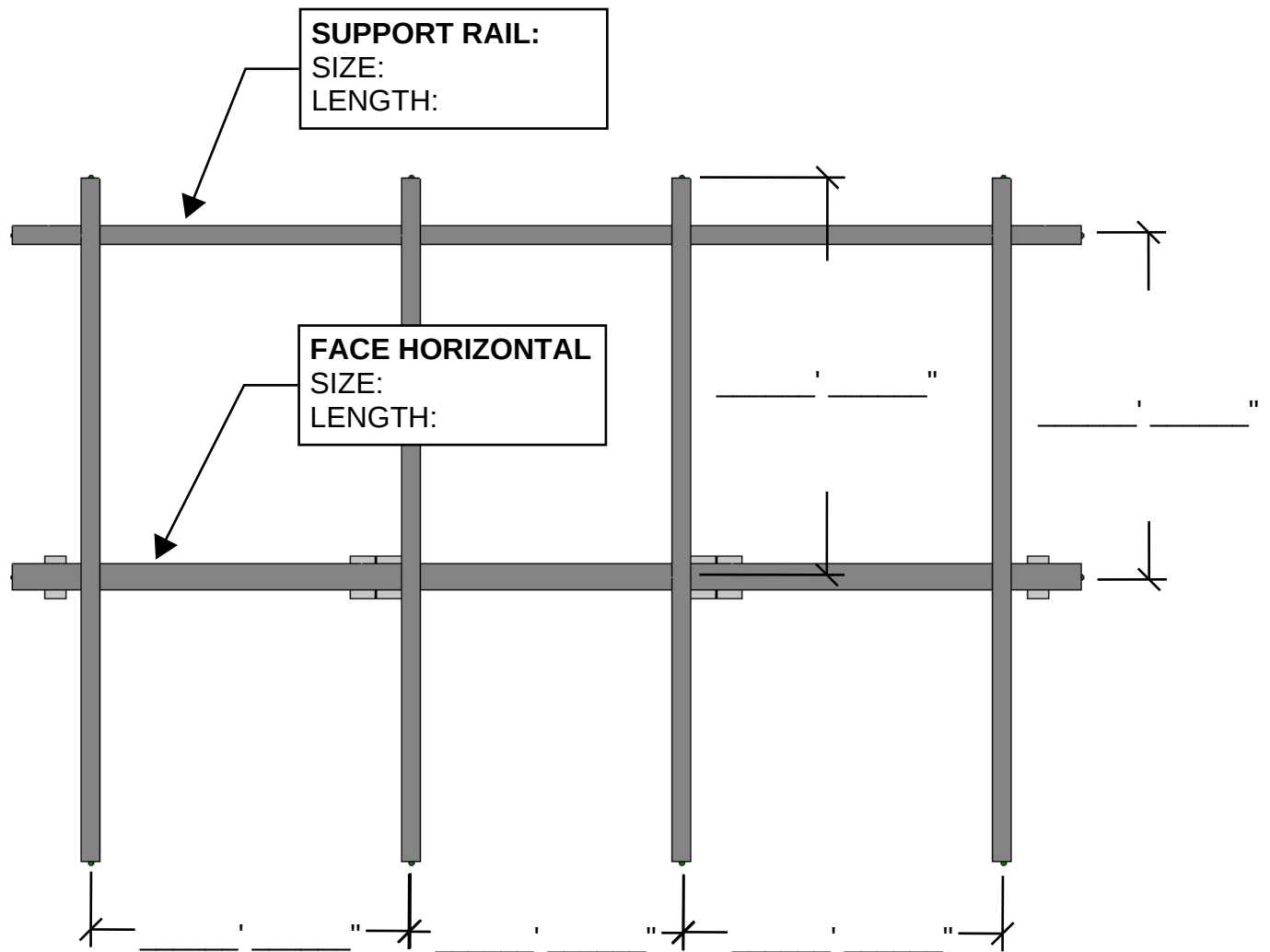


Illustration #2

Certifying Individual:

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

MOUNT GEOMETRY VERIFICATION



MOUNT FRONT ELEVATION VIEW (TYP. ALL SECTORS)

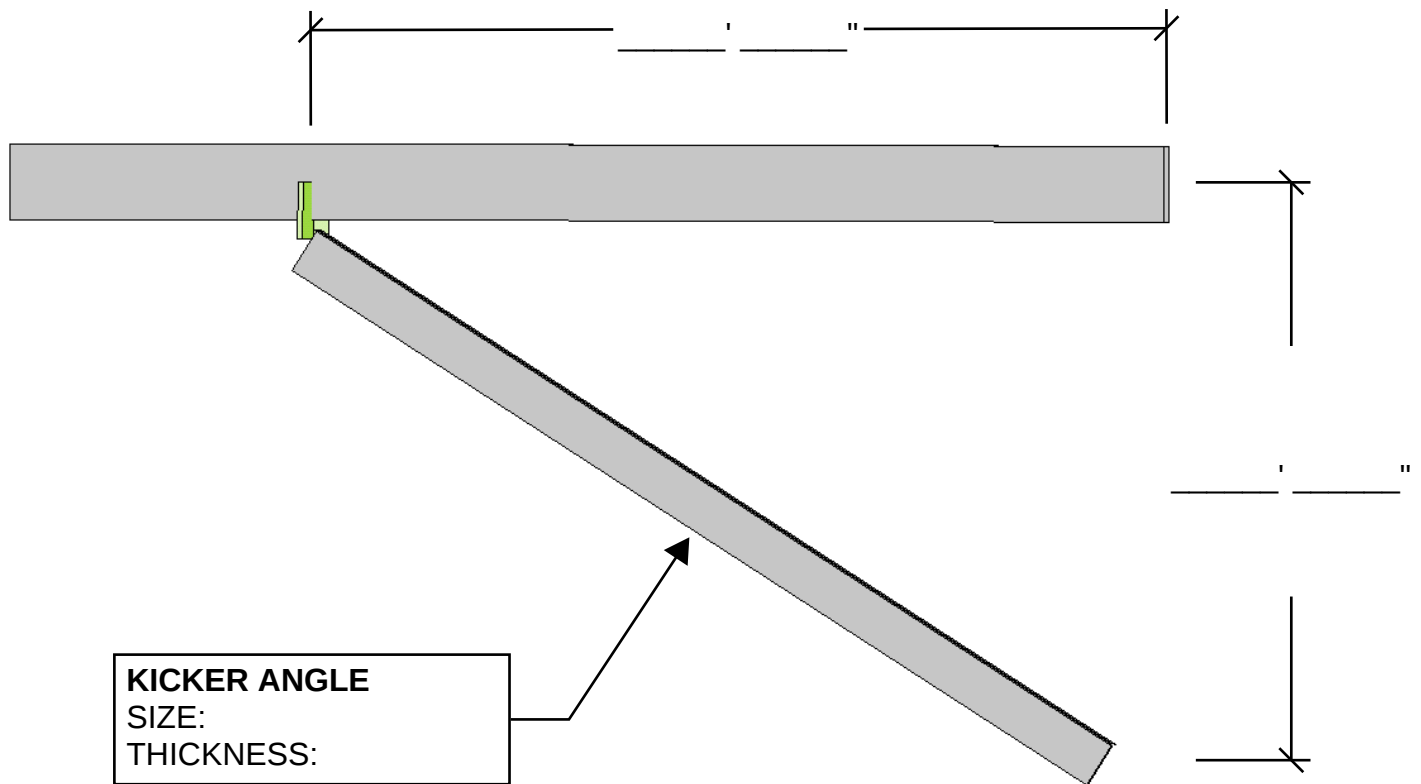
N.T.S.

TOWER GEOMETRY VERIFICATION

MONOPOLE DIAMETER: _____"

CONTRACTOR SHALL MEASURE ALL DIMENSIONS AND MEMBER SIZES REQUESTED ON THIS SKETCH. RECORD VIA PHOTOS AND MARKUPS ON THIS PAGE. PROVIDE PHOTOS AND MARKED-UP SKETCH TO THE EOR FOR EVALUATION.

MOUNT GEOMETRY VERIFICATION

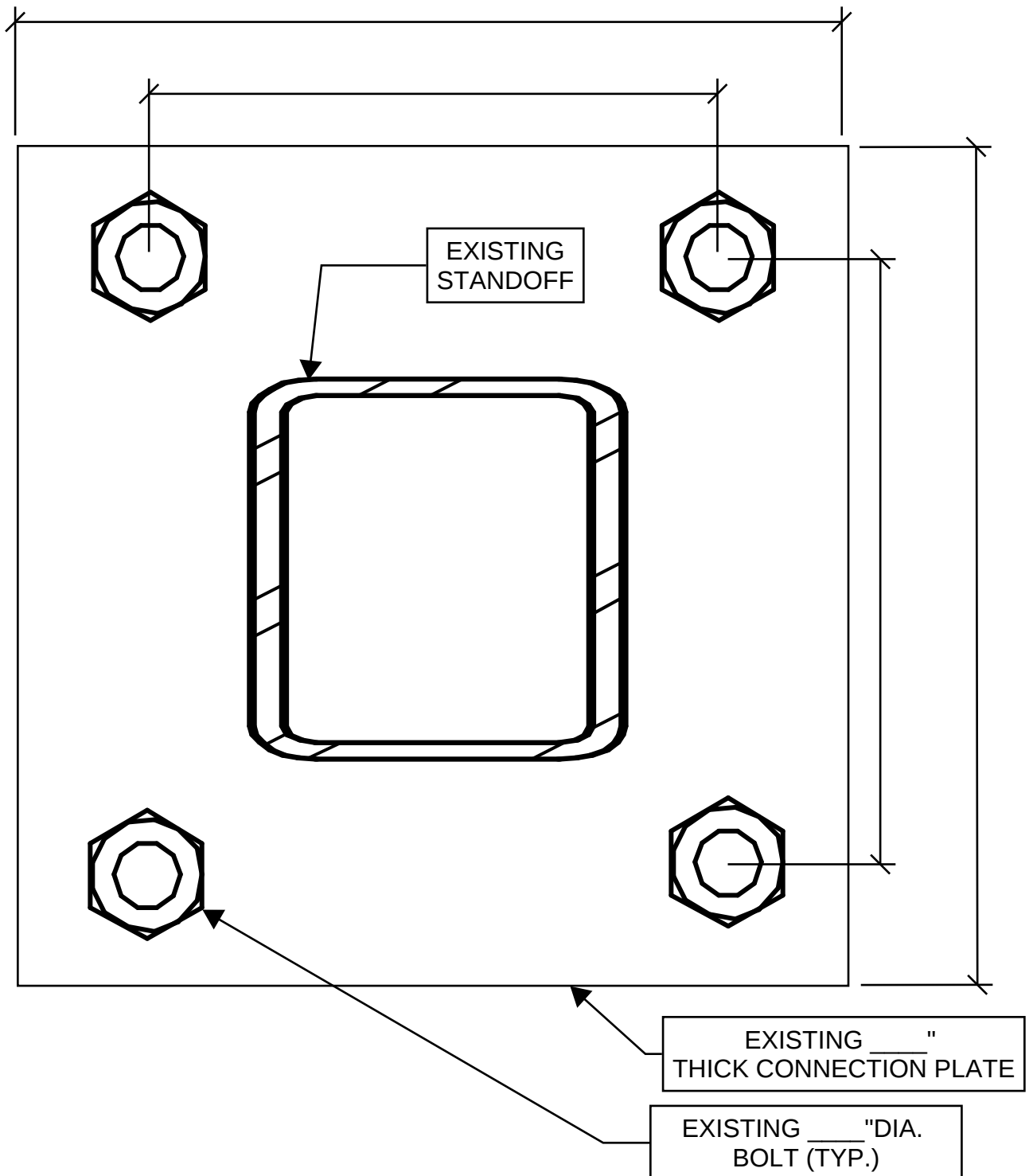


MOUNT SIDE ELEVATION VIEW (TYP. ALL SECTORS)

N.T.S.

CONTRACTOR SHALL MEASURE ALL DIMENSIONS AND MEMBER SIZES REQUESTED ON THIS SKETCH. RECORD VIA PHOTOS AND MARKUPS ON THIS PAGE. PROVIDE PHOTOS AND MARKED-UP SKETCH TO THE EOR FOR EVALUATION.

MOUNT GEOMETRY VERIFICATION



CONNECTION GEOMETRY (TYP. ALL SECTORS)

N.T.S.

CONTRACTOR SHALL MEASURE ALL DIMENSIONS AND MEMBER SIZES REQUESTED ON THIS SKETCH. RECORD VIA PHOTOS AND MARKUPS ON THIS PAGE. PROVIDE PHOTOS AND MARKED-UP SKETCH TO THE EOR FOR EVALUATION.

MOUNT GEOMETRY VERIFICATION

STANDARD PIPE DIMENSIONS				
		THICKNESS (IN.)		
PIPE SIZE	O.D. (IN.)	STD	XSTR	XXSTR
P1 1/2	1.900	0.145	0.200	0.400
P2	2.375	0.154	0.218	0.436
P2 1/2	2.875	0.203	0.276	0.552
P3	3.500	0.216	0.300	0.600
P3 1/2	4.000	0.226	0.318	0.636
P4	4.500	0.237	0.337	0.674
P4 1/2	5.000	0.247	0.355	0.710
P5	5.563	0.258	0.375	0.750
P6	6.625	0.280	0.432	0.864

**CONTRACTOR SHALL USE MEMBER SIZES AND DETAILS TO FACILITATE
GEOMETRY VERIFICATION. CONTACT EOR FOR ADDITIONAL CLARIFICATION IF
NEEDED**

Sector: A

3/15/2024

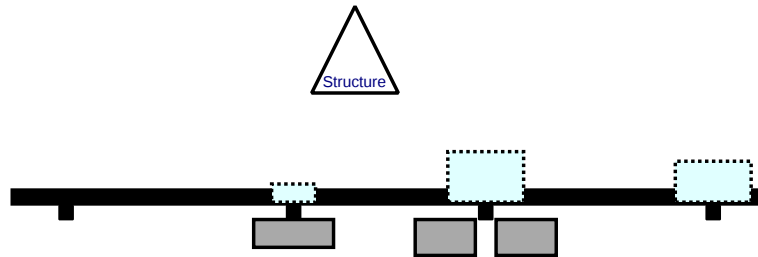
Structure Type: Monopole

10227145

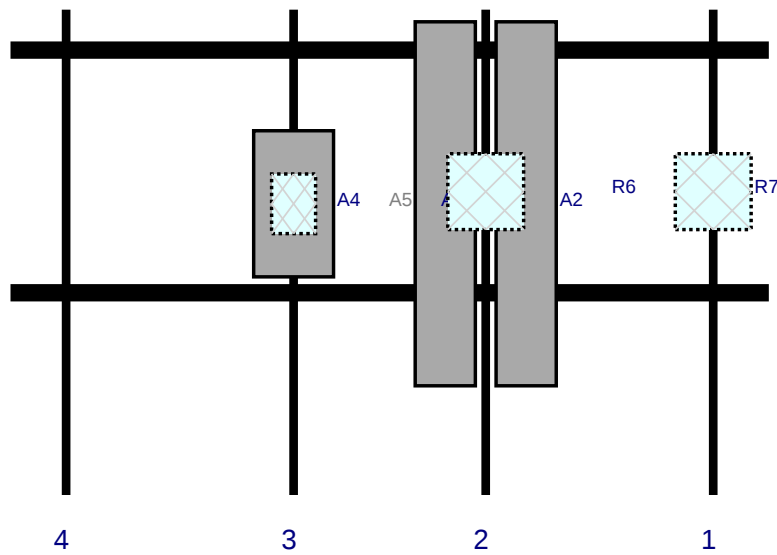
Mount Elev: 89.75

Page: 1

Plan View



Front View - Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R7	B5/B13 RRH-BR04C	15	15	139	1	a	Behind	36	0	Retained	
A2	NHHSS-65B-R2BT4	72	11.9	94	2	a	Front	38.4	8	Retained	
A3	NHH-65B-R2B	72	11.9	94	2	a	Front	38.4	-8	Retained	
R6	B2/B66A RRH-BR049	15	15	94	2	a	Behind	36	0	Retained	
A4	MT6413-77A	28.9	15.8	56	3	a	Front	38.4	0	Added	
A5	RT4423-48A	11.8	8.7	56	3	a	Behind	38.4	0	Added	

Sector: **B**

3/15/2024

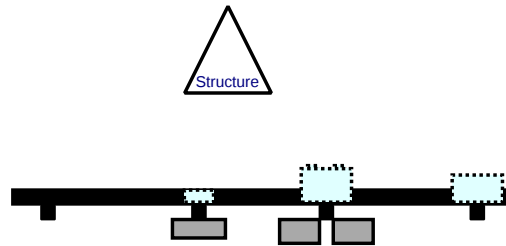
Structure Type: Monopole

10227145

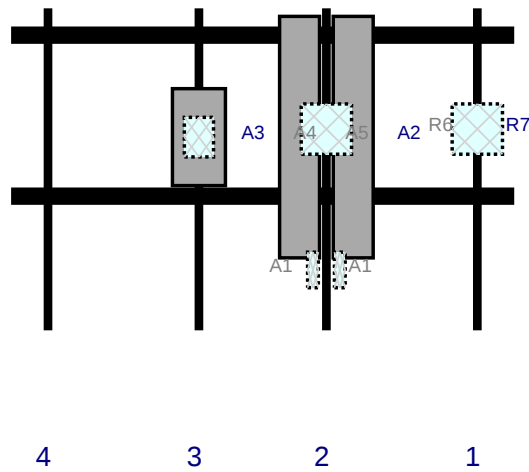
Mount Elev: 89.75

Page: 2

Plan View



Front View - Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R7	B5/B13 RRH-BR04C	15	15	139	1	a	Behind	36	0	Retained	
A2	NHHSS-65B-R2BT4	72	11.9	94	2	a	Front	38.4	8	Retained	
A3	NHH-65B-R2B	72	11.9	94	2	a	Front	38.4	-8	Retained	
A1	BSF0020F3V1-1	10.6	3.2	94	2	a	Behind	78	-4	Retained	
A1	BSF0020F3V1-1	10.6	3.2	94	2	b	Behind	78	4	Retained	
R6	B2/B66A RRH-BR049	15	15	94	2	a	Behind	36	0	Retained	
A4	MT6413-77A	28.9	15.8	56	3	a	Front	38.4	0	Added	
A5	RT4423-48A	11.8	8.7	56	3	a	Behind	38.4	0	Added	

Sector: C

3/15/2024

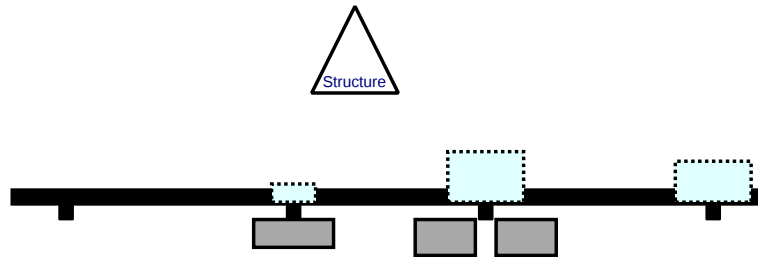
Structure Type: Monopole

10227145

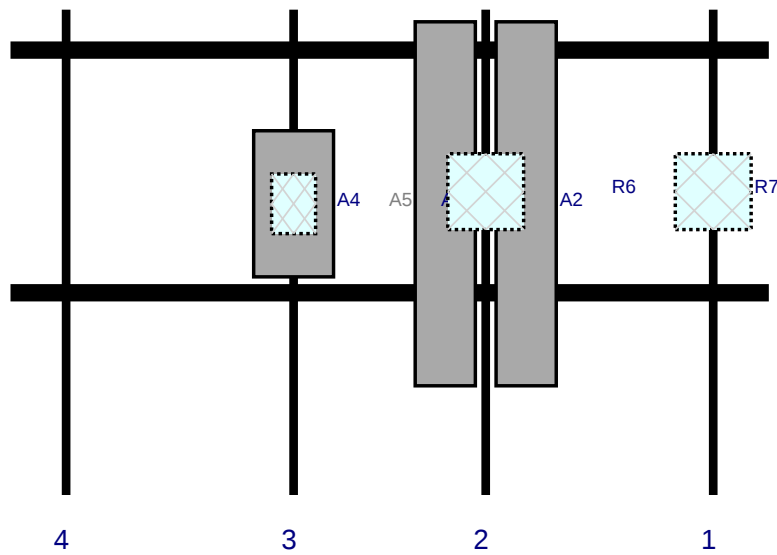
Mount Elev: 89.75

Page: 3

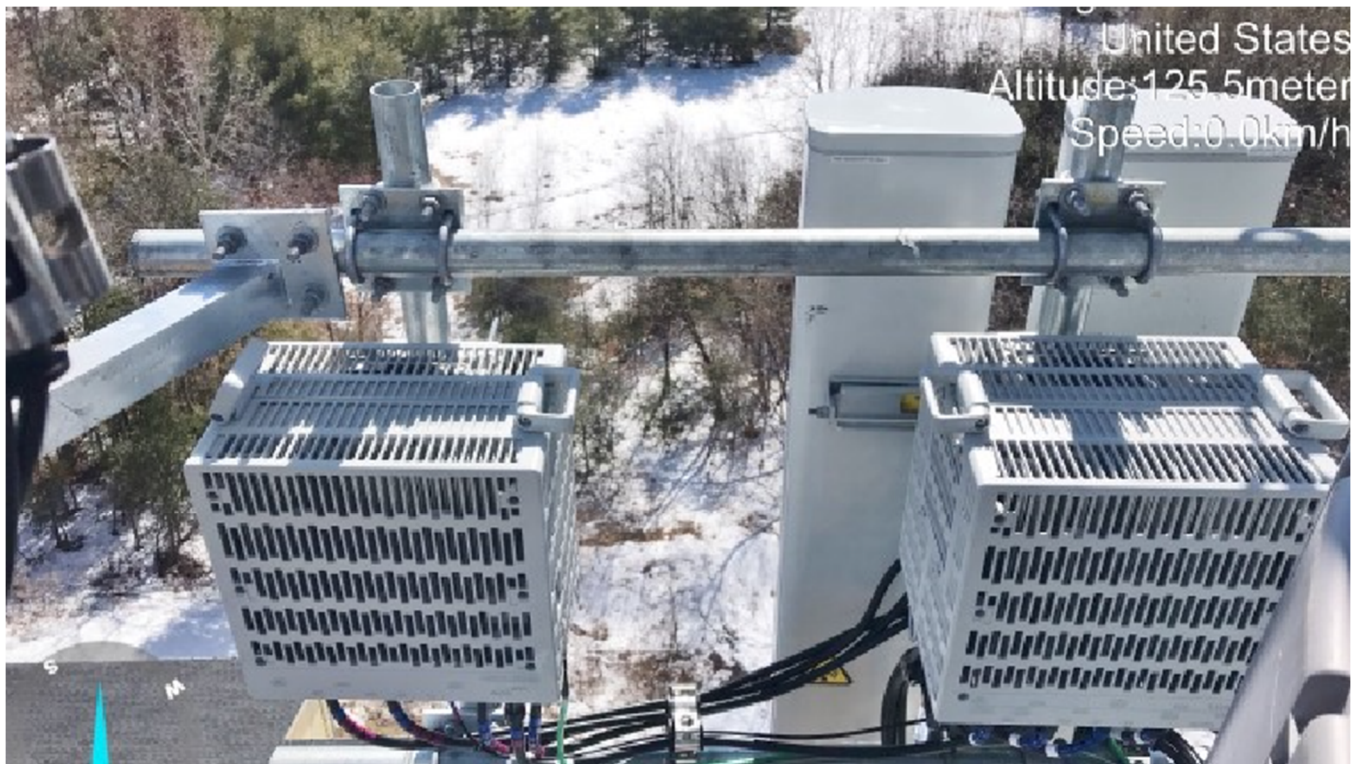
Plan View



Front View - Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R7	B5/B13 RRH-BR04C	15	15	139	1	a	Behind	36	0	Retained	
A2	NHHSS-65B-R2BT4	72	11.9	94	2	a	Front	38.4	8	Retained	
A3	NHH-65B-R2B	72	11.9	94	2	a	Front	38.4	-8	Retained	
R6	B2/B66A RRH-BR049	15	15	94	2	a	Behind	36	0	Retained	
A4	MT6413-77A	28.9	15.8	56	3	a	Front	38.4	0	Added	
A5	RT4423-48A	11.8	8.7	56	3	a	Behind	38.4	0	Added	

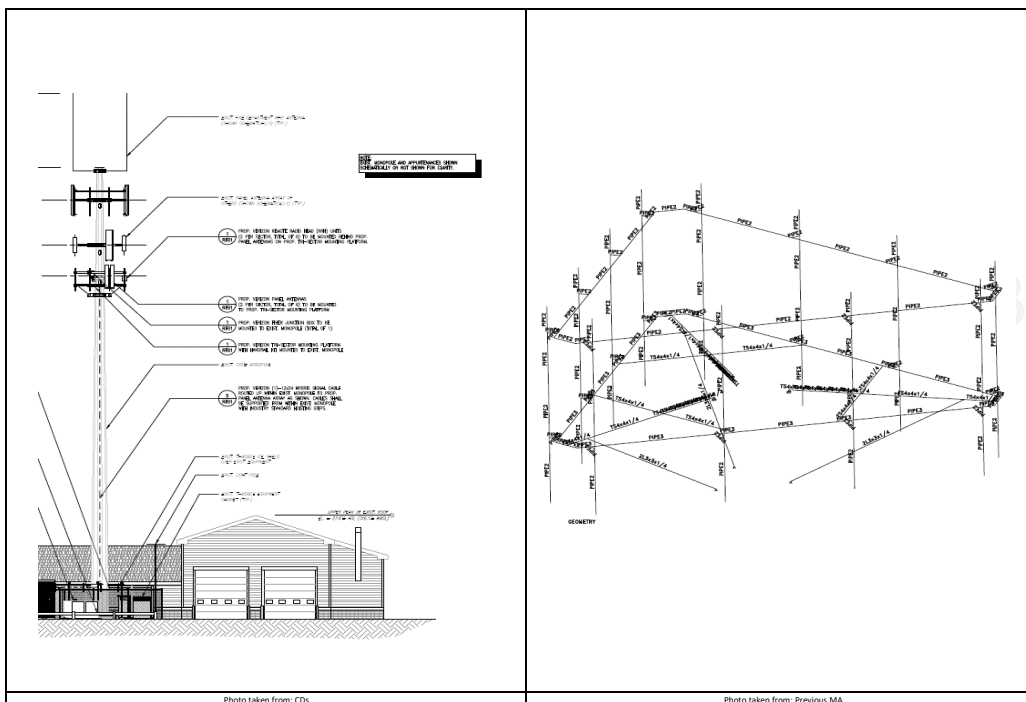


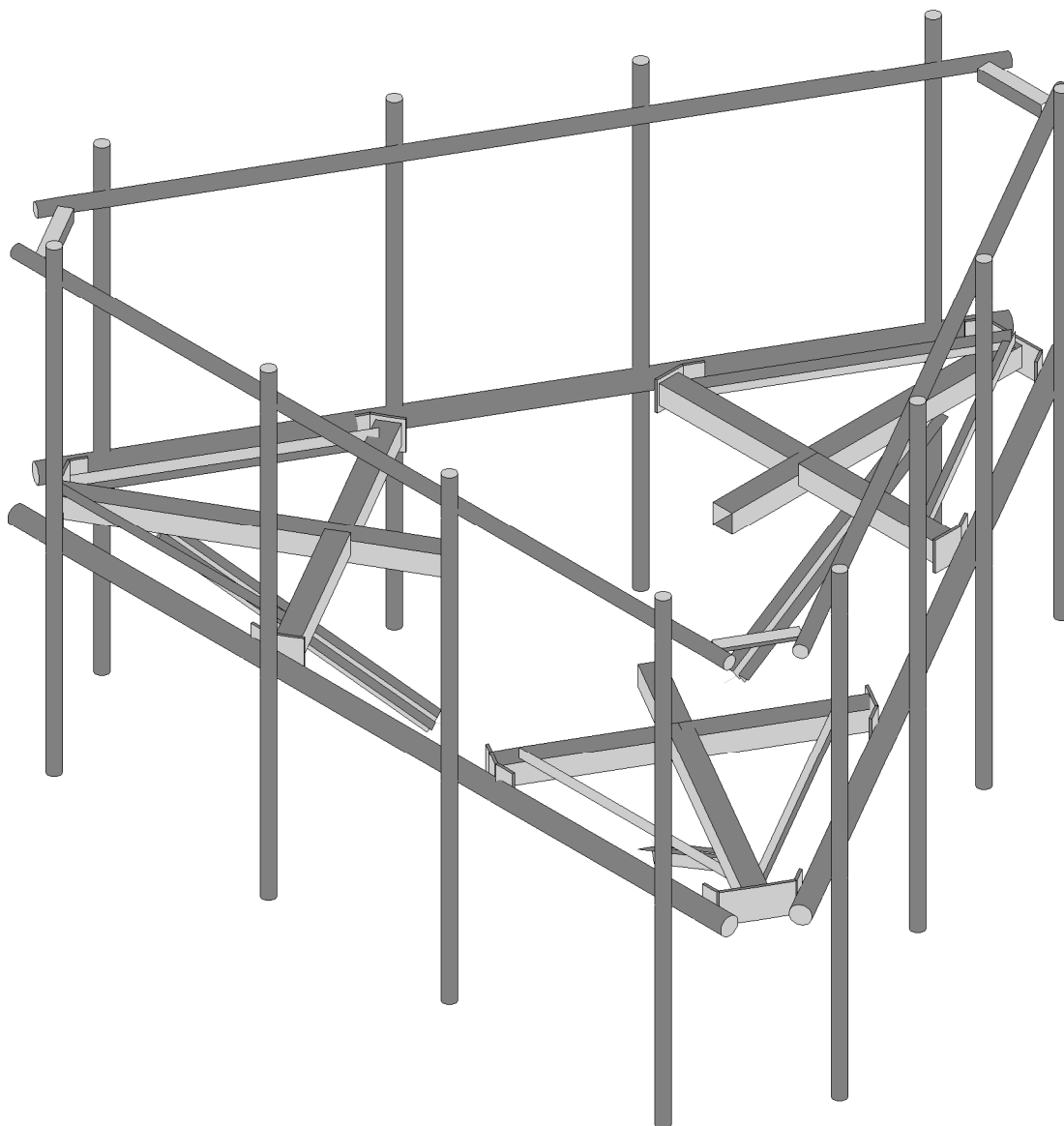
Desktop Mount Mapping Form				
Colliers Engineering & Design	Site Name:	BURLINGTON SW CT - A	Tower Type:	Monopole
	Site ID:		Tower Owner:	
	PSLC:	479435	Tower Height (Ft.):	
	Customer:	Verizon Wireless	Mount Elevation (Ft.):	
	Colliers Project No.	21781103	Date:	7/20/2021

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Document Type	Provided? (Yes/No)	Source Name	Project No.	Dated	Comments/Remarks
Previous Mount Mapping	No				
Previous Mapping Photos	No				
Previous Mount Analysis	Yes	As Built MA		7/30/2020	Provided and is a primary source of information for MA.
Previous Mount Modifications	No				
Previous Structural Analysis	Yes	As Built SA		5/5/2020	Provided and is a secondary source of information for MA.
Construction Drawings	Yes	As Built CD		8/6/2020	Provided and is a primary source of information for MA. See for mount part numbers and details.
Greenbook	No				
Closeout Photos	Yes	6 Pictures			
Handover Package	No				
New Build 445 Documentation	No				
Other	No				
Previous PMI	No				

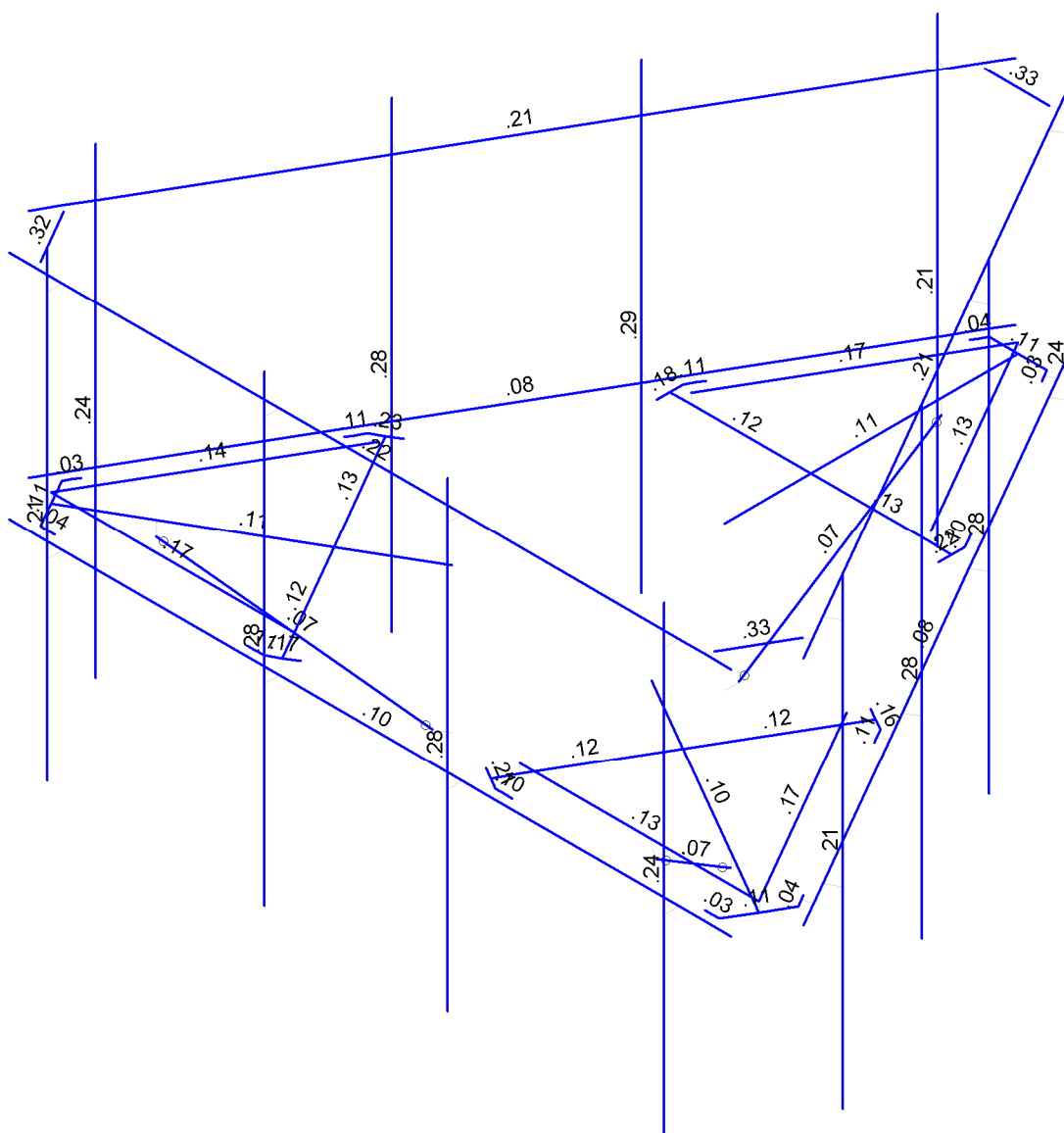
The **desktop mount mapping** is based on the engineering review of the available site documents in FUZE, as listed above, in place of a full mount mapping. It is assumed that the information provided in the documents listed above, provide an accurate representation of the existing mount. EOR reserves the right and will typically require additional clarification and verification as will be included in the PMI requirements. During the Post Modification Inspection (PMI) process, the GC on site will be required to confirm all questions, confirmations, and validations as posed by the EOR. The engineering review for this desktop mount mapping was performed in accordance to the ANSI/TIA-222-H requirements and Verizon's NST446 standard.



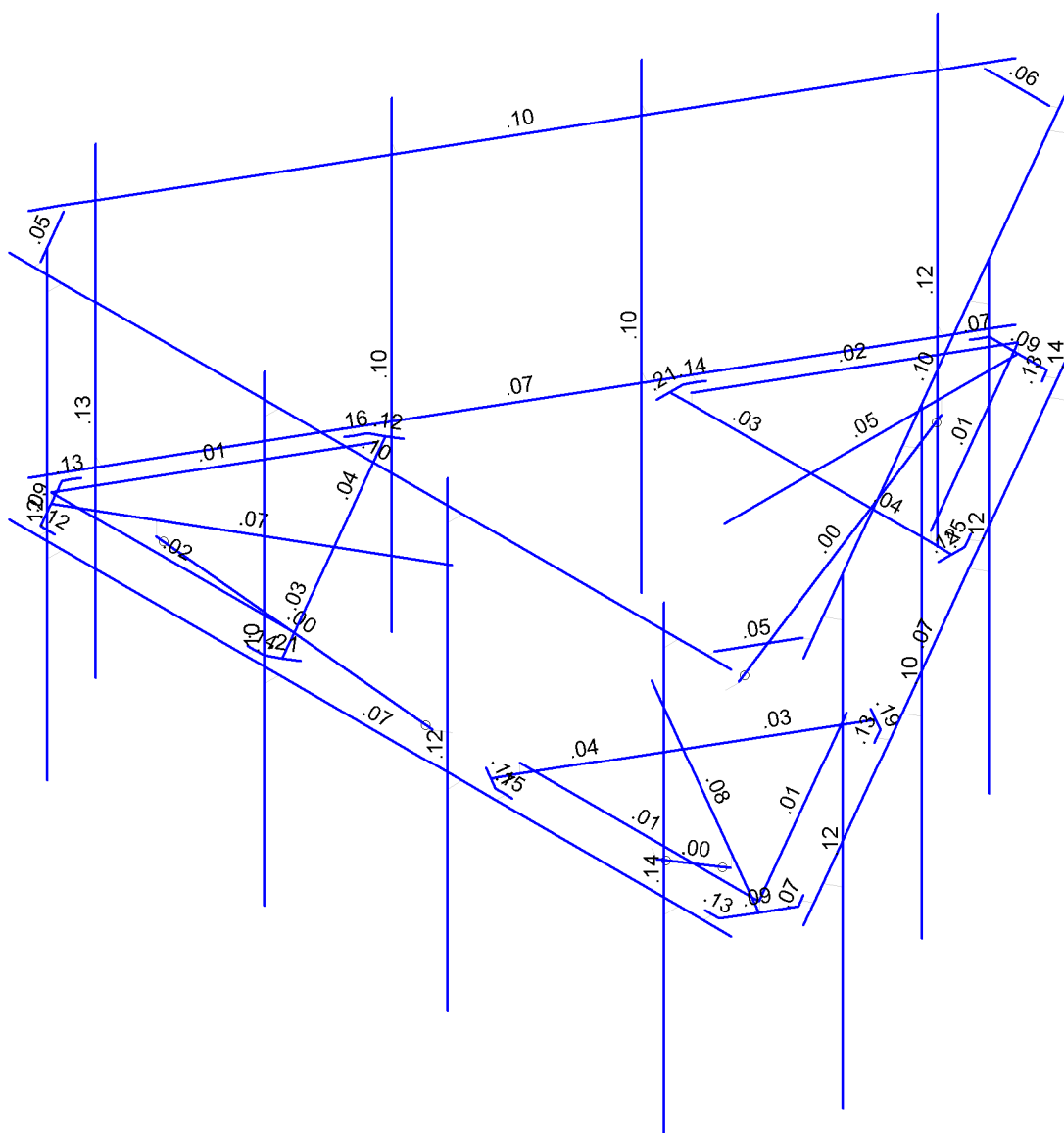


Envelope Only Solution

Colliers Engineering & Des...	5000063849-VZW_MT_LO_H Rendered Model	SK - 1
ILR		Mar 14, 2024 at 1:42 PM
Project No. 10227145		5000063849-VZW_MT_LO_H.r3d



5000063849-VZW_MT_LO_H.r3d



ILR
Project No. 10227145

5000063849-VZW_MT_LO_H
Shear Check

Mar 14, 2024 at 1:42 PM

Basic Load Cases

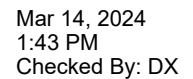
	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...	Surface(P...
1	Antenna D	None					93		
2	Antenna Di	None					93		
3	Antenna Wo (0 Deg)	None					93		
4	Antenna Wo (30 Deg)	None					93		
5	Antenna Wo (60 Deg)	None					93		
6	Antenna Wo (90 Deg)	None					93		
7	Antenna Wo (120 Deg)	None					93		
8	Antenna Wo (150 Deg)	None					93		
9	Antenna Wo (180 Deg)	None					93		
10	Antenna Wo (210 Deg)	None					93		
11	Antenna Wo (240 Deg)	None					93		
12	Antenna Wo (270 Deg)	None					93		
13	Antenna Wo (300 Deg)	None					93		
14	Antenna Wo (330 Deg)	None					93		
15	Antenna Wi (0 Deg)	None					93		
16	Antenna Wi (30 Deg)	None					93		
17	Antenna Wi (60 Deg)	None					93		
18	Antenna Wi (90 Deg)	None					93		
19	Antenna Wi (120 Deg)	None					93		
20	Antenna Wi (150 Deg)	None					93		
21	Antenna Wi (180 Deg)	None					93		
22	Antenna Wi (210 Deg)	None					93		
23	Antenna Wi (240 Deg)	None					93		
24	Antenna Wi (270 Deg)	None					93		
25	Antenna Wi (300 Deg)	None					93		
26	Antenna Wi (330 Deg)	None					93		
27	Antenna Wm (0 Deg)	None					93		
28	Antenna Wm (30 Deg)	None					93		
29	Antenna Wm (60 Deg)	None					93		
30	Antenna Wm (90 Deg)	None					93		
31	Antenna Wm (120 Deg)	None					93		
32	Antenna Wm (150 Deg)	None					93		
33	Antenna Wm (180 Deg)	None					93		
34	Antenna Wm (210 Deg)	None					93		
35	Antenna Wm (240 Deg)	None					93		
36	Antenna Wm (270 Deg)	None					93		
37	Antenna Wm (300 Deg)	None					93		
38	Antenna Wm (330 Deg)	None					93		
39	Structure D	None		-1				3	
40	Structure Di	None						60	3
41	Structure Wo (0 Deg)	None						120	
42	Structure Wo (30 Deg)	None						120	
43	Structure Wo (60 Deg)	None						120	
44	Structure Wo (90 Deg)	None						120	
45	Structure Wo (120 D...	None						120	
46	Structure Wo (150 D...	None						120	
47	Structure Wo (180 D...	None						120	
48	Structure Wo (210 D...	None						120	
49	Structure Wo (240 D...	None						120	
50	Structure Wo (270 D...	None						120	
51	Structure Wo (300 D...	None						120	
52	Structure Wo (330 D...	None						120	
53	Structure Wi (0 Deg)	None						120	

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						120	
55 Structure Wi (60 Deg)	None						120	
56 Structure Wi (90 Deg)	None						120	
57 Structure Wi (120 De..	None						120	
58 Structure Wi (150 De..	None						120	
59 Structure Wi (180 De..	None						120	
60 Structure Wi (210 De..	None						120	
61 Structure Wi (240 De..	None						120	
62 Structure Wi (270 De..	None						120	
63 Structure Wi (300 De..	None						120	
64 Structure Wi (330 De..	None						120	
65 Structure Wm (0 Deg)	None						120	
66 Structure Wm (30 De..	None						120	
67 Structure Wm (60 De..	None						120	
68 Structure Wm (90 De..	None						120	
69 Structure Wm (120 D..	None						120	
70 Structure Wm (150 D..	None						120	
71 Structure Wm (180 D..	None						120	
72 Structure Wm (210 D..	None						120	
73 Structure Wm (240 D..	None						120	
74 Structure Wm (270 D..	None						120	
75 Structure Wm (300 D..	None						120	
76 Structure Wm (330 D..	None						120	
77 Lm1	None					1		
78 Lm2	None					1		
79 Lv1	None					1		
80 Lv2	None					1		
81 Antenna Ev	None					93		
82 Antenna Eh (0 Deg)	None					62		
83 Antenna Eh (90 Deg)	None					62		
84 Structure Ev	ELY							
85 Structure Eh (0 Deg)	ELZ			-03				
86 Structure Eh (90 Deg)	ELX	.03						
87 BLC 39 Transient Are..	None						15	
88 BLC 40 Transient Are..	None						15	

Load Combinations

Description	S...	P...	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
1 1.2D+1.0Wo (0 Deg)	Yes	Y			1	1.2	39	1.2	3	1	41	1									
2 1.2D+1.0Wo (30 Deg)	Yes	Y			1	1.2	39	1.2	4	1	42	1									
3 1.2D+1.0Wo (60 Deg)	Yes	Y			1	1.2	39	1.2	5	1	43	1									
4 1.2D+1.0Wo (90 Deg)	Yes	Y			1	1.2	39	1.2	6	1	44	1									
5 1.2D+1.0Wo (120 Deg)	Yes	Y			1	1.2	39	1.2	7	1	45	1									
6 1.2D+1.0Wo (150 Deg)	Yes	Y			1	1.2	39	1.2	8	1	46	1									
7 1.2D+1.0Wo (180 Deg)	Yes	Y			1	1.2	39	1.2	9	1	47	1									
8 1.2D+1.0Wo (210 Deg)	Yes	Y			1	1.2	39	1.2	10	1	48	1									
9 1.2D+1.0Wo (240 Deg)	Yes	Y			1	1.2	39	1.2	11	1	49	1									
10 1.2D+1.0Wo (270 Deg)	Yes	Y			1	1.2	39	1.2	12	1	50	1									
11 1.2D+1.0Wo (300 Deg)	Yes	Y			1	1.2	39	1.2	13	1	51	1									
12 1.2D+1.0Wo (330 Deg)	Yes	Y			1	1.2	39	1.2	14	1	52	1									
13 1.2D + 1.0Di + 1.0Wi (0 Deg)	Yes	Y			1	1.2	39	1.2	2	1	40	1	15	1	53	1					
14 1.2D + 1.0Di + 1.0Wi (30 Deg)	Yes	Y			1	1.2	39	1.2	2	1	40	1	16	1	54	1					
15 1.2D + 1.0Di + 1.0Wi (60 Deg)	Yes	Y			1	1.2	39	1.2	2	1	40	1	17	1	55	1					
16 1.2D + 1.0Di + 1.0Wi (90 Deg)	Yes	Y			1	1.2	39	1.2	2	1	40	1	18	1	56	1					
17 1.2D + 1.0Di + 1.0Wi (120 Deg)	Yes	Y			1	1.2	39	1.2	2	1	40	1	19	1	57	1					



Load Combinations (Continued)

Description	S...	P...	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
75 0.9D - 1.0Ev + 1.0Eh (330 Deg)	Yes	Y			1	.9	39	.9	81	-1	E...	-1	82	.866	83	-.5	E...	.866	E...	-.5	

Hot Rolled Steel Section Sets

Label	Shape	Type	Design List	Material	Design R...	A [in ²]	Iyy [in ⁴]	Izz [in ⁴]	J [in ⁴]
1 Standoff Horizontal	HSS4X4X4	Beam	None	A500 Gr.B Rect	Typical	3.37	7.8	7.8	12.8
2 Corner Plates	PL1/2x6	Beam	None	A36 Gr.36	Typical	3	.063	9	.237
3 Face Horizontal	PIPE 3.0	Beam	None	A53 Gr.B	Typical	2.07	2.85	2.85	5.69
4 Support Rail	PIPE 2.0	Beam	None	A53 Gr.B	Typical	1.02	.627	.627	1.25
5 Mount Pipe	PIPE 2.0	Column	None	A53 Gr.B	Typical	1.02	.627	.627	1.25
6 Grating Angle	L2x2x3	Beam	None	A36 Gr.36	Typical	.722	.271	.271	.009
7 Standoff Cross Hori...	HSS4X4X4	Beam	None	A500 Gr.B Rect	Typical	3.37	7.8	7.8	12.8
8 Support Rail Angle	L2.5x2.5x3	Beam	None	A36 Gr.36	Typical	.901	.535	.535	.011
9 Kicker Kit	LL2.5x2.5x3x3	VBrace	None	A36 Gr.36	Typical	1.8	2.46	1.07	.023

Hot Rolled Steel Properties

Label	E [ksi]	G [ksi]	Nu	Therm (/1E...	Density[k/ft...	Yield[ksi]	Ry	Fu[ksi]	Rt
1 A992	29000	11154	.3	.65	.49	50	1.1	65	1.1
2 A36 Gr.36	29000	11154	.3	.65	.49	36	1.5	58	1.2
3 A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	65	1.1
4 A500 Gr.B RND	29000	11154	.3	.65	.527	42	1.4	58	1.3
5 A500 Gr.B Rect	29000	11154	.3	.65	.527	46	1.4	58	1.3
6 A53 Gr.B	29000	11154	.3	.65	.49	35	1.6	60	1.2
7 A1085	29000	11154	.3	.65	.49	50	1.25	65	1.15
8 A913 Gr.65	29000	11154	.3	.65	.49	65	1.1	80	1.1

Member Primary Data

Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1 M1	N1	N2			Face Horizontal	Beam	None	A53 Gr.B	Typical
2 M8	N20	N19			RIGID	None	None	RIGID	Typical
3 M10	N23	N22B			RIGID	None	None	RIGID	Typical
4 M12	N27	N26			RIGID	None	None	RIGID	Typical
5 M14	N31	N30			RIGID	None	None	RIGID	Typical
6 M40	N78	N77			RIGID	None	None	RIGID	Typical
7 M41	N79	N80			Corner Plates	Beam	None	A36 Gr.36	Typical
8 M42	N83	N82			RIGID	None	None	RIGID	Typical
9 M43	N84	N85			Corner Plates	Beam	None	A36 Gr.36	Typical
10 M44	N85	N79			Corner Plates	Beam	None	A36 Gr.36	Typical
11 M45A	N86	N87			Standoff Horiz...	Beam	None	A500 Gr.B...	Typical
12 M46A	N88	N96			Standoff Cross...	Beam	None	A500 Gr.B...	Typical
13 M47A	N88	N102			Standoff Cross...	Beam	None	A500 Gr.B...	Typical
14 M48	N92	N91			RIGID	None	None	RIGID	Typical
15 M49	N93	N94			Corner Plates	Beam	None	A36 Gr.36	Typical
16 M50	N93	N95			Corner Plates	Beam	None	A36 Gr.36	Typical
17 M51	N98	N97			RIGID	None	None	RIGID	Typical
18 M52	N99	N100			Corner Plates	Beam	None	A36 Gr.36	Typical
19 M53	N99	N101			Corner Plates	Beam	None	A36 Gr.36	Typical
20 M56	N104A	N106		270	Grating Angle	Beam	None	A36 Gr.36	Typical
21 M56A	N104A	N86			RIGID	None	None	RIGID	Typical
22 M57A	N106	N104			RIGID	None	None	RIGID	Typical
23 M67	N104A	N123			Grating Angle	Beam	None	A36 Gr.36	Typical
24 M70	N123	N119			RIGID	None	None	RIGID	Typical
25 M88	N148A	N149A			Support Rail	Beam	None	A53 Gr.B	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
26	M89	N151	N150			RIGID	None	None	RIGID	Typical
27	M90	N153	N152			RIGID	None	None	RIGID	Typical
28	M91	N155	N154			RIGID	None	None	RIGID	Typical
29	M92	N157	N156			RIGID	None	None	RIGID	Typical
30	M34	N61	N62			Face Horizontal	Beam	None	A53 Gr.B	Typical
31	M43A	N82A	N81			RIGID	None	None	RIGID	Typical
32	M44A	N83A	N84A			Corner Plates	Beam	None	A36 Gr.36	Typical
33	M45	N86A	N85A			RIGID	None	None	RIGID	Typical
34	M46	N87A	N88A			Corner Plates	Beam	None	A36 Gr.36	Typical
35	M47	N88A	N83A			Corner Plates	Beam	None	A36 Gr.36	Typical
36	M48A	N89A	N90			Standoff Horiz...	Beam	None	A500 Gr.B...	Typical
37	M49A	N91A	N98A			Standoff Cross...	Beam	None	A500 Gr.B...	Typical
38	M50A	N91A	N104B			Standoff Cross...	Beam	None	A500 Gr.B...	Typical
39	M51A	N94A	N93A			RIGID	None	None	RIGID	Typical
40	M52A	N95A	N96A			Corner Plates	Beam	None	A36 Gr.36	Typical
41	M53A	N95A	N97A			Corner Plates	Beam	None	A36 Gr.36	Typical
42	M54	N100A	N99A			RIGID	None	None	RIGID	Typical
43	M55	N101A	N102A			Corner Plates	Beam	None	A36 Gr.36	Typical
44	M56B	N101A	N103			Corner Plates	Beam	None	A36 Gr.36	Typical
45	M57	N106A	N107		270	Grating Angle	Beam	None	A36 Gr.36	Typical
46	M58	N106A	N89A		240	RIGID	None	None	RIGID	Typical
47	M59	N107	N105		240	RIGID	None	None	RIGID	Typical
48	M60	N106A	N109			Grating Angle	Beam	None	A36 Gr.36	Typical
49	M61	N109	N108		240	RIGID	None	None	RIGID	Typical
50	M62	N110	N111			Support Rail	Beam	None	A53 Gr.B	Typical
51	M67A	N121	N122			Face Horizontal	Beam	None	A53 Gr.B	Typical
52	M76	N142	N141			RIGID	None	None	RIGID	Typical
53	M77	N143	N144			Corner Plates	Beam	None	A36 Gr.36	Typical
54	M78	N146	N145			RIGID	None	None	RIGID	Typical
55	M79	N147	N148			Corner Plates	Beam	None	A36 Gr.36	Typical
56	M80	N148	N143			Corner Plates	Beam	None	A36 Gr.36	Typical
57	M81	N149	N150A			Standoff Horiz...	Beam	None	A500 Gr.B...	Typical
58	M82	N151A	N158			Standoff Cross...	Beam	None	A500 Gr.B...	Typical
59	M83	N151A	N164			Standoff Cross...	Beam	None	A500 Gr.B...	Typical
60	M84	N154A	N153A			RIGID	None	None	RIGID	Typical
61	M85	N155A	N156A			Corner Plates	Beam	None	A36 Gr.36	Typical
62	M86	N155A	N157A			Corner Plates	Beam	None	A36 Gr.36	Typical
63	M87	N160	N159			RIGID	None	None	RIGID	Typical
64	M88A	N161	N162			Corner Plates	Beam	None	A36 Gr.36	Typical
65	M89A	N161	N163			Corner Plates	Beam	None	A36 Gr.36	Typical
66	M90A	N166	N167		270	Grating Angle	Beam	None	A36 Gr.36	Typical
67	M91A	N166	N149		120	RIGID	None	None	RIGID	Typical
68	M92A	N167	N165		120	RIGID	None	None	RIGID	Typical
69	M93	N166	N169			Grating Angle	Beam	None	A36 Gr.36	Typical
70	M94	N169	N168		120	RIGID	None	None	RIGID	Typical
71	M95	N170	N171			Support Rail	Beam	None	A53 Gr.B	Typical
72	M100	N195A	N176A		90	Support Rail A...	Beam	None	A36 Gr.36	Typical
73	M101	N177A	N190A		90	Support Rail A...	Beam	None	A36 Gr.36	Typical
74	M102	N191A	N194A		90	Support Rail A...	Beam	None	A36 Gr.36	Typical
75	MP4A	N195	N196		240	Mount Pipe	Column	None	A53 Gr.B	Typical
76	MP3A	N197	N198		240	Mount Pipe	Column	None	A53 Gr.B	Typical
77	MP2A	N199	N200		240	Mount Pipe	Column	None	A53 Gr.B	Typical
78	MP1A	N201	N202		240	Mount Pipe	Column	None	A53 Gr.B	Typical
79	M106	N204	N203			Kicker Kit	VBrace	None	A36 Gr.36	Typical
80	M107	N188	N204			RIGID	None	None	RIGID	Typical
81	M108	N203	N189			RIGID	None	None	RIGID	Typical
82	M109	N185	N205			RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
83	M110	N186	N206			RIGID	None	None	RIGID	Typical
84	M111	N206	N185			Kicker Kit	VBrace	None	A36 Gr.36	Typical
85	M112	N207	N209			RIGID	None	None	RIGID	Typical
86	M113	N208	N210			RIGID	None	None	RIGID	Typical
87	M114	N210	N207			Kicker Kit	VBrace	None	A36 Gr.36	Typical
88	M96	N176	N193			RIGID	None	None	RIGID	Typical
89	M97	N175	N179			RIGID	None	None	RIGID	Typical
90	M98	N181	N184			RIGID	None	None	RIGID	Typical
91	MP3C	N187	N190		240	Mount Pipe	Column	None	A53 Gr.B	Typical
92	M103	N191	N192			RIGID	None	None	RIGID	Typical
93	MP2C	N177	N173		240	Mount Pipe	Column	None	A53 Gr.B	Typical
94	M105	N174	N194			RIGID	None	None	RIGID	Typical
95	M116	N212	N213			RIGID	None	None	RIGID	Typical
96	MP1C	N214	N215		240	Mount Pipe	Column	None	A53 Gr.B	Typical
97	M118	N216	N217			RIGID	None	None	RIGID	Typical
98	M119	N218	N219			RIGID	None	None	RIGID	Typical
99	MP4C	N172	N178		240	Mount Pipe	Column	None	A53 Gr.B	Typical
100	M121	N224	N234			RIGID	None	None	RIGID	Typical
101	M122	N223	N227			RIGID	None	None	RIGID	Typical
102	M123	N228	N229			RIGID	None	None	RIGID	Typical
103	MP3B	N230	N231		240	Mount Pipe	Column	None	A53 Gr.B	Typical
104	M125	N232	N233			RIGID	None	None	RIGID	Typical
105	MP2B	N225	N221		240	Mount Pipe	Column	None	A53 Gr.B	Typical
106	M127	N222	N235			RIGID	None	None	RIGID	Typical
107	M128	N236	N237			RIGID	None	None	RIGID	Typical
108	MP1B	N238	N239		240	Mount Pipe	Column	None	A53 Gr.B	Typical
109	M130	N240	N241			RIGID	None	None	RIGID	Typical
110	M131	N242	N243			RIGID	None	None	RIGID	Typical
111	MP4B	N220	N226		240	Mount Pipe	Column	None	A53 Gr.B	Typical
112	M112A	N189A	N177A			RIGID	None	None	RIGID	Typical
113	M113A	N188A	N176A			RIGID	None	None	RIGID	Typical
114	M114A	N180	N191A			RIGID	None	None	RIGID	Typical
115	M115	N179A	N190A			RIGID	None	None	RIGID	Typical
116	M116A	N183	N195A			RIGID	None	None	RIGID	Typical
117	M117	N182	N194A			RIGID	None	None	RIGID	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M1						Yes				None
2	M8						Yes	** NA **			None
3	M10						Yes	** NA **			None
4	M12						Yes	** NA **			None
5	M14						Yes	** NA **			None
6	M40		BenPIN				Yes	** NA **			None
7	M41						Yes	Default			None
8	M42		BenPIN				Yes	** NA **			None
9	M43						Yes				None
10	M44						Yes				None
11	M45A						Yes				None
12	M46A						Yes	Default			None
13	M47A						Yes				None
14	M48		BenPIN				Yes	** NA **			None
15	M49						Yes				None
16	M50						Yes				None
17	M51		BenPIN				Yes	** NA **			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
18	M52						Yes				None
19	M53						Yes				None
20	M56						Yes				None
21	M56A						Yes	** NA **			None
22	M57A						Yes	** NA **			None
23	M67						Yes				None
24	M70						Yes	** NA **			None
25	M88						Yes				None
26	M89						Yes	** NA **			None
27	M90						Yes	** NA **			None
28	M91						Yes	** NA **			None
29	M92						Yes	** NA **			None
30	M34						Yes				None
31	M43A		BenPIN				Yes	** NA **			None
32	M44A						Yes				None
33	M45		BenPIN				Yes	** NA **			None
34	M46						Yes				None
35	M47						Yes				None
36	M48A						Yes				None
37	M49A						Yes	Default			None
38	M50A						Yes				None
39	M51A		BenPIN				Yes	** NA **			None
40	M52A						Yes				None
41	M53A						Yes				None
42	M54		BenPIN				Yes	** NA **			None
43	M55						Yes				None
44	M56B						Yes				None
45	M57						Yes				None
46	M58						Yes	** NA **			None
47	M59						Yes	** NA **			None
48	M60						Yes				None
49	M61						Yes	** NA **			None
50	M62						Yes				None
51	M67A						Yes				None
52	M76		BenPIN				Yes	** NA **			None
53	M77						Yes				None
54	M78		BenPIN				Yes	** NA **			None
55	M79						Yes				None
56	M80						Yes				None
57	M81						Yes				None
58	M82						Yes	Default			None
59	M83						Yes				None
60	M84		BenPIN				Yes	** NA **			None
61	M85						Yes				None
62	M86						Yes				None
63	M87		BenPIN				Yes	** NA **			None
64	M88A						Yes				None
65	M89A						Yes				None
66	M90A						Yes				None
67	M91A						Yes	** NA **			None
68	M92A						Yes	** NA **			None
69	M93						Yes				None
70	M94						Yes	** NA **			None
71	M95						Yes				None
72	M100						Yes				None
73	M101						Yes				None
74	M102						Yes				None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
75	MP4A						Yes	** NA **			None
76	MP3A						Yes	** NA **			None
77	MP2A						Yes	** NA **			None
78	MP1A						Yes	** NA **			None
79	M106	BenPIN	BenPIN				Yes	** NA **			None
80	M107						Yes	** NA **			None
81	M108						Yes	** NA **			None
82	M109						Yes	** NA **			None
83	M110						Yes	** NA **			None
84	M111	BenPIN	BenPIN				Yes	** NA **			None
85	M112						Yes	** NA **			None
86	M113						Yes	** NA **			None
87	M114	BenPIN	BenPIN				Yes	** NA **			None
88	M96						Yes	** NA **			None
89	M97						Yes	** NA **			None
90	M98						Yes	** NA **			None
91	MP3C						Yes	** NA **			None
92	M103						Yes	** NA **			None
93	MP2C						Yes	** NA **			None
94	M105						Yes	** NA **			None
95	M116						Yes	** NA **			None
96	MP1C						Yes	** NA **			None
97	M118						Yes	** NA **			None
98	M119						Yes	** NA **			None
99	MP4C						Yes	** NA **			None
100	M121						Yes	** NA **			None
101	M122						Yes	** NA **			None
102	M123						Yes	** NA **			None
103	MP3B						Yes	** NA **			None
104	M125						Yes	** NA **			None
105	MP2B						Yes	** NA **			None
106	M127						Yes	** NA **			None
107	M128						Yes	** NA **			None
108	MP1B						Yes	** NA **			None
109	M130						Yes	** NA **			None
110	M131						Yes	** NA **			None
111	MP4B						Yes	** NA **			None
112	M112A	OOOOOX					Yes	** NA **			None
113	M113A	OOOOOX					Yes	** NA **			None
114	M114A	OOOOOX					Yes	** NA **			None
115	M115	OOOOOX					Yes	** NA **			None
116	M116A	OOOOOX					Yes	** NA **			None
117	M117	OOOOOX					Yes	** NA **			None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2B	Y	-8.8	6
2	MP2B	My	-.002	6
3	MP2B	Mz	.009	6
4	MP2B	Y	-8.8	7
5	MP2B	My	-.002	7
6	MP2B	Mz	.009	7
7	MP2B	Y	-8.8	6
8	MP2B	My	-.007	6
9	MP2B	Mz	.006	6

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
10	MP2B	Y	-8.8	7
11	MP2B	My	-.007	7
12	MP2B	Mz	.006	7
13	MP2A	Y	-32.3	1
14	MP2A	My	-.027	1
15	MP2A	Mz	.022	1
16	MP2A	Y	-32.3	5.4
17	MP2A	My	-.027	5.4
18	MP2A	Mz	.022	5.4
19	MP2B	Y	-32.3	1
20	MP2B	My	-.005	1
21	MP2B	Mz	-.034	1
22	MP2B	Y	-32.3	5.4
23	MP2B	My	-.005	5.4
24	MP2B	Mz	-.034	5.4
25	MP2C	Y	-32.3	1
26	MP2C	My	.029	1
27	MP2C	Mz	.018	1
28	MP2C	Y	-32.3	5.4
29	MP2C	My	.029	5.4
30	MP2C	Mz	.018	5.4
31	MP2A	Y	-21.85	1
32	MP2A	My	-.018	1
33	MP2A	Mz	-.015	1
34	MP2A	Y	-21.85	5.4
35	MP2A	My	-.018	5.4
36	MP2A	Mz	-.015	5.4
37	MP2B	Y	-21.85	1
38	MP2B	My	.022	1
39	MP2B	Mz	-.008	1
40	MP2B	Y	-21.85	5.4
41	MP2B	My	.022	5.4
42	MP2B	Mz	-.008	5.4
43	MP2C	Y	-21.85	1
44	MP2C	My	-.007	1
45	MP2C	Mz	.022	1
46	MP2C	Y	-21.85	5.4
47	MP2C	My	-.007	5.4
48	MP2C	Mz	.022	5.4
49	MP3A	Y	-28.65	2.2
50	MP3A	My	-.024	2.2
51	MP3A	Mz	0	2.2
52	MP3A	Y	-28.65	4.2
53	MP3A	My	-.024	4.2
54	MP3A	Mz	0	4.2
55	MP3B	Y	-28.65	2.2
56	MP3B	My	.012	2.2
57	MP3B	Mz	-.021	2.2
58	MP3B	Y	-28.65	4.2
59	MP3B	My	.012	4.2
60	MP3B	Mz	-.021	4.2
61	MP3C	Y	-28.65	2.2
62	MP3C	My	.008	2.2
63	MP3C	Mz	.022	2.2
64	MP3C	Y	-28.65	4.2
65	MP3C	My	.008	4.2
66	MP3C	Mz	.022	4.2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
67	MP3A	Y	-15.4	3.2
68	MP3A	My	.01	3.2
69	MP3A	Mz	0	3.2
70	MP3B	Y	-15.4	3.2
71	MP3B	My	-.005	3.2
72	MP3B	Mz	.009	3.2
73	MP3C	Y	-15.4	3.2
74	MP3C	My	-.004	3.2
75	MP3C	Mz	-.01	3.2
76	MP2A	Y	-84.4	3
77	MP2A	My	.056	3
78	MP2A	Mz	0	3
79	MP2B	Y	-84.4	3
80	MP2B	My	-.028	3
81	MP2B	Mz	.049	3
82	MP2C	Y	-84.4	3
83	MP2C	My	-.019	3
84	MP2C	Mz	-.053	3
85	MP1A	Y	-70.3	3
86	MP1A	My	.047	3
87	MP1A	Mz	0	3
88	MP1B	Y	-70.3	3
89	MP1B	My	-.023	3
90	MP1B	Mz	.041	3
91	MP1C	Y	-70.3	3
92	MP1C	My	-.016	3
93	MP1C	Mz	-.044	3

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2B	Y	-13.669	6
2	MP2B	My	-.003	6
3	MP2B	Mz	.014	6
4	MP2B	Y	-13.669	7
5	MP2B	My	-.003	7
6	MP2B	Mz	.014	7
7	MP2B	Y	-13.669	6
8	MP2B	My	-.011	6
9	MP2B	Mz	.01	6
10	MP2B	Y	-13.669	7
11	MP2B	My	-.011	7
12	MP2B	Mz	.01	7
13	MP2A	Y	-91.078	1
14	MP2A	My	-.076	1
15	MP2A	Mz	.061	1
16	MP2A	Y	-91.078	5.4
17	MP2A	My	-.076	5.4
18	MP2A	Mz	.061	5.4
19	MP2B	Y	-91.078	1
20	MP2B	My	-.015	1
21	MP2B	Mz	-.096	1
22	MP2B	Y	-91.078	5.4
23	MP2B	My	-.015	5.4
24	MP2B	Mz	-.096	5.4
25	MP2C	Y	-91.078	1
26	MP2C	My	.083	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
27	MP2C	Mz	.051	1
28	MP2C	Y	-91.078	5.4
29	MP2C	My	.083	5.4
30	MP2C	Mz	.051	5.4
31	MP2A	Y	-91.078	1
32	MP2A	My	-.076	1
33	MP2A	Mz	-.061	1
34	MP2A	Y	-91.078	5.4
35	MP2A	My	-.076	5.4
36	MP2A	Mz	-.061	5.4
37	MP2B	Y	-91.078	1
38	MP2B	My	.091	1
39	MP2B	Mz	-.035	1
40	MP2B	Y	-91.078	5.4
41	MP2B	My	.091	5.4
42	MP2B	Mz	-.035	5.4
43	MP2C	Y	-91.078	1
44	MP2C	My	-.031	1
45	MP2C	Mz	.092	1
46	MP2C	Y	-91.078	5.4
47	MP2C	My	-.031	5.4
48	MP2C	Mz	.092	5.4
49	MP3A	Y	-45.074	2.2
50	MP3A	My	-.038	2.2
51	MP3A	Mz	0	2.2
52	MP3A	Y	-45.074	4.2
53	MP3A	My	-.038	4.2
54	MP3A	Mz	0	4.2
55	MP3B	Y	-45.074	2.2
56	MP3B	My	.019	2.2
57	MP3B	Mz	-.033	2.2
58	MP3B	Y	-45.074	4.2
59	MP3B	My	.019	4.2
60	MP3B	Mz	-.033	4.2
61	MP3C	Y	-45.074	2.2
62	MP3C	My	.013	2.2
63	MP3C	Mz	.035	2.2
64	MP3C	Y	-45.074	4.2
65	MP3C	My	.013	4.2
66	MP3C	Mz	.035	4.2
67	MP3A	Y	-26.323	3.2
68	MP3A	My	.018	3.2
69	MP3A	Mz	0	3.2
70	MP3B	Y	-26.323	3.2
71	MP3B	My	-.009	3.2
72	MP3B	Mz	.015	3.2
73	MP3C	Y	-26.323	3.2
74	MP3C	My	-.006	3.2
75	MP3C	Mz	-.016	3.2
76	MP2A	Y	-68.224	3
77	MP2A	My	.045	3
78	MP2A	Mz	0	3
79	MP2B	Y	-68.224	3
80	MP2B	My	-.023	3
81	MP2B	Mz	.039	3
82	MP2C	Y	-68.224	3
83	MP2C	My	-.016	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
84	MP2C	Mz	-.043	3
85	MP1A	Y	-61.568	3
86	MP1A	My	.041	3
87	MP1A	Mz	0	3
88	MP1B	Y	-61.568	3
89	MP1B	My	-.021	3
90	MP1B	Mz	.036	3
91	MP1C	Y	-61.568	3
92	MP1C	My	-.014	3
93	MP1C	Mz	-.039	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2B	X	0	6
2	MP2B	Z	-8.844	6
3	MP2B	Mx	-.009	6
4	MP2B	X	0	7
5	MP2B	Z	-8.844	7
6	MP2B	Mx	-.009	7
7	MP2B	X	0	6
8	MP2B	Z	-8.844	6
9	MP2B	Mx	-.006	6
10	MP2B	X	0	7
11	MP2B	Z	-8.844	7
12	MP2B	Mx	-.006	7
13	MP2A	X	0	1
14	MP2A	Z	-155.323	1
15	MP2A	Mx	-.104	1
16	MP2A	X	0	5.4
17	MP2A	Z	-155.323	5.4
18	MP2A	Mx	-.104	5.4
19	MP2B	X	0	1
20	MP2B	Z	-116.131	1
21	MP2B	Mx	.123	1
22	MP2B	X	0	5.4
23	MP2B	Z	-116.131	5.4
24	MP2B	Mx	.123	5.4
25	MP2C	X	0	1
26	MP2C	Z	-109.179	1
27	MP2C	Mx	-.061	1
28	MP2C	X	0	5.4
29	MP2C	Z	-109.179	5.4
30	MP2C	Mx	-.061	5.4
31	MP2A	X	0	1
32	MP2A	Z	-104.771	1
33	MP2A	Mx	.07	1
34	MP2A	X	0	5.4
35	MP2A	Z	-104.771	5.4
36	MP2A	Mx	.07	5.4
37	MP2B	X	0	1
38	MP2B	Z	-59.91	1
39	MP2B	Mx	.023	1
40	MP2B	X	0	5.4
41	MP2B	Z	-59.91	5.4
42	MP2B	Mx	.023	5.4
43	MP2C	X	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
44	MP2C	Z	-51.954	1
45	MP2C	Mx	-.053	1
46	MP2C	X	0	5.4
47	MP2C	Z	-51.954	5.4
48	MP2C	Mx	-.053	5.4
49	MP3A	X	0	2.2
50	MP3A	Z	-60.972	2.2
51	MP3A	Mx	0	2.2
52	MP3A	X	0	4.2
53	MP3A	Z	-60.972	4.2
54	MP3A	Mx	0	4.2
55	MP3B	X	0	2.2
56	MP3B	Z	-31.306	2.2
57	MP3B	Mx	.023	2.2
58	MP3B	X	0	4.2
59	MP3B	Z	-31.306	4.2
60	MP3B	Mx	.023	4.2
61	MP3C	X	0	2.2
62	MP3C	Z	-26.044	2.2
63	MP3C	Mx	-.02	2.2
64	MP3C	X	0	4.2
65	MP3C	Z	-26.044	4.2
66	MP3C	Mx	-.02	4.2
67	MP3A	X	0	3.2
68	MP3A	Z	-29.328	3.2
69	MP3A	Mx	0	3.2
70	MP3B	X	0	3.2
71	MP3B	Z	-20.067	3.2
72	MP3B	Mx	-.012	3.2
73	MP3C	X	0	3.2
74	MP3C	Z	-18.424	3.2
75	MP3C	Mx	.012	3.2
76	MP2A	X	0	3
77	MP2A	Z	-59.814	3
78	MP2A	Mx	0	3
79	MP2B	X	0	3
80	MP2B	Z	-45.053	3
81	MP2B	Mx	-.026	3
82	MP2C	X	0	3
83	MP2C	Z	-42.435	3
84	MP2C	Mx	.027	3
85	MP1A	X	0	3
86	MP1A	Z	-59.814	3
87	MP1A	Mx	0	3
88	MP1B	X	0	3
89	MP1B	Z	-39.554	3
90	MP1B	Mx	-.023	3
91	MP1C	X	0	3
92	MP1C	Z	-35.961	3
93	MP1C	Mx	.023	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2B	X	2.809	6
2	MP2B	Z	-4.865	6
3	MP2B	Mx	-.006	6

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
4	MP2B	X	2.809	7
5	MP2B	Z	-4.865	7
6	MP2B	Mx	-.006	7
7	MP2B	X	2.809	6
8	MP2B	Z	-4.865	6
9	MP2B	Mx	-.006	6
10	MP2B	X	2.809	7
11	MP2B	Z	-4.865	7
12	MP2B	Mx	-.006	7
13	MP2A	X	71.129	1
14	MP2A	Z	-123.2	1
15	MP2A	Mx	-.141	1
16	MP2A	X	71.129	5.4
17	MP2A	Z	-123.2	5.4
18	MP2A	Mx	-.141	5.4
19	MP2B	X	51.533	1
20	MP2B	Z	-89.258	1
21	MP2B	Mx	.086	1
22	MP2B	X	51.533	5.4
23	MP2B	Z	-89.258	5.4
24	MP2B	Mx	.086	5.4
25	MP2C	X	66.866	1
26	MP2C	Z	-115.815	1
27	MP2C	Mx	-.003	1
28	MP2C	X	66.866	5.4
29	MP2C	Z	-115.815	5.4
30	MP2C	Mx	-.003	5.4
31	MP2A	X	44.909	1
32	MP2A	Z	-77.784	1
33	MP2A	Mx	.014	1
34	MP2A	X	44.909	5.4
35	MP2A	Z	-77.784	5.4
36	MP2A	Mx	.014	5.4
37	MP2B	X	22.478	1
38	MP2B	Z	-38.934	1
39	MP2B	Mx	.037	1
40	MP2B	X	22.478	5.4
41	MP2B	Z	-38.934	5.4
42	MP2B	Mx	.037	5.4
43	MP2C	X	40.029	1
44	MP2C	Z	-69.331	1
45	MP2C	Mx	-.084	1
46	MP2C	X	40.029	5.4
47	MP2C	Z	-69.331	5.4
48	MP2C	Mx	-.084	5.4
49	MP3A	X	25.541	2.2
50	MP3A	Z	-44.239	2.2
51	MP3A	Mx	-.021	2.2
52	MP3A	X	25.541	4.2
53	MP3A	Z	-44.239	4.2
54	MP3A	Mx	-.021	4.2
55	MP3B	X	10.709	2.2
56	MP3B	Z	-18.548	2.2
57	MP3B	Mx	.018	2.2
58	MP3B	X	10.709	4.2
59	MP3B	Z	-18.548	4.2
60	MP3B	Mx	.018	4.2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
61	MP3C	X	22.314	2.2
62	MP3C	Z	-38.65	2.2
63	MP3C	Mx	-.024	2.2
64	MP3C	X	22.314	4.2
65	MP3C	Z	-38.65	4.2
66	MP3C	Mx	-.024	4.2
67	MP3A	X	13.12	3.2
68	MP3A	Z	-22.725	3.2
69	MP3A	Mx	.009	3.2
70	MP3B	X	8.49	3.2
71	MP3B	Z	-14.705	3.2
72	MP3B	Mx	-.011	3.2
73	MP3C	X	12.113	3.2
74	MP3C	Z	-20.98	3.2
75	MP3C	Mx	.01	3.2
76	MP2A	X	27.447	3
77	MP2A	Z	-47.539	3
78	MP2A	Mx	.018	3
79	MP2B	X	20.067	3
80	MP2B	Z	-34.756	3
81	MP2B	Mx	-.027	3
82	MP2C	X	25.841	3
83	MP2C	Z	-44.758	3
84	MP2C	Mx	.022	3
85	MP1A	X	26.53	3
86	MP1A	Z	-45.952	3
87	MP1A	Mx	.018	3
88	MP1B	X	16.401	3
89	MP1B	Z	-28.407	3
90	MP1B	Mx	-.022	3
91	MP1C	X	24.326	3
92	MP1C	Z	-42.135	3
93	MP1C	Mx	.021	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2B	X	7.659	6
2	MP2B	Z	-4.422	6
3	MP2B	Mx	-.006	6
4	MP2B	X	7.659	7
5	MP2B	Z	-4.422	7
6	MP2B	Mx	-.006	7
7	MP2B	X	7.659	6
8	MP2B	Z	-4.422	6
9	MP2B	Mx	-.009	6
10	MP2B	X	7.659	7
11	MP2B	Z	-4.422	7
12	MP2B	Mx	-.009	7
13	MP2A	X	100.572	1
14	MP2A	Z	-58.065	1
15	MP2A	Mx	-.123	1
16	MP2A	X	100.572	5.4
17	MP2A	Z	-58.065	5.4
18	MP2A	Mx	-.123	5.4
19	MP2B	X	100.572	1
20	MP2B	Z	-58.065	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
21	MP2B	Mx	.045	1
22	MP2B	X	100.572	5.4
23	MP2B	Z	-58.065	5.4
24	MP2B	Mx	.045	5.4
25	MP2C	X	133.149	1
26	MP2C	Z	-76.874	1
27	MP2C	Mx	.079	1
28	MP2C	X	133.149	5.4
29	MP2C	Z	-76.874	5.4
30	MP2C	Mx	.079	5.4
31	MP2A	X	51.884	1
32	MP2A	Z	-29.955	1
33	MP2A	Mx	-.023	1
34	MP2A	X	51.884	5.4
35	MP2A	Z	-29.955	5.4
36	MP2A	Mx	-.023	5.4
37	MP2B	X	51.884	1
38	MP2B	Z	-29.955	1
39	MP2B	Mx	.063	1
40	MP2B	X	51.884	5.4
41	MP2B	Z	-29.955	5.4
42	MP2B	Mx	.063	5.4
43	MP2C	X	89.172	1
44	MP2C	Z	-51.484	1
45	MP2C	Mx	-.083	1
46	MP2C	X	89.172	5.4
47	MP2C	Z	-51.484	5.4
48	MP2C	Mx	-.083	5.4
49	MP3A	X	27.112	2.2
50	MP3A	Z	-15.653	2.2
51	MP3A	Mx	-.023	2.2
52	MP3A	X	27.112	4.2
53	MP3A	Z	-15.653	4.2
54	MP3A	Mx	-.023	4.2
55	MP3B	X	27.112	2.2
56	MP3B	Z	-15.653	2.2
57	MP3B	Mx	.023	2.2
58	MP3B	X	27.112	4.2
59	MP3B	Z	-15.653	4.2
60	MP3B	Mx	.023	4.2
61	MP3C	X	51.77	2.2
62	MP3C	Z	-29.889	2.2
63	MP3C	Mx	-.009	2.2
64	MP3C	X	51.77	4.2
65	MP3C	Z	-29.889	4.2
66	MP3C	Mx	-.009	4.2
67	MP3A	X	17.378	3.2
68	MP3A	Z	-10.033	3.2
69	MP3A	Mx	.012	3.2
70	MP3B	X	17.378	3.2
71	MP3B	Z	-10.033	3.2
72	MP3B	Mx	-.012	3.2
73	MP3C	X	25.076	3.2
74	MP3C	Z	-14.478	3.2
75	MP3C	Mx	.003	3.2
76	MP2A	X	39.017	3
77	MP2A	Z	-22.527	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
78	MP2A	Mx	.026	3
79	MP2B	X	39.017	3
80	MP2B	Z	-22.527	3
81	MP2B	Mx	-.026	3
82	MP2C	X	51.286	3
83	MP2C	Z	-29.61	3
84	MP2C	Mx	.007	3
85	MP1A	X	34.255	3
86	MP1A	Z	-19.777	3
87	MP1A	Mx	.023	3
88	MP1B	X	34.255	3
89	MP1B	Z	-19.777	3
90	MP1B	Mx	-.023	3
91	MP1C	X	51.095	3
92	MP1C	Z	-29.5	3
93	MP1C	Mx	.007	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2B	X	15.297	6
2	MP2B	Z	0	6
3	MP2B	Mx	-.003	6
4	MP2B	X	15.297	7
5	MP2B	Z	0	7
6	MP2B	Mx	-.003	7
7	MP2B	X	15.297	6
8	MP2B	Z	0	6
9	MP2B	Mx	-.012	6
10	MP2B	X	15.297	7
11	MP2B	Z	0	7
12	MP2B	Mx	-.012	7
13	MP2A	X	103.066	1
14	MP2A	Z	0	1
15	MP2A	Mx	-.086	1
16	MP2A	X	103.066	5.4
17	MP2A	Z	0	5.4
18	MP2A	Mx	-.086	5.4
19	MP2B	X	142.259	1
20	MP2B	Z	0	1
21	MP2B	Mx	-.023	1
22	MP2B	X	142.259	5.4
23	MP2B	Z	0	5.4
24	MP2B	Mx	-.023	5.4
25	MP2C	X	149.21	1
26	MP2C	Z	0	1
27	MP2C	Mx	.136	1
28	MP2C	X	149.21	5.4
29	MP2C	Z	0	5.4
30	MP2C	Mx	.136	5.4
31	MP2A	X	44.957	1
32	MP2A	Z	0	1
33	MP2A	Mx	-.037	1
34	MP2A	X	44.957	5.4
35	MP2A	Z	0	5.4
36	MP2A	Mx	-.037	5.4
37	MP2B	X	89.817	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
38	MP2B	Z	0	1
39	MP2B	Mx	.089	1
40	MP2B	X	89.817	5.4
41	MP2B	Z	0	5.4
42	MP2B	Mx	.089	5.4
43	MP2C	X	97.774	1
44	MP2C	Z	0	1
45	MP2C	Mx	-.033	1
46	MP2C	X	97.774	5.4
47	MP2C	Z	0	5.4
48	MP2C	Mx	-.033	5.4
49	MP3A	X	21.417	2.2
50	MP3A	Z	0	2.2
51	MP3A	Mx	-.018	2.2
52	MP3A	X	21.417	4.2
53	MP3A	Z	0	4.2
54	MP3A	Mx	-.018	4.2
55	MP3B	X	51.083	2.2
56	MP3B	Z	0	2.2
57	MP3B	Mx	.021	2.2
58	MP3B	X	51.083	4.2
59	MP3B	Z	0	4.2
60	MP3B	Mx	.021	4.2
61	MP3C	X	56.345	2.2
62	MP3C	Z	0	2.2
63	MP3C	Mx	.016	2.2
64	MP3C	X	56.345	4.2
65	MP3C	Z	0	4.2
66	MP3C	Mx	.016	4.2
67	MP3A	X	16.979	3.2
68	MP3A	Z	0	3.2
69	MP3A	Mx	.011	3.2
70	MP3B	X	26.241	3.2
71	MP3B	Z	0	3.2
72	MP3B	Mx	-.009	3.2
73	MP3C	X	27.884	3.2
74	MP3C	Z	0	3.2
75	MP3C	Mx	-.006	3.2
76	MP2A	X	40.133	3
77	MP2A	Z	0	3
78	MP2A	Mx	.027	3
79	MP2B	X	54.894	3
80	MP2B	Z	0	3
81	MP2B	Mx	-.018	3
82	MP2C	X	57.512	3
83	MP2C	Z	0	3
84	MP2C	Mx	-.013	3
85	MP1A	X	32.801	3
86	MP1A	Z	0	3
87	MP1A	Mx	.022	3
88	MP1B	X	53.061	3
89	MP1B	Z	0	3
90	MP1B	Mx	-.018	3
91	MP1C	X	56.654	3
92	MP1C	Z	0	3
93	MP1C	Mx	-.013	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2B	X	16.041	6
2	MP2B	Z	9.261	6
3	MP2B	Mx	.006	6
4	MP2B	X	16.041	7
5	MP2B	Z	9.261	7
6	MP2B	Mx	.006	7
7	MP2B	X	16.041	6
8	MP2B	Z	9.261	6
9	MP2B	Mx	-.006	6
10	MP2B	X	16.041	7
11	MP2B	Z	9.261	7
12	MP2B	Mx	-.006	7
13	MP2A	X	100.572	1
14	MP2A	Z	58.065	1
15	MP2A	Mx	-.045	1
16	MP2A	X	100.572	5.4
17	MP2A	Z	58.065	5.4
18	MP2A	Mx	-.045	5.4
19	MP2B	X	134.514	1
20	MP2B	Z	77.662	1
21	MP2B	Mx	-.104	1
22	MP2B	X	134.514	5.4
23	MP2B	Z	77.662	5.4
24	MP2B	Mx	-.104	5.4
25	MP2C	X	107.957	1
26	MP2C	Z	62.329	1
27	MP2C	Mx	.133	1
28	MP2C	X	107.957	5.4
29	MP2C	Z	62.329	5.4
30	MP2C	Mx	.133	5.4
31	MP2A	X	51.884	1
32	MP2A	Z	29.955	1
33	MP2A	Mx	-.063	1
34	MP2A	X	51.884	5.4
35	MP2A	Z	29.955	5.4
36	MP2A	Mx	-.063	5.4
37	MP2B	X	90.734	1
38	MP2B	Z	52.385	1
39	MP2B	Mx	.07	1
40	MP2B	X	90.734	5.4
41	MP2B	Z	52.385	5.4
42	MP2B	Mx	.07	5.4
43	MP2C	X	60.336	1
44	MP2C	Z	34.835	1
45	MP2C	Mx	.015	1
46	MP2C	X	60.336	5.4
47	MP2C	Z	34.835	5.4
48	MP2C	Mx	.015	5.4
49	MP3A	X	27.112	2.2
50	MP3A	Z	15.653	2.2
51	MP3A	Mx	-.023	2.2
52	MP3A	X	27.112	4.2
53	MP3A	Z	15.653	4.2
54	MP3A	Mx	-.023	4.2
55	MP3B	X	52.803	2.2
56	MP3B	Z	30.486	2.2
57	MP3B	Mx	0	2.2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP3B	X	52.803	4.2
59	MP3B	Z	30.486	4.2
60	MP3B	Mx	0	4.2
61	MP3C	X	32.701	2.2
62	MP3C	Z	18.88	2.2
63	MP3C	Mx	.024	2.2
64	MP3C	X	32.701	4.2
65	MP3C	Z	18.88	4.2
66	MP3C	Mx	.024	4.2
67	MP3A	X	17.378	3.2
68	MP3A	Z	10.033	3.2
69	MP3A	Mx	.012	3.2
70	MP3B	X	25.399	3.2
71	MP3B	Z	14.664	3.2
72	MP3B	Mx	0	3.2
73	MP3C	X	19.123	3.2
74	MP3C	Z	11.041	3.2
75	MP3C	Mx	-.011	3.2
76	MP2A	X	39.017	3
77	MP2A	Z	22.527	3
78	MP2A	Mx	.026	3
79	MP2B	X	51.8	3
80	MP2B	Z	29.907	3
81	MP2B	Mx	0	3
82	MP2C	X	41.798	3
83	MP2C	Z	24.132	3
84	MP2C	Mx	-.025	3
85	MP1A	X	34.255	3
86	MP1A	Z	19.777	3
87	MP1A	Mx	.023	3
88	MP1B	X	51.8	3
89	MP1B	Z	29.907	3
90	MP1B	Mx	0	3
91	MP1C	X	38.072	3
92	MP1C	Z	21.981	3
93	MP1C	Mx	-.022	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2B	X	7.648	6
2	MP2B	Z	13.247	6
3	MP2B	Mx	.012	6
4	MP2B	X	7.648	7
5	MP2B	Z	13.247	7
6	MP2B	Mx	.012	7
7	MP2B	X	7.648	6
8	MP2B	Z	13.247	6
9	MP2B	Mx	.003	6
10	MP2B	X	7.648	7
11	MP2B	Z	13.247	7
12	MP2B	Mx	.003	7
13	MP2A	X	71.129	1
14	MP2A	Z	123.2	1
15	MP2A	Mx	.023	1
16	MP2A	X	71.129	5.4
17	MP2A	Z	123.2	5.4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
18	MP2A	Mx	.023	5.4
19	MP2B	X	71.129	1
20	MP2B	Z	123.2	1
21	MP2B	Mx	-.141	1
22	MP2B	X	71.129	5.4
23	MP2B	Z	123.2	5.4
24	MP2B	Mx	-.141	5.4
25	MP2C	X	52.321	1
26	MP2C	Z	90.623	1
27	MP2C	Mx	.098	1
28	MP2C	X	52.321	5.4
29	MP2C	Z	90.623	5.4
30	MP2C	Mx	.098	5.4
31	MP2A	X	44.909	1
32	MP2A	Z	77.784	1
33	MP2A	Mx	-.089	1
34	MP2A	X	44.909	5.4
35	MP2A	Z	77.784	5.4
36	MP2A	Mx	-.089	5.4
37	MP2B	X	44.909	1
38	MP2B	Z	77.784	1
39	MP2B	Mx	.014	1
40	MP2B	X	44.909	5.4
41	MP2B	Z	77.784	5.4
42	MP2B	Mx	.014	5.4
43	MP2C	X	23.38	1
44	MP2C	Z	40.496	1
45	MP2C	Mx	.033	1
46	MP2C	X	23.38	5.4
47	MP2C	Z	40.496	5.4
48	MP2C	Mx	.033	5.4
49	MP3A	X	25.541	2.2
50	MP3A	Z	44.239	2.2
51	MP3A	Mx	-.021	2.2
52	MP3A	X	25.541	4.2
53	MP3A	Z	44.239	4.2
54	MP3A	Mx	-.021	4.2
55	MP3B	X	25.541	2.2
56	MP3B	Z	44.239	2.2
57	MP3B	Mx	-.021	2.2
58	MP3B	X	25.541	4.2
59	MP3B	Z	44.239	4.2
60	MP3B	Mx	-.021	4.2
61	MP3C	X	11.305	2.2
62	MP3C	Z	19.581	2.2
63	MP3C	Mx	.019	2.2
64	MP3C	X	11.305	4.2
65	MP3C	Z	19.581	4.2
66	MP3C	Mx	.019	4.2
67	MP3A	X	13.12	3.2
68	MP3A	Z	22.725	3.2
69	MP3A	Mx	.009	3.2
70	MP3B	X	13.12	3.2
71	MP3B	Z	22.725	3.2
72	MP3B	Mx	.009	3.2
73	MP3C	X	8.676	3.2
74	MP3C	Z	15.027	3.2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
75	MP3C	Mx	-.011	3.2
76	MP2A	X	27.447	3
77	MP2A	Z	47.539	3
78	MP2A	Mx	.018	3
79	MP2B	X	27.447	3
80	MP2B	Z	47.539	3
81	MP2B	Mx	.018	3
82	MP2C	X	20.363	3
83	MP2C	Z	35.27	3
84	MP2C	Mx	-.027	3
85	MP1A	X	26.53	3
86	MP1A	Z	45.952	3
87	MP1A	Mx	.018	3
88	MP1B	X	26.53	3
89	MP1B	Z	45.952	3
90	MP1B	Mx	.018	3
91	MP1C	X	16.808	3
92	MP1C	Z	29.112	3
93	MP1C	Mx	-.022	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2B	X	0	6
2	MP2B	Z	8.844	6
3	MP2B	Mx	.009	6
4	MP2B	X	0	7
5	MP2B	Z	8.844	7
6	MP2B	Mx	.009	7
7	MP2B	X	0	6
8	MP2B	Z	8.844	6
9	MP2B	Mx	.006	6
10	MP2B	X	0	7
11	MP2B	Z	8.844	7
12	MP2B	Mx	.006	7
13	MP2A	X	0	1
14	MP2A	Z	155.323	1
15	MP2A	Mx	.104	1
16	MP2A	X	0	5.4
17	MP2A	Z	155.323	5.4
18	MP2A	Mx	.104	5.4
19	MP2B	X	0	1
20	MP2B	Z	116.131	1
21	MP2B	Mx	-.123	1
22	MP2B	X	0	5.4
23	MP2B	Z	116.131	5.4
24	MP2B	Mx	-.123	5.4
25	MP2C	X	0	1
26	MP2C	Z	109.179	1
27	MP2C	Mx	.061	1
28	MP2C	X	0	5.4
29	MP2C	Z	109.179	5.4
30	MP2C	Mx	.061	5.4
31	MP2A	X	0	1
32	MP2A	Z	104.771	1
33	MP2A	Mx	-.07	1
34	MP2A	X	0	5.4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
35	MP2A	Z	104.771	5.4
36	MP2A	Mx	-.07	5.4
37	MP2B	X	0	1
38	MP2B	Z	59.91	1
39	MP2B	Mx	-.023	1
40	MP2B	X	0	5.4
41	MP2B	Z	59.91	5.4
42	MP2B	Mx	-.023	5.4
43	MP2C	X	0	1
44	MP2C	Z	51.954	1
45	MP2C	Mx	.053	1
46	MP2C	X	0	5.4
47	MP2C	Z	51.954	5.4
48	MP2C	Mx	.053	5.4
49	MP3A	X	0	2.2
50	MP3A	Z	60.972	2.2
51	MP3A	Mx	0	2.2
52	MP3A	X	0	4.2
53	MP3A	Z	60.972	4.2
54	MP3A	Mx	0	4.2
55	MP3B	X	0	2.2
56	MP3B	Z	31.306	2.2
57	MP3B	Mx	-.023	2.2
58	MP3B	X	0	4.2
59	MP3B	Z	31.306	4.2
60	MP3B	Mx	-.023	4.2
61	MP3C	X	0	2.2
62	MP3C	Z	26.044	2.2
63	MP3C	Mx	.02	2.2
64	MP3C	X	0	4.2
65	MP3C	Z	26.044	4.2
66	MP3C	Mx	.02	4.2
67	MP3A	X	0	3.2
68	MP3A	Z	29.328	3.2
69	MP3A	Mx	0	3.2
70	MP3B	X	0	3.2
71	MP3B	Z	20.067	3.2
72	MP3B	Mx	.012	3.2
73	MP3C	X	0	3.2
74	MP3C	Z	18.424	3.2
75	MP3C	Mx	-.012	3.2
76	MP2A	X	0	3
77	MP2A	Z	59.814	3
78	MP2A	Mx	0	3
79	MP2B	X	0	3
80	MP2B	Z	45.053	3
81	MP2B	Mx	.026	3
82	MP2C	X	0	3
83	MP2C	Z	42.435	3
84	MP2C	Mx	-.027	3
85	MP1A	X	0	3
86	MP1A	Z	59.814	3
87	MP1A	Mx	0	3
88	MP1B	X	0	3
89	MP1B	Z	39.554	3
90	MP1B	Mx	.023	3
91	MP1C	X	0	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
92	MP1C	Z	35.961	3
93	MP1C	Mx	-.023	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2B	X	-2.809	6
2	MP2B	Z	4.865	6
3	MP2B	Mx	.006	6
4	MP2B	X	-2.809	7
5	MP2B	Z	4.865	7
6	MP2B	Mx	.006	7
7	MP2B	X	-2.809	6
8	MP2B	Z	4.865	6
9	MP2B	Mx	.006	6
10	MP2B	X	-2.809	7
11	MP2B	Z	4.865	7
12	MP2B	Mx	.006	7
13	MP2A	X	-71.129	1
14	MP2A	Z	123.2	1
15	MP2A	Mx	.141	1
16	MP2A	X	-71.129	5.4
17	MP2A	Z	123.2	5.4
18	MP2A	Mx	.141	5.4
19	MP2B	X	-51.533	1
20	MP2B	Z	89.258	1
21	MP2B	Mx	-.086	1
22	MP2B	X	-51.533	5.4
23	MP2B	Z	89.258	5.4
24	MP2B	Mx	-.086	5.4
25	MP2C	X	-66.866	1
26	MP2C	Z	115.815	1
27	MP2C	Mx	.003	1
28	MP2C	X	-66.866	5.4
29	MP2C	Z	115.815	5.4
30	MP2C	Mx	.003	5.4
31	MP2A	X	-44.909	1
32	MP2A	Z	77.784	1
33	MP2A	Mx	-.014	1
34	MP2A	X	-44.909	5.4
35	MP2A	Z	77.784	5.4
36	MP2A	Mx	-.014	5.4
37	MP2B	X	-22.478	1
38	MP2B	Z	38.934	1
39	MP2B	Mx	-.037	1
40	MP2B	X	-22.478	5.4
41	MP2B	Z	38.934	5.4
42	MP2B	Mx	-.037	5.4
43	MP2C	X	-40.029	1
44	MP2C	Z	69.331	1
45	MP2C	Mx	.084	1
46	MP2C	X	-40.029	5.4
47	MP2C	Z	69.331	5.4
48	MP2C	Mx	.084	5.4
49	MP3A	X	-25.541	2.2
50	MP3A	Z	44.239	2.2
51	MP3A	Mx	.021	2.2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
52	MP3A	X	-25.541	4.2
53	MP3A	Z	44.239	4.2
54	MP3A	Mx	.021	4.2
55	MP3B	X	-10.709	2.2
56	MP3B	Z	18.548	2.2
57	MP3B	Mx	-.018	2.2
58	MP3B	X	-10.709	4.2
59	MP3B	Z	18.548	4.2
60	MP3B	Mx	-.018	4.2
61	MP3C	X	-22.314	2.2
62	MP3C	Z	38.65	2.2
63	MP3C	Mx	.024	2.2
64	MP3C	X	-22.314	4.2
65	MP3C	Z	38.65	4.2
66	MP3C	Mx	.024	4.2
67	MP3A	X	-13.12	3.2
68	MP3A	Z	22.725	3.2
69	MP3A	Mx	-.009	3.2
70	MP3B	X	-8.49	3.2
71	MP3B	Z	14.705	3.2
72	MP3B	Mx	.011	3.2
73	MP3C	X	-12.113	3.2
74	MP3C	Z	20.98	3.2
75	MP3C	Mx	-.01	3.2
76	MP2A	X	-27.447	3
77	MP2A	Z	47.539	3
78	MP2A	Mx	-.018	3
79	MP2B	X	-20.067	3
80	MP2B	Z	34.756	3
81	MP2B	Mx	.027	3
82	MP2C	X	-25.841	3
83	MP2C	Z	44.758	3
84	MP2C	Mx	-.022	3
85	MP1A	X	-26.53	3
86	MP1A	Z	45.952	3
87	MP1A	Mx	-.018	3
88	MP1B	X	-16.401	3
89	MP1B	Z	28.407	3
90	MP1B	Mx	.022	3
91	MP1C	X	-24.326	3
92	MP1C	Z	42.135	3
93	MP1C	Mx	-.021	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2B	X	-7.659	6
2	MP2B	Z	4.422	6
3	MP2B	Mx	.006	6
4	MP2B	X	-7.659	7
5	MP2B	Z	4.422	7
6	MP2B	Mx	.006	7
7	MP2B	X	-7.659	6
8	MP2B	Z	4.422	6
9	MP2B	Mx	.009	6
10	MP2B	X	-7.659	7
11	MP2B	Z	4.422	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
12	MP2B	Mx	.009	7
13	MP2A	X	-100.572	1
14	MP2A	Z	58.065	1
15	MP2A	Mx	.123	1
16	MP2A	X	-100.572	5.4
17	MP2A	Z	58.065	5.4
18	MP2A	Mx	.123	5.4
19	MP2B	X	-100.572	1
20	MP2B	Z	58.065	1
21	MP2B	Mx	-.045	1
22	MP2B	X	-100.572	5.4
23	MP2B	Z	58.065	5.4
24	MP2B	Mx	-.045	5.4
25	MP2C	X	-133.149	1
26	MP2C	Z	76.874	1
27	MP2C	Mx	-.079	1
28	MP2C	X	-133.149	5.4
29	MP2C	Z	76.874	5.4
30	MP2C	Mx	-.079	5.4
31	MP2A	X	-51.884	1
32	MP2A	Z	29.955	1
33	MP2A	Mx	.023	1
34	MP2A	X	-51.884	5.4
35	MP2A	Z	29.955	5.4
36	MP2A	Mx	.023	5.4
37	MP2B	X	-51.884	1
38	MP2B	Z	29.955	1
39	MP2B	Mx	-.063	1
40	MP2B	X	-51.884	5.4
41	MP2B	Z	29.955	5.4
42	MP2B	Mx	-.063	5.4
43	MP2C	X	-89.172	1
44	MP2C	Z	51.484	1
45	MP2C	Mx	.083	1
46	MP2C	X	-89.172	5.4
47	MP2C	Z	51.484	5.4
48	MP2C	Mx	.083	5.4
49	MP3A	X	-27.112	2.2
50	MP3A	Z	15.653	2.2
51	MP3A	Mx	.023	2.2
52	MP3A	X	-27.112	4.2
53	MP3A	Z	15.653	4.2
54	MP3A	Mx	.023	4.2
55	MP3B	X	-27.112	2.2
56	MP3B	Z	15.653	2.2
57	MP3B	Mx	-.023	2.2
58	MP3B	X	-27.112	4.2
59	MP3B	Z	15.653	4.2
60	MP3B	Mx	-.023	4.2
61	MP3C	X	-51.77	2.2
62	MP3C	Z	29.889	2.2
63	MP3C	Mx	.009	2.2
64	MP3C	X	-51.77	4.2
65	MP3C	Z	29.889	4.2
66	MP3C	Mx	.009	4.2
67	MP3A	X	-17.378	3.2
68	MP3A	Z	10.033	3.2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
69	MP3A	Mx	-.012	3.2
70	MP3B	X	-17.378	3.2
71	MP3B	Z	10.033	3.2
72	MP3B	Mx	.012	3.2
73	MP3C	X	-25.076	3.2
74	MP3C	Z	14.478	3.2
75	MP3C	Mx	-.003	3.2
76	MP2A	X	-39.017	3
77	MP2A	Z	22.527	3
78	MP2A	Mx	-.026	3
79	MP2B	X	-39.017	3
80	MP2B	Z	22.527	3
81	MP2B	Mx	.026	3
82	MP2C	X	-51.286	3
83	MP2C	Z	29.61	3
84	MP2C	Mx	-.007	3
85	MP1A	X	-34.255	3
86	MP1A	Z	19.777	3
87	MP1A	Mx	-.023	3
88	MP1B	X	-34.255	3
89	MP1B	Z	19.777	3
90	MP1B	Mx	.023	3
91	MP1C	X	-51.095	3
92	MP1C	Z	29.5	3
93	MP1C	Mx	-.007	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2B	X	-15.297	6
2	MP2B	Z	0	6
3	MP2B	Mx	.003	6
4	MP2B	X	-15.297	7
5	MP2B	Z	0	7
6	MP2B	Mx	.003	7
7	MP2B	X	-15.297	6
8	MP2B	Z	0	6
9	MP2B	Mx	.012	6
10	MP2B	X	-15.297	7
11	MP2B	Z	0	7
12	MP2B	Mx	.012	7
13	MP2A	X	-103.066	1
14	MP2A	Z	0	1
15	MP2A	Mx	.086	1
16	MP2A	X	-103.066	5.4
17	MP2A	Z	0	5.4
18	MP2A	Mx	.086	5.4
19	MP2B	X	-142.259	1
20	MP2B	Z	0	1
21	MP2B	Mx	.023	1
22	MP2B	X	-142.259	5.4
23	MP2B	Z	0	5.4
24	MP2B	Mx	.023	5.4
25	MP2C	X	-149.21	1
26	MP2C	Z	0	1
27	MP2C	Mx	-.136	1
28	MP2C	X	-149.21	5.4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
29	MP2C	Z	0	5.4
30	MP2C	Mx	-.136	5.4
31	MP2A	X	-44.957	1
32	MP2A	Z	0	1
33	MP2A	Mx	.037	1
34	MP2A	X	-44.957	5.4
35	MP2A	Z	0	5.4
36	MP2A	Mx	.037	5.4
37	MP2B	X	-89.817	1
38	MP2B	Z	0	1
39	MP2B	Mx	-.089	1
40	MP2B	X	-89.817	5.4
41	MP2B	Z	0	5.4
42	MP2B	Mx	-.089	5.4
43	MP2C	X	-97.774	1
44	MP2C	Z	0	1
45	MP2C	Mx	.033	1
46	MP2C	X	-97.774	5.4
47	MP2C	Z	0	5.4
48	MP2C	Mx	.033	5.4
49	MP3A	X	-21.417	2.2
50	MP3A	Z	0	2.2
51	MP3A	Mx	.018	2.2
52	MP3A	X	-21.417	4.2
53	MP3A	Z	0	4.2
54	MP3A	Mx	.018	4.2
55	MP3B	X	-51.083	2.2
56	MP3B	Z	0	2.2
57	MP3B	Mx	-.021	2.2
58	MP3B	X	-51.083	4.2
59	MP3B	Z	0	4.2
60	MP3B	Mx	-.021	4.2
61	MP3C	X	-56.345	2.2
62	MP3C	Z	0	2.2
63	MP3C	Mx	-.016	2.2
64	MP3C	X	-56.345	4.2
65	MP3C	Z	0	4.2
66	MP3C	Mx	-.016	4.2
67	MP3A	X	-16.979	3.2
68	MP3A	Z	0	3.2
69	MP3A	Mx	-.011	3.2
70	MP3B	X	-26.241	3.2
71	MP3B	Z	0	3.2
72	MP3B	Mx	.009	3.2
73	MP3C	X	-27.884	3.2
74	MP3C	Z	0	3.2
75	MP3C	Mx	.006	3.2
76	MP2A	X	-40.133	3
77	MP2A	Z	0	3
78	MP2A	Mx	-.027	3
79	MP2B	X	-54.894	3
80	MP2B	Z	0	3
81	MP2B	Mx	.018	3
82	MP2C	X	-57.512	3
83	MP2C	Z	0	3
84	MP2C	Mx	.013	3
85	MP1A	X	-32.801	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
86	MP1A	Z	0	3
87	MP1A	Mx	-.022	3
88	MP1B	X	-53.061	3
89	MP1B	Z	0	3
90	MP1B	Mx	.018	3
91	MP1C	X	-56.654	3
92	MP1C	Z	0	3
93	MP1C	Mx	.013	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2B	X	-16.041	6
2	MP2B	Z	-9.261	6
3	MP2B	Mx	-.006	6
4	MP2B	X	-16.041	7
5	MP2B	Z	-9.261	7
6	MP2B	Mx	-.006	7
7	MP2B	X	-16.041	6
8	MP2B	Z	-9.261	6
9	MP2B	Mx	.006	6
10	MP2B	X	-16.041	7
11	MP2B	Z	-9.261	7
12	MP2B	Mx	.006	7
13	MP2A	X	-100.572	1
14	MP2A	Z	-58.065	1
15	MP2A	Mx	.045	1
16	MP2A	X	-100.572	5.4
17	MP2A	Z	-58.065	5.4
18	MP2A	Mx	.045	5.4
19	MP2B	X	-134.514	1
20	MP2B	Z	-77.662	1
21	MP2B	Mx	.104	1
22	MP2B	X	-134.514	5.4
23	MP2B	Z	-77.662	5.4
24	MP2B	Mx	.104	5.4
25	MP2C	X	-107.957	1
26	MP2C	Z	-62.329	1
27	MP2C	Mx	-.133	1
28	MP2C	X	-107.957	5.4
29	MP2C	Z	-62.329	5.4
30	MP2C	Mx	-.133	5.4
31	MP2A	X	-51.884	1
32	MP2A	Z	-29.955	1
33	MP2A	Mx	.063	1
34	MP2A	X	-51.884	5.4
35	MP2A	Z	-29.955	5.4
36	MP2A	Mx	.063	5.4
37	MP2B	X	-90.734	1
38	MP2B	Z	-52.385	1
39	MP2B	Mx	-.07	1
40	MP2B	X	-90.734	5.4
41	MP2B	Z	-52.385	5.4
42	MP2B	Mx	-.07	5.4
43	MP2C	X	-60.336	1
44	MP2C	Z	-34.835	1
45	MP2C	Mx	-.015	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
46	MP2C	X	-60.336	5.4
47	MP2C	Z	-34.835	5.4
48	MP2C	Mx	-.015	5.4
49	MP3A	X	-27.112	2.2
50	MP3A	Z	-15.653	2.2
51	MP3A	Mx	.023	2.2
52	MP3A	X	-27.112	4.2
53	MP3A	Z	-15.653	4.2
54	MP3A	Mx	.023	4.2
55	MP3B	X	-52.803	2.2
56	MP3B	Z	-30.486	2.2
57	MP3B	Mx	0	2.2
58	MP3B	X	-52.803	4.2
59	MP3B	Z	-30.486	4.2
60	MP3B	Mx	0	4.2
61	MP3C	X	-32.701	2.2
62	MP3C	Z	-18.88	2.2
63	MP3C	Mx	-.024	2.2
64	MP3C	X	-32.701	4.2
65	MP3C	Z	-18.88	4.2
66	MP3C	Mx	-.024	4.2
67	MP3A	X	-17.378	3.2
68	MP3A	Z	-10.033	3.2
69	MP3A	Mx	-.012	3.2
70	MP3B	X	-25.399	3.2
71	MP3B	Z	-14.664	3.2
72	MP3B	Mx	0	3.2
73	MP3C	X	-19.123	3.2
74	MP3C	Z	-11.041	3.2
75	MP3C	Mx	.011	3.2
76	MP2A	X	-39.017	3
77	MP2A	Z	-22.527	3
78	MP2A	Mx	-.026	3
79	MP2B	X	-51.8	3
80	MP2B	Z	-29.907	3
81	MP2B	Mx	0	3
82	MP2C	X	-41.798	3
83	MP2C	Z	-24.132	3
84	MP2C	Mx	.025	3
85	MP1A	X	-34.255	3
86	MP1A	Z	-19.777	3
87	MP1A	Mx	-.023	3
88	MP1B	X	-51.8	3
89	MP1B	Z	-29.907	3
90	MP1B	Mx	0	3
91	MP1C	X	-38.072	3
92	MP1C	Z	-21.981	3
93	MP1C	Mx	.022	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2B	X	-7.648	6
2	MP2B	Z	-13.247	6
3	MP2B	Mx	-.012	6
4	MP2B	X	-7.648	7
5	MP2B	Z	-13.247	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
6	MP2B	Mx	-.012	7
7	MP2B	X	-7.648	6
8	MP2B	Z	-13.247	6
9	MP2B	Mx	-.003	6
10	MP2B	X	-7.648	7
11	MP2B	Z	-13.247	7
12	MP2B	Mx	-.003	7
13	MP2A	X	-71.129	1
14	MP2A	Z	-123.2	1
15	MP2A	Mx	-.023	1
16	MP2A	X	-71.129	5.4
17	MP2A	Z	-123.2	5.4
18	MP2A	Mx	-.023	5.4
19	MP2B	X	-71.129	1
20	MP2B	Z	-123.2	1
21	MP2B	Mx	.141	1
22	MP2B	X	-71.129	5.4
23	MP2B	Z	-123.2	5.4
24	MP2B	Mx	.141	5.4
25	MP2C	X	-52.321	1
26	MP2C	Z	-90.623	1
27	MP2C	Mx	-.098	1
28	MP2C	X	-52.321	5.4
29	MP2C	Z	-90.623	5.4
30	MP2C	Mx	-.098	5.4
31	MP2A	X	-44.909	1
32	MP2A	Z	-77.784	1
33	MP2A	Mx	.089	1
34	MP2A	X	-44.909	5.4
35	MP2A	Z	-77.784	5.4
36	MP2A	Mx	.089	5.4
37	MP2B	X	-44.909	1
38	MP2B	Z	-77.784	1
39	MP2B	Mx	-.014	1
40	MP2B	X	-44.909	5.4
41	MP2B	Z	-77.784	5.4
42	MP2B	Mx	-.014	5.4
43	MP2C	X	-23.38	1
44	MP2C	Z	-40.496	1
45	MP2C	Mx	-.033	1
46	MP2C	X	-23.38	5.4
47	MP2C	Z	-40.496	5.4
48	MP2C	Mx	-.033	5.4
49	MP3A	X	-25.541	2.2
50	MP3A	Z	-44.239	2.2
51	MP3A	Mx	.021	2.2
52	MP3A	X	-25.541	4.2
53	MP3A	Z	-44.239	4.2
54	MP3A	Mx	.021	4.2
55	MP3B	X	-25.541	2.2
56	MP3B	Z	-44.239	2.2
57	MP3B	Mx	.021	2.2
58	MP3B	X	-25.541	4.2
59	MP3B	Z	-44.239	4.2
60	MP3B	Mx	.021	4.2
61	MP3C	X	-11.305	2.2
62	MP3C	Z	-19.581	2.2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
63	MP3C	Mx	-.019	2.2
64	MP3C	X	-11.305	4.2
65	MP3C	Z	-19.581	4.2
66	MP3C	Mx	-.019	4.2
67	MP3A	X	-13.12	3.2
68	MP3A	Z	-22.725	3.2
69	MP3A	Mx	-.009	3.2
70	MP3B	X	-13.12	3.2
71	MP3B	Z	-22.725	3.2
72	MP3B	Mx	-.009	3.2
73	MP3C	X	-8.676	3.2
74	MP3C	Z	-15.027	3.2
75	MP3C	Mx	.011	3.2
76	MP2A	X	-27.447	3
77	MP2A	Z	-47.539	3
78	MP2A	Mx	-.018	3
79	MP2B	X	-27.447	3
80	MP2B	Z	-47.539	3
81	MP2B	Mx	-.018	3
82	MP2C	X	-20.363	3
83	MP2C	Z	-35.27	3
84	MP2C	Mx	.027	3
85	MP1A	X	-26.53	3
86	MP1A	Z	-45.952	3
87	MP1A	Mx	-.018	3
88	MP1B	X	-26.53	3
89	MP1B	Z	-45.952	3
90	MP1B	Mx	-.018	3
91	MP1C	X	-16.808	3
92	MP1C	Z	-29.112	3
93	MP1C	Mx	.022	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2B	X	0	6
2	MP2B	Z	-2.545	6
3	MP2B	Mx	-.003	6
4	MP2B	X	0	7
5	MP2B	Z	-2.545	7
6	MP2B	Mx	-.003	7
7	MP2B	X	0	6
8	MP2B	Z	-2.545	6
9	MP2B	Mx	-.002	6
10	MP2B	X	0	7
11	MP2B	Z	-2.545	7
12	MP2B	Mx	-.002	7
13	MP2A	X	0	1
14	MP2A	Z	-31.163	1
15	MP2A	Mx	-.021	1
16	MP2A	X	0	5.4
17	MP2A	Z	-31.163	5.4
18	MP2A	Mx	-.021	5.4
19	MP2B	X	0	1
20	MP2B	Z	-24.184	1
21	MP2B	Mx	.026	1
22	MP2B	X	0	5.4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
23	MP2B	Z	-24.184	5.4
24	MP2B	Mx	.026	5.4
25	MP2C	X	0	1
26	MP2C	Z	-22.947	1
27	MP2C	Mx	-.013	1
28	MP2C	X	0	5.4
29	MP2C	Z	-22.947	5.4
30	MP2C	Mx	-.013	5.4
31	MP2A	X	0	1
32	MP2A	Z	-31.163	1
33	MP2A	Mx	.021	1
34	MP2A	X	0	5.4
35	MP2A	Z	-31.163	5.4
36	MP2A	Mx	.021	5.4
37	MP2B	X	0	1
38	MP2B	Z	-24.184	1
39	MP2B	Mx	.009	1
40	MP2B	X	0	5.4
41	MP2B	Z	-24.184	5.4
42	MP2B	Mx	.009	5.4
43	MP2C	X	0	1
44	MP2C	Z	-22.947	1
45	MP2C	Mx	-.023	1
46	MP2C	X	0	5.4
47	MP2C	Z	-22.947	5.4
48	MP2C	Mx	-.023	5.4
49	MP3A	X	0	2.2
50	MP3A	Z	-15.339	2.2
51	MP3A	Mx	0	2.2
52	MP3A	X	0	4.2
53	MP3A	Z	-15.339	4.2
54	MP3A	Mx	0	4.2
55	MP3B	X	0	2.2
56	MP3B	Z	-8.888	2.2
57	MP3B	Mx	.006	2.2
58	MP3B	X	0	4.2
59	MP3B	Z	-8.888	4.2
60	MP3B	Mx	.006	4.2
61	MP3C	X	0	2.2
62	MP3C	Z	-7.744	2.2
63	MP3C	Mx	-.006	2.2
64	MP3C	X	0	4.2
65	MP3C	Z	-7.744	4.2
66	MP3C	Mx	-.006	4.2
67	MP3A	X	0	3.2
68	MP3A	Z	-8.303	3.2
69	MP3A	Mx	0	3.2
70	MP3B	X	0	3.2
71	MP3B	Z	-5.37	3.2
72	MP3B	Mx	-.003	3.2
73	MP3C	X	0	3.2
74	MP3C	Z	-4.85	3.2
75	MP3C	Mx	.003	3.2
76	MP2A	X	0	3
77	MP2A	Z	-16.159	3
78	MP2A	Mx	0	3
79	MP2B	X	0	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
80	MP2B	Z	-12.614	3
81	MP2B	Mx	-.007	3
82	MP2C	X	0	3
83	MP2C	Z	-11.985	3
84	MP2C	Mx	.008	3
85	MP1A	X	0	3
86	MP1A	Z	-16.159	3
87	MP1A	Mx	0	3
88	MP1B	X	0	3
89	MP1B	Z	-11.267	3
90	MP1B	Mx	-.007	3
91	MP1C	X	0	3
92	MP1C	Z	-10.399	3
93	MP1C	Mx	.007	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2B	X	.935	6
2	MP2B	Z	-1.62	6
3	MP2B	Mx	-.002	6
4	MP2B	X	.935	7
5	MP2B	Z	-1.62	7
6	MP2B	Mx	-.002	7
7	MP2B	X	.935	6
8	MP2B	Z	-1.62	6
9	MP2B	Mx	-.002	6
10	MP2B	X	.935	7
11	MP2B	Z	-1.62	7
12	MP2B	Mx	-.002	7
13	MP2A	X	14.418	1
14	MP2A	Z	-24.973	1
15	MP2A	Mx	-.029	1
16	MP2A	X	14.418	5.4
17	MP2A	Z	-24.973	5.4
18	MP2A	Mx	-.029	5.4
19	MP2B	X	10.929	1
20	MP2B	Z	-18.93	1
21	MP2B	Mx	.018	1
22	MP2B	X	10.929	5.4
23	MP2B	Z	-18.93	5.4
24	MP2B	Mx	.018	5.4
25	MP2C	X	13.659	1
26	MP2C	Z	-23.658	1
27	MP2C	Mx	-.000682	1
28	MP2C	X	13.659	5.4
29	MP2C	Z	-23.658	5.4
30	MP2C	Mx	-.000682	5.4
31	MP2A	X	14.418	1
32	MP2A	Z	-24.973	1
33	MP2A	Mx	.005	1
34	MP2A	X	14.418	5.4
35	MP2A	Z	-24.973	5.4
36	MP2A	Mx	.005	5.4
37	MP2B	X	10.929	1
38	MP2B	Z	-18.93	1
39	MP2B	Mx	.018	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
40	MP2B	X	10.929	5.4
41	MP2B	Z	-18.93	5.4
42	MP2B	Mx	.018	5.4
43	MP2C	X	13.659	1
44	MP2C	Z	-23.658	1
45	MP2C	Mx	-.029	1
46	MP2C	X	13.659	5.4
47	MP2C	Z	-23.658	5.4
48	MP2C	Mx	-.029	5.4
49	MP3A	X	6.594	2.2
50	MP3A	Z	-11.422	2.2
51	MP3A	Mx	-.005	2.2
52	MP3A	X	6.594	4.2
53	MP3A	Z	-11.422	4.2
54	MP3A	Mx	-.005	4.2
55	MP3B	X	3.369	2.2
56	MP3B	Z	-5.835	2.2
57	MP3B	Mx	.006	2.2
58	MP3B	X	3.369	4.2
59	MP3B	Z	-5.835	4.2
60	MP3B	Mx	.006	4.2
61	MP3C	X	5.893	2.2
62	MP3C	Z	-10.206	2.2
63	MP3C	Mx	-.006	2.2
64	MP3C	X	5.893	4.2
65	MP3C	Z	-10.206	4.2
66	MP3C	Mx	-.006	4.2
67	MP3A	X	3.663	3.2
68	MP3A	Z	-6.344	3.2
69	MP3A	Mx	.002	3.2
70	MP3B	X	2.196	3.2
71	MP3B	Z	-3.804	3.2
72	MP3B	Mx	-.003	3.2
73	MP3C	X	3.344	3.2
74	MP3C	Z	-5.791	3.2
75	MP3C	Mx	.003	3.2
76	MP2A	X	7.489	3
77	MP2A	Z	-12.971	3
78	MP2A	Mx	.005	3
79	MP2B	X	5.716	3
80	MP2B	Z	-9.9	3
81	MP2B	Mx	-.008	3
82	MP2C	X	7.103	3
83	MP2C	Z	-12.303	3
84	MP2C	Mx	.006	3
85	MP1A	X	7.264	3
86	MP1A	Z	-12.582	3
87	MP1A	Mx	.005	3
88	MP1B	X	4.818	3
89	MP1B	Z	-8.345	3
90	MP1B	Mx	-.006	3
91	MP1C	X	6.732	3
92	MP1C	Z	-11.66	3
93	MP1C	Mx	.006	3

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

	Member Label	Direction	Magnitude[lb.k.ft]	Location[ft.%]
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Member Point Loads (BLC 17 : Antenna Wi (60 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2B	X	2.204	6
2	MP2B	Z	-1.272	6
3	MP2B	Mx	-.002	6
4	MP2B	X	2.204	7
5	MP2B	Z	-1.272	7
6	MP2B	Mx	-.002	7
7	MP2B	X	2.204	6
8	MP2B	Z	-1.272	6
9	MP2B	Mx	-.003	6
10	MP2B	X	2.204	7
11	MP2B	Z	-1.272	7
12	MP2B	Mx	-.003	7
13	MP2A	X	20.944	1
14	MP2A	Z	-12.092	1
15	MP2A	Mx	-.026	1
16	MP2A	X	20.944	5.4
17	MP2A	Z	-12.092	5.4
18	MP2A	Mx	-.026	5.4
19	MP2B	X	20.944	1
20	MP2B	Z	-12.092	1
21	MP2B	Mx	.009	1
22	MP2B	X	20.944	5.4
23	MP2B	Z	-12.092	5.4
24	MP2B	Mx	.009	5.4
25	MP2C	X	26.745	1
26	MP2C	Z	-15.441	1
27	MP2C	Mx	.016	1
28	MP2C	X	26.745	5.4
29	MP2C	Z	-15.441	5.4
30	MP2C	Mx	.016	5.4
31	MP2A	X	20.944	1
32	MP2A	Z	-12.092	1
33	MP2A	Mx	-.009	1
34	MP2A	X	20.944	5.4
35	MP2A	Z	-12.092	5.4
36	MP2A	Mx	-.009	5.4
37	MP2B	X	20.944	1
38	MP2B	Z	-12.092	1
39	MP2B	Mx	.026	1
40	MP2B	X	20.944	5.4
41	MP2B	Z	-12.092	5.4
42	MP2B	Mx	.026	5.4
43	MP2C	X	26.745	1
44	MP2C	Z	-15.441	1
45	MP2C	Mx	-.025	1
46	MP2C	X	26.745	5.4
47	MP2C	Z	-15.441	5.4
48	MP2C	Mx	-.025	5.4
49	MP3A	X	7.697	2.2
50	MP3A	Z	-4.444	2.2
51	MP3A	Mx	-.006	2.2
52	MP3A	X	7.697	4.2
53	MP3A	Z	-4.444	4.2
54	MP3A	Mx	-.006	4.2
55	MP3B	X	7.697	2.2
56	MP3B	Z	-4.444	2.2
57	MP3B	Mx	.006	2.2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP3B	X	7.697	4.2
59	MP3B	Z	-4.444	4.2
60	MP3B	Mx	.006	4.2
61	MP3C	X	13.059	2.2
62	MP3C	Z	-7.54	2.2
63	MP3C	Mx	-.002	2.2
64	MP3C	X	13.059	4.2
65	MP3C	Z	-7.54	4.2
66	MP3C	Mx	-.002	4.2
67	MP3A	X	4.651	3.2
68	MP3A	Z	-2.685	3.2
69	MP3A	Mx	.003	3.2
70	MP3B	X	4.651	3.2
71	MP3B	Z	-2.685	3.2
72	MP3B	Mx	-.003	3.2
73	MP3C	X	7.089	3.2
74	MP3C	Z	-4.093	3.2
75	MP3C	Mx	.000948	3.2
76	MP2A	X	10.924	3
77	MP2A	Z	-6.307	3
78	MP2A	Mx	.007	3
79	MP2B	X	10.924	3
80	MP2B	Z	-6.307	3
81	MP2B	Mx	-.007	3
82	MP2C	X	13.871	3
83	MP2C	Z	-8.008	3
84	MP2C	Mx	.002	3
85	MP1A	X	9.757	3
86	MP1A	Z	-5.633	3
87	MP1A	Mx	.007	3
88	MP1B	X	9.757	3
89	MP1B	Z	-5.633	3
90	MP1B	Mx	-.007	3
91	MP1C	X	13.824	3
92	MP1C	Z	-7.981	3
93	MP1C	Mx	.002	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2B	X	3.892	6
2	MP2B	Z	0	6
3	MP2B	Mx	-.000822	6
4	MP2B	X	3.892	7
5	MP2B	Z	0	7
6	MP2B	Mx	-.000822	7
7	MP2B	X	3.892	6
8	MP2B	Z	0	6
9	MP2B	Mx	-.003	6
10	MP2B	X	3.892	7
11	MP2B	Z	0	7
12	MP2B	Mx	-.003	7
13	MP2A	X	21.858	1
14	MP2A	Z	0	1
15	MP2A	Mx	-.018	1
16	MP2A	X	21.858	5.4
17	MP2A	Z	0	5.4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
18	MP2A	Mx	-.018	5.4
19	MP2B	X	28.837	1
20	MP2B	Z	0	1
21	MP2B	Mx	-.005	1
22	MP2B	X	28.837	5.4
23	MP2B	Z	0	5.4
24	MP2B	Mx	-.005	5.4
25	MP2C	X	30.074	1
26	MP2C	Z	0	1
27	MP2C	Mx	.027	1
28	MP2C	X	30.074	5.4
29	MP2C	Z	0	5.4
30	MP2C	Mx	.027	5.4
31	MP2A	X	21.858	1
32	MP2A	Z	0	1
33	MP2A	Mx	-.018	1
34	MP2A	X	21.858	5.4
35	MP2A	Z	0	5.4
36	MP2A	Mx	-.018	5.4
37	MP2B	X	28.837	1
38	MP2B	Z	0	1
39	MP2B	Mx	.029	1
40	MP2B	X	28.837	5.4
41	MP2B	Z	0	5.4
42	MP2B	Mx	.029	5.4
43	MP2C	X	30.074	1
44	MP2C	Z	0	1
45	MP2C	Mx	-.01	1
46	MP2C	X	30.074	5.4
47	MP2C	Z	0	5.4
48	MP2C	Mx	-.01	5.4
49	MP3A	X	6.738	2.2
50	MP3A	Z	0	2.2
51	MP3A	Mx	-.006	2.2
52	MP3A	X	6.738	4.2
53	MP3A	Z	0	4.2
54	MP3A	Mx	-.006	4.2
55	MP3B	X	13.189	2.2
56	MP3B	Z	0	2.2
57	MP3B	Mx	.005	2.2
58	MP3B	X	13.189	4.2
59	MP3B	Z	0	4.2
60	MP3B	Mx	.005	4.2
61	MP3C	X	14.333	2.2
62	MP3C	Z	0	2.2
63	MP3C	Mx	.004	2.2
64	MP3C	X	14.333	4.2
65	MP3C	Z	0	4.2
66	MP3C	Mx	.004	4.2
67	MP3A	X	4.393	3.2
68	MP3A	Z	0	3.2
69	MP3A	Mx	.003	3.2
70	MP3B	X	7.326	3.2
71	MP3B	Z	0	3.2
72	MP3B	Mx	-.002	3.2
73	MP3C	X	7.846	3.2
74	MP3C	Z	0	3.2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
75	MP3C	Mx	-.002	3.2
76	MP2A	X	11.432	3
77	MP2A	Z	0	3
78	MP2A	Mx	.008	3
79	MP2B	X	14.977	3
80	MP2B	Z	0	3
81	MP2B	Mx	-.005	3
82	MP2C	X	15.606	3
83	MP2C	Z	0	3
84	MP2C	Mx	-.004	3
85	MP1A	X	9.636	3
86	MP1A	Z	0	3
87	MP1A	Mx	.006	3
88	MP1B	X	14.528	3
89	MP1B	Z	0	3
90	MP1B	Mx	-.005	3
91	MP1C	X	15.396	3
92	MP1C	Z	0	3
93	MP1C	Mx	-.004	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2B	X	3.954	6
2	MP2B	Z	2.283	6
3	MP2B	Mx	.002	6
4	MP2B	X	3.954	7
5	MP2B	Z	2.283	7
6	MP2B	Mx	.002	7
7	MP2B	X	3.954	6
8	MP2B	Z	2.283	6
9	MP2B	Mx	-.002	6
10	MP2B	X	3.954	7
11	MP2B	Z	2.283	7
12	MP2B	Mx	-.002	7
13	MP2A	X	20.944	1
14	MP2A	Z	12.092	1
15	MP2A	Mx	-.009	1
16	MP2A	X	20.944	5.4
17	MP2A	Z	12.092	5.4
18	MP2A	Mx	-.009	5.4
19	MP2B	X	26.988	1
20	MP2B	Z	15.581	1
21	MP2B	Mx	-.021	1
22	MP2B	X	26.988	5.4
23	MP2B	Z	15.581	5.4
24	MP2B	Mx	-.021	5.4
25	MP2C	X	22.259	1
26	MP2C	Z	12.851	1
27	MP2C	Mx	.027	1
28	MP2C	X	22.259	5.4
29	MP2C	Z	12.851	5.4
30	MP2C	Mx	.027	5.4
31	MP2A	X	20.944	1
32	MP2A	Z	12.092	1
33	MP2A	Mx	-.026	1
34	MP2A	X	20.944	5.4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
35	MP2A	Z	12.092	5.4
36	MP2A	Mx	-.026	5.4
37	MP2B	X	26.988	1
38	MP2B	Z	15.581	1
39	MP2B	Mx	.021	1
40	MP2B	X	26.988	5.4
41	MP2B	Z	15.581	5.4
42	MP2B	Mx	.021	5.4
43	MP2C	X	22.259	1
44	MP2C	Z	12.851	1
45	MP2C	Mx	.005	1
46	MP2C	X	22.259	5.4
47	MP2C	Z	12.851	5.4
48	MP2C	Mx	.005	5.4
49	MP3A	X	7.697	2.2
50	MP3A	Z	4.444	2.2
51	MP3A	Mx	-.006	2.2
52	MP3A	X	7.697	4.2
53	MP3A	Z	4.444	4.2
54	MP3A	Mx	-.006	4.2
55	MP3B	X	13.284	2.2
56	MP3B	Z	7.669	2.2
57	MP3B	Mx	0	2.2
58	MP3B	X	13.284	4.2
59	MP3B	Z	7.669	4.2
60	MP3B	Mx	0	4.2
61	MP3C	X	8.913	2.2
62	MP3C	Z	5.146	2.2
63	MP3C	Mx	.007	2.2
64	MP3C	X	8.913	4.2
65	MP3C	Z	5.146	4.2
66	MP3C	Mx	.007	4.2
67	MP3A	X	4.651	3.2
68	MP3A	Z	2.685	3.2
69	MP3A	Mx	.003	3.2
70	MP3B	X	7.191	3.2
71	MP3B	Z	4.152	3.2
72	MP3B	Mx	0	3.2
73	MP3C	X	5.203	3.2
74	MP3C	Z	3.004	3.2
75	MP3C	Mx	-.003	3.2
76	MP2A	X	10.924	3
77	MP2A	Z	6.307	3
78	MP2A	Mx	.007	3
79	MP2B	X	13.994	3
80	MP2B	Z	8.08	3
81	MP2B	Mx	0	3
82	MP2C	X	11.592	3
83	MP2C	Z	6.693	3
84	MP2C	Mx	-.007	3
85	MP1A	X	9.757	3
86	MP1A	Z	5.633	3
87	MP1A	Mx	.007	3
88	MP1B	X	13.994	3
89	MP1B	Z	8.08	3
90	MP1B	Mx	0	3
91	MP1C	X	10.679	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
92	MP1C	Z	6.166	3
93	MP1C	Mx	-.006	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2B	X	1.946	6
2	MP2B	Z	3.37	6
3	MP2B	Mx	.003	6
4	MP2B	X	1.946	7
5	MP2B	Z	3.37	7
6	MP2B	Mx	.003	7
7	MP2B	X	1.946	6
8	MP2B	Z	3.37	6
9	MP2B	Mx	.000822	6
10	MP2B	X	1.946	7
11	MP2B	Z	3.37	7
12	MP2B	Mx	.000822	7
13	MP2A	X	14.418	1
14	MP2A	Z	24.973	1
15	MP2A	Mx	.005	1
16	MP2A	X	14.418	5.4
17	MP2A	Z	24.973	5.4
18	MP2A	Mx	.005	5.4
19	MP2B	X	14.418	1
20	MP2B	Z	24.973	1
21	MP2B	Mx	-.029	1
22	MP2B	X	14.418	5.4
23	MP2B	Z	24.973	5.4
24	MP2B	Mx	-.029	5.4
25	MP2C	X	11.069	1
26	MP2C	Z	19.173	1
27	MP2C	Mx	.021	1
28	MP2C	X	11.069	5.4
29	MP2C	Z	19.173	5.4
30	MP2C	Mx	.021	5.4
31	MP2A	X	14.418	1
32	MP2A	Z	24.973	1
33	MP2A	Mx	-.029	1
34	MP2A	X	14.418	5.4
35	MP2A	Z	24.973	5.4
36	MP2A	Mx	-.029	5.4
37	MP2B	X	14.418	1
38	MP2B	Z	24.973	1
39	MP2B	Mx	.005	1
40	MP2B	X	14.418	5.4
41	MP2B	Z	24.973	5.4
42	MP2B	Mx	.005	5.4
43	MP2C	X	11.069	1
44	MP2C	Z	19.173	1
45	MP2C	Mx	.016	1
46	MP2C	X	11.069	5.4
47	MP2C	Z	19.173	5.4
48	MP2C	Mx	.016	5.4
49	MP3A	X	6.594	2.2
50	MP3A	Z	11.422	2.2
51	MP3A	Mx	-.005	2.2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
52	MP3A	X	6.594	4.2
53	MP3A	Z	11.422	4.2
54	MP3A	Mx	-.005	4.2
55	MP3B	X	6.594	2.2
56	MP3B	Z	11.422	2.2
57	MP3B	Mx	-.005	2.2
58	MP3B	X	6.594	4.2
59	MP3B	Z	11.422	4.2
60	MP3B	Mx	-.005	4.2
61	MP3C	X	3.499	2.2
62	MP3C	Z	6.06	2.2
63	MP3C	Mx	.006	2.2
64	MP3C	X	3.499	4.2
65	MP3C	Z	6.06	4.2
66	MP3C	Mx	.006	4.2
67	MP3A	X	3.663	3.2
68	MP3A	Z	6.344	3.2
69	MP3A	Mx	.002	3.2
70	MP3B	X	3.663	3.2
71	MP3B	Z	6.344	3.2
72	MP3B	Mx	.002	3.2
73	MP3C	X	2.255	3.2
74	MP3C	Z	3.906	3.2
75	MP3C	Mx	-.003	3.2
76	MP2A	X	7.489	3
77	MP2A	Z	12.971	3
78	MP2A	Mx	.005	3
79	MP2B	X	7.489	3
80	MP2B	Z	12.971	3
81	MP2B	Mx	.005	3
82	MP2C	X	5.787	3
83	MP2C	Z	10.024	3
84	MP2C	Mx	-.008	3
85	MP1A	X	7.264	3
86	MP1A	Z	12.582	3
87	MP1A	Mx	.005	3
88	MP1B	X	7.264	3
89	MP1B	Z	12.582	3
90	MP1B	Mx	.005	3
91	MP1C	X	4.916	3
92	MP1C	Z	8.515	3
93	MP1C	Mx	-.006	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2B	X	0	6
2	MP2B	Z	2.545	6
3	MP2B	Mx	.003	6
4	MP2B	X	0	7
5	MP2B	Z	2.545	7
6	MP2B	Mx	.003	7
7	MP2B	X	0	6
8	MP2B	Z	2.545	6
9	MP2B	Mx	.002	6
10	MP2B	X	0	7
11	MP2B	Z	2.545	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
12	MP2B	Mx	.002	7
13	MP2A	X	0	1
14	MP2A	Z	31.163	1
15	MP2A	Mx	.021	1
16	MP2A	X	0	5.4
17	MP2A	Z	31.163	5.4
18	MP2A	Mx	.021	5.4
19	MP2B	X	0	1
20	MP2B	Z	24.184	1
21	MP2B	Mx	-.026	1
22	MP2B	X	0	5.4
23	MP2B	Z	24.184	5.4
24	MP2B	Mx	-.026	5.4
25	MP2C	X	0	1
26	MP2C	Z	22.947	1
27	MP2C	Mx	.013	1
28	MP2C	X	0	5.4
29	MP2C	Z	22.947	5.4
30	MP2C	Mx	.013	5.4
31	MP2A	X	0	1
32	MP2A	Z	31.163	1
33	MP2A	Mx	-.021	1
34	MP2A	X	0	5.4
35	MP2A	Z	31.163	5.4
36	MP2A	Mx	-.021	5.4
37	MP2B	X	0	1
38	MP2B	Z	24.184	1
39	MP2B	Mx	-.009	1
40	MP2B	X	0	5.4
41	MP2B	Z	24.184	5.4
42	MP2B	Mx	-.009	5.4
43	MP2C	X	0	1
44	MP2C	Z	22.947	1
45	MP2C	Mx	.023	1
46	MP2C	X	0	5.4
47	MP2C	Z	22.947	5.4
48	MP2C	Mx	.023	5.4
49	MP3A	X	0	2.2
50	MP3A	Z	15.339	2.2
51	MP3A	Mx	0	2.2
52	MP3A	X	0	4.2
53	MP3A	Z	15.339	4.2
54	MP3A	Mx	0	4.2
55	MP3B	X	0	2.2
56	MP3B	Z	8.888	2.2
57	MP3B	Mx	-.006	2.2
58	MP3B	X	0	4.2
59	MP3B	Z	8.888	4.2
60	MP3B	Mx	-.006	4.2
61	MP3C	X	0	2.2
62	MP3C	Z	7.744	2.2
63	MP3C	Mx	.006	2.2
64	MP3C	X	0	4.2
65	MP3C	Z	7.744	4.2
66	MP3C	Mx	.006	4.2
67	MP3A	X	0	3.2
68	MP3A	Z	8.303	3.2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
69	MP3A	Mx	0	3.2
70	MP3B	X	0	3.2
71	MP3B	Z	5.37	3.2
72	MP3B	Mx	.003	3.2
73	MP3C	X	0	3.2
74	MP3C	Z	4.85	3.2
75	MP3C	Mx	-.003	3.2
76	MP2A	X	0	3
77	MP2A	Z	16.159	3
78	MP2A	Mx	0	3
79	MP2B	X	0	3
80	MP2B	Z	12.614	3
81	MP2B	Mx	.007	3
82	MP2C	X	0	3
83	MP2C	Z	11.985	3
84	MP2C	Mx	-.008	3
85	MP1A	X	0	3
86	MP1A	Z	16.159	3
87	MP1A	Mx	0	3
88	MP1B	X	0	3
89	MP1B	Z	11.267	3
90	MP1B	Mx	.007	3
91	MP1C	X	0	3
92	MP1C	Z	10.399	3
93	MP1C	Mx	-.007	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2B	X	-.935	6
2	MP2B	Z	1.62	6
3	MP2B	Mx	.002	6
4	MP2B	X	-.935	7
5	MP2B	Z	1.62	7
6	MP2B	Mx	.002	7
7	MP2B	X	-.935	6
8	MP2B	Z	1.62	6
9	MP2B	Mx	.002	6
10	MP2B	X	-.935	7
11	MP2B	Z	1.62	7
12	MP2B	Mx	.002	7
13	MP2A	X	-14.418	1
14	MP2A	Z	24.973	1
15	MP2A	Mx	.029	1
16	MP2A	X	-14.418	5.4
17	MP2A	Z	24.973	5.4
18	MP2A	Mx	.029	5.4
19	MP2B	X	-10.929	1
20	MP2B	Z	18.93	1
21	MP2B	Mx	-.018	1
22	MP2B	X	-10.929	5.4
23	MP2B	Z	18.93	5.4
24	MP2B	Mx	-.018	5.4
25	MP2C	X	-13.659	1
26	MP2C	Z	23.658	1
27	MP2C	Mx	.000682	1
28	MP2C	X	-13.659	5.4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
29	MP2C	Z	23.658	5.4
30	MP2C	Mx	.000682	5.4
31	MP2A	X	-14.418	1
32	MP2A	Z	24.973	1
33	MP2A	Mx	-.005	1
34	MP2A	X	-14.418	5.4
35	MP2A	Z	24.973	5.4
36	MP2A	Mx	-.005	5.4
37	MP2B	X	-10.929	1
38	MP2B	Z	18.93	1
39	MP2B	Mx	-.018	1
40	MP2B	X	-10.929	5.4
41	MP2B	Z	18.93	5.4
42	MP2B	Mx	-.018	5.4
43	MP2C	X	-13.659	1
44	MP2C	Z	23.658	1
45	MP2C	Mx	.029	1
46	MP2C	X	-13.659	5.4
47	MP2C	Z	23.658	5.4
48	MP2C	Mx	.029	5.4
49	MP3A	X	-6.594	2.2
50	MP3A	Z	11.422	2.2
51	MP3A	Mx	.005	2.2
52	MP3A	X	-6.594	4.2
53	MP3A	Z	11.422	4.2
54	MP3A	Mx	.005	4.2
55	MP3B	X	-3.369	2.2
56	MP3B	Z	5.835	2.2
57	MP3B	Mx	-.006	2.2
58	MP3B	X	-3.369	4.2
59	MP3B	Z	5.835	4.2
60	MP3B	Mx	-.006	4.2
61	MP3C	X	-5.893	2.2
62	MP3C	Z	10.206	2.2
63	MP3C	Mx	.006	2.2
64	MP3C	X	-5.893	4.2
65	MP3C	Z	10.206	4.2
66	MP3C	Mx	.006	4.2
67	MP3A	X	-3.663	3.2
68	MP3A	Z	6.344	3.2
69	MP3A	Mx	-.002	3.2
70	MP3B	X	-2.196	3.2
71	MP3B	Z	3.804	3.2
72	MP3B	Mx	.003	3.2
73	MP3C	X	-3.344	3.2
74	MP3C	Z	5.791	3.2
75	MP3C	Mx	-.003	3.2
76	MP2A	X	-7.489	3
77	MP2A	Z	12.971	3
78	MP2A	Mx	-.005	3
79	MP2B	X	-5.716	3
80	MP2B	Z	9.9	3
81	MP2B	Mx	.008	3
82	MP2C	X	-7.103	3
83	MP2C	Z	12.303	3
84	MP2C	Mx	-.006	3
85	MP1A	X	-7.264	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
86	MP1A	Z	12.582	3
87	MP1A	Mx	-.005	3
88	MP1B	X	-4.818	3
89	MP1B	Z	8.345	3
90	MP1B	Mx	.006	3
91	MP1C	X	-6.732	3
92	MP1C	Z	11.66	3
93	MP1C	Mx	-.006	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2B	X	-2.204	6
2	MP2B	Z	1.272	6
3	MP2B	Mx	.002	6
4	MP2B	X	-2.204	7
5	MP2B	Z	1.272	7
6	MP2B	Mx	.002	7
7	MP2B	X	-2.204	6
8	MP2B	Z	1.272	6
9	MP2B	Mx	.003	6
10	MP2B	X	-2.204	7
11	MP2B	Z	1.272	7
12	MP2B	Mx	.003	7
13	MP2A	X	-20.944	1
14	MP2A	Z	12.092	1
15	MP2A	Mx	.026	1
16	MP2A	X	-20.944	5.4
17	MP2A	Z	12.092	5.4
18	MP2A	Mx	.026	5.4
19	MP2B	X	-20.944	1
20	MP2B	Z	12.092	1
21	MP2B	Mx	-.009	1
22	MP2B	X	-20.944	5.4
23	MP2B	Z	12.092	5.4
24	MP2B	Mx	-.009	5.4
25	MP2C	X	-26.745	1
26	MP2C	Z	15.441	1
27	MP2C	Mx	-.016	1
28	MP2C	X	-26.745	5.4
29	MP2C	Z	15.441	5.4
30	MP2C	Mx	-.016	5.4
31	MP2A	X	-20.944	1
32	MP2A	Z	12.092	1
33	MP2A	Mx	.009	1
34	MP2A	X	-20.944	5.4
35	MP2A	Z	12.092	5.4
36	MP2A	Mx	.009	5.4
37	MP2B	X	-20.944	1
38	MP2B	Z	12.092	1
39	MP2B	Mx	-.026	1
40	MP2B	X	-20.944	5.4
41	MP2B	Z	12.092	5.4
42	MP2B	Mx	-.026	5.4
43	MP2C	X	-26.745	1
44	MP2C	Z	15.441	1
45	MP2C	Mx	.025	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
46	MP2C	X	-26.745	5.4
47	MP2C	Z	15.441	5.4
48	MP2C	Mx	.025	5.4
49	MP3A	X	-7.697	2.2
50	MP3A	Z	4.444	2.2
51	MP3A	Mx	.006	2.2
52	MP3A	X	-7.697	4.2
53	MP3A	Z	4.444	4.2
54	MP3A	Mx	.006	4.2
55	MP3B	X	-7.697	2.2
56	MP3B	Z	4.444	2.2
57	MP3B	Mx	-.006	2.2
58	MP3B	X	-7.697	4.2
59	MP3B	Z	4.444	4.2
60	MP3B	Mx	-.006	4.2
61	MP3C	X	-13.059	2.2
62	MP3C	Z	7.54	2.2
63	MP3C	Mx	.002	2.2
64	MP3C	X	-13.059	4.2
65	MP3C	Z	7.54	4.2
66	MP3C	Mx	.002	4.2
67	MP3A	X	-4.651	3.2
68	MP3A	Z	2.685	3.2
69	MP3A	Mx	-.003	3.2
70	MP3B	X	-4.651	3.2
71	MP3B	Z	2.685	3.2
72	MP3B	Mx	.003	3.2
73	MP3C	X	-7.089	3.2
74	MP3C	Z	4.093	3.2
75	MP3C	Mx	-.000948	3.2
76	MP2A	X	-10.924	3
77	MP2A	Z	6.307	3
78	MP2A	Mx	-.007	3
79	MP2B	X	-10.924	3
80	MP2B	Z	6.307	3
81	MP2B	Mx	.007	3
82	MP2C	X	-13.871	3
83	MP2C	Z	8.008	3
84	MP2C	Mx	-.002	3
85	MP1A	X	-9.757	3
86	MP1A	Z	5.633	3
87	MP1A	Mx	-.007	3
88	MP1B	X	-9.757	3
89	MP1B	Z	5.633	3
90	MP1B	Mx	.007	3
91	MP1C	X	-13.824	3
92	MP1C	Z	7.981	3
93	MP1C	Mx	-.002	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2B	X	-3.892	6
2	MP2B	Z	0	6
3	MP2B	Mx	.000822	6
4	MP2B	X	-3.892	7
5	MP2B	Z	0	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
6	MP2B	Mx	.000822	7
7	MP2B	X	-3.892	6
8	MP2B	Z	0	6
9	MP2B	Mx	.003	6
10	MP2B	X	-3.892	7
11	MP2B	Z	0	7
12	MP2B	Mx	.003	7
13	MP2A	X	-21.858	1
14	MP2A	Z	0	1
15	MP2A	Mx	.018	1
16	MP2A	X	-21.858	5.4
17	MP2A	Z	0	5.4
18	MP2A	Mx	.018	5.4
19	MP2B	X	-28.837	1
20	MP2B	Z	0	1
21	MP2B	Mx	.005	1
22	MP2B	X	-28.837	5.4
23	MP2B	Z	0	5.4
24	MP2B	Mx	.005	5.4
25	MP2C	X	-30.074	1
26	MP2C	Z	0	1
27	MP2C	Mx	-.027	1
28	MP2C	X	-30.074	5.4
29	MP2C	Z	0	5.4
30	MP2C	Mx	-.027	5.4
31	MP2A	X	-21.858	1
32	MP2A	Z	0	1
33	MP2A	Mx	.018	1
34	MP2A	X	-21.858	5.4
35	MP2A	Z	0	5.4
36	MP2A	Mx	.018	5.4
37	MP2B	X	-28.837	1
38	MP2B	Z	0	1
39	MP2B	Mx	-.029	1
40	MP2B	X	-28.837	5.4
41	MP2B	Z	0	5.4
42	MP2B	Mx	-.029	5.4
43	MP2C	X	-30.074	1
44	MP2C	Z	0	1
45	MP2C	Mx	.01	1
46	MP2C	X	-30.074	5.4
47	MP2C	Z	0	5.4
48	MP2C	Mx	.01	5.4
49	MP3A	X	-6.738	2.2
50	MP3A	Z	0	2.2
51	MP3A	Mx	.006	2.2
52	MP3A	X	-6.738	4.2
53	MP3A	Z	0	4.2
54	MP3A	Mx	.006	4.2
55	MP3B	X	-13.189	2.2
56	MP3B	Z	0	2.2
57	MP3B	Mx	-.005	2.2
58	MP3B	X	-13.189	4.2
59	MP3B	Z	0	4.2
60	MP3B	Mx	-.005	4.2
61	MP3C	X	-14.333	2.2
62	MP3C	Z	0	2.2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
63	MP3C	Mx	-.004	2.2
64	MP3C	X	-14.333	4.2
65	MP3C	Z	0	4.2
66	MP3C	Mx	-.004	4.2
67	MP3A	X	-4.393	3.2
68	MP3A	Z	0	3.2
69	MP3A	Mx	-.003	3.2
70	MP3B	X	-7.326	3.2
71	MP3B	Z	0	3.2
72	MP3B	Mx	.002	3.2
73	MP3C	X	-7.846	3.2
74	MP3C	Z	0	3.2
75	MP3C	Mx	.002	3.2
76	MP2A	X	-11.432	3
77	MP2A	Z	0	3
78	MP2A	Mx	-.008	3
79	MP2B	X	-14.977	3
80	MP2B	Z	0	3
81	MP2B	Mx	.005	3
82	MP2C	X	-15.606	3
83	MP2C	Z	0	3
84	MP2C	Mx	.004	3
85	MP1A	X	-9.636	3
86	MP1A	Z	0	3
87	MP1A	Mx	-.006	3
88	MP1B	X	-14.528	3
89	MP1B	Z	0	3
90	MP1B	Mx	.005	3
91	MP1C	X	-15.396	3
92	MP1C	Z	0	3
93	MP1C	Mx	.004	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2B	X	-3.954	6
2	MP2B	Z	-2.283	6
3	MP2B	Mx	-.002	6
4	MP2B	X	-3.954	7
5	MP2B	Z	-2.283	7
6	MP2B	Mx	-.002	7
7	MP2B	X	-3.954	6
8	MP2B	Z	-2.283	6
9	MP2B	Mx	.002	6
10	MP2B	X	-3.954	7
11	MP2B	Z	-2.283	7
12	MP2B	Mx	.002	7
13	MP2A	X	-20.944	1
14	MP2A	Z	-12.092	1
15	MP2A	Mx	.009	1
16	MP2A	X	-20.944	5.4
17	MP2A	Z	-12.092	5.4
18	MP2A	Mx	.009	5.4
19	MP2B	X	-26.988	1
20	MP2B	Z	-15.581	1
21	MP2B	Mx	.021	1
22	MP2B	X	-26.988	5.4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
23	MP2B	Z	-15.581	5.4
24	MP2B	Mx	.021	5.4
25	MP2C	X	-22.259	1
26	MP2C	Z	-12.851	1
27	MP2C	Mx	-.027	1
28	MP2C	X	-22.259	5.4
29	MP2C	Z	-12.851	5.4
30	MP2C	Mx	-.027	5.4
31	MP2A	X	-20.944	1
32	MP2A	Z	-12.092	1
33	MP2A	Mx	.026	1
34	MP2A	X	-20.944	5.4
35	MP2A	Z	-12.092	5.4
36	MP2A	Mx	.026	5.4
37	MP2B	X	-26.988	1
38	MP2B	Z	-15.581	1
39	MP2B	Mx	-.021	1
40	MP2B	X	-26.988	5.4
41	MP2B	Z	-15.581	5.4
42	MP2B	Mx	-.021	5.4
43	MP2C	X	-22.259	1
44	MP2C	Z	-12.851	1
45	MP2C	Mx	-.005	1
46	MP2C	X	-22.259	5.4
47	MP2C	Z	-12.851	5.4
48	MP2C	Mx	-.005	5.4
49	MP3A	X	-7.697	2.2
50	MP3A	Z	-4.444	2.2
51	MP3A	Mx	.006	2.2
52	MP3A	X	-7.697	4.2
53	MP3A	Z	-4.444	4.2
54	MP3A	Mx	.006	4.2
55	MP3B	X	-13.284	2.2
56	MP3B	Z	-7.669	2.2
57	MP3B	Mx	0	2.2
58	MP3B	X	-13.284	4.2
59	MP3B	Z	-7.669	4.2
60	MP3B	Mx	0	4.2
61	MP3C	X	-8.913	2.2
62	MP3C	Z	-5.146	2.2
63	MP3C	Mx	-.007	2.2
64	MP3C	X	-8.913	4.2
65	MP3C	Z	-5.146	4.2
66	MP3C	Mx	-.007	4.2
67	MP3A	X	-4.651	3.2
68	MP3A	Z	-2.685	3.2
69	MP3A	Mx	-.003	3.2
70	MP3B	X	-7.191	3.2
71	MP3B	Z	-4.152	3.2
72	MP3B	Mx	0	3.2
73	MP3C	X	-5.203	3.2
74	MP3C	Z	-3.004	3.2
75	MP3C	Mx	.003	3.2
76	MP2A	X	-10.924	3
77	MP2A	Z	-6.307	3
78	MP2A	Mx	-.007	3
79	MP2B	X	-13.994	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
80	MP2B	Z	-8.08	3
81	MP2B	Mx	0	3
82	MP2C	X	-11.592	3
83	MP2C	Z	-6.693	3
84	MP2C	Mx	.007	3
85	MP1A	X	-9.757	3
86	MP1A	Z	-5.633	3
87	MP1A	Mx	-.007	3
88	MP1B	X	-13.994	3
89	MP1B	Z	-8.08	3
90	MP1B	Mx	0	3
91	MP1C	X	-10.679	3
92	MP1C	Z	-6.166	3
93	MP1C	Mx	.006	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2B	X	-1.946	6
2	MP2B	Z	-3.37	6
3	MP2B	Mx	-.003	6
4	MP2B	X	-1.946	7
5	MP2B	Z	-3.37	7
6	MP2B	Mx	-.003	7
7	MP2B	X	-1.946	6
8	MP2B	Z	-3.37	6
9	MP2B	Mx	-.000822	6
10	MP2B	X	-1.946	7
11	MP2B	Z	-3.37	7
12	MP2B	Mx	-.000822	7
13	MP2A	X	-14.418	1
14	MP2A	Z	-24.973	1
15	MP2A	Mx	-.005	1
16	MP2A	X	-14.418	5.4
17	MP2A	Z	-24.973	5.4
18	MP2A	Mx	-.005	5.4
19	MP2B	X	-14.418	1
20	MP2B	Z	-24.973	1
21	MP2B	Mx	.029	1
22	MP2B	X	-14.418	5.4
23	MP2B	Z	-24.973	5.4
24	MP2B	Mx	.029	5.4
25	MP2C	X	-11.069	1
26	MP2C	Z	-19.173	1
27	MP2C	Mx	-.021	1
28	MP2C	X	-11.069	5.4
29	MP2C	Z	-19.173	5.4
30	MP2C	Mx	-.021	5.4
31	MP2A	X	-14.418	1
32	MP2A	Z	-24.973	1
33	MP2A	Mx	.029	1
34	MP2A	X	-14.418	5.4
35	MP2A	Z	-24.973	5.4
36	MP2A	Mx	.029	5.4
37	MP2B	X	-14.418	1
38	MP2B	Z	-24.973	1
39	MP2B	Mx	-.005	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
40	MP2B	X	-14.418	5.4
41	MP2B	Z	-24.973	5.4
42	MP2B	Mx	-.005	5.4
43	MP2C	X	-11.069	1
44	MP2C	Z	-19.173	1
45	MP2C	Mx	-.016	1
46	MP2C	X	-11.069	5.4
47	MP2C	Z	-19.173	5.4
48	MP2C	Mx	-.016	5.4
49	MP3A	X	-6.594	2.2
50	MP3A	Z	-11.422	2.2
51	MP3A	Mx	.005	2.2
52	MP3A	X	-6.594	4.2
53	MP3A	Z	-11.422	4.2
54	MP3A	Mx	.005	4.2
55	MP3B	X	-6.594	2.2
56	MP3B	Z	-11.422	2.2
57	MP3B	Mx	.005	2.2
58	MP3B	X	-6.594	4.2
59	MP3B	Z	-11.422	4.2
60	MP3B	Mx	.005	4.2
61	MP3C	X	-3.499	2.2
62	MP3C	Z	-6.06	2.2
63	MP3C	Mx	-.006	2.2
64	MP3C	X	-3.499	4.2
65	MP3C	Z	-6.06	4.2
66	MP3C	Mx	-.006	4.2
67	MP3A	X	-3.663	3.2
68	MP3A	Z	-6.344	3.2
69	MP3A	Mx	-.002	3.2
70	MP3B	X	-3.663	3.2
71	MP3B	Z	-6.344	3.2
72	MP3B	Mx	-.002	3.2
73	MP3C	X	-2.255	3.2
74	MP3C	Z	-3.906	3.2
75	MP3C	Mx	.003	3.2
76	MP2A	X	-7.489	3
77	MP2A	Z	-12.971	3
78	MP2A	Mx	-.005	3
79	MP2B	X	-7.489	3
80	MP2B	Z	-12.971	3
81	MP2B	Mx	-.005	3
82	MP2C	X	-5.787	3
83	MP2C	Z	-10.024	3
84	MP2C	Mx	.008	3
85	MP1A	X	-7.264	3
86	MP1A	Z	-12.582	3
87	MP1A	Mx	-.005	3
88	MP1B	X	-7.264	3
89	MP1B	Z	-12.582	3
90	MP1B	Mx	-.005	3
91	MP1C	X	-4.916	3
92	MP1C	Z	-8.515	3
93	MP1C	Mx	.006	3

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

	Member Label	Direction	Magnitude[lb.k.ft]	Location[ft.%]
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Member Point Loads (BLC 27 : Antenna Wm (0 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2B	X	0	6
2	MP2B	Z	-.553	6
3	MP2B	Mx	-.000571	6
4	MP2B	X	0	7
5	MP2B	Z	-.553	7
6	MP2B	Mx	-.000571	7
7	MP2B	X	0	6
8	MP2B	Z	-.553	6
9	MP2B	Mx	-.000387	6
10	MP2B	X	0	7
11	MP2B	Z	-.553	7
12	MP2B	Mx	-.000387	7
13	MP2A	X	0	1
14	MP2A	Z	-9.708	1
15	MP2A	Mx	-.006	1
16	MP2A	X	0	5.4
17	MP2A	Z	-9.708	5.4
18	MP2A	Mx	-.006	5.4
19	MP2B	X	0	1
20	MP2B	Z	-7.258	1
21	MP2B	Mx	.008	1
22	MP2B	X	0	5.4
23	MP2B	Z	-7.258	5.4
24	MP2B	Mx	.008	5.4
25	MP2C	X	0	1
26	MP2C	Z	-6.824	1
27	MP2C	Mx	-.004	1
28	MP2C	X	0	5.4
29	MP2C	Z	-6.824	5.4
30	MP2C	Mx	-.004	5.4
31	MP2A	X	0	1
32	MP2A	Z	-6.548	1
33	MP2A	Mx	.004	1
34	MP2A	X	0	5.4
35	MP2A	Z	-6.548	5.4
36	MP2A	Mx	.004	5.4
37	MP2B	X	0	1
38	MP2B	Z	-3.744	1
39	MP2B	Mx	.001	1
40	MP2B	X	0	5.4
41	MP2B	Z	-3.744	5.4
42	MP2B	Mx	.001	5.4
43	MP2C	X	0	1
44	MP2C	Z	-3.247	1
45	MP2C	Mx	-.003	1
46	MP2C	X	0	5.4
47	MP2C	Z	-3.247	5.4
48	MP2C	Mx	-.003	5.4
49	MP3A	X	0	2.2
50	MP3A	Z	-3.811	2.2
51	MP3A	Mx	0	2.2
52	MP3A	X	0	4.2
53	MP3A	Z	-3.811	4.2
54	MP3A	Mx	0	4.2
55	MP3B	X	0	2.2
56	MP3B	Z	-1.957	2.2
57	MP3B	Mx	.001	2.2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP3B	X	0	4.2
59	MP3B	Z	-1.957	4.2
60	MP3B	Mx	.001	4.2
61	MP3C	X	0	2.2
62	MP3C	Z	-1.628	2.2
63	MP3C	Mx	-.001	2.2
64	MP3C	X	0	4.2
65	MP3C	Z	-1.628	4.2
66	MP3C	Mx	-.001	4.2
67	MP3A	X	0	3.2
68	MP3A	Z	-1.833	3.2
69	MP3A	Mx	0	3.2
70	MP3B	X	0	3.2
71	MP3B	Z	-1.254	3.2
72	MP3B	Mx	-.000724	3.2
73	MP3C	X	0	3.2
74	MP3C	Z	-1.151	3.2
75	MP3C	Mx	.000721	3.2
76	MP2A	X	0	3
77	MP2A	Z	-3.738	3
78	MP2A	Mx	0	3
79	MP2B	X	0	3
80	MP2B	Z	-2.816	3
81	MP2B	Mx	-.002	3
82	MP2C	X	0	3
83	MP2C	Z	-2.652	3
84	MP2C	Mx	.002	3
85	MP1A	X	0	3
86	MP1A	Z	-3.738	3
87	MP1A	Mx	0	3
88	MP1B	X	0	3
89	MP1B	Z	-2.472	3
90	MP1B	Mx	-.001	3
91	MP1C	X	0	3
92	MP1C	Z	-2.248	3
93	MP1C	Mx	.001	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2B	X	.176	6
2	MP2B	Z	-.304	6
3	MP2B	Mx	-.000351	6
4	MP2B	X	.176	7
5	MP2B	Z	-.304	7
6	MP2B	Mx	-.000351	7
7	MP2B	X	.176	6
8	MP2B	Z	-.304	6
9	MP2B	Mx	-.000351	6
10	MP2B	X	.176	7
11	MP2B	Z	-.304	7
12	MP2B	Mx	-.000351	7
13	MP2A	X	4.446	1
14	MP2A	Z	-7.7	1
15	MP2A	Mx	-.009	1
16	MP2A	X	4.446	5.4
17	MP2A	Z	-7.7	5.4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
18	MP2A	Mx	-.009	5.4
19	MP2B	X	3.221	1
20	MP2B	Z	-5.579	1
21	MP2B	Mx	.005	1
22	MP2B	X	3.221	5.4
23	MP2B	Z	-5.579	5.4
24	MP2B	Mx	.005	5.4
25	MP2C	X	4.179	1
26	MP2C	Z	-7.238	1
27	MP2C	Mx	-.000208	1
28	MP2C	X	4.179	5.4
29	MP2C	Z	-7.238	5.4
30	MP2C	Mx	-.000208	5.4
31	MP2A	X	2.807	1
32	MP2A	Z	-4.862	1
33	MP2A	Mx	.000902	1
34	MP2A	X	2.807	5.4
35	MP2A	Z	-4.862	5.4
36	MP2A	Mx	.000902	5.4
37	MP2B	X	1.405	1
38	MP2B	Z	-2.433	1
39	MP2B	Mx	.002	1
40	MP2B	X	1.405	5.4
41	MP2B	Z	-2.433	5.4
42	MP2B	Mx	.002	5.4
43	MP2C	X	2.502	1
44	MP2C	Z	-4.333	1
45	MP2C	Mx	-.005	1
46	MP2C	X	2.502	5.4
47	MP2C	Z	-4.333	5.4
48	MP2C	Mx	-.005	5.4
49	MP3A	X	1.596	2.2
50	MP3A	Z	-2.765	2.2
51	MP3A	Mx	-.001	2.2
52	MP3A	X	1.596	4.2
53	MP3A	Z	-2.765	4.2
54	MP3A	Mx	-.001	4.2
55	MP3B	X	.669	2.2
56	MP3B	Z	-1.159	2.2
57	MP3B	Mx	.001	2.2
58	MP3B	X	.669	4.2
59	MP3B	Z	-1.159	4.2
60	MP3B	Mx	.001	4.2
61	MP3C	X	1.395	2.2
62	MP3C	Z	-2.416	2.2
63	MP3C	Mx	-.001	2.2
64	MP3C	X	1.395	4.2
65	MP3C	Z	-2.416	4.2
66	MP3C	Mx	-.001	4.2
67	MP3A	X	.82	3.2
68	MP3A	Z	-1.42	3.2
69	MP3A	Mx	.000547	3.2
70	MP3B	X	.531	3.2
71	MP3B	Z	-.919	3.2
72	MP3B	Mx	-.000708	3.2
73	MP3C	X	.757	3.2
74	MP3C	Z	-1.311	3.2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
75	MP3C	Mx	.000649	3.2
76	MP2A	X	1.715	3
77	MP2A	Z	-2.971	3
78	MP2A	Mx	.001	3
79	MP2B	X	1.254	3
80	MP2B	Z	-2.172	3
81	MP2B	Mx	-.002	3
82	MP2C	X	1.615	3
83	MP2C	Z	-2.797	3
84	MP2C	Mx	.001	3
85	MP1A	X	1.658	3
86	MP1A	Z	-2.872	3
87	MP1A	Mx	.001	3
88	MP1B	X	1.025	3
89	MP1B	Z	-1.775	3
90	MP1B	Mx	-.001	3
91	MP1C	X	1.52	3
92	MP1C	Z	-2.633	3
93	MP1C	Mx	.001	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2B	X	.479	6
2	MP2B	Z	-.276	6
3	MP2B	Mx	-.000386	6
4	MP2B	X	.479	7
5	MP2B	Z	-.276	7
6	MP2B	Mx	-.000386	7
7	MP2B	X	.479	6
8	MP2B	Z	-.276	6
9	MP2B	Mx	-.000571	6
10	MP2B	X	.479	7
11	MP2B	Z	-.276	7
12	MP2B	Mx	-.000571	7
13	MP2A	X	6.286	1
14	MP2A	Z	-3.629	1
15	MP2A	Mx	-.008	1
16	MP2A	X	6.286	5.4
17	MP2A	Z	-3.629	5.4
18	MP2A	Mx	-.008	5.4
19	MP2B	X	6.286	1
20	MP2B	Z	-3.629	1
21	MP2B	Mx	.003	1
22	MP2B	X	6.286	5.4
23	MP2B	Z	-3.629	5.4
24	MP2B	Mx	.003	5.4
25	MP2C	X	8.322	1
26	MP2C	Z	-4.805	1
27	MP2C	Mx	.005	1
28	MP2C	X	8.322	5.4
29	MP2C	Z	-4.805	5.4
30	MP2C	Mx	.005	5.4
31	MP2A	X	3.243	1
32	MP2A	Z	-1.872	1
33	MP2A	Mx	-.001	1
34	MP2A	X	3.243	5.4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
35	MP2A	Z	-1.872	5.4
36	MP2A	Mx	-.001	5.4
37	MP2B	X	3.243	1
38	MP2B	Z	-1.872	1
39	MP2B	Mx	.004	1
40	MP2B	X	3.243	5.4
41	MP2B	Z	-1.872	5.4
42	MP2B	Mx	.004	5.4
43	MP2C	X	5.573	1
44	MP2C	Z	-3.218	1
45	MP2C	Mx	-.005	1
46	MP2C	X	5.573	5.4
47	MP2C	Z	-3.218	5.4
48	MP2C	Mx	-.005	5.4
49	MP3A	X	1.694	2.2
50	MP3A	Z	-.978	2.2
51	MP3A	Mx	-.001	2.2
52	MP3A	X	1.694	4.2
53	MP3A	Z	-.978	4.2
54	MP3A	Mx	-.001	4.2
55	MP3B	X	1.694	2.2
56	MP3B	Z	-.978	2.2
57	MP3B	Mx	.001	2.2
58	MP3B	X	1.694	4.2
59	MP3B	Z	-.978	4.2
60	MP3B	Mx	.001	4.2
61	MP3C	X	3.236	2.2
62	MP3C	Z	-1.868	2.2
63	MP3C	Mx	-.00054	2.2
64	MP3C	X	3.236	4.2
65	MP3C	Z	-1.868	4.2
66	MP3C	Mx	-.00054	4.2
67	MP3A	X	1.086	3.2
68	MP3A	Z	-.627	3.2
69	MP3A	Mx	.000724	3.2
70	MP3B	X	1.086	3.2
71	MP3B	Z	-.627	3.2
72	MP3B	Mx	-.000724	3.2
73	MP3C	X	1.567	3.2
74	MP3C	Z	-.905	3.2
75	MP3C	Mx	.00021	3.2
76	MP2A	X	2.439	3
77	MP2A	Z	-1.408	3
78	MP2A	Mx	.002	3
79	MP2B	X	2.439	3
80	MP2B	Z	-1.408	3
81	MP2B	Mx	-.002	3
82	MP2C	X	3.205	3
83	MP2C	Z	-1.851	3
84	MP2C	Mx	.000429	3
85	MP1A	X	2.141	3
86	MP1A	Z	-1.236	3
87	MP1A	Mx	.001	3
88	MP1B	X	2.141	3
89	MP1B	Z	-1.236	3
90	MP1B	Mx	-.001	3
91	MP1C	X	3.193	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
92	MP1C	Z	-1.844	3
93	MP1C	Mx	.000427	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2B	X	.956	6
2	MP2B	Z	0	6
3	MP2B	Mx	-.000202	6
4	MP2B	X	.956	7
5	MP2B	Z	0	7
6	MP2B	Mx	-.000202	7
7	MP2B	X	.956	6
8	MP2B	Z	0	6
9	MP2B	Mx	-.000754	6
10	MP2B	X	.956	7
11	MP2B	Z	0	7
12	MP2B	Mx	-.000754	7
13	MP2A	X	6.442	1
14	MP2A	Z	0	1
15	MP2A	Mx	-.005	1
16	MP2A	X	6.442	5.4
17	MP2A	Z	0	5.4
18	MP2A	Mx	-.005	5.4
19	MP2B	X	8.891	1
20	MP2B	Z	0	1
21	MP2B	Mx	-.001	1
22	MP2B	X	8.891	5.4
23	MP2B	Z	0	5.4
24	MP2B	Mx	-.001	5.4
25	MP2C	X	9.326	1
26	MP2C	Z	0	1
27	MP2C	Mx	.009	1
28	MP2C	X	9.326	5.4
29	MP2C	Z	0	5.4
30	MP2C	Mx	.009	5.4
31	MP2A	X	2.81	1
32	MP2A	Z	0	1
33	MP2A	Mx	-.002	1
34	MP2A	X	2.81	5.4
35	MP2A	Z	0	5.4
36	MP2A	Mx	-.002	5.4
37	MP2B	X	5.614	1
38	MP2B	Z	0	1
39	MP2B	Mx	.006	1
40	MP2B	X	5.614	5.4
41	MP2B	Z	0	5.4
42	MP2B	Mx	.006	5.4
43	MP2C	X	6.111	1
44	MP2C	Z	0	1
45	MP2C	Mx	-.002	1
46	MP2C	X	6.111	5.4
47	MP2C	Z	0	5.4
48	MP2C	Mx	-.002	5.4
49	MP3A	X	1.339	2.2
50	MP3A	Z	0	2.2
51	MP3A	Mx	-.001	2.2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
52	MP3A	X	1.339	4.2
53	MP3A	Z	0	4.2
54	MP3A	Mx	-.001	4.2
55	MP3B	X	3.193	2.2
56	MP3B	Z	0	2.2
57	MP3B	Mx	.001	2.2
58	MP3B	X	3.193	4.2
59	MP3B	Z	0	4.2
60	MP3B	Mx	.001	4.2
61	MP3C	X	3.522	2.2
62	MP3C	Z	0	2.2
63	MP3C	Mx	.001	2.2
64	MP3C	X	3.522	4.2
65	MP3C	Z	0	4.2
66	MP3C	Mx	.001	4.2
67	MP3A	X	1.061	3.2
68	MP3A	Z	0	3.2
69	MP3A	Mx	.000707	3.2
70	MP3B	X	1.64	3.2
71	MP3B	Z	0	3.2
72	MP3B	Mx	-.000547	3.2
73	MP3C	X	1.743	3.2
74	MP3C	Z	0	3.2
75	MP3C	Mx	-.000397	3.2
76	MP2A	X	2.508	3
77	MP2A	Z	0	3
78	MP2A	Mx	.002	3
79	MP2B	X	3.431	3
80	MP2B	Z	0	3
81	MP2B	Mx	-.001	3
82	MP2C	X	3.594	3
83	MP2C	Z	0	3
84	MP2C	Mx	-.000819	3
85	MP1A	X	2.05	3
86	MP1A	Z	0	3
87	MP1A	Mx	.001	3
88	MP1B	X	3.316	3
89	MP1B	Z	0	3
90	MP1B	Mx	-.001	3
91	MP1C	X	3.541	3
92	MP1C	Z	0	3
93	MP1C	Mx	-.000807	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2B	X	1.003	6
2	MP2B	Z	.579	6
3	MP2B	Mx	.000386	6
4	MP2B	X	1.003	7
5	MP2B	Z	.579	7
6	MP2B	Mx	.000386	7
7	MP2B	X	1.003	6
8	MP2B	Z	.579	6
9	MP2B	Mx	-.000386	6
10	MP2B	X	1.003	7
11	MP2B	Z	.579	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
12	MP2B	Mx	-.000386	7
13	MP2A	X	6.286	1
14	MP2A	Z	3.629	1
15	MP2A	Mx	-.003	1
16	MP2A	X	6.286	5.4
17	MP2A	Z	3.629	5.4
18	MP2A	Mx	-.003	5.4
19	MP2B	X	8.407	1
20	MP2B	Z	4.854	1
21	MP2B	Mx	-.006	1
22	MP2B	X	8.407	5.4
23	MP2B	Z	4.854	5.4
24	MP2B	Mx	-.006	5.4
25	MP2C	X	6.747	1
26	MP2C	Z	3.896	1
27	MP2C	Mx	.008	1
28	MP2C	X	6.747	5.4
29	MP2C	Z	3.896	5.4
30	MP2C	Mx	.008	5.4
31	MP2A	X	3.243	1
32	MP2A	Z	1.872	1
33	MP2A	Mx	-.004	1
34	MP2A	X	3.243	5.4
35	MP2A	Z	1.872	5.4
36	MP2A	Mx	-.004	5.4
37	MP2B	X	5.671	1
38	MP2B	Z	3.274	1
39	MP2B	Mx	.004	1
40	MP2B	X	5.671	5.4
41	MP2B	Z	3.274	5.4
42	MP2B	Mx	.004	5.4
43	MP2C	X	3.771	1
44	MP2C	Z	2.177	1
45	MP2C	Mx	.000914	1
46	MP2C	X	3.771	5.4
47	MP2C	Z	2.177	5.4
48	MP2C	Mx	.000914	5.4
49	MP3A	X	1.694	2.2
50	MP3A	Z	.978	2.2
51	MP3A	Mx	-.001	2.2
52	MP3A	X	1.694	4.2
53	MP3A	Z	.978	4.2
54	MP3A	Mx	-.001	4.2
55	MP3B	X	3.3	2.2
56	MP3B	Z	1.905	2.2
57	MP3B	Mx	0	2.2
58	MP3B	X	3.3	4.2
59	MP3B	Z	1.905	4.2
60	MP3B	Mx	0	4.2
61	MP3C	X	2.044	2.2
62	MP3C	Z	1.18	2.2
63	MP3C	Mx	.002	2.2
64	MP3C	X	2.044	4.2
65	MP3C	Z	1.18	4.2
66	MP3C	Mx	.002	4.2
67	MP3A	X	1.086	3.2
68	MP3A	Z	.627	3.2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
69	MP3A	Mx	.000724	3.2
70	MP3B	X	1.587	3.2
71	MP3B	Z	.917	3.2
72	MP3B	Mx	0	3.2
73	MP3C	X	1.195	3.2
74	MP3C	Z	.69	3.2
75	MP3C	Mx	-.000705	3.2
76	MP2A	X	2.439	3
77	MP2A	Z	1.408	3
78	MP2A	Mx	.002	3
79	MP2B	X	3.238	3
80	MP2B	Z	1.869	3
81	MP2B	Mx	0	3
82	MP2C	X	2.612	3
83	MP2C	Z	1.508	3
84	MP2C	Mx	-.002	3
85	MP1A	X	2.141	3
86	MP1A	Z	1.236	3
87	MP1A	Mx	.001	3
88	MP1B	X	3.238	3
89	MP1B	Z	1.869	3
90	MP1B	Mx	0	3
91	MP1C	X	2.38	3
92	MP1C	Z	1.374	3
93	MP1C	Mx	-.001	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2B	X	.478	6
2	MP2B	Z	.828	6
3	MP2B	Mx	.000754	6
4	MP2B	X	.478	7
5	MP2B	Z	.828	7
6	MP2B	Mx	.000754	7
7	MP2B	X	.478	6
8	MP2B	Z	.828	6
9	MP2B	Mx	.000202	6
10	MP2B	X	.478	7
11	MP2B	Z	.828	7
12	MP2B	Mx	.000202	7
13	MP2A	X	4.446	1
14	MP2A	Z	7.7	1
15	MP2A	Mx	.001	1
16	MP2A	X	4.446	5.4
17	MP2A	Z	7.7	5.4
18	MP2A	Mx	.001	5.4
19	MP2B	X	4.446	1
20	MP2B	Z	7.7	1
21	MP2B	Mx	-.009	1
22	MP2B	X	4.446	5.4
23	MP2B	Z	7.7	5.4
24	MP2B	Mx	-.009	5.4
25	MP2C	X	3.27	1
26	MP2C	Z	5.664	1
27	MP2C	Mx	.006	1
28	MP2C	X	3.27	5.4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
29	MP2C	Z	5.664	5.4
30	MP2C	Mx	.006	5.4
31	MP2A	X	2.807	1
32	MP2A	Z	4.862	1
33	MP2A	Mx	-.006	1
34	MP2A	X	2.807	5.4
35	MP2A	Z	4.862	5.4
36	MP2A	Mx	-.006	5.4
37	MP2B	X	2.807	1
38	MP2B	Z	4.862	1
39	MP2B	Mx	.000902	1
40	MP2B	X	2.807	5.4
41	MP2B	Z	4.862	5.4
42	MP2B	Mx	.000902	5.4
43	MP2C	X	1.461	1
44	MP2C	Z	2.531	1
45	MP2C	Mx	.002	1
46	MP2C	X	1.461	5.4
47	MP2C	Z	2.531	5.4
48	MP2C	Mx	.002	5.4
49	MP3A	X	1.596	2.2
50	MP3A	Z	2.765	2.2
51	MP3A	Mx	-.001	2.2
52	MP3A	X	1.596	4.2
53	MP3A	Z	2.765	4.2
54	MP3A	Mx	-.001	4.2
55	MP3B	X	1.596	2.2
56	MP3B	Z	2.765	2.2
57	MP3B	Mx	-.001	2.2
58	MP3B	X	1.596	4.2
59	MP3B	Z	2.765	4.2
60	MP3B	Mx	-.001	4.2
61	MP3C	X	.707	2.2
62	MP3C	Z	1.224	2.2
63	MP3C	Mx	.001	2.2
64	MP3C	X	.707	4.2
65	MP3C	Z	1.224	4.2
66	MP3C	Mx	.001	4.2
67	MP3A	X	.82	3.2
68	MP3A	Z	1.42	3.2
69	MP3A	Mx	.000547	3.2
70	MP3B	X	.82	3.2
71	MP3B	Z	1.42	3.2
72	MP3B	Mx	.000547	3.2
73	MP3C	X	.542	3.2
74	MP3C	Z	.939	3.2
75	MP3C	Mx	-.000712	3.2
76	MP2A	X	1.715	3
77	MP2A	Z	2.971	3
78	MP2A	Mx	.001	3
79	MP2B	X	1.715	3
80	MP2B	Z	2.971	3
81	MP2B	Mx	.001	3
82	MP2C	X	1.273	3
83	MP2C	Z	2.204	3
84	MP2C	Mx	-.002	3
85	MP1A	X	1.658	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
86	MP1A	Z	2.872	3
87	MP1A	Mx	.001	3
88	MP1B	X	1.658	3
89	MP1B	Z	2.872	3
90	MP1B	Mx	.001	3
91	MP1C	X	1.05	3
92	MP1C	Z	1.82	3
93	MP1C	Mx	-.001	3

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2B	X	0	6
2	MP2B	Z	.553	6
3	MP2B	Mx	.000571	6
4	MP2B	X	0	7
5	MP2B	Z	.553	7
6	MP2B	Mx	.000571	7
7	MP2B	X	0	6
8	MP2B	Z	.553	6
9	MP2B	Mx	.000387	6
10	MP2B	X	0	7
11	MP2B	Z	.553	7
12	MP2B	Mx	.000387	7
13	MP2A	X	0	1
14	MP2A	Z	9.708	1
15	MP2A	Mx	.006	1
16	MP2A	X	0	5.4
17	MP2A	Z	9.708	5.4
18	MP2A	Mx	.006	5.4
19	MP2B	X	0	1
20	MP2B	Z	7.258	1
21	MP2B	Mx	-.008	1
22	MP2B	X	0	5.4
23	MP2B	Z	7.258	5.4
24	MP2B	Mx	-.008	5.4
25	MP2C	X	0	1
26	MP2C	Z	6.824	1
27	MP2C	Mx	.004	1
28	MP2C	X	0	5.4
29	MP2C	Z	6.824	5.4
30	MP2C	Mx	.004	5.4
31	MP2A	X	0	1
32	MP2A	Z	6.548	1
33	MP2A	Mx	-.004	1
34	MP2A	X	0	5.4
35	MP2A	Z	6.548	5.4
36	MP2A	Mx	-.004	5.4
37	MP2B	X	0	1
38	MP2B	Z	3.744	1
39	MP2B	Mx	-.001	1
40	MP2B	X	0	5.4
41	MP2B	Z	3.744	5.4
42	MP2B	Mx	-.001	5.4
43	MP2C	X	0	1
44	MP2C	Z	3.247	1
45	MP2C	Mx	.003	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
46	MP2C	X	0	5.4
47	MP2C	Z	3.247	5.4
48	MP2C	Mx	.003	5.4
49	MP3A	X	0	2.2
50	MP3A	Z	3.811	2.2
51	MP3A	Mx	0	2.2
52	MP3A	X	0	4.2
53	MP3A	Z	3.811	4.2
54	MP3A	Mx	0	4.2
55	MP3B	X	0	2.2
56	MP3B	Z	1.957	2.2
57	MP3B	Mx	-.001	2.2
58	MP3B	X	0	4.2
59	MP3B	Z	1.957	4.2
60	MP3B	Mx	-.001	4.2
61	MP3C	X	0	2.2
62	MP3C	Z	1.628	2.2
63	MP3C	Mx	.001	2.2
64	MP3C	X	0	4.2
65	MP3C	Z	1.628	4.2
66	MP3C	Mx	.001	4.2
67	MP3A	X	0	3.2
68	MP3A	Z	1.833	3.2
69	MP3A	Mx	0	3.2
70	MP3B	X	0	3.2
71	MP3B	Z	1.254	3.2
72	MP3B	Mx	.000724	3.2
73	MP3C	X	0	3.2
74	MP3C	Z	1.151	3.2
75	MP3C	Mx	-.000721	3.2
76	MP2A	X	0	3
77	MP2A	Z	3.738	3
78	MP2A	Mx	0	3
79	MP2B	X	0	3
80	MP2B	Z	2.816	3
81	MP2B	Mx	.002	3
82	MP2C	X	0	3
83	MP2C	Z	2.652	3
84	MP2C	Mx	-.002	3
85	MP1A	X	0	3
86	MP1A	Z	3.738	3
87	MP1A	Mx	0	3
88	MP1B	X	0	3
89	MP1B	Z	2.472	3
90	MP1B	Mx	.001	3
91	MP1C	X	0	3
92	MP1C	Z	2.248	3
93	MP1C	Mx	-.001	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2B	X	-.176	6
2	MP2B	Z	.304	6
3	MP2B	Mx	.000351	6
4	MP2B	X	-.176	7
5	MP2B	Z	.304	7

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
6	MP2B	Mx	.000351	7
7	MP2B	X	-.176	6
8	MP2B	Z	.304	6
9	MP2B	Mx	.000351	6
10	MP2B	X	-.176	7
11	MP2B	Z	.304	7
12	MP2B	Mx	.000351	7
13	MP2A	X	-4.446	1
14	MP2A	Z	7.7	1
15	MP2A	Mx	.009	1
16	MP2A	X	-4.446	5.4
17	MP2A	Z	7.7	5.4
18	MP2A	Mx	.009	5.4
19	MP2B	X	-3.221	1
20	MP2B	Z	5.579	1
21	MP2B	Mx	-.005	1
22	MP2B	X	-3.221	5.4
23	MP2B	Z	5.579	5.4
24	MP2B	Mx	-.005	5.4
25	MP2C	X	-4.179	1
26	MP2C	Z	7.238	1
27	MP2C	Mx	.000208	1
28	MP2C	X	-4.179	5.4
29	MP2C	Z	7.238	5.4
30	MP2C	Mx	.000208	5.4
31	MP2A	X	-2.807	1
32	MP2A	Z	4.862	1
33	MP2A	Mx	-.000902	1
34	MP2A	X	-2.807	5.4
35	MP2A	Z	4.862	5.4
36	MP2A	Mx	-.000902	5.4
37	MP2B	X	-1.405	1
38	MP2B	Z	2.433	1
39	MP2B	Mx	-.002	1
40	MP2B	X	-1.405	5.4
41	MP2B	Z	2.433	5.4
42	MP2B	Mx	-.002	5.4
43	MP2C	X	-2.502	1
44	MP2C	Z	4.333	1
45	MP2C	Mx	.005	1
46	MP2C	X	-2.502	5.4
47	MP2C	Z	4.333	5.4
48	MP2C	Mx	.005	5.4
49	MP3A	X	-1.596	2.2
50	MP3A	Z	2.765	2.2
51	MP3A	Mx	.001	2.2
52	MP3A	X	-1.596	4.2
53	MP3A	Z	2.765	4.2
54	MP3A	Mx	.001	4.2
55	MP3B	X	-.669	2.2
56	MP3B	Z	1.159	2.2
57	MP3B	Mx	-.001	2.2
58	MP3B	X	-.669	4.2
59	MP3B	Z	1.159	4.2
60	MP3B	Mx	-.001	4.2
61	MP3C	X	-1.395	2.2
62	MP3C	Z	2.416	2.2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
63	MP3C	Mx	.001	2.2
64	MP3C	X	-1.395	4.2
65	MP3C	Z	2.416	4.2
66	MP3C	Mx	.001	4.2
67	MP3A	X	-.82	3.2
68	MP3A	Z	1.42	3.2
69	MP3A	Mx	-.000547	3.2
70	MP3B	X	-.531	3.2
71	MP3B	Z	.919	3.2
72	MP3B	Mx	.000708	3.2
73	MP3C	X	-.757	3.2
74	MP3C	Z	1.311	3.2
75	MP3C	Mx	-.000649	3.2
76	MP2A	X	-1.715	3
77	MP2A	Z	2.971	3
78	MP2A	Mx	-.001	3
79	MP2B	X	-1.254	3
80	MP2B	Z	2.172	3
81	MP2B	Mx	.002	3
82	MP2C	X	-1.615	3
83	MP2C	Z	2.797	3
84	MP2C	Mx	-.001	3
85	MP1A	X	-1.658	3
86	MP1A	Z	2.872	3
87	MP1A	Mx	-.001	3
88	MP1B	X	-1.025	3
89	MP1B	Z	1.775	3
90	MP1B	Mx	.001	3
91	MP1C	X	-1.52	3
92	MP1C	Z	2.633	3
93	MP1C	Mx	-.001	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2B	X	-.479	6
2	MP2B	Z	.276	6
3	MP2B	Mx	.000386	6
4	MP2B	X	-.479	7
5	MP2B	Z	.276	7
6	MP2B	Mx	.000386	7
7	MP2B	X	-.479	6
8	MP2B	Z	.276	6
9	MP2B	Mx	.000571	6
10	MP2B	X	-.479	7
11	MP2B	Z	.276	7
12	MP2B	Mx	.000571	7
13	MP2A	X	-6.286	1
14	MP2A	Z	3.629	1
15	MP2A	Mx	.008	1
16	MP2A	X	-6.286	5.4
17	MP2A	Z	3.629	5.4
18	MP2A	Mx	.008	5.4
19	MP2B	X	-6.286	1
20	MP2B	Z	3.629	1
21	MP2B	Mx	-.003	1
22	MP2B	X	-6.286	5.4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
23	MP2B	Z	3.629	5.4
24	MP2B	Mx	-.003	5.4
25	MP2C	X	-8.322	1
26	MP2C	Z	4.805	1
27	MP2C	Mx	-.005	1
28	MP2C	X	-8.322	5.4
29	MP2C	Z	4.805	5.4
30	MP2C	Mx	-.005	5.4
31	MP2A	X	-3.243	1
32	MP2A	Z	1.872	1
33	MP2A	Mx	.001	1
34	MP2A	X	-3.243	5.4
35	MP2A	Z	1.872	5.4
36	MP2A	Mx	.001	5.4
37	MP2B	X	-3.243	1
38	MP2B	Z	1.872	1
39	MP2B	Mx	-.004	1
40	MP2B	X	-3.243	5.4
41	MP2B	Z	1.872	5.4
42	MP2B	Mx	-.004	5.4
43	MP2C	X	-5.573	1
44	MP2C	Z	3.218	1
45	MP2C	Mx	.005	1
46	MP2C	X	-5.573	5.4
47	MP2C	Z	3.218	5.4
48	MP2C	Mx	.005	5.4
49	MP3A	X	-1.694	2.2
50	MP3A	Z	.978	2.2
51	MP3A	Mx	.001	2.2
52	MP3A	X	-1.694	4.2
53	MP3A	Z	.978	4.2
54	MP3A	Mx	.001	4.2
55	MP3B	X	-1.694	2.2
56	MP3B	Z	.978	2.2
57	MP3B	Mx	-.001	2.2
58	MP3B	X	-1.694	4.2
59	MP3B	Z	.978	4.2
60	MP3B	Mx	-.001	4.2
61	MP3C	X	-3.236	2.2
62	MP3C	Z	1.868	2.2
63	MP3C	Mx	.00054	2.2
64	MP3C	X	-3.236	4.2
65	MP3C	Z	1.868	4.2
66	MP3C	Mx	.00054	4.2
67	MP3A	X	-1.086	3.2
68	MP3A	Z	.627	3.2
69	MP3A	Mx	-.000724	3.2
70	MP3B	X	-1.086	3.2
71	MP3B	Z	.627	3.2
72	MP3B	Mx	.000724	3.2
73	MP3C	X	-1.567	3.2
74	MP3C	Z	.905	3.2
75	MP3C	Mx	-.00021	3.2
76	MP2A	X	-2.439	3
77	MP2A	Z	1.408	3
78	MP2A	Mx	-.002	3
79	MP2B	X	-2.439	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
80	MP2B	Z	1.408	3
81	MP2B	Mx	.002	3
82	MP2C	X	-3.205	3
83	MP2C	Z	1.851	3
84	MP2C	Mx	-.000429	3
85	MP1A	X	-2.141	3
86	MP1A	Z	1.236	3
87	MP1A	Mx	-.001	3
88	MP1B	X	-2.141	3
89	MP1B	Z	1.236	3
90	MP1B	Mx	.001	3
91	MP1C	X	-3.193	3
92	MP1C	Z	1.844	3
93	MP1C	Mx	-.000427	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2B	X	-.956	6
2	MP2B	Z	0	6
3	MP2B	Mx	.000202	6
4	MP2B	X	-.956	7
5	MP2B	Z	0	7
6	MP2B	Mx	.000202	7
7	MP2B	X	-.956	6
8	MP2B	Z	0	6
9	MP2B	Mx	.000754	6
10	MP2B	X	-.956	7
11	MP2B	Z	0	7
12	MP2B	Mx	.000754	7
13	MP2A	X	-6.442	1
14	MP2A	Z	0	1
15	MP2A	Mx	.005	1
16	MP2A	X	-6.442	5.4
17	MP2A	Z	0	5.4
18	MP2A	Mx	.005	5.4
19	MP2B	X	-8.891	1
20	MP2B	Z	0	1
21	MP2B	Mx	.001	1
22	MP2B	X	-8.891	5.4
23	MP2B	Z	0	5.4
24	MP2B	Mx	.001	5.4
25	MP2C	X	-9.326	1
26	MP2C	Z	0	1
27	MP2C	Mx	-.009	1
28	MP2C	X	-9.326	5.4
29	MP2C	Z	0	5.4
30	MP2C	Mx	-.009	5.4
31	MP2A	X	-2.81	1
32	MP2A	Z	0	1
33	MP2A	Mx	.002	1
34	MP2A	X	-2.81	5.4
35	MP2A	Z	0	5.4
36	MP2A	Mx	.002	5.4
37	MP2B	X	-5.614	1
38	MP2B	Z	0	1
39	MP2B	Mx	-.006	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
40	MP2B	X	-5.614	5.4
41	MP2B	Z	0	5.4
42	MP2B	Mx	-.006	5.4
43	MP2C	X	-6.111	1
44	MP2C	Z	0	1
45	MP2C	Mx	.002	1
46	MP2C	X	-6.111	5.4
47	MP2C	Z	0	5.4
48	MP2C	Mx	.002	5.4
49	MP3A	X	-1.339	2.2
50	MP3A	Z	0	2.2
51	MP3A	Mx	.001	2.2
52	MP3A	X	-1.339	4.2
53	MP3A	Z	0	4.2
54	MP3A	Mx	.001	4.2
55	MP3B	X	-3.193	2.2
56	MP3B	Z	0	2.2
57	MP3B	Mx	-.001	2.2
58	MP3B	X	-3.193	4.2
59	MP3B	Z	0	4.2
60	MP3B	Mx	-.001	4.2
61	MP3C	X	-3.522	2.2
62	MP3C	Z	0	2.2
63	MP3C	Mx	-.001	2.2
64	MP3C	X	-3.522	4.2
65	MP3C	Z	0	4.2
66	MP3C	Mx	-.001	4.2
67	MP3A	X	-1.061	3.2
68	MP3A	Z	0	3.2
69	MP3A	Mx	-.000707	3.2
70	MP3B	X	-1.64	3.2
71	MP3B	Z	0	3.2
72	MP3B	Mx	.000547	3.2
73	MP3C	X	-1.743	3.2
74	MP3C	Z	0	3.2
75	MP3C	Mx	.000397	3.2
76	MP2A	X	-2.508	3
77	MP2A	Z	0	3
78	MP2A	Mx	-.002	3
79	MP2B	X	-3.431	3
80	MP2B	Z	0	3
81	MP2B	Mx	.001	3
82	MP2C	X	-3.594	3
83	MP2C	Z	0	3
84	MP2C	Mx	.000819	3
85	MP1A	X	-2.05	3
86	MP1A	Z	0	3
87	MP1A	Mx	-.001	3
88	MP1B	X	-3.316	3
89	MP1B	Z	0	3
90	MP1B	Mx	.001	3
91	MP1C	X	-3.541	3
92	MP1C	Z	0	3
93	MP1C	Mx	.000807	3

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

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2B	X	-1.003	6
2	MP2B	Z	-.579	6
3	MP2B	Mx	-.000386	6
4	MP2B	X	-1.003	7
5	MP2B	Z	-.579	7
6	MP2B	Mx	-.000386	7
7	MP2B	X	-1.003	6
8	MP2B	Z	-.579	6
9	MP2B	Mx	.000386	6
10	MP2B	X	-1.003	7
11	MP2B	Z	-.579	7
12	MP2B	Mx	.000386	7
13	MP2A	X	-6.286	1
14	MP2A	Z	-3.629	1
15	MP2A	Mx	.003	1
16	MP2A	X	-6.286	5.4
17	MP2A	Z	-3.629	5.4
18	MP2A	Mx	.003	5.4
19	MP2B	X	-8.407	1
20	MP2B	Z	-4.854	1
21	MP2B	Mx	.006	1
22	MP2B	X	-8.407	5.4
23	MP2B	Z	-4.854	5.4
24	MP2B	Mx	.006	5.4
25	MP2C	X	-6.747	1
26	MP2C	Z	-3.896	1
27	MP2C	Mx	-.008	1
28	MP2C	X	-6.747	5.4
29	MP2C	Z	-3.896	5.4
30	MP2C	Mx	-.008	5.4
31	MP2A	X	-3.243	1
32	MP2A	Z	-1.872	1
33	MP2A	Mx	.004	1
34	MP2A	X	-3.243	5.4
35	MP2A	Z	-1.872	5.4
36	MP2A	Mx	.004	5.4
37	MP2B	X	-5.671	1
38	MP2B	Z	-3.274	1
39	MP2B	Mx	-.004	1
40	MP2B	X	-5.671	5.4
41	MP2B	Z	-3.274	5.4
42	MP2B	Mx	-.004	5.4
43	MP2C	X	-3.771	1
44	MP2C	Z	-2.177	1
45	MP2C	Mx	-.000914	1
46	MP2C	X	-3.771	5.4
47	MP2C	Z	-2.177	5.4
48	MP2C	Mx	-.000914	5.4
49	MP3A	X	-1.694	2.2
50	MP3A	Z	-.978	2.2
51	MP3A	Mx	.001	2.2
52	MP3A	X	-1.694	4.2
53	MP3A	Z	-.978	4.2
54	MP3A	Mx	.001	4.2
55	MP3B	X	-3.3	2.2
56	MP3B	Z	-1.905	2.2
57	MP3B	Mx	0	2.2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP3B	X	-3.3	4.2
59	MP3B	Z	-1.905	4.2
60	MP3B	Mx	0	4.2
61	MP3C	X	-2.044	2.2
62	MP3C	Z	-1.18	2.2
63	MP3C	Mx	-.002	2.2
64	MP3C	X	-2.044	4.2
65	MP3C	Z	-1.18	4.2
66	MP3C	Mx	-.002	4.2
67	MP3A	X	-1.086	3.2
68	MP3A	Z	-.627	3.2
69	MP3A	Mx	-.000724	3.2
70	MP3B	X	-1.587	3.2
71	MP3B	Z	-.917	3.2
72	MP3B	Mx	0	3.2
73	MP3C	X	-1.195	3.2
74	MP3C	Z	-.69	3.2
75	MP3C	Mx	.000705	3.2
76	MP2A	X	-2.439	3
77	MP2A	Z	-1.408	3
78	MP2A	Mx	-.002	3
79	MP2B	X	-3.238	3
80	MP2B	Z	-1.869	3
81	MP2B	Mx	0	3
82	MP2C	X	-2.612	3
83	MP2C	Z	-1.508	3
84	MP2C	Mx	.002	3
85	MP1A	X	-2.141	3
86	MP1A	Z	-1.236	3
87	MP1A	Mx	-.001	3
88	MP1B	X	-3.238	3
89	MP1B	Z	-1.869	3
90	MP1B	Mx	0	3
91	MP1C	X	-2.38	3
92	MP1C	Z	-1.374	3
93	MP1C	Mx	.001	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2B	X	-.478	6
2	MP2B	Z	-.828	6
3	MP2B	Mx	-.000754	6
4	MP2B	X	-.478	7
5	MP2B	Z	-.828	7
6	MP2B	Mx	-.000754	7
7	MP2B	X	-.478	6
8	MP2B	Z	-.828	6
9	MP2B	Mx	-.000202	6
10	MP2B	X	-.478	7
11	MP2B	Z	-.828	7
12	MP2B	Mx	-.000202	7
13	MP2A	X	-4.446	1
14	MP2A	Z	-7.7	1
15	MP2A	Mx	-.001	1
16	MP2A	X	-4.446	5.4
17	MP2A	Z	-7.7	5.4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
18	MP2A	Mx	-.001	5.4
19	MP2B	X	-4.446	1
20	MP2B	Z	-7.7	1
21	MP2B	Mx	.009	1
22	MP2B	X	-4.446	5.4
23	MP2B	Z	-7.7	5.4
24	MP2B	Mx	.009	5.4
25	MP2C	X	-3.27	1
26	MP2C	Z	-5.664	1
27	MP2C	Mx	-.006	1
28	MP2C	X	-3.27	5.4
29	MP2C	Z	-5.664	5.4
30	MP2C	Mx	-.006	5.4
31	MP2A	X	-2.807	1
32	MP2A	Z	-4.862	1
33	MP2A	Mx	.006	1
34	MP2A	X	-2.807	5.4
35	MP2A	Z	-4.862	5.4
36	MP2A	Mx	.006	5.4
37	MP2B	X	-2.807	1
38	MP2B	Z	-4.862	1
39	MP2B	Mx	-.000902	1
40	MP2B	X	-2.807	5.4
41	MP2B	Z	-4.862	5.4
42	MP2B	Mx	-.000902	5.4
43	MP2C	X	-1.461	1
44	MP2C	Z	-2.531	1
45	MP2C	Mx	-.002	1
46	MP2C	X	-1.461	5.4
47	MP2C	Z	-2.531	5.4
48	MP2C	Mx	-.002	5.4
49	MP3A	X	-1.596	2.2
50	MP3A	Z	-2.765	2.2
51	MP3A	Mx	.001	2.2
52	MP3A	X	-1.596	4.2
53	MP3A	Z	-2.765	4.2
54	MP3A	Mx	.001	4.2
55	MP3B	X	-1.596	2.2
56	MP3B	Z	-2.765	2.2
57	MP3B	Mx	.001	2.2
58	MP3B	X	-1.596	4.2
59	MP3B	Z	-2.765	4.2
60	MP3B	Mx	.001	4.2
61	MP3C	X	-.707	2.2
62	MP3C	Z	-1.224	2.2
63	MP3C	Mx	-.001	2.2
64	MP3C	X	-.707	4.2
65	MP3C	Z	-1.224	4.2
66	MP3C	Mx	-.001	4.2
67	MP3A	X	-.82	3.2
68	MP3A	Z	-1.42	3.2
69	MP3A	Mx	-.000547	3.2
70	MP3B	X	-.82	3.2
71	MP3B	Z	-1.42	3.2
72	MP3B	Mx	-.000547	3.2
73	MP3C	X	-.542	3.2
74	MP3C	Z	-.939	3.2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
75	MP3C	Mx	.000712	3.2
76	MP2A	X	-1.715	3
77	MP2A	Z	-2.971	3
78	MP2A	Mx	-.001	3
79	MP2B	X	-1.715	3
80	MP2B	Z	-2.971	3
81	MP2B	Mx	-.001	3
82	MP2C	X	-1.273	3
83	MP2C	Z	-2.204	3
84	MP2C	Mx	.002	3
85	MP1A	X	-1.658	3
86	MP1A	Z	-2.872	3
87	MP1A	Mx	-.001	3
88	MP1B	X	-1.658	3
89	MP1B	Z	-2.872	3
90	MP1B	Mx	-.001	3
91	MP1C	X	-1.05	3
92	MP1C	Z	-1.82	3
93	MP1C	Mx	.001	3

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M12	Y	-500	%100

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M10	Y	-500	%100

Member Point Loads (BLC 79 : Lv1)

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

Member Point Loads (BLC 80 : Lv2)

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

Member Point Loads (BLC 81 : Antenna Ev)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2B	Y	0	6
2	MP2B	My	0	6
3	MP2B	Mz	0	6
4	MP2B	Y	0	7
5	MP2B	My	0	7
6	MP2B	Mz	0	7
7	MP2B	Y	0	6
8	MP2B	My	0	6
9	MP2B	Mz	0	6
10	MP2B	Y	0	7
11	MP2B	My	0	7
12	MP2B	Mz	0	7
13	MP2A	Y	0	1
14	MP2A	My	0	1
15	MP2A	Mz	0	1
16	MP2A	Y	0	5.4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
17	MP2A	My	0	5.4
18	MP2A	Mz	0	5.4
19	MP2B	Y	0	1
20	MP2B	My	0	1
21	MP2B	Mz	0	1
22	MP2B	Y	0	5.4
23	MP2B	My	0	5.4
24	MP2B	Mz	0	5.4
25	MP2C	Y	0	1
26	MP2C	My	0	1
27	MP2C	Mz	0	1
28	MP2C	Y	0	5.4
29	MP2C	My	0	5.4
30	MP2C	Mz	0	5.4
31	MP2A	Y	0	1
32	MP2A	My	0	1
33	MP2A	Mz	0	1
34	MP2A	Y	0	5.4
35	MP2A	My	0	5.4
36	MP2A	Mz	0	5.4
37	MP2B	Y	0	1
38	MP2B	My	0	1
39	MP2B	Mz	0	1
40	MP2B	Y	0	5.4
41	MP2B	My	0	5.4
42	MP2B	Mz	0	5.4
43	MP2C	Y	0	1
44	MP2C	My	0	1
45	MP2C	Mz	0	1
46	MP2C	Y	0	5.4
47	MP2C	My	0	5.4
48	MP2C	Mz	0	5.4
49	MP3A	Y	0	2.2
50	MP3A	My	0	2.2
51	MP3A	Mz	0	2.2
52	MP3A	Y	0	4.2
53	MP3A	My	0	4.2
54	MP3A	Mz	0	4.2
55	MP3B	Y	0	2.2
56	MP3B	My	0	2.2
57	MP3B	Mz	0	2.2
58	MP3B	Y	0	4.2
59	MP3B	My	0	4.2
60	MP3B	Mz	0	4.2
61	MP3C	Y	0	2.2
62	MP3C	My	0	2.2
63	MP3C	Mz	0	2.2
64	MP3C	Y	0	4.2
65	MP3C	My	0	4.2
66	MP3C	Mz	0	4.2
67	MP3A	Y	0	3.2
68	MP3A	My	0	3.2
69	MP3A	Mz	0	3.2
70	MP3B	Y	0	3.2
71	MP3B	My	0	3.2
72	MP3B	Mz	0	3.2
73	MP3C	Y	0	3.2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
74	MP3C	My	0	3.2
75	MP3C	Mz	0	3.2
76	MP2A	Y	0	3
77	MP2A	My	0	3
78	MP2A	Mz	0	3
79	MP2B	Y	0	3
80	MP2B	My	0	3
81	MP2B	Mz	0	3
82	MP2C	Y	0	3
83	MP2C	My	0	3
84	MP2C	Mz	0	3
85	MP1A	Y	0	3
86	MP1A	My	0	3
87	MP1A	Mz	0	3
88	MP1B	Y	0	3
89	MP1B	My	0	3
90	MP1B	Mz	0	3
91	MP1C	Y	0	3
92	MP1C	My	0	3
93	MP1C	Mz	0	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2B	Z	-.264	6
2	MP2B	Mx	-.000273	6
3	MP2B	Z	-.264	7
4	MP2B	Mx	-.000273	7
5	MP2B	Z	-.264	6
6	MP2B	Mx	-.000185	6
7	MP2B	Z	-.264	7
8	MP2B	Mx	-.000185	7
9	MP2A	Z	-.969	1
10	MP2A	Mx	-.000646	1
11	MP2A	Z	-.969	5.4
12	MP2A	Mx	-.000646	5.4
13	MP2B	Z	-.969	1
14	MP2B	Mx	.001	1
15	MP2B	Z	-.969	5.4
16	MP2B	Mx	.001	5.4
17	MP2C	Z	-.969	1
18	MP2C	Mx	-.000538	1
19	MP2C	Z	-.969	5.4
20	MP2C	Mx	-.000538	5.4
21	MP2A	Z	-.655	1
22	MP2A	Mx	.000437	1
23	MP2A	Z	-.655	5.4
24	MP2A	Mx	.000437	5.4
25	MP2B	Z	-.655	1
26	MP2B	Mx	.000255	1
27	MP2B	Z	-.655	5.4
28	MP2B	Mx	.000255	5.4
29	MP2C	Z	-.655	1
30	MP2C	Mx	-.000663	1
31	MP2C	Z	-.655	5.4
32	MP2C	Mx	-.000663	5.4
33	MP3A	Z	-.86	2.2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
34	MP3A	Mx	0	2.2
35	MP3A	Z	-.86	4.2
36	MP3A	Mx	0	4.2
37	MP3B	Z	-.86	2.2
38	MP3B	Mx	.00062	2.2
39	MP3B	Z	-.86	4.2
40	MP3B	Mx	.00062	4.2
41	MP3C	Z	-.86	2.2
42	MP3C	Mx	-.000673	2.2
43	MP3C	Z	-.86	4.2
44	MP3C	Mx	-.000673	4.2
45	MP3A	Z	-.462	3.2
46	MP3A	Mx	0	3.2
47	MP3B	Z	-.462	3.2
48	MP3B	Mx	-.000267	3.2
49	MP3C	Z	-.462	3.2
50	MP3C	Mx	.000289	3.2
51	MP2A	Z	-2.532	3
52	MP2A	Mx	0	3
53	MP2B	Z	-2.532	3
54	MP2B	Mx	-.001	3
55	MP2C	Z	-2.532	3
56	MP2C	Mx	.002	3
57	MP1A	Z	-2.109	3
58	MP1A	Mx	0	3
59	MP1B	Z	-2.109	3
60	MP1B	Mx	-.001	3
61	MP1C	Z	-2.109	3
62	MP1C	Mx	.001	3

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2B	X	.264	6
2	MP2B	Mx	-5.6e-5	6
3	MP2B	X	.264	7
4	MP2B	Mx	-5.6e-5	7
5	MP2B	X	.264	6
6	MP2B	Mx	-.000208	6
7	MP2B	X	.264	7
8	MP2B	Mx	-.000208	7
9	MP2A	X	.969	1
10	MP2A	Mx	-.000808	1
11	MP2A	X	.969	5.4
12	MP2A	Mx	-.000808	5.4
13	MP2B	X	.969	1
14	MP2B	Mx	-.000156	1
15	MP2B	X	.969	5.4
16	MP2B	Mx	-.000156	5.4
17	MP2C	X	.969	1
18	MP2C	Mx	.000883	1
19	MP2C	X	.969	5.4
20	MP2C	Mx	.000883	5.4
21	MP2A	X	.655	1
22	MP2A	Mx	-.000546	1
23	MP2A	X	.655	5.4
24	MP2A	Mx	-.000546	5.4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
25	MP2B	X	.655	1
26	MP2B	Mx	.000652	1
27	MP2B	X	.655	5.4
28	MP2B	Mx	.000652	5.4
29	MP2C	X	.655	1
30	MP2C	Mx	-.000224	1
31	MP2C	X	.655	5.4
32	MP2C	Mx	-.000224	5.4
33	MP3A	X	.86	2.2
34	MP3A	Mx	-.000716	2.2
35	MP3A	X	.86	4.2
36	MP3A	Mx	-.000716	4.2
37	MP3B	X	.86	2.2
38	MP3B	Mx	.000358	2.2
39	MP3B	X	.86	4.2
40	MP3B	Mx	.000358	4.2
41	MP3C	X	.86	2.2
42	MP3C	Mx	.000245	2.2
43	MP3C	X	.86	4.2
44	MP3C	Mx	.000245	4.2
45	MP3A	X	.462	3.2
46	MP3A	Mx	.000308	3.2
47	MP3B	X	.462	3.2
48	MP3B	Mx	-.000154	3.2
49	MP3C	X	.462	3.2
50	MP3C	Mx	-.000105	3.2
51	MP2A	X	2.532	3
52	MP2A	Mx	.002	3
53	MP2B	X	2.532	3
54	MP2B	Mx	-.000844	3
55	MP2C	X	2.532	3
56	MP2C	Mx	-.000577	3
57	MP1A	X	2.109	3
58	MP1A	Mx	.001	3
59	MP1B	X	2.109	3
60	MP1B	Mx	-.000703	3
61	MP1C	X	2.109	3
62	MP1C	Mx	-.000481	3

Joint Loads and Enforced Displacements

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

Member Area Loads (BLC 39 : Structure D)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N106	N104A	N123		Y	Two Way	-.005
2	N167	N166	N169		Y	Two Way	-.005
3	N107	N106A	N109		Y	Two Way	-.005

Member Area Loads (BLC 40 : Structure Di)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N106	N104A	N123		Y	Two Way	-.015
2	N167	N166	N169		Y	Two Way	-.015

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

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
3	N107	N106A	N109		Y	Two Way	-.015

Envelope Joint Reactions

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N87	max	2821.885	10	1113.88	15	795.216	1	.047	7	1.262	12	-.301	10
2		min	-1360.477	4	290.804	9	-1647.939	7	-.949	37	-1.259	6	-1.23	16
3	N90	max	1233.953	11	1051.011	23	989.834	1	-.13	7	1.187	8	.866	22
4		min	-2657.253	5	261.56	5	-1809.477	7	-1.128	25	-1.176	2	.165	4
5	N150A	max	1087.617	10	1100.387	19	3107.112	1	1.195	19	1.282	4	.256	22
6		min	-1086.948	4	280.893	1	-1420.764	7	.293	1	-1.269	10	-.093	4
7	N189	max	30.106	10	1700.453	13	-103.413	7	.425	13	.008	4	0	10
8		min	-30.109	4	71.783	7	-2572.742	13	.018	7	-.008	10	0	4
9	N205	max	-90.926	3	1698.386	21	1284.954	21	-.009	3	.008	12	-.016	3
10		min	-2225.168	21	72.797	3	52.493	3	-.212	21	-.008	6	-.368	21
11	N209	max	2189.629	17	1671.902	17	1264.022	17	-.006	11	.008	8	.362	17
12		min	61.646	11	51.067	11	35.59	11	-.209	17	-.008	2	.011	11
13	Totals:	max	3852.974	10	7720.946	21	3730.784	1						
14		min	-3852.973	4	2239.98	66	-3730.785	7						

Joint Reactions (By Combination)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
1	1	N87	7.507	474.49	795.216	-.266	.617	-.445
2	1	N90	107.614	458.477	989.834	-.446	-.636	.322
3	1	N150A	-83.34	280.893	3107.112	.293	.079	.083
4	1	N189	-.004	1118.083	-1700.532	.28	0	0
5	1	N205	-436.399	339.135	278.742	-.042	.006	-.073
6	1	N209	404.625	315.561	260.411	-.04	-.006	.068
7	1	Totals:	.003	2986.64	3730.784			
8	1	COG (ft):	X: -.065	Y: .889	Z: -.012			
9	2	N87	-949.505	521.583	726.297	-.241	-.154	-.519
10	2	N90	-1130.416	396.012	538.37	-.434	-1.176	.241
11	2	N150A	-318.146	294.825	2959.276	.306	-.051	.007
12	2	N189	-10.171	1051.167	-1595.194	.263	.002	0
13	2	N205	-186.423	146.508	118.85	-.018	.002	-.032
14	2	N209	741.207	576.543	462.763	-.072	-.008	.125
15	2	Totals:	-1853.454	2986.639	3210.361			
16	2	COG (ft):	X: -.065	Y: .889	Z: -.012			
17	3	N87	-1311.186	538.303	644.672	-.189	-.015	-.571
18	3	N90	-2114.514	327.881	-451.041	-.374	-.539	.182
19	3	N150A	-820.087	331.443	2294.691	.347	.714	-.06
20	3	N189	-23.063	869.976	-1316.494	.217	.006	0
21	3	N205	-90.926	72.797	52.493	-.009	0	-.016
22	3	N209	1096.568	846.238	659.78	-.106	-.006	.183
23	3	Totals:	-3263.208	2986.638	1884.101			
24	3	COG (ft):	X: -.065	Y: .889	Z: -.012			
25	4	N87	-1360.477	525.684	356.475	-.119	.091	-.599
26	4	N90	-2562.737	278.324	-1309.865	-.296	.232	.165
27	4	N150A	-1086.948	394.049	975.762	.424	1.282	-.093
28	4	N189	-30.109	605.942	-919.037	.151	.008	0
29	4	N205	-182.479	136.369	94.131	-.017	-.002	-.03
30	4	N209	1369.777	1046.27	802.612	-.131	-.003	.226
31	4	Totals:	-3852.973	2986.638	.078			
32	4	COG (ft):	X: -.065	Y: .889	Z: -.012			
33	5	N87	-993.697	484.765	-437.785	-.038	-.697	-.59

Joint Reactions (By Combination) (Continued)

LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
34	5	N90	-2657.253	261.56	-1642.507	-.225	.079
35	5	N150A	-710.84	468.575	-429.547	.512	.628
36	5	N189	-23.196	330.931	-504.537	.083	.006
37	5	N205	-441.305	325.56	227.997	-.04	-.006
38	5	N209	1468.89	1115.248	848.04	-.139	0
39	5	Totals:	-3357.402	2986.639	-1938.339		
40	5	COG (ft):	X: -.065	Y: .889	Z: -.012		
41	6	N87	69.528	421.107	-1309.911	.027	-1.259
42	6	N90	-2389.691	275.983	-1764.788	-.165	-.08
43	6	N150A	-159.488	521.876	-1227.991	.569	-.185
44	6	N189	-9.716	135.84	-204.274	.034	.002
45	6	N205	-790.982	591.115	421.904	-.074	-.008
46	6	N209	1372.513	1040.718	780.596	-.13	.002
47	6	Totals:	-1907.836	2986.639	-3304.463		
48	6	COG (ft):	X: -.065	Y: .889	Z: -.012		
49	7	N87	1454.478	354.253	-1647.939	.047	-.614
50	7	N90	-1530.636	316.69	-1809.477	-.13	.646
51	7	N150A	84.364	536.987	-1420.764	.584	-.067
52	7	N189	-.002	71.783	-103.413	.018	0
53	7	N205	-1133.505	856.532	627.848	-.107	-.006
54	7	N209	1125.299	850.394	622.959	-.106	.006
55	7	Totals:	-.003	2986.64	-3730.785		
56	7	COG (ft):	X: -.065	Y: .889	Z: -.012		
57	8	N87	2411.753	307.46	-1578.019	.021	.158
58	8	N90	-292.935	378.971	-1358.536	-.142	1.187
59	8	N150A	320.434	522.938	-1273.153	.571	.063
60	8	N189	9.709	138.598	-208.564	.035	-.002
61	8	N205	-1384.088	1049.366	787.473	-.131	-.003
62	8	N209	788.582	589.308	420.438	-.074	.008
63	8	Totals:	1853.455	2986.641	-3210.362		
64	8	COG (ft):	X: -.065	Y: .889	Z: -.012		
65	9	N87	2773.57	290.804	-1497.955	-.03	.017
66	9	N90	691.648	447.324	-368.665	-.202	.55
67	9	N150A	820.987	486.067	-608.592	.529	-.702
68	9	N189	23.183	319.485	-486.728	.08	-.006
69	9	N205	-1479.606	1123.256	854.417	-.14	0
70	9	N209	433.428	319.705	223.422	-.04	.006
71	9	Totals:	3263.209	2986.642	-1884.102		
72	9	COG (ft):	X: -.065	Y: .889	Z: -.012		
73	10	N87	2821.885	303.287	-1210.635	-.1	-.089
74	10	N90	1140.801	497.185	489.296	-.28	-.221
75	10	N150A	1087.617	423.278	710.736	.452	-1.269
76	10	N189	30.106	583.369	-883.91	.146	-.008
77	10	N205	-1387.72	1059.622	813.11	-.132	.002
78	10	N209	160.285	119.9	81.325	-.015	.002
79	10	Totals:	3852.974	2986.641	-.079		
80	10	COG (ft):	X: -.065	Y: .889	Z: -.012		
81	11	N87	2455.753	343.924	-414.883	-.181	.699
82	11	N90	1233.953	514.022	822.746	-.351	-.069
83	11	N150A	711.811	348.962	2115.079	.365	-.616
84	11	N189	23.037	858.501	-1298.633	.215	-.006
85	11	N205	-1128.799	870.164	678.44	-.109	.006
86	11	N209	61.646	51.067	35.59	-.006	0
87	11	Totals:	3357.403	2986.641	1938.339		
88	11	COG (ft):	X: -.065	Y: .889	Z: -.012		
89	12	N87	1393.168	407.401	457.149	-.246	1.262
90	12	N90	965.928	499.461	946.426	-.411	.089

Joint Reactions (By Combination) (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
91	12	N150A	159.337	295.947	2913.273	.308	.197	.154
92	12	N189	10.154	1053.853	-1599.373	.263	-.003	0
93	12	N205	-778.868	604.479	484.487	-.076	.008	-.131
94	12	N209	158.117	125.499	102.501	-.016	-.002	.027
95	12	Totals:	1907.837	2986.64	3304.463			
96	12	COG (ft):	X: -.065	Y: .889	Z: -.012			
97	13	N87	1639.717	1094.316	-702.947	-.327	.198	-1.182
98	13	N90	-1580.05	1033.767	-636.399	-.831	-.191	.82
99	13	N150A	-19.024	1020.726	2916.776	1.102	.025	.21
100	13	N189	-.115	1700.453	-2572.742	.425	0	0
101	13	N205	-1894.927	1450.913	1101.833	-.181	.002	-.314
102	13	N209	1854.4	1420.772	1078.164	-.178	-.002	.307
103	13	Totals:	.002	7720.946	1184.685			
104	13	COG (ft):	X: -.058	Y: .914	Z: -.01			
105	14	N87	1335.739	1108.642	-708.602	-.318	-.024	-1.206
106	14	N90	-1971.345	1014.107	-782.152	-.827	-.345	.795
107	14	N150A	-97.462	1024.872	2857.995	1.106	.006	.186
108	14	N189	-2.876	1679.464	-2539.431	.42	0	0
109	14	N205	-1815.618	1390.281	1051.545	-.174	0	-.301
110	14	N209	1961.629	1503.579	1142.471	-.188	-.002	.325
111	14	Totals:	-589.934	7720.945	1021.825			
112	14	COG (ft):	X: -.058	Y: .914	Z: -.01			
113	15	N87	1216.564	1113.88	-737.984	-.302	-.004	-1.222
114	15	N90	-2288.21	993.359	-1079.339	-.809	-.171	.777
115	15	N150A	-241.366	1037.154	2626.979	1.121	.224	.164
116	15	N189	-6.698	1621.137	-2449.185	.405	.002	0
117	15	N205	-1785.593	1367.401	1031.044	-.171	0	-.296
118	15	N209	2073.147	1588.014	1204.425	-.199	-.002	.344
119	15	Totals:	-1032.156	7720.945	595.94			
120	15	COG (ft):	X: -.058	Y: .914	Z: -.01			
121	16	N87	1215.843	1109.848	-838.241	-.279	.009	-1.23
122	16	N90	-2440.629	978.493	-1341.953	-.784	.05	.772
123	16	N150A	-317.923	1057.023	2209.297	1.145	.383	.154
124	16	N189	-8.785	1537.659	-2323.118	.384	.002	0
125	16	N205	-1815.208	1387.95	1044.996	-.173	0	-.301
126	16	N209	2158.122	1649.973	1249.043	-.206	0	.357
127	16	Totals:	-1208.581	7720.945	.024			
128	16	COG (ft):	X: -.058	Y: .914	Z: -.01			
129	17	N87	1351.518	1096.759	-1084.62	-.253	-.216	-1.227
130	17	N90	-2471.432	973.18	-1453.397	-.761	.025	.778
131	17	N150A	-216.487	1079.266	1773.109	1.171	.203	.159
132	17	N189	-6.708	1452.047	-2193.733	.363	.002	0
133	17	N205	-1897.329	1447.791	1087.951	-.181	-.002	-.314
134	17	N209	2189.629	1671.902	1264.022	-.209	0	.362
135	17	Totals:	-1050.809	7720.945	-606.667			
136	17	COG (ft):	X: -.058	Y: .914	Z: -.01			
137	18	N87	1685.421	1076.91	-1356.093	-.233	-.375	-1.21
138	18	N90	-2377.398	977.42	-1490.325	-.742	-.001	.794
139	18	N150A	-58.407	1095.179	1511.689	1.189	-.028	.177
140	18	N189	-2.83	1390.687	-2098.772	.348	0	0
141	18	N205	-2007.628	1531.342	1149.26	-.191	-.002	-.332
142	18	N209	2160.139	1649.407	1243.789	-.206	0	.357
143	18	Totals:	-600.703	7720.946	-1040.452			
144	18	COG (ft):	X: -.058	Y: .914	Z: -.01			
145	19	N87	2110.385	1056.502	-1477.686	-.227	-.198	-1.185
146	19	N90	-2100.134	990.379	-1489.073	-.731	.209	.818
147	19	N150A	23.929	1100.387	1438.801	1.195	-.011	.2

Joint Reactions (By Combination) (Continued)

LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
148	19	N189	- .102	1369.372	-2064.956	.342	0
149	19	N205	-2115.789	1614.85	1214.148	-.202	-.35
150	19	N209	2081.711	1589.455	1194.08	-.199	.344
151	19	Totals:	0	7720.946	-1184.685		
152	19	COG (ft):	X: -.058	Y: .914	Z: -.01		
153	20	N87	2414.374	1042.209	-1471.935	-.235	.024
154	20	N90	-1708.872	1010.019	-1343.372	-.735	.364
155	20	N150A	102.484	1096.228	1497.572	1.19	.008
156	20	N189	2.623	1390.356	-2098.256	.348	0
157	20	N205	-2195.145	1675.495	1264.41	-.209	0
158	20	N209	1974.473	1506.639	1129.755	-.188	.002
159	20	Totals:	589.936	7720.946	-1021.825		
160	20	COG (ft):	X: -.058	Y: .914	Z: -.01		
161	21	N87	2533.538	1036.981	-1442.681	-.252	.004
162	21	N90	-1391.954	1030.789	-1046.154	-.754	.189
163	21	N150A	246.273	1083.917	1728.608	1.176	-.21
164	21	N189	6.496	1448.663	-2188.464	.362	-.002
165	21	N205	-2225.168	1698.386	1284.954	-.212	0
166	21	N209	1862.973	1422.211	1067.797	-.178	.002
167	21	Totals:	1032.158	7720.946	-595.939		
168	21	COG (ft):	X: -.058	Y: .914	Z: -.01		
169	22	N87	2534.18	1040.998	-1342.509	-.274	-.009
170	22	N90	-1239.445	1045.688	-783.605	-.779	-.031
171	22	N150A	322.809	1064.028	2146.334	1.152	-.369
172	22	N189	8.568	1532.13	-2314.51	.383	-.002
173	22	N205	-2195.529	1677.834	1271.03	-.209	0
174	22	N209	1777.999	1360.267	1023.238	-.17	0
175	22	Totals:	1208.582	7720.946	-.023		
176	22	COG (ft):	X: -.058	Y: .914	Z: -.01		
177	23	N87	2398.578	1054.056	-1096.022	-.3	.216
178	23	N90	-1208.745	1051.011	-672.078	-.801	-.007
179	23	N150A	221.384	1041.806	2582.435	1.125	-.189
180	23	N189	6.475	1617.75	-2443.911	.404	-.002
181	23	N205	-2113.408	1617.976	1228.01	-.202	.002
182	23	N209	1746.526	1338.346	1008.233	-.167	0
183	23	Totals:	1050.811	7720.946	606.667		
184	23	COG (ft):	X: -.058	Y: .914	Z: -.01		
185	24	N87	2064.739	1073.885	-824.556	-.321	.375
186	24	N90	-1302.828	1046.757	-635.03	-.82	.019
187	24	N150A	63.204	1025.925	2843.817	1.107	.041
188	24	N189	2.649	1679.127	-2538.906	.42	0
189	24	N205	-2003.086	1534.415	1166.701	-.192	.002
190	24	N209	1776.027	1360.837	1028.427	-.17	0
191	24	Totals:	600.705	7720.946	1040.452		
192	24	COG (ft):	X: -.058	Y: .914	Z: -.01		
193	25	N87	737.643	645.415	-381.116	-.557	.039
194	25	N90	-984.289	744.911	-508.826	-1.128	-.035
195	25	N150A	-4.499	291.504	965.234	.324	.012
196	25	N189	-.005	619.103	-938.535	.155	0
197	25	N205	-821.236	624.711	475.786	-.078	0
198	25	N209	1072.387	811.002	620.633	-.102	0
199	25	Totals:	0	3736.646	233.175		
200	25	COG (ft):	X: .266	Y: .711	Z: .821		
201	26	N87	677.81	648.356	-385.457	-.556	-.009
202	26	N90	-1061.648	741.018	-537.009	-1.127	-.069
203	26	N150A	-19.206	292.378	956.012	.325	.004
204	26	N189	-.626	614.928	-931.965	.154	0

Joint Reactions (By Combination) (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]	
	205	26	N205	-805.589	612.663	465.8	-.077	0	-.133
	206	26	N209	1093.417	827.302	633.264	-.104	0	.179
	207	26	Totals:	-115.843	3736.646	200.645			
	208	26	COG (ft):	X: .266	Y: .711	Z: .821			
	209	27	N87	655.182	649.4	-390.506	-.552	0	-.459
	210	27	N90	-1123.14	736.782	-598.86	-1.123	-.029	.269
	211	27	N150A	-50.529	294.676	914.503	.328	.052	-.002
	212	27	N189	-1.45	603.619	-914.572	.151	0	0
	213	27	N205	-799.602	608.037	461.624	-.076	0	-.132
	214	27	N209	1115.587	844.131	645.566	-.106	0	.183
	215	27	Totals:	-203.952	3736.646	117.754			
	216	27	COG (ft):	X: .266	Y: .711	Z: .821			
	217	28	N87	652.115	648.62	-408.478	-.548	.007	-.461
	218	28	N90	-1151.163	733.705	-652.519	-1.119	.019	.268
	219	28	N150A	-67.197	298.594	832.074	.333	.087	-.004
	220	28	N189	-1.887	587.123	-889.741	.147	0	0
	221	28	N205	-805.314	611.996	464.204	-.077	0	-.132
	222	28	N209	1132.631	856.607	654.465	-.108	0	.185
	223	28	Totals:	-240.814	3736.646	.005			
	224	28	COG (ft):	X: .266	Y: .711	Z: .821			
	225	29	N87	675.004	646.084	-458.153	-.543	-.043	-.46
	226	29	N90	-1157.018	732.675	-673.323	-1.114	.009	.269
	227	29	N150A	-43.694	303.247	744.284	.338	.046	-.003
	228	29	N189	-1.45	569.93	-863.828	.142	0	0
	229	29	N205	-821.473	623.814	472.584	-.078	0	-.135
	230	29	N209	1138.793	860.895	657.292	-.108	0	.186
	231	29	Totals:	-209.839	3736.646	-121.145			
	232	29	COG (ft):	X: .266	Y: .711	Z: .821			
	233	30	N87	741.422	642.118	-512.65	-.539	-.078	-.457
	234	30	N90	-1140.273	733.596	-681.003	-1.11	0	.272
	235	30	N150A	-9.199	306.575	694.404	.342	-.005	0
	236	30	N189	-.625	557.731	-845.05	.139	0	0
	237	30	N205	-843.315	640.399	484.693	-.08	0	-.139
	238	30	N209	1132.751	856.227	653.075	-.107	0	.185
	239	30	Totals:	-119.239	3736.646	-206.531			
	240	30	COG (ft):	X: .266	Y: .711	Z: .821			
	241	31	N87	827.994	637.926	-533.765	-.538	-.038	-.452
	242	31	N90	-1086.59	736.162	-683.774	-1.108	.045	.277
	243	31	N150A	6.004	307.523	682.333	.343	.003	.005
	244	31	N189	-.005	553.724	-838.74	.138	0	0
	245	31	N205	-864.71	656.976	497.549	-.082	0	-.142
	246	31	N209	1117.308	844.335	643.222	-.106	0	.183
	247	31	Totals:	0	3736.646	-233.175			
	248	31	COG (ft):	X: .266	Y: .711	Z: .821			
	249	32	N87	887.828	634.986	-529.42	-.539	.011	-.447
	250	32	N90	-1009.233	740.053	-655.593	-1.109	.079	.282
	251	32	N150A	20.717	306.648	691.554	.342	.011	.01
	252	32	N189	.615	557.898	-845.31	.139	0	0
	253	32	N205	-880.36	669.025	507.534	-.084	0	-.145
	254	32	N209	1096.277	828.035	630.59	-.104	0	.179
	255	32	Totals:	115.844	3736.646	-200.645			
	256	32	COG (ft):	X: .266	Y: .711	Z: .821			
	257	33	N87	910.456	633.943	-524.376	-.542	.002	-.444
	258	33	N90	-947.739	744.291	-593.74	-1.113	.039	.285
	259	33	N150A	52.034	304.349	733.063	.339	-.037	.014
	260	33	N189	1.44	569.206	-862.7	.142	0	0
	261	33	N205	-886.346	673.651	511.712	-.084	0	-.146

Joint Reactions (By Combination) (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
262	33	N209	1074.107	811.206	618.287	-.102	0	.175
263	33	Totals:	203.952	3736.646	-117.754			
264	33	COG (ft):	X: .266	Y: .711	Z: .821			
265	34	N87	913.52	634.722	-506.408	-.547	-.005	-.442
266	34	N90	-919.713	747.368	-540.085	-1.118	-.009	.286
267	34	N150A	68.7	300.431	815.494	.334	-.072	.016
268	34	N189	1.877	585.702	-887.53	.146	0	0
269	34	N205	-880.633	669.691	509.134	-.084	0	-.145
270	34	N209	1057.063	798.731	609.391	-.1	0	.173
271	34	Totals:	240.815	3736.646	-.005			
272	34	COG (ft):	X: .266	Y: .711	Z: .821			
273	35	N87	890.634	637.257	-456.727	-.552	.045	-.443
274	35	N90	-913.863	748.399	-519.277	-1.122	0	.285
275	35	N150A	45.199	295.779	903.28	.329	-.032	.015
276	35	N189	1.44	602.895	-913.445	.151	0	0
277	35	N205	-864.474	657.873	500.751	-.082	0	-.142
278	35	N209	1050.904	794.443	606.563	-.1	0	.172
279	35	Totals:	209.84	3736.646	121.146			
280	35	COG (ft):	X: .266	Y: .711	Z: .821			
281	36	N87	824.218	641.223	-402.231	-.556	.08	-.446
282	36	N90	-930.609	747.477	-511.592	-1.126	.01	.282
283	36	N150A	10.7	292.452	953.159	.325	.019	.012
284	36	N189	.617	615.095	-932.225	.154	0	0
285	36	N205	-842.631	641.287	488.641	-.08	0	-.139
286	36	N209	1056.946	799.112	610.778	-.1	0	.173
287	36	Totals:	119.24	3736.646	206.531			
288	36	COG (ft):	X: .266	Y: .711	Z: .821			
289	37	N87	1009.543	770.995	-536.968	-.949	.039	-.411
290	37	N90	-712.397	619.315	-352.989	-.736	-.035	.318
291	37	N150A	-4.483	291.511	965.236	.324	.009	.127
292	37	N189	-.021	619.105	-938.539	.155	0	0
293	37	N205	-1093.135	826.412	632.666	-.104	0	-.179
294	37	N209	800.493	609.307	463.769	-.076	0	.132
295	37	Totals:	0	3736.645	233.175			
296	37	COG (ft):	X: -.37	Y: .711	Z: .821			
297	38	N87	949.709	773.94	-541.321	-.948	-.009	-.416
298	38	N90	-789.758	615.415	-381.18	-.735	-.069	.313
299	38	N150A	-19.196	292.388	956.011	.325	0	.122
300	38	N189	-.642	614.927	-931.963	.154	0	0
301	38	N205	-1077.479	814.361	622.686	-.102	0	-.176
302	38	N209	821.524	625.613	476.412	-.078	0	.135
303	38	Totals:	-115.843	3736.645	200.645			
304	38	COG (ft):	X: -.37	Y: .711	Z: .821			
305	39	N87	927.091	774.995	-546.373	-.944	0	-.419
306	39	N90	-851.259	611.163	-443.02	-.731	-.029	.309
307	39	N150A	-50.529	294.687	914.494	.328	.048	.118
308	39	N189	-1.465	603.614	-914.564	.151	0	0
309	39	N205	-1071.495	809.736	618.505	-.101	0	-.175
310	39	N209	843.706	642.449	488.713	-.081	0	.139
311	39	Totals:	-203.952	3736.645	117.754			
312	39	COG (ft):	X: -.37	Y: .711	Z: .821			
313	40	N87	924.032	774.227	-564.347	-.94	.007	-.421
314	40	N90	-879.288	608.074	-496.665	-.726	.019	.308
315	40	N150A	-67.207	298.605	832.059	.333	.084	.116
316	40	N189	-1.902	587.115	-889.729	.147	0	0
317	40	N205	-1077.209	813.695	621.078	-.102	0	-.176
318	40	N209	860.76	654.93	497.608	-.082	0	.142

Joint Reactions (By Combination) (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
319	40	Totals:	-240.814	3736.645	.004			
320	40	COG (ft):	X: -.37	Y: .711	Z: .821			
321	41	N87	946.917	771.705	-614.038	-.935	-.043	-.42
322	41	N90	-885.136	607.032	-517.467	-.722	.009	.309
323	41	N150A	-43.714	303.255	744.268	.338	.043	.117
324	41	N189	-1.465	569.922	-863.815	.142	0	0
325	41	N205	-1093.362	825.509	629.464	-.103	0	-.179
326	41	N209	866.92	659.221	500.443	-.083	0	.143
327	41	Totals:	-209.839	3736.645	-121.146			
328	41	COG (ft):	X: -.37	Y: .711	Z: .821			
329	42	N87	1013.333	767.754	-668.549	-.931	-.078	-.417
330	42	N90	-868.382	607.941	-525.143	-.718	0	.312
331	42	N150A	-9.228	306.58	694.388	.342	-.008	.12
332	42	N189	-.64	557.724	-845.039	.139	0	0
333	42	N205	-1115.199	842.093	641.579	-.106	0	-.182
334	42	N209	860.877	654.553	496.232	-.082	0	.142
335	42	Totals:	-119.24	3736.645	-206.532			
336	42	COG (ft):	X: -.37	Y: .711	Z: .821			
337	43	N87	1099.911	763.571	-689.66	-.93	-.038	-.411
338	43	N90	-814.697	610.5	-527.9	-.716	.045	.317
339	43	N150A	5.971	307.525	682.317	.343	0	.125
340	43	N189	-.02	553.719	-838.732	.138	0	0
341	43	N205	-1136.603	858.671	654.429	-.108	0	-.186
342	43	N209	845.437	642.66	486.369	-.081	0	.139
343	43	Totals:	0	3736.645	-233.176			
344	43	COG (ft):	X: -.37	Y: .711	Z: .821			
345	44	N87	1159.747	760.627	-685.303	-.931	.011	-.407
346	44	N90	-737.337	614.399	-499.711	-.717	.079	.322
347	44	N150A	20.689	306.647	691.542	.342	.008	.13
348	44	N189	.6	557.896	-845.307	.139	0	0
349	44	N205	-1152.261	870.722	664.407	-.109	0	-.188
350	44	N209	824.406	626.354	473.726	-.079	0	.135
351	44	Totals:	115.843	3736.645	-200.646			
352	44	COG (ft):	X: -.37	Y: .711	Z: .821			
353	45	N87	1182.365	759.572	-680.257	-.935	.002	-.404
354	45	N90	-675.834	618.652	-437.869	-.72	.039	.326
355	45	N150A	52.016	304.347	733.059	.339	-.04	.134
356	45	N189	1.426	569.208	-862.704	.142	0	0
357	45	N205	-1158.246	875.348	668.591	-.11	0	-.189
358	45	N209	802.225	609.518	461.424	-.076	0	.132
359	45	Totals:	203.952	3736.645	-117.755			
360	45	COG (ft):	X: -.37	Y: .711	Z: .821			
361	46	N87	1185.42	760.34	-662.286	-.939	-.005	-.402
362	46	N90	-647.802	621.743	-384.228	-.725	-.009	.327
363	46	N150A	68.693	300.429	815.495	.334	-.075	.136
364	46	N189	1.862	585.707	-887.538	.146	0	0
365	46	N205	-1152.53	871.389	666.02	-.109	0	-.189
366	46	N209	785.171	597.038	452.532	-.075	0	.129
367	46	Totals:	240.815	3736.645	-.006			
368	46	COG (ft):	X: -.37	Y: .711	Z: .821			
369	47	N87	1162.537	762.861	-612.589	-.944	.045	-.402
370	47	N90	-641.959	622.785	-363.422	-.73	0	.325
371	47	N150A	45.202	295.779	903.282	.329	-.035	.135
372	47	N189	1.424	602.9	-913.452	.151	0	0
373	47	N205	-1136.377	859.573	657.631	-.108	0	-.186
374	47	N209	779.012	592.747	449.696	-.074	0	.128
375	47	Totals:	209.84	3736.645	121.145			

Joint Reactions (By Combination) (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
376	47	COG (ft):	X: -.37	Y: .711	Z: .821			
377	48	N87	1096.125	766.811	-558.079	-.948	.08	-.406
378	48	N90	-658.715	621.875	-355.741	-.733	.01	.322
379	48	N150A	10.712	292.455	953.161	.325	.016	.131
380	48	N189	.601	615.099	-932.23	.154	0	0
381	48	N205	-1114.539	842.99	645.515	-.106	0	-.182
382	48	N209	785.056	597.415	453.905	-.075	0	.129
383	48	Totals:	119.24	3736.645	206.53			
384	48	COG (ft):	X: -.37	Y: .711	Z: .821			
385	49	N87	1376.662	310.46	-797.069	-.176	-.001	-.305
386	49	N90	-668.629	400.371	-389.467	-.297	.014	.324
387	49	N150A	4.163	392.242	808.307	.423	-.006	.095
388	49	N189	-.025	590.794	-895.462	.148	0	0
389	49	N205	-1459.2	1098.104	842.401	-.137	0	-.238
390	49	N209	747.031	569.67	431.288	-.071	0	.123
391	49	Totals:	0	3361.641	-.001			
392	49	COG (ft):	X: -.755	Y: .79	Z: .451			
393	50	N87	806.334	574.1	-470.565	-.446	0	-.44
394	50	N90	-787.057	547.343	-453.562	-.624	.005	.306
395	50	N150A	.749	350.795	832.202	.383	.006	.066
396	50	N189	-.013	590.403	-894.851	.148	0	0
397	50	N205	-864.647	656.932	499.189	-.082	0	-.142
398	50	N209	844.635	642.069	487.586	-.08	0	.139
399	50	Totals:	0	3361.643	0			
400	50	COG (ft):	X: -.058	Y: .79	Z: .451			
401	51	N87	852.207	483.499	-497.437	-.128	.001	-.525
402	51	N90	-829.706	452.276	-477.579	-.336	.006	.368
403	51	N150A	.877	476.963	982.853	.511	.007	.077
404	51	N189	-.017	693.919	-1051.981	.173	0	0
405	51	N205	-915.925	697.553	528.846	-.087	0	-.151
406	51	N209	892.566	680.203	515.298	-.085	0	.147
407	51	Totals:	0	3484.413	0			
408	51	COG (ft):	X: -.065	Y: .889	Z: -.012			
409	52	N87	717.268	415.5	-404.676	-.112	.013	-.45
410	52	N90	-696.882	388.671	-386.606	-.291	-.007	.315
411	52	N150A	-.414	406.614	889.338	.436	.007	.066
412	52	N189	-.012	603.893	-915.466	.151	0	0
413	52	N205	-778.988	593.393	450.153	-.074	0	-.129
414	52	N209	759.029	578.57	438.586	-.072	0	.125
415	52	Totals:	0	2986.64	71.329			
416	52	COG (ft):	X: -.065	Y: .889	Z: -.012			
417	53	N87	698.976	416.222	-401.022	-.112	.008	-.451
418	53	N90	-717.177	387.644	-396.873	-.29	-.008	.314
419	53	N150A	-7.396	406.879	883.707	.436	.014	.065
420	53	N189	-.201	602.689	-913.644	.151	0	0
421	53	N205	-774.779	590.128	447.563	-.074	0	-.128
422	53	N209	764.912	583.077	442.041	-.073	0	.126
423	53	Totals:	-35.664	2986.64	61.772			
424	53	COG (ft):	X: -.065	Y: .889	Z: -.012			
425	54	N87	689.119	416.463	-404.157	-.111	0	-.452
426	54	N90	-735.859	386.624	-410.482	-.289	-.006	.313
427	54	N150A	-12.196	407.666	867.017	.437	.019	.064
428	54	N189	-.34	599.369	-908.617	.15	0	0
429	54	N205	-773.325	588.946	446.505	-.074	0	-.128
430	54	N209	770.83	587.572	445.399	-.074	0	.127
431	54	Totals:	-61.771	2986.64	35.665			
432	54	COG (ft):	X: -.065	Y: .889	Z: -.012			

Joint Reactions (By Combination) (Continued)

LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
433	55 N87	690.334	416.158	-413.242	-.109	-.007	-.452
434	55 N90	-747.926	385.881	-423.789	-.288	0	.313
435	55 N150A	-13.527	408.763	843.739	.438	.02	.063
436	55 N189	-.391	594.822	-901.732	.149	0	0
437	55 N205	-775.017	590.165	447.264	-.074	0	-.128
438	55 N209	775.198	590.852	447.761	-.074	0	.128
439	55 Totals:	-71.329	2986.64	0			
440	55 COG (ft):	X: -.065	Y: .889	Z: -.012			
441	56 N87	702.3	415.389	-425.843	-.108	-.012	-.452
442	56 N90	-750.141	385.616	-433.226	-.287	.006	.313
443	56 N150A	-11.032	409.877	820.11	.439	.017	.064
444	56 N189	-.34	590.266	-894.834	.148	0	0
445	56 N205	-779.401	593.457	449.635	-.074	0	-.129
446	56 N209	776.843	592.036	448.492	-.074	0	.128
447	56 Totals:	-61.771	2986.64	-35.664			
448	56 COG (ft):	X: -.065	Y: .889	Z: -.012			
449	57 N87	721.807	414.362	-438.581	-.107	-.013	-.451
450	57 N90	-741.913	385.9	-436.265	-.286	.012	.314
451	57 N150A	-5.382	410.709	802.463	.44	.011	.065
452	57 N189	-.202	586.923	-889.771	.147	0	0
453	57 N205	-785.302	597.939	452.984	-.075	0	-.13
454	57 N209	775.328	590.808	447.399	-.074	0	.128
455	57 Totals:	-35.664	2986.64	-61.771			
456	57 COG (ft):	X: -.065	Y: .889	Z: -.012			
457	58 N87	743.63	413.352	-448.047	-.107	-.011	-.45
458	58 N90	-725.445	386.656	-432.094	-.285	.016	.316
459	58 N150A	1.912	411.036	795.523	.441	.004	.066
460	58 N189	-.013	585.687	-887.899	.146	0	0
461	58 N205	-791.14	602.413	456.414	-.075	0	-.13
462	58 N209	771.056	587.497	444.772	-.074	0	.127
463	58 Totals:	0	2986.64	-71.33			
464	58 COG (ft):	X: -.065	Y: .889	Z: -.012			
465	59 N87	761.921	412.63	-451.701	-.107	-.006	-.448
466	59 N90	-705.149	387.682	-421.826	-.286	.017	.317
467	59 N150A	8.894	410.77	801.155	.44	-.003	.067
468	59 N189	.176	586.891	-889.721	.147	0	0
469	59 N205	-795.349	605.678	459.004	-.076	0	-.131
470	59 N209	765.173	582.989	441.317	-.073	0	.126
471	59 Totals:	35.665	2986.64	-61.773			
472	59 COG (ft):	X: -.065	Y: .889	Z: -.012			
473	60 N87	771.779	412.389	-448.565	-.108	.002	-.447
474	60 N90	-686.467	388.703	-408.217	-.287	.015	.318
475	60 N150A	13.693	409.983	817.844	.44	-.007	.068
476	60 N189	.314	590.211	-894.748	.148	0	0
477	60 N205	-796.803	606.859	460.061	-.076	0	-.131
478	60 N209	759.255	578.494	437.959	-.072	0	.125
479	60 Totals:	61.772	2986.64	-35.666			
480	60 COG (ft):	X: -.065	Y: .889	Z: -.012			
481	61 N87	770.564	412.694	-439.481	-.11	.009	-.447
482	61 N90	-674.4	389.445	-394.911	-.288	.01	.318
483	61 N150A	15.024	408.886	841.123	.438	-.008	.069
484	61 N189	.365	594.758	-901.633	.149	0	0
485	61 N205	-795.111	605.641	459.303	-.076	0	-.131
486	61 N209	754.888	575.215	435.598	-.072	0	.124
487	61 Totals:	71.33	2986.64	-.001			
488	61 COG (ft):	X: -.065	Y: .889	Z: -.012			
489	62 N87	758.598	413.463	-426.88	-.111	.014	-.447

Joint Reactions (By Combination) (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
490	62	N90	-672.185	389.71	-385.474	-.289	.004	.317
491	62	N150A	12.53	407.772	864.752	.437	-.005	.068
492	62	N189	.315	599.314	-908.531	.15	0	0
493	62	N205	-790.727	602.349	456.931	-.075	0	-.13
494	62	N209	753.242	574.031	434.866	-.072	0	.124
495	62	Totals:	61.772	2986.64	35.664			
496	62	COG (ft):	X: -.065	Y: .889	Z: -.012			
497	63	N87	739.091	414.49	-414.141	-.112	.015	-.448
498	63	N90	-680.414	389.427	-382.434	-.29	-.002	.317
499	63	N150A	6.879	406.94	882.398	.436	0	.067
500	63	N189	.177	602.657	-913.594	.151	0	0
501	63	N205	-784.826	597.866	453.582	-.075	0	-.129
502	63	N209	754.758	575.259	435.96	-.072	0	.125
503	63	Totals:	35.665	2986.64	61.771			
504	63	COG (ft):	X: -.065	Y: .889	Z: -.012			
505	64	N87	534.647	311.891	-298.074	-.085	.013	-.337
506	64	N90	-519.082	291.753	-284.266	-.219	-.008	.236
507	64	N150A	-.605	304.406	678.699	.326	.006	.05
508	64	N189	-.007	455.191	-690.016	.114	0	0
509	64	N205	-582.711	443.921	336.822	-.055	0	-.096
510	64	N209	567.758	432.818	328.164	-.054	0	.094
511	64	Totals:	0	2239.98	71.329			
512	64	COG (ft):	X: -.065	Y: .889	Z: -.012			
513	65	N87	516.36	312.613	-294.423	-.084	.007	-.339
514	65	N90	-539.372	290.727	-294.529	-.218	-.009	.235
515	65	N150A	-7.588	304.672	673.069	.326	.013	.048
516	65	N189	-.196	453.988	-688.195	.113	0	0
517	65	N205	-578.505	440.658	334.233	-.055	0	-.095
518	65	N209	573.636	437.322	331.617	-.055	0	.095
519	65	Totals:	-35.664	2239.98	61.772			
520	65	COG (ft):	X: -.065	Y: .889	Z: -.012			
521	66	N87	506.503	312.854	-297.559	-.083	0	-.34
522	66	N90	-558.048	289.706	-308.135	-.217	-.007	.234
523	66	N150A	-12.387	305.458	656.385	.327	.017	.047
524	66	N189	-.335	450.67	-683.173	.113	0	0
525	66	N205	-577.052	439.477	333.176	-.055	0	-.095
526	66	N209	579.549	441.813	334.972	-.055	0	.096
527	66	Totals:	-61.771	2239.98	35.666			
528	66	COG (ft):	X: -.065	Y: .889	Z: -.012			
529	67	N87	507.716	312.55	-306.644	-.082	-.007	-.34
530	67	N90	-570.11	288.964	-321.44	-.216	-.002	.234
531	67	N150A	-13.719	306.555	633.114	.329	.018	.047
532	67	N189	-.386	446.126	-676.293	.112	0	0
533	67	N205	-578.743	440.694	333.933	-.055	0	-.095
534	67	N209	583.913	445.09	337.331	-.056	0	.096
535	67	Totals:	-71.329	2239.98	0			
536	67	COG (ft):	X: -.065	Y: .889	Z: -.012			
537	68	N87	519.677	311.781	-319.242	-.081	-.012	-.339
538	68	N90	-572.323	288.698	-330.877	-.215	.005	.235
539	68	N150A	-11.224	307.669	609.492	.33	.016	.047
540	68	N189	-.336	441.574	-669.401	.11	0	0
541	68	N205	-583.123	443.984	336.302	-.055	0	-.096
542	68	N209	585.558	446.273	338.062	-.056	0	.097
543	68	Totals:	-61.771	2239.98	-35.664			
544	68	COG (ft):	X: -.065	Y: .889	Z: -.012			
545	69	N87	539.177	310.754	-331.977	-.08	-.014	-.338
546	69	N90	-564.096	288.982	-333.919	-.214	.011	.236

Joint Reactions (By Combination) (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]	
	547	69	N150A	-5.573	308.501	591.85	.331	.01	.048
	548	69	N189	-.197	438.233	-664.342	.11	0	0
	549	69	N205	-589.02	448.463	339.648	-.056	0	-.097
	550	69	N209	584.044	445.046	336.968	-.056	0	.096
	551	69	Totals:	-35.664	2239.98	-61.771			
	552	69	COG (ft):	X: -.065	Y: .889	Z: -.012			
	553	70	N87	560.995	309.744	-341.439	-.08	-.011	-.337
	554	70	N90	-547.632	289.737	-329.75	-.213	.015	.237
	555	70	N150A	1.722	308.829	584.913	.331	.003	.049
	556	70	N189	-.008	436.999	-662.472	.109	0	0
	557	70	N205	-594.852	452.933	343.074	-.057	0	-.098
	558	70	N209	579.776	441.738	334.344	-.055	0	.096
	559	70	Totals:	0	2239.98	-71.33			
	560	70	COG (ft):	X: -.065	Y: .889	Z: -.012			
	561	71	N87	579.282	309.022	-345.09	-.08	-.006	-.336
	562	71	N90	-527.342	290.763	-319.486	-.214	.016	.238
	563	71	N150A	8.704	308.563	590.543	.331	-.004	.051
	564	71	N189	.182	438.202	-664.293	.11	0	0
	565	71	N205	-599.058	456.196	345.663	-.057	0	-.099
	566	71	N209	573.897	437.234	330.891	-.055	0	.095
	567	71	Totals:	35.665	2239.98	-61.772			
	568	71	COG (ft):	X: -.065	Y: .889	Z: -.012			
	569	72	N87	589.138	308.781	-341.953	-.081	.001	-.335
	570	72	N90	-508.666	291.784	-305.88	-.215	.014	.239
	571	72	N150A	13.504	307.777	607.227	.33	-.009	.052
	572	72	N189	.321	441.52	-669.316	.11	0	0
	573	72	N205	-600.51	457.377	346.72	-.057	0	-.099
	574	72	N209	567.984	432.742	327.536	-.054	0	.094
	575	72	Totals:	61.772	2239.98	-35.666			
	576	72	COG (ft):	X: -.065	Y: .889	Z: -.012			
	577	73	N87	587.926	309.085	-332.869	-.082	.008	-.335
	578	73	N90	-496.603	292.527	-292.575	-.216	.009	.239
	579	73	N150A	14.836	306.679	630.498	.329	-.01	.052
	580	73	N189	.372	446.063	-676.195	.112	0	0
	581	73	N205	-598.82	456.16	345.963	-.057	0	-.099
	582	73	N209	563.62	429.465	325.177	-.054	0	.093
	583	73	Totals:	71.33	2239.98	-.001			
	584	73	COG (ft):	X: -.065	Y: .889	Z: -.012			
	585	74	N87	575.965	309.854	-320.271	-.084	.013	-.335
	586	74	N90	-494.391	292.792	-283.138	-.217	.003	.239
	587	74	N150A	12.341	305.565	654.12	.327	-.007	.052
	588	74	N189	.321	450.616	-683.088	.113	0	0
	589	74	N205	-594.44	452.87	343.594	-.057	0	-.098
	590	74	N209	561.975	428.282	324.446	-.054	0	.093
	591	74	Totals:	61.772	2239.98	35.664			
	592	74	COG (ft):	X: -.065	Y: .889	Z: -.012			
	593	75	N87	556.464	310.881	-307.535	-.084	.015	-.336
	594	75	N90	-502.618	292.509	-280.097	-.218	-.004	.238
	595	75	N150A	6.689	304.734	671.761	.326	-.001	.051
	596	75	N189	.183	453.957	-688.146	.113	0	0
	597	75	N205	-588.543	448.391	340.248	-.056	0	-.097
	598	75	N209	563.49	429.509	325.54	-.054	0	.093
	599	75	Totals:	35.665	2239.98	61.771			
	600	75	COG (ft):	X: -.065	Y: .889	Z: -.012			

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

	Member	Shape	Code Check	L...	LC	Shear Check	Loc[...]	Dir	LC	phi*Pn...	phi*Pnt...	phi*Mn...	phi*Mn...	Cb	Eqn
1	M1	PIPE 3.0	.100	7...	34	.070	4.167		7	28250...	65205	5.749	5.749	2...	H1-1b
2	M41	PL1/2x6	.033	....	3	.129	0	y	20	95014...	97200	1.012	12.15	1...	H1-1b
3	M43	PL1/2x6	.037	....	9	.115	.25	y	49	95014...	97200	1.012	12.15	2...	H1-1b
4	M44	PL1/2x6	.110	....	9	.094	.499	y	18	67613...	97200	1.012	12.15	1...	H1-1b
5	M45A	HSS4X4X4	.109	5...	12	.065	5.08	y	37	125232...	139518	16.181	16.181	1...	H1-1b
6	M46A	HSS4X4X4	.121	0	20	.032	0	y	37	136092...	139518	16.181	16.181	1...	H1-1b
7	M47A	HSS4X4X4	.133	0	22	.043	0	y	17	136092...	139518	16.181	16.181	1...	H1-1b
8	M49	PL1/2x6	.106	....	2	.143	0	y	46	94230...	97200	1.012	12.15	1...	H1-1b
9	M50	PL1/2x6	.166	....	6	.206	.224	y	15	90056...	97200	1.012	12.15	3...	H1-1b
10	M52	PL1/2x6	.111	....	4	.161	0	y	20	94230...	97200	1.012	12.15	1...	H1-1b
11	M53	PL1/2x6	.227	....	12	.122	.224	y	15	90056...	97200	1.012	12.15	2...	H1-1b
12	M56	L2x2x3	.169	0	20	.015	0	z	18	9921.0...	23392.8	.558	1.239	2...	H2-1
13	M67	L2x2x3	.136	0	10	.011	4.138	y	15	9921.0...	23392.8	.558	1.21	2...	H2-1
14	M88	PIPE 2.0	.219	7...	7	.098	11.4...		6	6295.4...	32130	1.872	1.872	3...	H1-1b
15	M34	PIPE 3.0	.081	7...	24	.070	4.167		3	28250...	65205	5.749	5.749	2...	H1-1b
16	M44A	PL1/2x6	.033	....	11	.127	0	y	16	95014...	97200	1.012	12.15	1...	H1-1b
17	M46	PL1/2x6	.037	....	5	.069	.25	y	6	95014...	97200	1.012	12.15	2...	H1-1b
18	M47	PL1/2x6	.110	....	5	.091	.499	y	14	67613...	97200	1.012	12.15	1...	H1-1b
19	M48A	HSS4X4X4	.102	5...	8	.081	5.081	y	26	125232...	139518	16.181	16.181	1...	H1-1b
20	M49A	HSS4X4X4	.116	0	16	.028	0	y	21	136092...	139518	16.181	16.181	1...	H1-1b
21	M50A	HSS4X4X4	.123	0	18	.041	0	y	13	136092...	139518	16.181	16.181	1...	H1-1b
22	M52A	PL1/2x6	.108	....	10	.128	0	y	18	94230...	97200	1.012	12.15	1...	H1-1b
23	M53A	PL1/2x6	.160	....	2	.194	.224	y	23	90056...	97200	1.012	12.15	3...	H1-1b
24	M55	PL1/2x6	.104	....	12	.147	0	y	16	94230...	97200	1.012	12.15	1...	H1-1b
25	M56B	PL1/2x6	.207	....	8	.110	.224	y	47	90056...	97200	1.012	12.15	2...	H1-1b
26	M57	L2x2x3	.166	0	16	.015	0	z	14	9921.0...	23392.8	.558	1.239	2...	H2-1
27	M60	L2x2x3	.129	0	6	.011	4.138	y	23	9921.0...	23392.8	.558	1.21	2...	H2-1
28	M62	PIPE 2.0	.210	7...	3	.097	11.4...		3	6295.4...	32130	1.872	1.872	3...	H1-1b
29	M67A	PIPE 3.0	.083	7...	20	.066	4.167		11	28250...	65205	5.749	5.749	2...	H1-1b
30	M77	PL1/2x6	.033	....	6	.127	0	y	24	95014...	97200	1.012	12.15	1...	H1-1b
31	M79	PL1/2x6	.036	....	1	.071	.25	y	14	95014...	97200	1.012	12.15	2...	H1-1b
32	M80	PL1/2x6	.109	....	1	.093	.499	y	22	67613...	97200	1.012	12.15	1...	H1-1b
33	M81	HSS4X4X4	.109	5...	10	.046	5.08	y	22	125232...	139518	16.181	16.181	2...	H1-1b
34	M82	HSS4X4X4	.124	0	24	.029	0	y	17	136092...	139518	16.181	16.181	1...	H1-1b
35	M83	HSS4X4X4	.127	0	14	.041	0	y	21	136092...	139518	16.181	16.181	1...	H1-1b
36	M85	PL1/2x6	.111	....	6	.139	0	y	14	94230...	97200	1.012	12.15	1...	H1-1b
37	M86	PL1/2x6	.176	....	10	.208	.224	y	19	90056...	97200	1.012	12.15	3...	H1-1b
38	M88A	PL1/2x6	.103	....	8	.152	0	y	24	94230...	97200	1.012	12.15	1...	H1-1b
39	M89A	PL1/2x6	.218	....	4	.116	.224	y	19	90056...	97200	1.012	12.15	2...	H1-1b
40	M90A	L2x2x3	.169	0	24	.015	0	z	22	9921.0...	23392.8	.558	1.239	2...	H2-1
41	M93	L2x2x3	.129	0	2	.011	4.138	y	19	9921.0...	23392.8	.558	1.21	2...	H2-1
42	M95	PIPE 2.0	.214	7...	11	.099	11.4...		10	6295.4...	32130	1.872	1.872	3...	H1-1b
43	M100	L2.5x2.5x3	.319	1...	11	.054	0	y	6	27576...	29192.4	.873	1.972	1...	H2-1
44	M101	L2.5x2.5x3	.333	1...	7	.054	.012	y	2	27576...	29192.4	.873	1.972	1...	H2-1
45	M102	L2.5x2.5x3	.328	1...	3	.055	.023	y	10	27576...	29192.4	.873	1.972	1...	H2-1
46	MP4A	PIPE 2.0	.213	4...	10	.121	.667		7	14916...	32130	1.872	1.872	2...	H1-1b
47	MP3A	PIPE 2.0	.284	4...	10	.100	4.667		8	14916...	32130	1.872	1.872	2...	H1-1b
48	MP2A	PIPE 2.0	.278	4...	10	.116	4.667		3	14916...	32130	1.872	1.872	2...	H1-1b
49	MP1A	PIPE 2.0	.235	4...	4	.138	.667		7	14916...	32130	1.872	1.872	2...	H1-1b
50	M106	LL2.5x2.5...	.069	4...	13	.003	4.161	y	22	44634...	58320	3.954	2.55	1	H1-1b*
51	M111	LL2.5x2.5...	.069	4...	21	.004	4.161	y	18	44634...	58320	3.954	2.55	1	H1-1b*
52	M114	LL2.5x2.5...	.068	4...	17	.004	0	y	14	44634...	58320	3.954	2.55	1	H1-1b*
53	MP3C	PIPE 2.0	.280	4...	6	.100	4.667		4	14916...	32130	1.872	1.872	2...	H1-1b
54	MP2C	PIPE 2.0	.277	4...	11	.118	4.667		11	14916...	32130	1.872	1.872	2...	H1-1b
55	MP1C	PIPE 2.0	.238	4...	12	.139	.667		3	14916...	32130	1.872	1.872	2...	H1-1b
56	MP4C	PIPE 2.0	.214	4...	5	.123	.667		3	14916...	32130	1.872	1.872	2...	H1-1b

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

Member	Shape	Code Check	L...	LC	Shear Check	Loc[...Dir	LC	phi*Pn...	phi*Pnt...	phi*Mn...	phi*Mn...	Cb	Eqn
57	MP3B	PIPE 2.0	.290	4...	3	.099	4.667	12	14916....	32130	1.872	1.872	2...H1-1b
58	MP2B	PIPE 2.0	.280	4...	6	.098	4.667	7	14916....	32130	1.872	1.872	2...H1-1b
59	MP1B	PIPE 2.0	.240	4...	9	.134	.667	11	14916....	32130	1.872	1.872	2...H1-1b
60	MP4B	PIPE 2.0	.214	4...	2	.118	.667	11	14916....	32130	1.872	1.872	2...H1-1b

I. Mount-to-Tower Connection Check

Custom Orientation Required

No

Tower Connection Bolt Checks

Yes

Bolt Orientation

Parallel

Bolt Quantity per Reaction:

4

d_x (in) (Delta X of typ. bolt config. sketch):

6

d_y (in) (Delta Y of typ. bolt config. sketch):

6

Bolt Type:

A325N

Bolt Diameter (in):

0.625

Required Tensile Strength / bolt (kips):

2.1

Required Shear Strength / bolt (kips):

0.6

Tensile Capacity / bolt (kips):

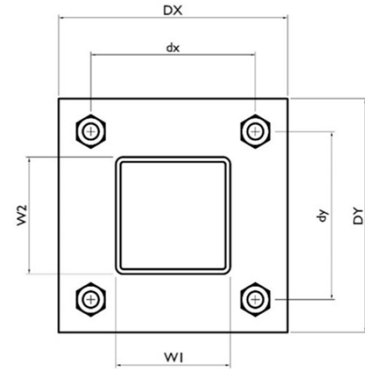
20.7

Shear Capacity / bolt (kips):

12.4

Bolt Overall Utilization:

10.1%



Tower Connection Baseplate Checks

Yes

Connecting Standoff Member Shape:

Rect Tube

Weld Stiffener Configuration:

No Stiffeners

Plate Width, D_x (in):

8

Plate Height, D_y (in):

8

$W1$ (in):

4

$W2$ (in):

4

Member Thickness (in):

0.25

Stiffener location a_1 (in):

Stiffener location b_1 (in):

Stiffener location a_2 (in):

Stiffener location b_2 (in):

F_y (ksi, plate):

36

Plate Thickness (in):

0.75

Length of Yield Line, L_y (in):

5.85

Bolt Eccentricity, e (in):

1.65

M_u (kip-in):

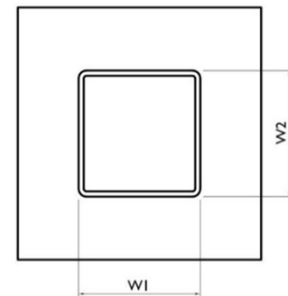
3.44

$\Phi \cdot M_n$ (kip-in):

26.65

Plate Bending Utilization:

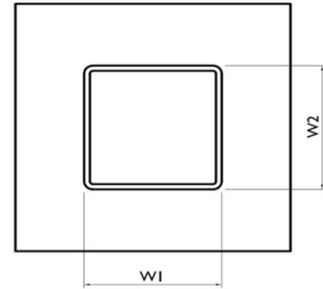
12.9%

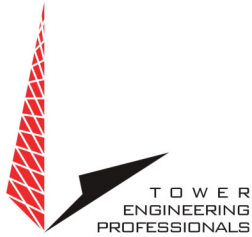


Tower Connection Weld Checks

Weld Shape:
Weld Stiffener Configuration:
Stiffener Notch Length, n (in):
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:

Yes
Rectangle
None
6
4
4
16.00
21.33
21.33
85.33
2.25
2.25
0.71
8.35
8.5%





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RALEIGH, NC 27607
919.661.6351
WWW.TEPGROUP.NET

Non-Ionizing Electromagnetic Radiation (NIER) Study

Site Number:

209185

Site Name:

Burlington 2

Location:

Burlington, Connecticut

Tenants:

AT&T Mobility, T-Mobile, Dish Wireless, & Verizon Wireless

Prepared For:

American Tower, Inc.
Woburn, Massachusetts

July 15th, 2024

260045 P408684

Prepared By:

Adam Carlson MS, CBRE, CPI
Program Manager RF Design & Service
Tower Engineering Professionals

Approved By:



[Handwritten Signature]

07/16/24



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RALEIGH, NC 27607
919.661.6351
WWW.TEPGROUP.NET

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919.661.6351
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TOWER ENGINEERING PROFESSIONALS

RALEIGH, NORTH CAROLINA



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919.661.6351
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Non-Ionizing Electromagnetic Radiation (NIER) Study

209185 Burlington 2
Burlington, Connecticut

INTRODUCTION

Tower Engineering Professionals RF Design & Services Division (TEP-RF) of Raleigh, North Carolina, has been retained by American Tower, Inc. (ATC), of Woburn, Massachusetts to evaluate the RF emissions compared to the Maximum Permissible Exposure (MPE) limit for facilities at this location. This evaluation uses compliance standards as outlined in Federal Communications Commission (FCC) document OET-65.

SITE AND FACILITY CONSIDERATIONS

Site 209185 Burlington 2 is located at 87 Monce Rd. in Burlington, Connecticut at coordinates 41.739191, -72.907819. The support structure is 120' monopole. An aerial view of the tower can be found in Appendix 1, Site Photos. The tenants are AT&T Mobility (AT&T), Dish Wireless (Dish), T-Mobile (TMO), & Verizon Wireless (VZW). A table listing all antennae and effective radiated power (ERP) levels that were used in this study may be found in Appendix 2, Antenna Inventory.

POWER DENSITY CALCULATIONS

Power densities were calculated based on FCC MPE limits for both General Population/Uncontrolled and Occupational/Controlled environments.

For the purpose of this study, a radius of 100' from the base of the tower with a height of 6' above ground level was used, beyond 100' the MPE levels become *di minimus*. This study utilized FCC recognized and accepted software programs using the maximum ERP levels for the antenna models provided by ATC. Diagrams depicting the predicted spatial average power density level at any specific location may be found in Appendix 3, MPE Limit Study. A discussion regarding the FCC limits may be found in Appendix 4, Information Pertaining to MPE Studies. Study methodology describing Non-ionizing Radiation Prediction Models used in this study may be found in Appendix 5, MPE Standards Methodology.



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All data used in this study was collected from one or more of the following sources:

- ATC furnished data and does not include other unidentified communication facilities.
- Load List at Load List at 209185 Burlington 2.RF NIER Study 07/03/2024.
- FCC databases.
- Carrier standard configurations.
- Empirical data collected by TEP.

SITE MITIGATION & CONTROL

In order to comply with FCC, tenant, & ATC requirements, TEP recommends the placement of signage at the following points:

Site Entrance

1. Site ID Sign (tower owner defined)
2. RF Information Sign (Green)

Tower Access Point

1. RF Exposure Sign (Red)

Alpha Sector

No additional mitigation is required.

Beta Sector

No additional mitigation is required.

Gamma Sector

No additional mitigation is required

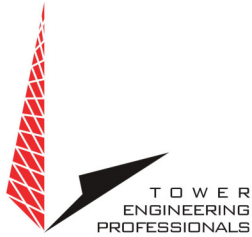
COMPLIANCE DETERMINATION

With the above mitigation implemented, this installation **WILL BE** in compliance with current FCC MPE limits as described in FCC OET-65.

Appendix 1 Site Photos



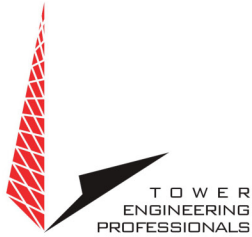
Aerial View of Site



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Appendix 2 .1 Antenna Inventory

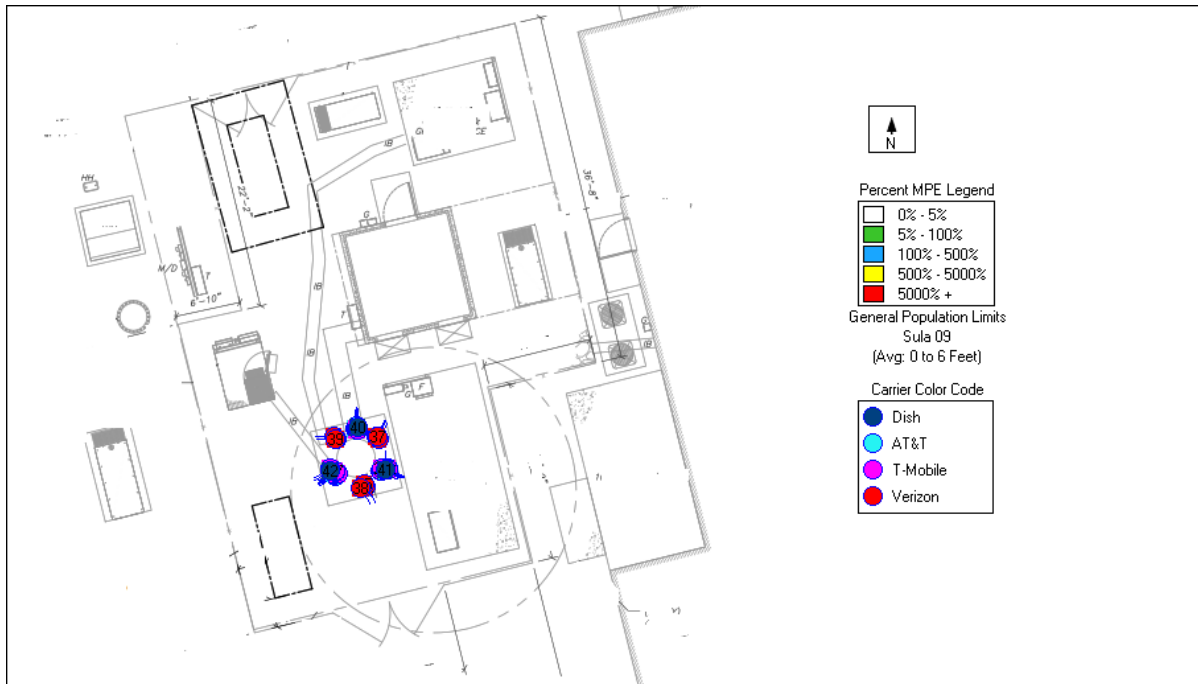
209185 Burlington 2							
Antenna Inventory							
Antenna #	Carrier	Antenna Manufacturer	Antenna Model	Frequency Band (MHz)	Azimuth (°)	Effective Radiated Power (W)	Radiation Center (ft)
1	AT&T	CCI	HPA-65R-BUU-H8	700/1800/1900	000	34759	110.0
2	AT&T	CCI	HPA-65R-BUU-H8	700/1800/1900	120	34759	110.0
3	AT&T	CCI	HPA-65R-BUU-H8	700/1800/1900	240	34759	110.0
4	AT&T	CCI	HPA-65R-BUU-H8	700/1800/1900	000	34759	110.0
5	AT&T	CCI	HPA-65R-BUU-H8	700/1800/1900	120	34759	110.0
6	AT&T	CCI	HPA-65R-BUU-H8	700/1800/1900	240	34759	110.0
7	AT&T	CCI	HPA-65R-BUU-H8	700/1800/1900	000	34759	110.0
8	AT&T	CCI	HPA-65R-BUU-H8	700/1800/1900	120	34759	110.0
9	AT&T	CCI	HPA-65R-BUU-H8	700/1800/1900	240	34759	110.0
10	AT&T	CCI	HPA-65R-BUU-H8	700/1800/1900	000	34759	110.0
11	AT&T	CCI	HPA-65R-BUU-H8	700/1800/1900	120	34759	110.0
12	AT&T	CCI	HPA-65R-BUU-H8	700/1800/1900	240	34759	110.0
13	TMO	RFS	APX19DWV	1900/2100	000	1400	100.0
14	TMO	RFS	APX19DWV	1900/2100	120	1400	100.0
15	TMO	RFS	APX19DWV	1900/2100	240	1400	100.0
16	TMO	RFS	APXVAALL24	600/1900/2100	020	23200	120.0
17	TMO	RFS	APXVAALL24	600/1900/2100	110	23200	120.0
18	TMO	RFS	APXVAALL24	600/1900/2100	290	23200	120.0
19	TMO	Ericsson	Air 32	2500/2600	000	20300	100.0
20	TMO	Ericsson	Air 32	2500/2600	120	20300	100.0
21	TMO	Ericsson	Air 32	2500/2600	240	20300	100.0



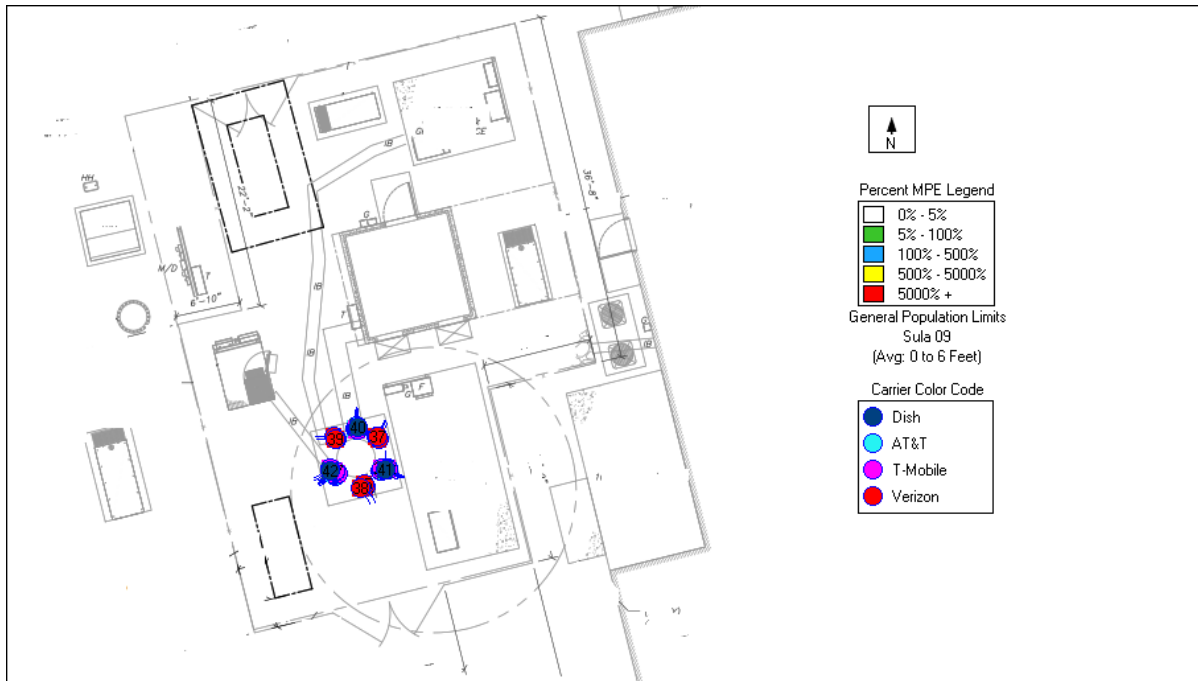
Appendix 2 .2 Antenna Inventory

209185 Burlington 2							
Antenna Inventory							
Antenna #	Carrier	Antenna Manufacturer	Antenna Model	Frequency Band (MHz)	Azimuth (°)	Effective Radiated Power (W)	Radiation Center (ft)
22	TMO	RFS	APX16DWV	700	000	7000	100.0
23	TMO	RFS	APX16DWV	700	120	7000	100.0
24	TMO	RFS	APX16DWV	700	240	7000	100.0
25	TMO	RFS	APXVAALL24	600/1900/2100	020	23200	120.0
26	TMO	RFS	APXVAALL24	600/1900/2100	110	23200	120.0
27	TMO	RFS	APXVAALL24	600/1900/2100	290	23200	120.0
28	TMO	Ericsson	Air 6419	2500	000	71639	100.0
29	TMO	Ericsson	Air 6419	2500	120	71639	100.0
30	TMO	Ericsson	Air 6419	2500	240	71639	100.0
31	VZW	Commscope	NHH-65B-R2B	700/800/1900/2100	050	16690	91.0
32	VZW	Commscope	NHH-65B-R2B	700/800/1900/2100	170	16690	91.0
33	VZW	Commscope	NHH-65B-R2B	700/800/1900/2100	300	16690	91.0
34	VZW	Commscope	NHHSS-65B-R2BT	700/800/1900/2100	050	16690	91.0
35	VZW	Commscope	NHHSS-65B-R2BT	700/800/1900/2100	170	16690	91.0
36	VZW	Commscope	NHHSS-65B-R2BT	700/800/1900/2100	300	16690	91.0
37	VZW	Samsung	MT6407	3700/3800/3900	050	18286	91.0
38	VZW	Samsung	MT6407	3700/3800/3900	170	18286	91.0
39	VZW	Samsung	MT6407	3700/3800/3900	300	18286	91.0
40	Dish	JMA	MX08FRO665-21	600/1900/2000/2100	000	48332	70.0
41	Dish	JMA	MX08FRO665-21	600/1900/2000/2100	120	48332	70.0
42	Dish	JMA	MX08FRO665-21	600/1900/2000/2100	240	48332	70.0

Appendix 3.1 MPE Limit Study General Population



Appendix 3.2 MPE Limit Study Occupational Limits



Appendix 4 RF Hazard Signs

RF Safety Exposure Categorization								
Exposure Conditions	Control Measures	Signage						
- Operational of the source(s) or locations where RF fields are too weak to cause exposures greater than General Public limit. <table border="1"> <tr> <th>Cat.</th><th>Occupational Worker</th><th>General Public</th></tr> <tr> <td>1</td><td><20%</td><td><100%</td></tr> </table> - Green zone is where the time and spatial-average is below 20% of Occupational Worker limit or <100% of General Public limit.	Cat.	Occupational Worker	General Public	1	<20%	<100%	- RF Safety Guideline/NIER report must be submitted to RFSO for approval. - No special EME safety practices required in these areas. - No signage required except Information sign.	 *the antenna owner information and Antenna Structure Registration Number and must be displayed on the sign. INFORMATION sign for access to rooftop/access door.
Cat.	Occupational Worker	General Public						
1	<20%	<100%						
- Operational of the source(s) or locations where RF exposure could cause exposure greater than General Public limit but not the Occupational Worker limit to be exceeded in accessible areas. <table border="1"> <tr> <th>Cat.</th><th>Occupational Worker</th><th>General</th></tr> <tr> <td>2</td><td>≥20% but <100%</td><td>>100%</td></tr> </table> - Blue zone is where the spatial average is between 20%-100% of Occupational Worker limit. This limit MUST be less than the Occupational limit.	Cat.	Occupational Worker	General	2	≥20% but <100%	>100%	- RF Safety Guideline/NIER report must be submitted to RFSO for approval. - Recommended RF safety awareness training for all workers in this area. - Controlled areas with barriers and/or signage required in these areas. - Do not walk in front of the antenna face or no loitering in this controlled area. - Individual MUST have full control over any area where the exposure levels exceed the limit.	 NOTICE signage shall be posted on the barriers/stanchion to prevent anyone from entering into the area (must be cordon off around the antennas - 4 posts /3 signs). Or must be posted in location that can be easily viewed by individuals that enter the areas of concerns.
Cat.	Occupational Worker	General						
2	≥20% but <100%	>100%						
- Operational of the source(s) or locations where RF exposure exceeded the Occupational Worker limit in accessible areas. <table border="1"> <tr> <th>Cat.</th><th>Occupational Worker</th><th>General Public</th></tr> <tr> <td>3</td><td>≥100%</td><td>≥500%</td></tr> </table> - Yellow zone is where the spatial average is above 100% of Occupational Worker limit.	Cat.	Occupational Worker	General Public	3	≥100%	≥500%	- RF Safety Guideline/NIER report must be submitted to RFSO for approval. - Individual shall not enter and work in these areas without RS approval - Required RF safety training and access area is restricted only for authorized worker. - Controlled areas with barriers and signage required in these areas. - Do not walk in front of the antenna face. - Require reduction of RF power and approval from Radiation Safety prior any work on the antennas.	 CAUTION signage shall be posted on the barriers/stanchion to prevent anyone from entering into the area (must be cordon off around the antennas - 4 posts /3 signs).
Cat.	Occupational Worker	General Public						
3	≥100%	≥500%						
- Exposure will exceed exposure limit in accessible areas. <table border="1"> <tr> <th>Cat.</th><th>Occupational Worker</th><th>General Public</th></tr> <tr> <td>4</td><td>>500%</td><td>>1000%</td></tr> </table> - Red zone is where the time and spatial-averaged levels fall above 500% of Occupational Worker limit or is not feasible to prevent exposures.	Cat.	Occupational Worker	General Public	4	>500%	>1000%	- RF Safety Guideline/NIER report must be submitted to RFSO for approval. - MUST re-engineer site to reduce the EME fields. No access allowed-Prohibited access! There must be controls to detect any unauthorized enter and terminate the RF energy in the area. - Lock out tag out of transmitters during the maintenance of the antenna system. - PPE is not sufficient. - Special RF training and PPE are required. (Applies only to individuals trained by RS).	 RF WARNING & Pacemaker DANGER signage or appropriate DANGER sign shall be posted very near radiation RF sources or if appropriate DANGER sign.
Cat.	Occupational Worker	General Public						
4	>500%	>1000%						



Appendix 5 Information Pertaining to MPE Studies

In 1985, the FCC first adopted guidelines to be used for evaluating human exposure to RF emissions. The FCC revised and updated these guidelines on August 1, 1996, as a result of a rule-making proceeding initiated in 1993. The new guidelines incorporate limits for Maximum Permissible Exposure (MPE) in terms of electric and magnetic field strength and power density for transmitters operating at frequencies between 300 kHz and 100 GHz.

The FCC's MPE limits are based on exposure limits recommended by the National Council on Radiation Protection and Measurements (NCRP), and, over a wide range of frequencies, the exposure limits were developed by the Institute of Electrical and Electronics Engineers, Inc., (IEEE) and adopted by the American National Standards Institute (ANSI) to replace the 1982 ANSI guidelines. Limits for localized absorption are based on recommendations of both ANSI/IEEE and NCRP.

The FCC's limits, and the NCRP and ANSI/IEEE limits on which they are based, are derived from exposure criteria quantified in terms of specific absorption rate (SAR). The basis for these limits is a whole-body averaged SAR threshold level of 4 watts per kilogram (4 W/kg), as averaged over the entire mass of the body, above which expert organizations have determined that potentially hazardous exposures may occur. The MPE limits are derived by incorporating safety factors that lead, in some cases, to limits that are more conservative than the limits originally adopted by the FCC in 1985. Where more conservative limits exist, they do not arise from a fundamental change in the RF safety criteria for whole-body averaged SAR, but from a precautionary desire to protect subgroups of the general population who, potentially, may be more at risk.

The FCC exposure limits are also based on data showing that the human body absorbs RF energy at some frequencies more efficiently than at others. The most restrictive limits occur in the frequency range of 30-300 MHz where whole-body absorption of RF energy by human beings is most efficient. At other frequencies, whole-body absorption is less efficient, and consequently, the MPE limits are less restrictive.



MPE limits are defined in terms of power density (units of milliwatts per centimeter squared: mW/cm^2), electric field strength (units of volts per meter: V/m) and magnetic field strength (units of amperes per meter: A/m). The far-field of a transmitting antenna is where the electric field vector (E), the magnetic field vector (H), and the direction of propagation can be considered to be all mutually orthogonal ("plane-wave" conditions).

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

General population/uncontrolled exposure limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment-related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area. Additional details can be found in FCC OET 65.



Appendix 6 MPE Standards Methodology

This study predicts RF field strength and power density levels that emanate from communications system antennae. It considers all transmitter power levels (less filter and line losses) delivered to each active transmitting antenna at the communications site. Calculations are performed to determine power density and MPE levels for each antenna as well as composite levels from all antennas. The calculated levels are based on where a human (Observer) would be standing at various locations at the site. The point of interest where the MPE level is predicted is based on the height of the Observer.

Compliance with the FCC limits on RF emissions are determined by spatially averaging a person's exposure over the projected area of an adult human body, that is approximately six-feet or two-meters, as defined in the ANSI/IEEE C95.1 standard. The MPE limits are specified as time-averaged exposure limits. This means that exposure is averaged over an identifiable time interval. It is 30 minutes for the general population/uncontrolled RF environment and 6 minutes for the occupational/controlled RF environment. However, in the case of the general public, time averaging should not be applied because the general public is typically not aware of RF exposure, and they do not have control of their exposure time. Therefore, it should be assumed that any RF exposure to the general public will be continuous.



The FCC's limits for exposure at different frequencies are shown in the following Tables.

Limits for Occupational/Controlled Exposure				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time |E|², |H|² or S (minutes)
0.3 - 3.0	614	1.63	100*	6
3.0 - 30	1842/f	4.89/f	900/F ²	6
30 - 300	61.4	0.163	1.0	6
300 - 1500	--	--	f/300	6
1500 - 100,000	--	--	5	6

f = frequency

* = Plane-wave equivalent power density

Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time |E|², |H|² or S (minutes)
0.3 - 1.34	614	1.63	100*	30
1.34 - 30	824/f	2.19/f	180/F ²	30
30 -300	27.5	0.073	0.2	30
300 -1500	--	--	f/1500	30
1500 -100,000	--	--	1.0	30

f = frequency

* = Plane-wave equivalent power density

General population/uncontrolled exposures apply in situations in which the general public may be exposed or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

It is important to understand that these limits apply cumulatively to all sources of RF emissions affecting a given area. For example, if several different communications system antennas occupy a shared facility such as a tower or rooftop, then the total exposure from all systems at the facility must be within compliance of the FCC guidelines.



The field strength emanating from an antenna can be estimated based on the characteristics of an antenna radiating in free space. There are basically two field areas associated with a radiating antenna. When close to the antenna, the region is known as the Near Field. Within this region, the characteristics of the RF fields are very complex, and the wave front is extremely curved. As you move further from the antenna, the wave front has less curvature and becomes planar. The wave front still has a curvature, but it appears to occupy a flat plane in space (plane-wave radiation). This region is known as the Far Field.

Two models are utilized to predict Near and Far field power densities. They are based on the formulae in FCC OET 65.

Cylindrical Model (Near Field Predictions)

Spatially averaged plane-wave equivalent power densities parallel to the antenna may be estimated by dividing the antenna input power by the surface area of an imaginary cylinder surrounding the length of the radiating antenna. While the actual power density will vary along the height of the antenna, the average value along its length will closely follow the relation given by the following equation:

$$S = P \div 2\pi RL$$

Where:

S = Power Density

P = Total Power into antenna

R = Distance from the antenna

L = Antenna aperture length



For directional-type antennas, power densities can be estimated by dividing the input power by that portion of a cylindrical surface area corresponding to the angular beam width of the antenna. For example, for the case of a 120-degree azimuthal beam width, the surface area should correspond to 1/3 that of a full cylinder. This would increase the power density near the antenna by a factor of three over that for a purely omni-directional antenna. Mathematically, this can be represented by the following formula:

$$S = (180 / \theta_{BW}) P \div \pi RL$$

Where:

S = Power Density

θ_{BW} = Beam width of antenna in degrees (3 dB half-power point)

P = Total Power into antenna

R = Distance from the antenna

L = Antenna aperture length

If the antenna is a 360-degree omni-directional antenna, this formula would be equivalent to the previous formula.



Spherical Model (Far Field Predictions)

Spatially averaged plane-wave power densities in the Far Field of an antenna may be estimated by considering the additional factors of antenna gain and reflective waves that would contribute to exposure.

The radiation pattern of an antenna has developed in the Far Field region and the power gain needs to be considered in exposure predictions. Also, if the vertical radiation pattern of the antenna is considered, the exposure predictions would most likely be reduced significantly at ground level, resulting in a more realistic estimate of the actual exposure levels.

Additionally, to model a truly "worst case" prediction of exposure levels at or near a surface, such as at ground-level or on a rooftop, reflection off the surface of antenna radiation power can be assumed, resulting in a potential four-fold increase in power density.

These additional factors are considered, and the Far Field prediction model is determined by the following equation:

$$S = EIRP \times Rc \div 4\pi R^2$$

Where:

S = Power Density

EIRP = Effective Radiated Power from antenna

Rc = Reflection Coefficient (2.56)

R = Distance from the antenna

The EIRP includes the antenna gain. If the antenna pattern is considered, the antenna gain is relative based on the horizontal and vertical pattern gain values at that particular location in space, on a rooftop or on the ground. However, it is recommended that the antenna radiation pattern characteristics not be considered to provide a conservative "worst case" prediction. This is the equation is utilized for the Far Field exposure predictions herein.



Town of Burlington, CT

Property Listing Report

Map Block Lot

11-06-33

Building # 1

Section # 1

Account

00039400

Property Information

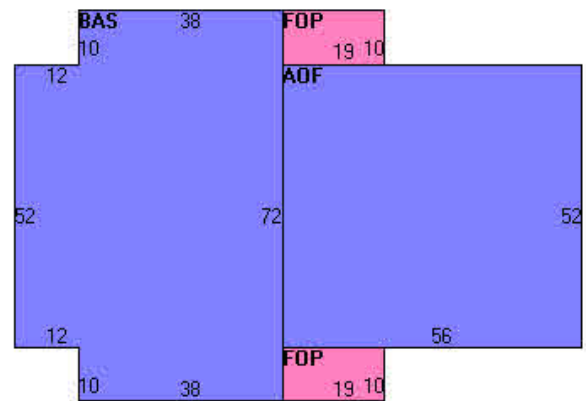
Property Location	87 MONCE RD
Owner	BURLINGTON TOWN OF
Co-Owner	
Mailing Address	200 SPIELMANY HWY BURLINGTON CT 06013
Land Use	9032 Mun Fire
Land Class	E
Zoning Code	R44
Census Tract	

Street Index	4000
Acreage	0.95
Utilities	
Lot Setting/Desc	Rural Level
Additional Info	

Photo



Sketch



Primary Construction Details

Year Built	2016
Stories	1
Building Style	Fire Station
Building Use	Serv Station
Building Condition	A
Occupancy	1.00
Extra Fixtures	
Bath Style	
Kitchen Style	
AC Type	03
Heating Type	Forced Air
Heating Fuel	Gas

Bedrooms	
Full Bathrooms	
Half Bathrooms	
Total Rooms	1
Roof Style	Gable
Roof Cover	Archit Shingl
Interior Floors 1	Concrete
Interior Floors 2	
Exterior Walls	Clapboard
Exterior Walls 2	Brick/Masonry
Interior Walls	Drywall
Interior Walls 2	

(*Industrial / Commercial Details)

Building Desc.	Mun Fire
Building Grade	
Heat / AC	HEAT/AC PKGS
Frame Type	WOOD FRAME
Baths / Plumbing	AVERAGE
Ceiling / Wall	SUSP-CEIL ONLY
Rooms / Prtns	AVERAGE
Wall Height	18
First Floor Use	NA

Town of Burlington, CT

Property Listing Report

Map Block Lot

11-06-33

Building # **1**Section # **1**

Account

00039400

Valuation Summary (Assessed value = 70% of Appraised Value)

Item	Appraised	Assessed
Buildings	711700	498190
Extras	0	0
Improvements		
Outbuildings	38500	26950
Land	140900	98630
Total	891100	623770

Sub Areas

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
Office	2912	2912
First Floor	3360	3360
Porch, Open	380	0
Total Area	6652	6272

Outbuilding and Extra Features

[illegible]

Sales History

Owner of Record	Book/ Page	Sale Date	Sale Price
BURLINGTON TOWN OF	0355/0902	2018-08-23	0
BURLINGTON TOWN OF	0335/0780	2015-04-06	0
BURLINGTON VOLUNTEER FIRE DEPT	00151/0044	1995-02-01	5000
BURLINGTON VOLUNTEER FIRE	00047/0037		0

Town of Burlington

Geographic Information System (GIS)



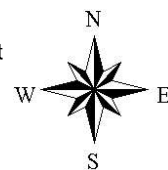
Date Printed: 7/24/2024



MAP DISCLAIMER - NOTICE OF LIABILITY

This map is for assessment purposes only. It is not for legal description or conveyances. All information is subject to verification by any user. The Town of Burlington and its mapping contractors assume no legal responsibility for the information contained herein.

Approximate Scale: 1 inch = 400 feet





AMERICAN TOWER®

A.T. ENGINEERING SERVICES LLC

1 FENTON MAIN

SUITE 300

CARY, NC 27511

PHONE: (919) 468-0112

PEC.0001553

THE USE AND PUBLICATION OF THESE DRAWINGS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY ARE PREPARED. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO AMERICAN TOWER OR THE SPECIFIED CARRIER IS STRICTLY PROHIBITED. NEITHER THE ARCHITECT NOR THE ENGINEER WILL BE PROVIDING ON-SITE CONSTRUCTION REVIEW OF THIS PROJECT. CONTRACTOR(S) MUST VERIFY ALL DIMENSIONS AND ADVISE AMERICAN TOWER OR THE SPECIFIED CARRIER OF ANY DISCREPANCIES. ANY PRIOR ISSUANCE OF THIS DRAWING IS SUPERSEDED BY THE LATEST VERSION.

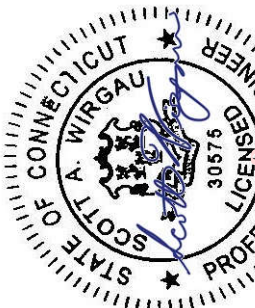
REV.	DESCRIPTION	BY	DATE
△	FOR CONSTRUCTION	EDNA	7/17/2024
△			
△			
△			
△			

ATC SITE NUMBER:
209185

ATC SITE NAME:
BURLINGTON 2

VERIZON SITE NAME:
BURLINGTON SW CT - A

SEAL:



Scott A. Wirgau
Digitally signed
by Scott Wirgau
Date:
2024.07.17
22:40:42 -04'00'



ATC JOB NO: 1486812_G0

CUSTOMER ID: BURLINGTON SW CT - A

CUSTOMER #: 5000063849

TITLE SHEET

SHEET NUMBER: G-001

REVISION: 0

LOCATION MAP



AMERICAN TOWER®

ATC SITE NAME: BURLINGTON 2

ATC SITE NUMBER: 209185

VERIZON SITE NAME: BURLINGTON SW CT - A

VERIZON SITE NUMBER: 5000063849

VERIZON FUZE PID: 16559975

SITE ADDRESS: 87 MONCE ROAD

BURLINGTON, CT 6013

VICINITY MAP

VERIZON AMENDMENT DRAWINGS

COMPLIANCE CODE		PROJECT SUMMARY	PROJECT DESCRIPTION	SHEET INDEX			
ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNMENT AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES. 1. 2020 NFPA 70, NATIONAL ELECTRIC CODE (NEC) 2. 2022 CONNECTICUT STATE BUILDING CODE 3. 2021 INTERNATIONAL BUILDING CODE (IBC) DESIGN CRITERIA FROM TOWER STRUCTURAL ANALYSIS: BASIC WIND SPEED: 116 MPH (3-SECOND GUST) BASIC WIND SPEED W/ ICE: 50 MPH (3 SECOND GUST) W/ 1.50" RADIAL ICE CODE(S): CONCURRENT ANS/I/TIA-222-H / 2021 IBC / 2022 CONNECTICUT STATE BUILDING CODE EXPOSURE CATEGORY: II RISK CATEGORY: METHOD 1 TOPO FACTOR PROCEDURE: 1 TOPOGRAPHIC CATEGORY: FLAT FEATURE: S_w=0.18, S_i=0.05 SPECTRAL RESPONSE: D - STIFF SOIL - DEFAULT SITE CLASS: INFORMATION TAKEN FROM STRUCTURAL ANALYSIS COMPLETED BY ATC, DATED 07/02/24.	TOWER OWNER: AMERICAN TOWER 10 PRESIDENTIAL WAY WOBBURN, MA 01801 ENGINEER: A.T. ENGINEERING SERVICES LLC 1 FENTON MAIN, STE 300 CARY, NC 27511 PROPERTY OWNER: TOWN OF BURLINGTON 87 MONCE ROAD BURLINGTON, CT 6013						

 PROJECT TEAM APPLICANT: VERIZON WIRELESS | THE PROPOSED PROJECT INCLUDES MODIFYING GROUND BASED AND TOWER MOUNTED EQUIPMENT AS INDICATED PER BELOW: INSTALL (3) ANTENNA(s) AND (3) RRH(s) EXISTING (6) ANTENNA(s), (6) RRH(s), (2) FILTER(s), (1) OVP(s), AND (1) 1-5/8" 12X24 HYBRIFLEX CABLE(s) TO REMAIN | SHEET NO: G-001 G-002 C-101 C-201 C-401 C-501 E-501 | DESCRIPTION: TITLE SHEET GENERAL NOTES DETAILED SITE PLAN TOWER ELEVATION ANTENNA INFORMATION & SCHEDULE CONSTRUCTION DETAILS GROUNDING DETAILS SUPPLEMENTAL SHEETS (1 PAGE) | REV: 0 0 0 0 0 0 | DATE: 7/17/2024 7/17/2024 7/17/2024 7/17/2024 7/17/2024 7/17/2024 7/17/2024 | BY: EDNA EDNA EDNA EDNA EDNA EDNA EDNA || | CONTRACTOR PMI REQUIREMENTS | | | | | | |
	PMI ACCESSED AT: HTTPS://PMI.VZWSMART.COM						
	SMART TOOL VENDOR PROJECT NUMBER: 10227145						
	VZW LOCATION CODE (PSLC): 5000063849						
	***PMI AND REQUIREMENTS ALSO EMBEDDED IN MOUNT ANALYSIS REPORT						
	MOUNT MODIFICATION REQUIRED: NO						
	VZW APPROVED SMART KIT VENDORS: REFER TO MOUNT MODIFICATION DRAWINGS PAGES FOR VZW SMART KIT APPROVED VENDORS						
PROJECT LOCATION DIRECTIONS		FROM CITY: HARTFORD, CT					
		TAKE I-84 W/US-6 W TOWARD WATERBURY. TAKE THE US-6 W EXIT . EXIT 38. TOWARD BRISTOL. KEEP LEFT TO TAKE THE RAMP TOWARD BRISTOL. STAY STRAIGHT TO GO ONTO COLT HWY/US-6 W. CONTINUE TO FOLLOW US-6 W. TURN RIGHT ONTO PLAINVILLE AVE/CT-177. TURN LEFT ONTO COPPERMINE RD. COPPERMINE RD BECOMES STAFFORD RD. TURN RIGHT ONTO MONCE RD. DESTINATION ON LEFT.					

GENERAL CONSTRUCTION NOTES:

1.

OWNER FURNISHED MATERIALS, VERIZON "THE COMPANY" WILL PROVIDE AND THE CONTRACTOR WILL INSTALL
2.

1.

BTS EQUIPMENT FRAME (PLATFORM) AND ICEBRIDGE SHELTER (GROUND BUILD/CO-LOCATE ONLY)

2.

AC/TELCO INTERFACE BOX (PPC)

3.

ICE BRIDGE (CABLE TRAY WITH COVER) (GROUND BUILD/CO-LOCATE ONLY, GC TO FURNISH AND INSTALL FOR ROOF-TOP INSTALLATION)

4.

TOWERS, MONOPOLES

5.

TOWER LIGHTING

6.

GENERATORS & LIQUID PROPANE TANK

7.

ANTENNA STANDARD BRACKETS, FRAMES AND PIPES FOR MOUNTING

8.

ANTENNAS (INSTALLED BY OTHERS)

9.

TRANSMISSION LINE

10.

TRANSMISSION LINE JUMPERS

11.

TRANSMISSION LINE CONNECTORS WITH WEATHERPROOFING KITS

12.

HANGERS

13.

HOISTING GRIPS

14.

BTS EQUIPMENT

THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL OTHER MATERIALS FOR THE COMPLETE INSTALLATION OF THE SITE INCLUDING, BUT NOT LIMITED TO, SUCH MATERIALS AS FENCING, STRUCTURAL STEEL SUPPORTING SUB-FRAME FOR PLATFORM, ROOFING LABOR AND MATERIALS, GROUNDING RINGS, GROUNDING WIRES, COPPER-CLAD OR XIT CHEMICAL GROUND ROD(S), BUSS BARS, TRANSFORMERS AND DISCONNECT SWITCHES WHERE APPLICABLE, TEMPORARY ELECTRICAL POWER, CONDUIT, LANDSCAPING COMPOUND STONE, CRANES, CORE DRILLING, SLEEPERS AND RUBBER MATTING, REBAR, CONCRETE CARBONS, PADS AND/OR AUGER MOUNTS, MISCELLANEOUS FASTENERS, CABLE TRAYS, NON-STANDARD ANTENNA FRAMES AND ALL OTHER MATERIAL AND LABOR REQUIRED TO COMPLETE THE JOB ACCORDING TO THE DRAWINGS AND SPECIFICATIONS. IT IS THE POSITION OF VERIZON TO APPLY FOR PERMITTING AND CONTRACTOR RESPONSIBLE FOR PICKUP AND PAYMENT OF REQUIRED PERMITS.
3.

ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING ANSIEA/ITIA-222, AND COMPLY WITH ATC CONSTRUCTION SPECIFICATIONS.
4.

CONTRACTOR SHALL CONTACT LOCAL 811 FOR IDENTIFICATION OF UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
5.

CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED INSPECTIONS.
6.

ALL DIMENSIONS TO, OF, AND ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, AND SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
7.

DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.
8.

DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
9.

THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
10.

CONTRACTOR SHALL BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR BOLTS, ETC.
11.

CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC, BEFORE COMMENCING WORK.
12.

INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE VERIZON REP PRIOR TO REMEDIAL OR CORRECTIVE ACTION, ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE VERIZON REP PRIOR TO PROCEEDING.
13.

EACH CONTRACTOR SHALL COOPERATE WITH THE VERIZON REP AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
14.

CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE VERIZON CONSTRUCTION MANAGER.
15.

ALL CABLE/CONDUIT ENTRY/EXIT PORTS SHALL BE WEATHERPROOFED DURING INSTALLATION USING A SILICONE SEALANT.
16.

WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET, CONTRACTOR SHALL NOTIFY THE VERIZON REP AND ENGINEER OF RECORD IMMEDIATELY.
17.

CONTRACTOR SHALL ENSURE ALL SUBCONTRACTORS ARE PROVIDED WITH A COMPLETE AND CURRENT SET OF DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
18.

CONTRACTOR SHALL REMOVE ALL RUBBISH AND DEBRIS FROM THE SITE AT THE END OF EACH DAY.
19.

CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH AMERICAN TOWER CORPORATION (ATC) AND TAKE PRECAUTIONS TO MINIMIZE IMPACT AND DISRUPTION OF OTHER OCCUPANTS OF THE FACILITY.
20.

CONTRACTOR SHALL FURNISH VERIZON AND AMERICAN TOWER CORPORATION (ATC) WITH A PDF MARKED UP AS-BUILT SET OF DRAWINGS UPON COMPLETION OF WORK.
21.

PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH VERIZON REP TO DETERMINE WHAT, IF ANY, ITEMS WILL BE PROVIDED. ALL ITEMS NOT PROVIDED SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. CONTRACTOR WILL INSTALL ALL ITEMS PROVIDED.

- B.
- ALL COAXIAL/HYBRID CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL/HYBRID CABLE (NOT WITHIN BENDS)

22.
- PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH VERIZON REP TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY CONTRACTOR. ALL REQUIRED PERMITS NOT OBTAINED BY VERIZON MUST BE OBTAINED, AND PAID FOR, BY THE CONTRACTOR.

23.
- CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH VERIZON SPECIFICATIONS AND REQUIREMENTS.

24.
- CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO VERIZON FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.

25.
- ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURERS SPECIFICATIONS AND LOCATED ACCORDING TO VERIZON SPECIFICATIONS, AND AS SHOWN IN THESE PLANS.

26.
- THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.

27.
- CONTRACTOR SHALL NOTIFY VERIZON REP A MINIMUM OF 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING ANY UNDERGROUND UTILITIES, FOUNDATIONS OR SEALING ANY WALL, FLOOR OR ROOF PENETRATIONS FOR ENGINEERING REVIEW AND APPROVAL.

28.
- WHEN THE PROJECT SCOPE REQUIRES THE USE OF THE SAFETY CLIMB, THE GENERAL CONTRACTOR SHALL ENSURE THE SAFETY CLIMB IS FREE OF OBSTRUCTIONS, NOT RUBBING ON OR TRAPPED BY ANY INSTALLED CUSTOMER EQUIPMENT, IS VISUALLY TAUT, MEETS MANUFACTURER INSTALLATION SPECIFICATIONS, AND IS FIRMLY SECURED AT ALL CABLE GUIDE LOCATIONS UPON PROJECT COMPLETION.

29.
- COMPLETION OF PROJECT SHALL NOT OBSTRUCT, TRAP, LOOSEN, OR OTHERWISE CAUSE FAILURE TO MEET MANUFACTURER INSTALLATION REQUIREMENTS FOR THE SAFETY CLIMB.

30.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY INCLUDING COMPLIANCE WITH ALL APPLICABLE OSHA STANDARDS AND RECOMMENDATIONS AND SHALL PROVIDE ALL NECESSARY SAFETY DEVICES INCLUDING PPE AND PPM AND CONSTRUCTION DEVICES SUCH AS RELAYS, NO FIRE PROTECTION, TEMPORARY SHORING, SCAFFOLDING, TRENCH BOXES/SLOPING, BARRIERS, ETC.

31.
- THE CONTRACTOR SHALL PROTECT AT HIS OWN EXPENSE ALL EXISTING FACILITIES AND SUCH OF HIS NEW WORK LIABLE TO INJURY DURING THE CONSTRUCTION PERIOD. ANY DAMAGE CAUSED BY NEGLIGENCE ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, OR BY THE ELEMENTS DUE TO NEGLIGENCE ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, EITHER TO THE EXISTING WORK, OR TO HIS WORK OR THE WORK OF ANY OTHER CONTRACTOR, SHALL BE REPAIRED AT HIS EXPENSE TO THE OWNER'S SATISFACTION.

32.
- ALL WORK SHALL BE INSTALLED IN A FIRST CLASS, NEAT AND WORKMANLIKE MANNER BY MEN SKILLED IN THE TRADE INVOLVED. THE QUALITY OF WORKMANSHIP SHALL BE SUBJECT TO THE APPROVAL OF THE VERIZON REP. ANY WORK FOUND BY THE VERIZON REP TO BE OF INFERIOR QUALITY AND/OR WORKMANSHIP SHALL BE REPLACED AND/OR REWORKED AT CONTRACTOR EXPENSE UNTIL APPROVAL IS OBTAINED.

33.
- IN ORDER TO ESTABLISH STANDARDS OF QUALITY AND PERFORMANCE, ALL TYPES OF MATERIALS LISTED HEREINAFTER BY MANUFACTURER'S NAMES AND/OR MANUFACTURER'S CATALOG NUMBER SHALL BE PROVIDED BY THESE MANUFACTURERS AS SPECIFIED.

34.
- VERIZON FURNISHED EQUIPMENT SHALL BE PICKED UP AT THE VERIZON WAREHOUSE, NO LATER THAN 48HR AFTER BEING NOTIFIED. STORED UNDERATE, PROTECTED FROM WEATHER, AND KEPT IN WORKING ORDER. VERIZON TENDERS REQUIRED TO PLACE THE EQUIPMENT IN OPERATION, READY FOR USE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE EQUIPMENT AFTER PICKING IT UP.

35.
- VERIZON OR HIS ARCHITECT/ENGINEER RESERVES THE RIGHT TO REJECT ANY EQUIPMENT OR MATERIALS WHICH, IN HIS OWN OPINION ARE NOT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS, EITHER BEFORE OR AFTER INSTALLATION AND THE EQUIPMENT SHALL BE REPLACED WITH EQUIPMENT CONFORMING TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS BY THE CONTRACTOR AT NO COST TO VERIZON OR THEIR ARCHITECT/ENGINEER.

SPECIAL CONSTRUCTION
ANTENNA INSTALLATION NOTES:

1.

WORK INCLUDED:

A.

ANTENNA AND COAXIAL/HYBRID CABLES ARE FURNISHED BY VERIZON UNDER A SEPARATE CONTRACT. THE CONTRACTOR SHALL ASSIST ANTENNA INSTALLATION CONTRACTOR WITH TERMS OF COORDINATION AND SITE ACCESS. ERECTOR/SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF PERSONNEL.
- B.

INSTALL ANTENNAS AS INDICATED ON DRAWINGS AND VERIZON SPECIFICATIONS.
- C.

INSTALL GALVANIZED STEEL ANTENNA MOUNTS AS INDICATED ON DRAWINGS.
- D.

INSTALL FURNISHED GALVANIZED STEEL OR ALUMINUM WAVEGUIDE
- E.

INSTALL COAXIAL/HYBRID CABLES AND TERMINATING BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. WEATHERPROOF ALL CONNECTIONS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL/HYBRID CABLE THREE (3) FEET IN EXCESS OF ENTRY PORT LOCATION UNLESS OTHERWISE STATED.
2.

ANTENNA AND COAXIAL/HYBRID CABLE GROUNDING:

A.

ALL EXTERIOR #6 GREEN GROUND WIRE "DAISY CHAIN" CONNECTIONS ARE TO BE WEATHER SEALED WITH RFS CONNECTORS/SP-LICE WEATHERPROOFING KIT #221213 OR EQUAL.

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

AMERICAN TOWER®

A.T. ENGINEERING SERVICES LLC

1 FENTON MAIN

SUITE 300

CARY, NC 27511

PHONE: (919) 468-0112

PEC.0001553

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REV.	DESCRIPTION	BY	DATE
1	FOR CONSTRUCTION	EDNA	7/17/2024

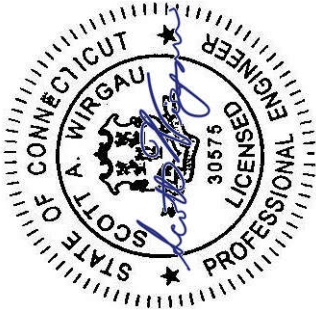
ATC SITE NUMBER:
209185

ATC SITE NAME:
BURLINGTON 2

VERIZON SITE NAME:
BURLINGTON SW CT - A

SITE ADDRESS:
87 MONCE ROAD
BURLINGTON, CT 6013

SEAL:



Digitally Signed: 2024-07-17

ATC JOB NO:	14868812_G0
CUSTOMER ID:	BURLINGTON SW CT - A
CUSTOMER #:	5000063849

GENERAL NOTES

SHEET NUMBER: G-002	REVISION: 0
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A.T. ENGINEERING SERVICES LLC
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SUITE 300
CARY, NC 27511
PHONE: (919) 468-0112
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- 

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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	EDNA	7/17/2024

ATC SITE NUMBER:
209185

ATC SITE NAME:

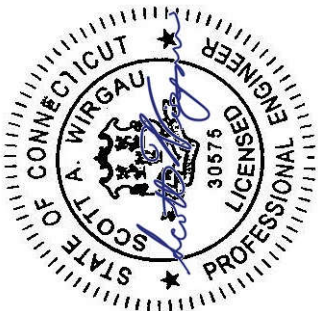
BURLINGTON 2

VERIZON SITE NAME:

BURLINGTON SW CT - A

SITE ADDRESS:
87 MONCE ROAD
BURLINGTON, CT 60

SEAL:



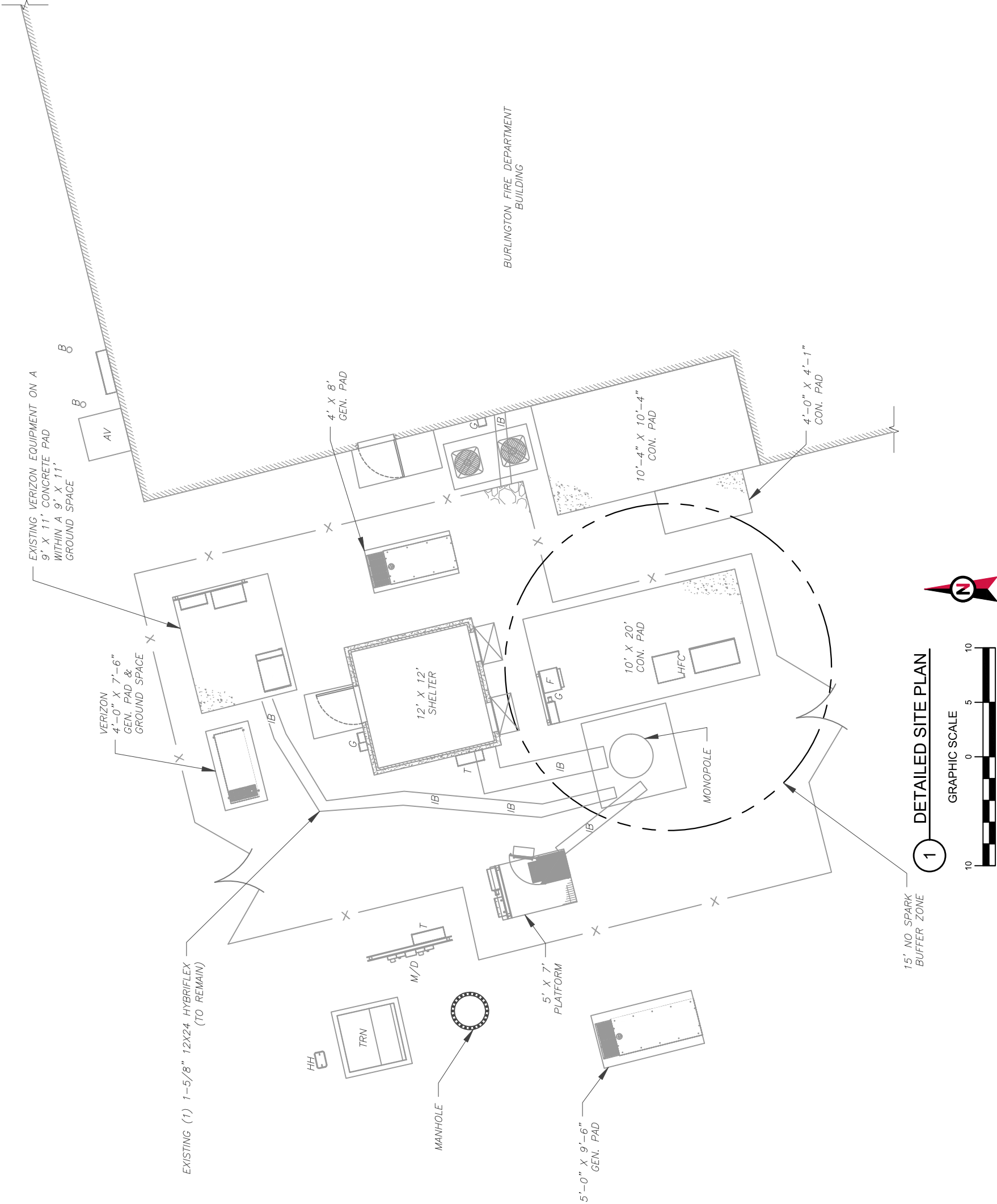
Digitally Signed: 2024-07-17



ATC JOB NO:	14866812_G0
CUSTOMER ID:	BURLINGTON SW CT - A
CUSTOMER #:	5000063849

DETAILED SITE PLAN

SHEET NUMBER: C-101 REVISION: 0



DETAILED SITE PLAN

GRAPHIC SCALE



(IN FEET)
1 UNIT = 10 FEET

FAA REGISTERED HEIGHT: 143' AGL

PER MOUNT ANALYSIS COMPLETED BY COLLIER'S
ENGINEERING & DESIGN, DATED 03/19/24, THE
EXISTING MOUNT CAN ADEQUATELY SUPPORT
THE PROPOSED LOADING.

TOP OF EXISTING
HIGHEST APPURTENANCE
ELEV. 138.6'

TOP OF EXISTING TOWER
ELEV. 120.17'

2
C-401

1
C-401

EXISTING AND
PROPOSED VERIZON
EQUIPMENT

EXISTING (1) 1-5/8" 12X24 HYBRIFLEX
(TO REMAIN)

EXISTING TOWER

EXISTING GRADE
ELEV. 0'

1 TOWER ELEVATION
SCALE: N.T.S.

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

- TOWER NOTE:
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM WITH THE PROJECT MANAGER THAT THEY HAVE THE MOST RECENT VERSION OF THE STRUCTURAL ANALYSIS BEFORE COMMENCING WORK. EXISTING AND PROPOSED TOWER APPURTENANCES, MOUNTS, AND ANTENNAS ARE SHOWN BASED ON THE STRUCTURAL ANALYSIS. WHERE APPLICABLE, ALL NEW ANTENNAS, EQUIPMENT, MOUNTS, CABLING, ETC. SHALL BE PAINTED/SOCKED TO MATCH EXISTING EQUIPMENT IN ACCORDANCE WITH FAA, JURISDICTION, AND/OR OTHER LOCAL REQUIREMENTS.
 - TOWER ELEVATION DEPICTION MAY NOT REFLECT ALL EQUIPMENT INCLUDED IN STRUCTURAL ANALYSIS. REFER TO STRUCTURAL ANALYSIS FOR FULL TOWER LOADING.



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△	FOR CONSTRUCTION	EDNA	7/17/2024
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ATC SITE NUMBER:

209185

ATC SITE NAME:

BURLINGTON 2

VERIZON SITE NAME:

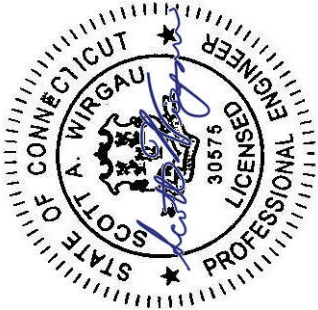
BURLINGTON SW CT - A

SITE ADDRESS:

87 MONCE ROAD

BURLINGTON, CT 6013

SEAL:



Digitally Signed: 2024-07-17

verizon

ATC JOB NO: 1486812_GO

CUSTOMER ID: BURLINGTON SW CT - A

CUSTOMER #: 5000063849

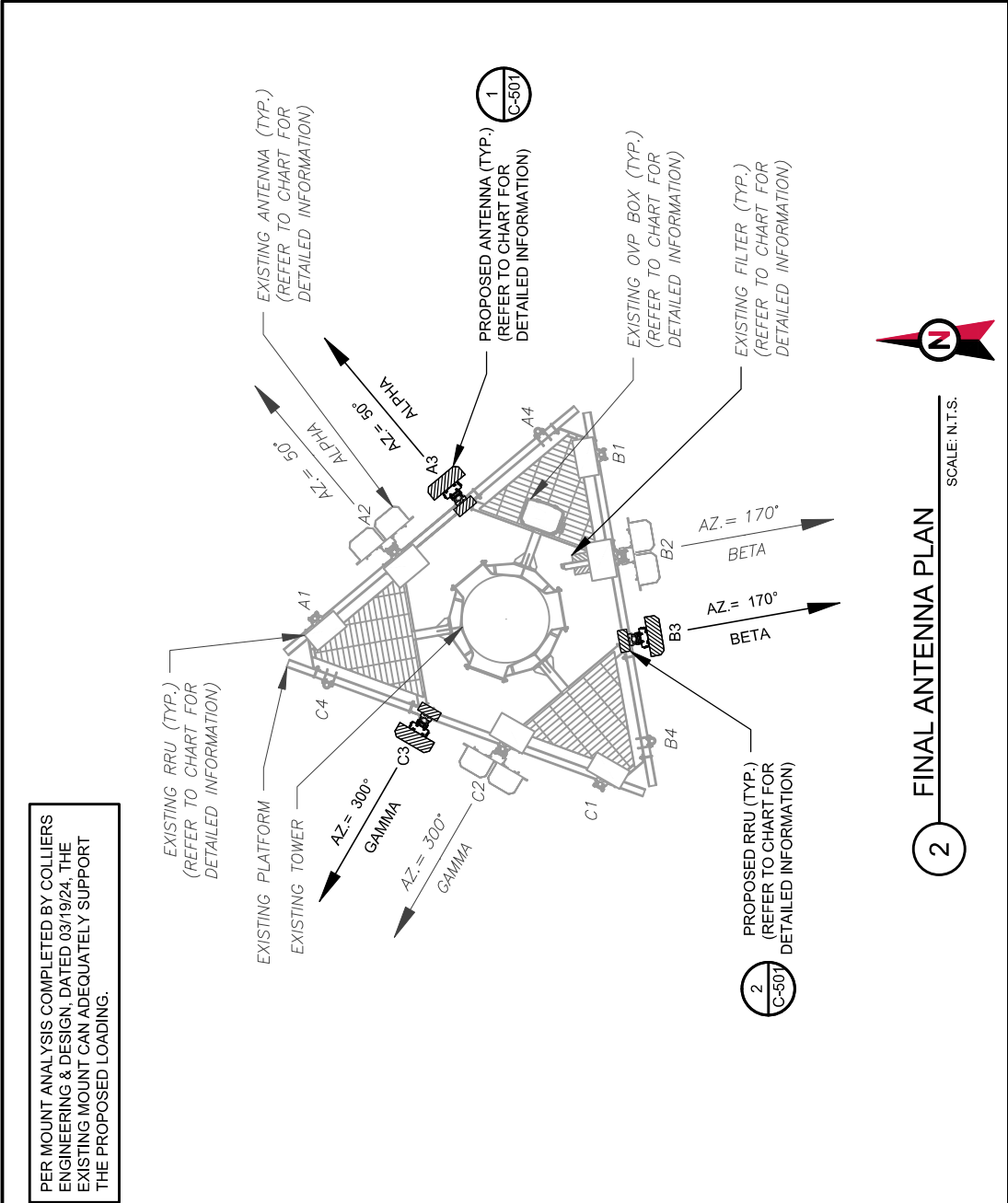
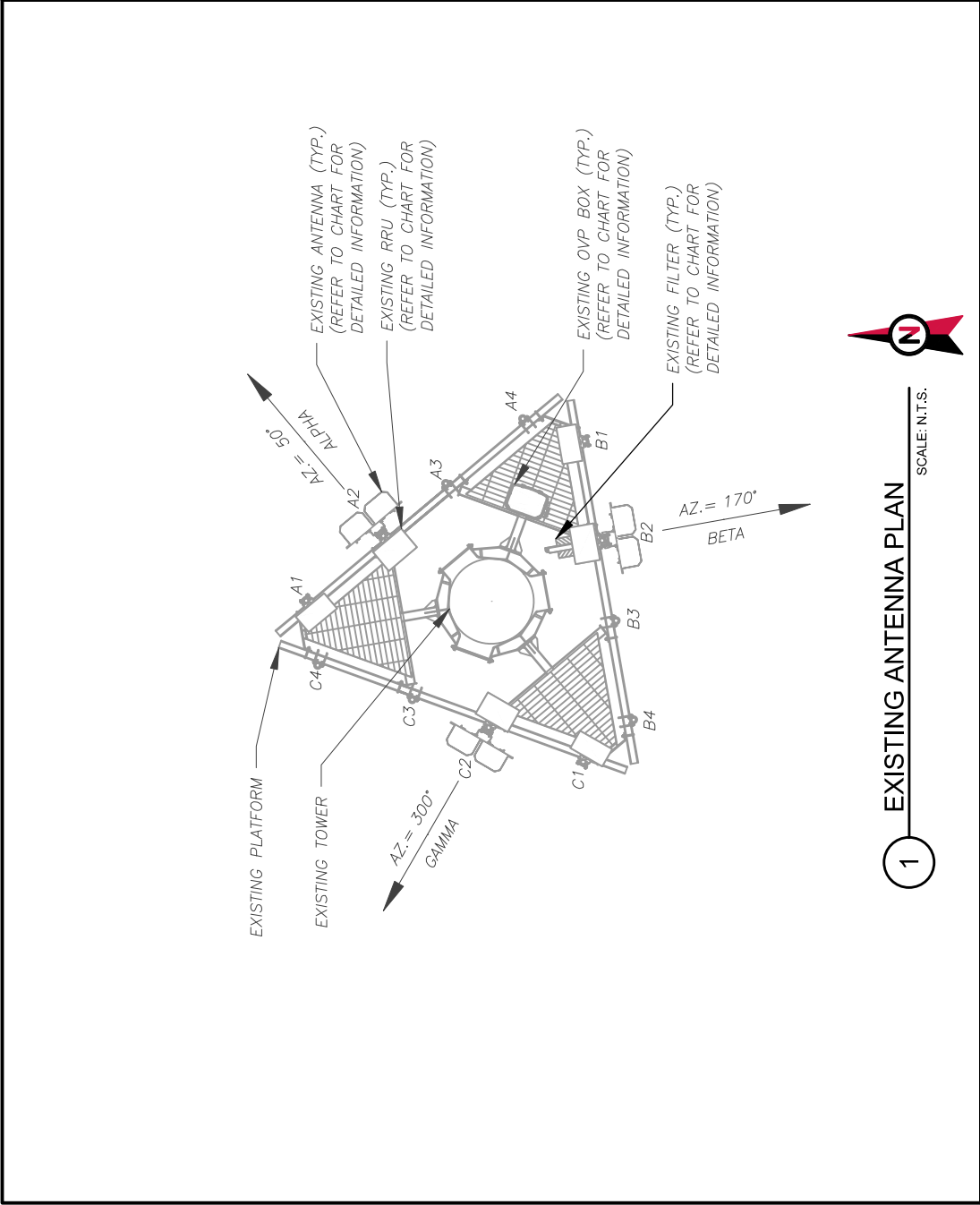
TOWER ELEVATION

SHEET NUMBER:

C-201

REVISION:

0



EXISTING ANTENNA SCHEDULE										NOTES
LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY			
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS		
ALPHA	91'	50°	A1	—	—	—	B5/B13 RRH—BR04C	RMN	1. GC TO VERIFY THE FINAL RFDS MATCHES THE FINAL CONSTRUCTION DRAWINGS. GC TO NOTIFY ATC PM OF ANY DISCREPANCY PRIOR TO INSTALLING THE EQUIPMENT. GC TO CAP ALL UNUSED PORTS. 2. GC TO CONFIRM SPACING OF PROPOSED EQUIP DOES NOT CAUSE TOWER CONFLICTS NOR IMPEDE TOWER CLIMBING PEGS.	
			A2	NHH—65B—R2B NHHSS—65B—R2BT4	L700, L850, L1900 LAWS	RMN RMN	B2/B66A RRH—BR049	RMN		
			A3	—	—	—	—	—		
			A4	—	—	—	—	—		
BETA	91'	170°	B1	—	—	—	B5/B13 RRH—BR04C	RMN	STATUS ABBREVIATIONS RMV: TO BE REMOVED RMN: TO REMAIN REL: TO BE RELOCATED ADD: TO BE ADDED	
			B2	NHH—65B—R2B NHHSS—65B—R2BT4	L700, L850, L1900 LAWS	RMN RMN	B2/B66A RRH—BR049 (2) KA—6030	RMN RMN		
			B3	—	—	—	—	—		
			B4	—	—	—	—	—		
GAMMA	91'	300°	C1	—	—	—	B5/B13 RRH—BR04C	RMN	CABLE LENGTHS FOR JUMPERS JUNCTION BOX TO RRU: 15' RRU TO ANTENNA: 10'	
			C2	NHH—65B—R2B NHHSS—65B—R2BT4	L700, L850, L1900 LAWS	RMN RMN	B2/B66A RRH—BR049	RMN		
			C3	—	—	—	—	—		
			C4	—	—	—	—	—		

FINAL ANTENNA SCHEDULE								
LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	91°	50°	A1	-	-	-	B5/B13 RRH-BR04C	RMN
			A2	NHH-65B-R2B NHHSS-65B-R2BT4	L700, L850, L1900 LAWS	RMN RMN	B2/B66A RRH-BR049	RMN
			A3	MT6413-77A	5G CBAND	ADD	RT4423-48A	ADD
			A4	-	-	-	-	-
BETA	91°	170°	B1	-	-	-	B5/B13 RRH-BR04C	RMN
			B2	NHH-65B-R2B NHHSS-65B-R2BT4	L700, L850, L1900 LAWS	RMN RMN	B2/B66A RRH-BR049 (2) KA-6030	RMN RMN
			B3	MT6413-77A	5G CBAND	ADD	RT4423-48A	ADD
			B4	-	-	-	-	-
GAMMA	91°	300°	C1	-	-	-	B5/B13 RRH-BR04C	RMN
			C2	NHH-65B-R2B NHHSS-65B-R2BT4	L700, L850, L1900 LAWS	RMN RMN	B2/B66A RRH-BR049	RMN
			C3	MT6413-77A	5G CBAND	ADD	RT4423-48A	ADD
			C4	-	-	-	-	-

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ATC JOB NO:	1486812_G0
CUSTOMER ID:	BURLINGTON SW CT - A
CUSTOMER #:	5000063849

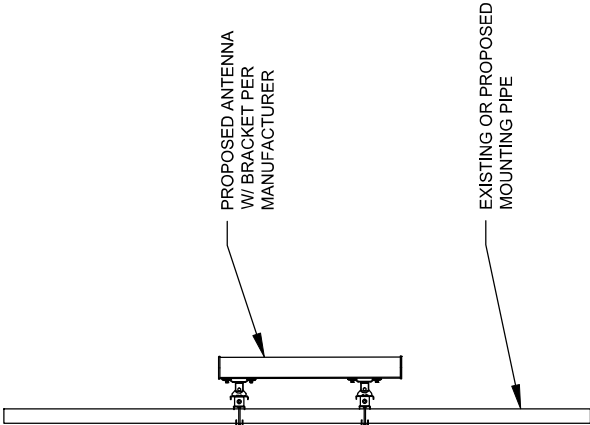
ANTENNA INFORMATION & SCHEDULE	
SHEET NUMBER: C-401	REVISION:
	0

EXISTING FIBER DISTRIBUTION / OVP BOX		EXISTING CABLING SUMMARY	
MODEL NUMBER	STATUS	CABLE QTY, SIZE, TYPE	STATUS
RVZDC-6627-PF-48	RMN	(1) 1-5/8" 12X24 HYBRIFLEX	RMN
-	RMV	-----	RMV

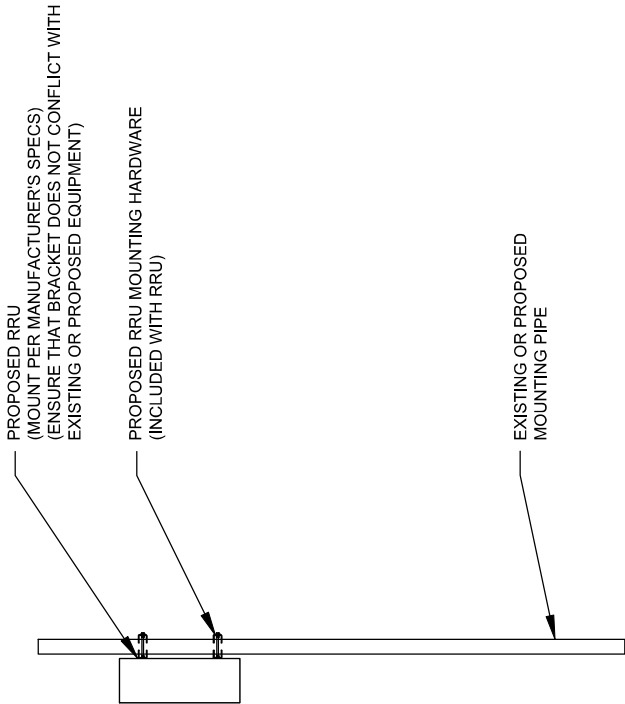
EQUIPMENT SCHEDULES

3

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



1 PROPOSED 5G ANTENNA MOUNTING DETAIL - TYPICAL
SCALE: N.T.S.



2 PROPOSED RRU MOUNTING DETAIL - TYPICAL
SCALE: N.T.S.



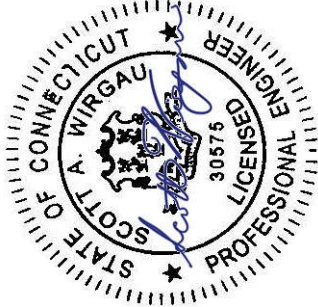
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△			
△			
△			
△			

ATC SITE NUMBER:
209185
ATC SITE NAME:
BURLINGTON 2
VERIZON SITE NAME:
BURLINGTON SW CT - A
SITE ADDRESS:
87 MONCE ROAD
BURLINGTON, CT 6013

SEAL:



Digitally Signed: 2024-07-17

	
ATC JOB NO:	1486812_G0
CUSTOMER ID:	BURLINGTON SW CT - A
CUSTOMER #:	5000063849

CONSTRUCTION
DETAILS

SHEET NUMBER:	REVISION:
C-501	0

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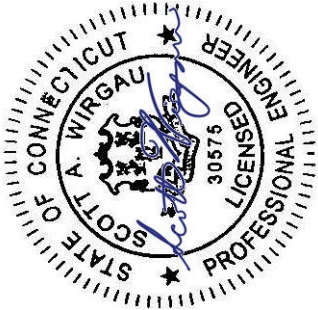
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209185

ATC SITE NAME:
BURLINGTON 2

VERIZON SITE NAME:
BURLINGTON SW CT - A

SITE ADDRESS:
87 MONCE ROAD
BURLINGTON, CT 6013

SEAL:

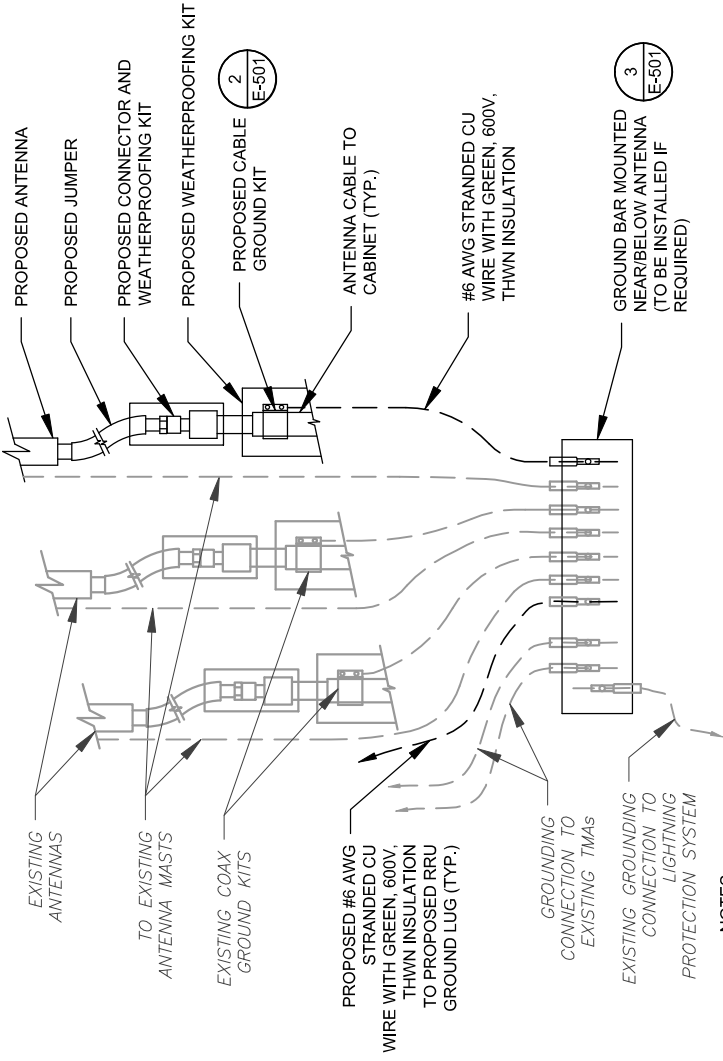


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verizon	
ATC JOB NO:	1486812_G0
CUSTOMER ID:	BURLINGTON SW CT - A
CUSTOMER #:	5000063849

GROUNDING DETAILS

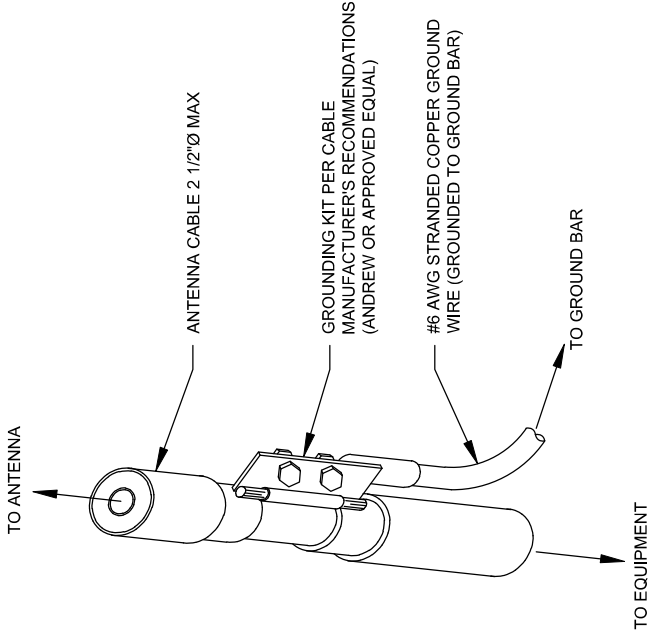
SHEET NUMBER:	REVISION:
E-501	0



NOTES:

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

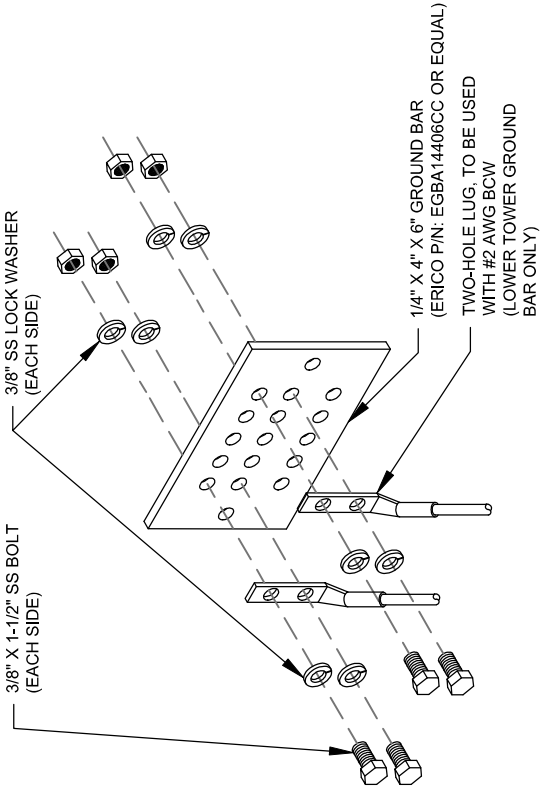
1 TYPICAL ANTENNA GROUNDING DIAGRAM
SCALE: N.T.S.



GROUND KIT NOTES:

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

2 CABLE GROUND KIT CONNECTION DETAIL
SCALE: N.T.S.



GROUND BAR NOTES:

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

3 TOWER GROUND BAR DETAIL
SCALE: N.T.S.



Colliers Engineering & Design,
Architecture, Landscape Architecture,
Surveying, CT P.C.
105 Washington Boulevard
Stamford, CT 06901
203.324.0800
peter.albano@collierseng.com



Antenna Mount Analysis Report and PMI Requirements

Mount ReAnalysis-VZW
SMART Tool Project #: 10227145
Colliers Engineering & Design Project #: 21781103 (Rev 1)

March 19, 2024

Site Information

Site ID: 5000063849-VZW / BURLINGTON SW CT - A
Site Name: BURLINGTON SW CT - A
Carrier Name: Verizon Wireless
Address: 87 Monce Road
Burlington, Connecticut 06013
Hartford County
Latitude: 41.73913611°
Longitude: -72.90780278°

Structure Information

Tower Type: 120-Ft Monopole
Mount Type: 12.50-Ft Platform

FUZE ID # 16559975

Analysis Results

Platform: 33.3% 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: Vincent DiGirolamo



Mount Structural Analysis Report
(1) 12.50-Ft Platform

March 19, 2024
Site ID: 5000063849-VZW / BURLINGTON SW CT - A
Page | 6

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 shall record all dimensions and member sizes requested in the Mount Geometry Verification Requirements section of the Mount Analysis report. Contractor shall provide the requested information to Colliers Engineering & Design CT, P.C. for structural verification while on site. Contact EOR if these documents are not available to the general contractor.

Contractor shall inspect climbing facilities and safety climb, if present, and ensure they are in good condition. Contractor shall install safety climb wire rope guides in locations where wire rope is rubbing against the mount or mount-to-tower connection steel. Wire brush clean any observed corrosion and protect with two (2) coats of cold galvanization (Zinc Kote or Zinga). Contractor shall provide photos of wire rope guide installation as part of PMI documents. Contact EOR if additional guidance is required.

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

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

SUPPLEMENTAL

SHEET NUMBER:

R-601

REVISION:

0



AMERICAN TOWER®
CORPORATION

LETTER OF AUTHORIZATION FOR PERMITTING

ATC SITE#/NAME/PROJECT: 209185 / Burlington 2 / 14866812
SITE ADDRESS: 87 Monce Rd, Burlington, CT 06013
APN: BURL M:11-06 L:33-CEL
LICENSEE: VERIZON WIRELESS
SITE ACQUISITION VENDOR: PYRAMID NETWORK SERVICES LLC

I, Margaret Robinson, Vice President, UST Legal for American Tower*, owner of the tower facility located at the address identified above (the "Tower Facility"), do hereby authorize VERIZON WIRELESS, PYRAMID NETWORK SERVICES LLC, their successors and assigns, and/or their agent, (collectively, the "Licensee") to act as American Tower's non-exclusive agent for the sole purpose of filing and consummating any land-use, building, or electrical permit application(s) as may be required by the applicable permitting authorities for Licensee's telecommunications' installation on the Tower Facility.

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

Signature: _____

Margaret Robinson, Vice President, UST Legal
US Tower Division

NOTARY BLOCK

COMMONWEALTH OF MASSACHUSETTS
County of Middlesex

This instrument was acknowledged before me by Margaret Robinson, Vice President, UST Legal for American Tower* (Tower Facility owner and/or operator), personally known to me (or proved to me based on satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same.

WITNESS my hand and official seal, this 21st day of June 2024.

NOTARY SEAL



GERARD T. HEFFRON
Notary Public
Commonwealth of Massachusetts
My Commission Expires
August 9, 2024

Notary Public

My Commission Expires: August 9th, 2024

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

ORIGIN ID: SYRA (315) 569-9241
 CASSANDRA DARMODY
 PYRAMID NETWORK SERVICES LLC
 6615 TOWMPATH RD

SHIP DATE: 24 JUL 24
 ACTWGT: 0.50 LB
 CAD: 114425996/NET4730

E SYRACUSE, NY 13057
 UNITED STATES US

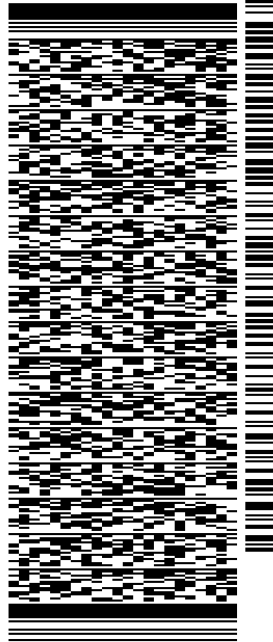
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TO DOUGLAS K. THOMPSON OR JERRY BURNS
 TOWN OF BURLINGTON CT
 200 SPIELMAN HIGHWAY

BURLINGTON CT 06013

(860) 673-6789 X 1 REF: ATCONV2000BURLINGTON2CT14868812
 INV: ATCONV2000BURLINGTON2CT14868812
 PO: ATCONV2000BURLINGTON2CT14868812 DEPT:

583J9/E0E4/9AE3

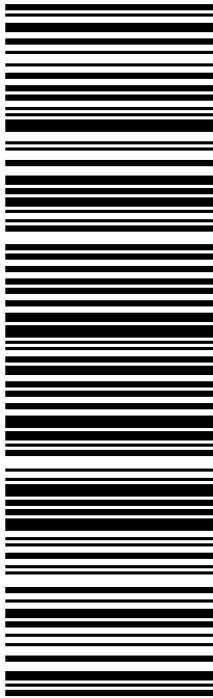


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SHIP DATE: 24 JUL 24
 ACTWGT: 0.50 LB
 CAD: 114425996/NET4730

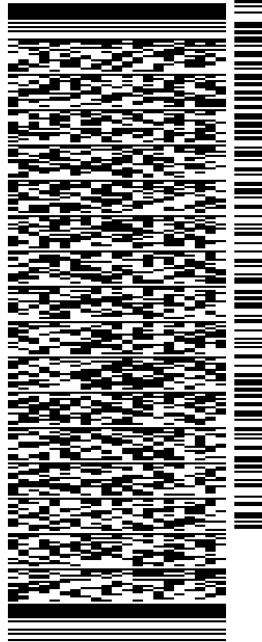
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TO **LAND MANAGEMENT**
AMERICAN TOWER CORP
10 PRESIDENTIAL WAY

WOBURN MA 01801

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 PO: ATCONV2000BURLINGTON2CT14868812 DEPT:

583J9/E0E4/9AE3

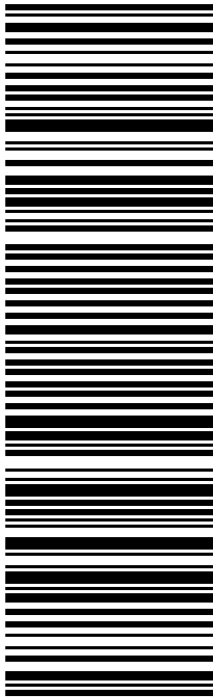


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 EXPRESS SAVER

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After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

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